

CHAPTER 7
MAINTENANCE AND OPERATION PLANNING

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7-1 Personnel Planning

7-1-1 Personnel

The PGH has a new plan of increasing its personnel by persons including 6 doctors and 74 nurses. These people are to be considered the staff of the PGH as a whole, and specifically the OPD.

7-1-2 Personnel Cost

The PGH allows 9,322,161 pesos as a budget for 1989. This amount means an increase of more than 50% compared with the amount of 5,971,964 pesos in 1985. Therefore, once this budget is secured, no financial problems are expected.

7-2 Maintenance and Operation Planning for Facility

7-2-1 Maintenance and Operation Planning

In constructing the OPD, the increase in staff needed to maintain and operate the facility must be considered. Presently the PGH has a total of 116 engineers. Those include civil, Mechanical and Electrical Engineers. Below the engineers, are assistant engineers, totaling more than 1,000 persons. The services provided by the engineering section include the main operation tasks of daily inspection of medical devices, inspection maintenance of building facilities, and repair and drawing up the supply list of consumables.

However, the engineers are engaged not only with the PGH, but also with more than 10 other facilities related to the medical facilities in the UP Manila, (College of Medicine, College of Public Health, College of Nursing School, College of Dentistry, College of Pharmacy, UP College of Science etc.). Presently they have a regularly dispatched patrol service based at PGH. In order to make this project successful, it is necessary to secure the required engineering staff. When efficiently operated, the PGH

can handle the increase in out-patients. There will be no increase in staff for OPD.

7-2-2 Operation Cost

a) Electricity rates

The electricity rate system consists of a basic rate and power consumption. The estimation of the basic rate is made under the following conditions:

Equipment capacity:

Transformer capacity $500 \text{ kVA} \times 2 \text{ sets} = 1,000 \text{ kVA}$

Contract power capacity:

$1,000 \text{ kVA} \times \text{Demand } (0.75) \times \text{Non-uniform rate } (0.6) \times$
 $\text{Power factor } (0.9) = 405 \text{ kW} = 400 \text{ kW}$

- Basic rate (Contract power capacity 400 kW)

$400 \text{ kW} \times \text{P}12.60/\text{kW} = 5,040 \text{ Pesos/month} \dots\dots(1)$

- Power consumption

$400 \text{ kW} \times 8 \text{ Hrs} \times 25 \text{ days/month} = 80,000 \text{ kWh/month}$

$80,000 \text{ kWh/month} \times 0.42 \text{ Pesos/kWhr}$

$= 33,600 \text{ Pesos/month}$

- Power factor discount

(10% Off ... Power factor, in case of 90%)

$33,600 - 3,360 = 30,240 \text{ Pesos/month} \dots\dots (2)$

$(1) + (2) = 35,280 \text{ Pesos/month}$

- Annual maintenance and operation cost

$35,280 \text{ Pesos/month} \times 12 = 423,360 \text{ Pesos/year}$

In the case of the PGH, mainly composed of charity patients, it is possible to take 50% off this cost consultation with the electricity company. The electricity rates are as follows:

$423,360 \times 1/2 = 211,680 \text{ Pesos/year} \dots\dots (a)$

b) Service maintenance cost of power generation

The number of power failures and duration: 3 times/week, 1 hour/time

$$0.168 \text{ kg/Peso} \times 860 \text{ Pesos} \times 12 \text{ times/month} \times 12 \text{ month/year} \times$$

$$0.7 \text{ Pesos/Diesel Hr} = 14,563 \text{ Pesos} = 14,500 \text{ Pesos/year} \dots (b)$$

c) Water supply/sewage

$$\text{Consumption rate: } 30 \text{ m}^3/\text{Day} \times 25 \text{ days/month} = 750 \text{ m}^3/\text{month}$$

(1) Consumption rate:

$$\text{Fixed rate up to } 25 \text{ m}^3/\text{month} = 111.7 \text{ Pesos/month}$$

More than $25 \text{ m}^3/\text{month}$

$$\underline{4.7075 \text{ Pesos/m}^3 \times (750 - 25) = 632.3 \text{ Pesos/month}}$$

$$\text{Total} \qquad \qquad \qquad 750 \text{ Pesos/month}$$

(2) Current exchange rate adjustment rate:

$$750 \text{ Pesos/month} \times 0.1409 = 106 \text{ Pesos/month}$$

(3) Water meter maintenance cost: 6 Pesos/month

(4) Water supply rate Total:

$$(1) + (2) + (3) = 862 \text{ Pesos/month} \times 12 \text{ months}$$

$$= 10,344 \text{ Pesos/year} \dots (c)$$

(5) Sewage rate:

$$((1) + (2)) \times 0.6 = 514 \text{ Pesos/month} \times 12 \text{ months}$$

$$= 6,168 \text{ Pesos/year} \dots (d)$$

d) Town gas

Consumption:

$$3.75 \text{ Nm}^3/\text{h} \times 8 \text{ h/day} \times 0.2 \times 25 \text{ days/month} = 150 \text{ Nm}^3/\text{month}$$

Consumption rate:

$$\text{Fixed rate up to } 25 \text{ Nm}^3 = 100 \text{ Pesos/month}$$

More than $25 \text{ Nm}^3/\text{month}$

$$\underline{3.5 \text{ Pesos/Nm}^3 \times 125 = 438 \text{ Pesos/month}}$$

Total 538 Pesos/month x 12 months
= 6,456 Pesos/month (e)

e) Medical gas

Consumption of oxygen cylinders:

14 pieces/day x 25 days/month = 35 pieces/month

Cylinder replacement rate:

135 Pesos x 35 pieces/month

= 4,700 Pesos/month x 12 months

= 56,400 Pesos/year (f)

Based on the above, the total amount of the maintenance and operation cost of this facility comes to:

(a) + (b) + (c) + (d) + (e) + (f) = 305,548 Pesos/year

7-2-3 Maintenance and Repair Cost

To maintain the building and equipment, a budget allowance for maintenance and repair costs is necessary. Included in this are the upkeep of the roof, external wall, doors and windows, and interior finishes (ceiling, wall, floor). Also included is equipment: the maintenance and repair cost of electrical, mechanical systems and the provision of consumables are indispensable.

The factors which determine the budget of maintenance and repair costst differ greatly according to the grade of daily maintenance operation. Although it can not be unconditionally estimated, the cost of about 0.6 - 1.4% of the construction cost is common for repair costs. This totals about 1,875,000 Pesos as an annual maintenance and repair cost.

7-3 Maintenance and Operation Planning for Medical Equipment

7-3-1 Maintenance and Operation Planning

a) Medical Equipment

The medical equipment supports the activity of OPD, and thus it is necessary to keep up its maintenance.

The medical equipment related to visual diagnosis, equipment for specimen tests, and operation equipment should be planned with consideration taken for the safety and security of both patients and operating personnel and the reduction of maintenance and operation costs.

It is possible to provide proper operating personnel as this is a hospital affiliated with UP. However, due to the peculiar characteristics of medical equipment, the staff of PGH will have difficulty in securing personnel for its maintenance. Accordingly, it has to be entrusted to the professional workers or manufacturers outside.

In Particular, it is absolutely necessary for the maintenance services of the X-ray CT unit and medical record control system to be entrusted to the outside.

Two ways can be considered for maintenance. One is the periodic maintenance contract system; the other is occasional service contract system. In the periodic maintenance contract, maintenance is conducted periodically for equipment used constantly, which is largely composed of electric and electronic parts. On the other hand, machines which have a large mechanical composition and are used frequently are the subject of an occasional service contract. Although maintenance is entrusted to professional workers or outside manufacturers, the maintenance department within the PGH should conduct a daily maintenance inspection periodically upon the following equipment:

- . Equipment for radiotherapy
- . Equipment for ultrasonic diagnosis
- . Equipment for medical electronic diagnosis
- . Equipment for laboratory
- . Equipment for analysis
- . Optical equipment

- . Equipment for general purpose experiments
- . Equipment for operation room
- . Dental equipment
- . Equipment for sterilization

The equipment subject to the periodic maintenance contract and occasional service contract service are classified as follows:

. Periodic Maintenance contract

	Number of periodical services
1) Radiology equipment	12 times/year
2) Clinical examination equipment	24 times/year
3) Endoscopic equipment	6 times/year
4) Electronic medical equipment	3 times/year
5) Medical record control system	24 times/year

. Occasional service contract

- 1) Medical equipment for operation room
- 2) Sterilization equipment
- 3) Equipment for optical examination
- 4) Equipment for dental treatment

b) Medical record and hospital management system

A maintenance service is required which enables a normal application of the medical record control system at all times. Daily maintenance inspection needs to be conducted by the person in charge of operation, but the adjustment operation accompanied with other other parts inspection, should be conducted mainly through outside contract.

The equipment concerned is shown as follows:

- . Medical record management system
- . Personal Computers & Word Processors
- . Office equipment such as typewriters
- . Other office equipment

7-3-2 Maintenance Contract Cost

The cost of periodic maintenance contracts is estimated as follows:

1) Radiology equipment	
(39,584 x 12 times/year)	475,000 Pesos
2) Clinical examination equipment	
(6,250 x 24 times/year)	150,000 Pesos
3) Endoscopic equipment	
(12,500 x 6 times/year)	75,000 Pesos
4) Medical electronic equipment	
(25,000 x 3 times/year)	75,000 Pesos
5) Medical record management system	
(12,500 x 24 times/year)	300,000 Pesos
Subtotal (1)	<u>1,075,000 Pesos/year</u>

The cost of occasional service contracts is estimated as follows:

1) Medical equipment for operation room	
1,700 Pesos x 12 times =	20,400 Pesos
2) Sterilization equipment	
1,700 Pesos x 4 times =	6,800 Pesos
3) Equipment for optical examination	
2,500 Pesos x 12 times =	30,000 Pesos
4) Equipment for dental treatment	
2,200 Pesos x 6 times =	13,200 Pesos
Subtotal (2)	<u>57,200 Pesos/year</u>

Cost of periodic maintenance contracts

 Subtotal (1) 1,075,000 pesos/year

Cost of occasional maintenance contracts

 Subtotal (2) 57,200 pesos/year

 Total 1,132,200 Pesos/year

7-3-3 Operation Cost

(Consumables and reagents for diagnosis)

Consumables and reagents are indispensable as those which form a substantial part of the daily medical activities. Systems should always be kept in repair, and the periodic purchase and supplement of the necessary quantities should be provided at each department. In view of the above, the purchase and distribution to each department can be made. The purchase and distribution by the new management computer should be made in an effective and proper manner.

The consumables and reagents concerned are as follows.

- . Consumables for X-ray
- . Consumables for medical electronic equipment
- . Glassware for clinical examination
- . Diagnostic reagent for clinical examination
- . Ports and consumables for operation room
- . Ports and consumables for dental treatment
- . Medicines and consumables for diagnostic treatment
- . Other antiseptic and miscellaneous expenses

Following is the computation of maintenance and operation costs at the respective departments.

The numbers of diagnoses and examinations are based on future predictions, and the maintenance and operation cost was estimated from the consumables and reagents for each case.

1) Radiology department

Number of X-ray film sheets (Large, cut in four)

100 sheets/day x 250 days x 55 Pesos = 1,375,000 Pesos

Related to ultrasonic diagnosis unit

50 cases/day x 250 days x 25 Pesos = 312,500 Pesos

X-ray CT unit

5 persons/day x 250 days x 600 Pesos = 75,000 Pesos

Subtotal (1) 2,437,500 Pesos

2) Clinical examination department

Bacteriological examination

200 cases/day x 250 days x 24 Pesos = 1,200,000 Pesos

Biochemical test

400 cases/day x 250 days x 15 Pesos = 1,512,500 Pesos

Blood examination

200 cases/day x 250 days x 25 Pesos = 1,250,000 Pesos

General examination

200 cases/day x 250 days x 15 Pesos = 750,000 Pesos

Serum examination

70 cases/day x 250 days x 22 Pesos = 385,000 Pesos

Pathological examination

80 cases/day x 250 days x 27 Pesos = 540,000 Pesos

Subtotal (2) 5,625,000 Pesos

3) Physiological diagnosis department

Related to endoscope

20 persons/day x 250 days x 80 Pesos = 400,000 Pesos

Respiratory function examination

20 persons/day x 250 days x 10 Pesos = 50,000 Pesos

Electrocardiogram examination

50 persons/day x 250 days x 10 Pesos = 125,000 Pesos

Electroencephalograph examination

5 persons/day x 250 days x 35 Pesos = 43,750 Pesos

Electromyograph examination

5 persons/day x 250 days x 55 Pesos = 68,750 Pesos

Stress electrocardiogram examination

5 persons/day x 250 days x 85 Pesos = 106,250 Pesos

Visual function test

20 persons/day x 250 days x 25 Pesos = 125,000 Pesos

Audiometry examination

10 persons/day x 250 days x 15 Pesos = 37,500 Pesos

Subtotal (3) 956,250 Pesos

4) Dental diagnosis department

Out-patient treatment department

100 persons/day x 250 days x 18 Pesos = 450,000 Pesos
(including X-ray diagnosis)

Subtotal (4) 450,000 Pesos

5) Minor operation department

General surgical operation

15 persons/day x 75 Pesos = 281,250 Pesos

Ophthalmic operation

5 persons/day x 250 days x 55 Pesos = 68,750 Pesos

Otolaryngological operation

10 persons/day x 250 days x 65 Pesos = 162,500 Pesos

Biopsy operation (each department)

30 persons/day x 250 days x 20 Pesos = 150,000 Pesos

Subtotal (5) 662,500 Pesos

Medical equipment maintenance and operation cost

(Subtotal 1 - 5)

Total 10,131,250 Pesos/year

In principle, the medical equipment operation cost as estimated above should be covered by the payment from patients.

7-4 Summary of Maintenance and Operation Cost

The following table shows the summary of maintenance and operation costs, and the budget bill for 1989 made by the PGH side for OPD.

Annual maintenance and operation cost of OPD

Unit: Peso (JYen)

	Estimation	Budget bill for 1989 by PGH
1. Personnel cost	9,322,161 (68,797,500)	9,322,161 (68,797,500)
2. Facility operation maintenance cost	306,000 (2,258,300)	587,000 (4,332,100)
3. Facility maintenance and operation cost	1,875,000 (13,837,500)	3,464,080 (25,514,900)
4. Medical equipment maintenance cost	1,132,200 (8,355,600)	12,467,000 (92,006,500)
5. Medical equipment operation cost	10,131,250 (74,768,600)	
Total	22,766,611 (168,017,500)	25,840,241 (190,701,000)

PGH considers the income sources for the budget of 1989 as follows:

Unit: Peso (JYen)

1) Income from patients	
First visit fee	967,500 (7,140,150)
Radiography	2,680,500 (19,782,090)
Laboratory exam.	7,368,750 (54,381,380)
Physical therapy exam.	1,141,250 (8,422,430)
Dental treatment	441,000 (3,254,580)
Operation	662,500 (4,889,250)
Subtotal	13,261,500 (97,869,880)

2) Subsidy from the Government	12,578,741 (92,831,110)
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Total	25,840,241 (190,700,970)
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As mentioned above, the Philippines proposed to earmark approx. 25.84 million pesos (approx. JYen 192 million) as a budget bill for fiscal 1989 once the Out-patient Department is completed. Approx. 13 million pesos (approx. JYen 96 million), which amount to half of the budget bill, will be provided by the Philippine Government as a subsidy, and the rest will be covered by the income from patients.

According to the budget in 1987, the subsidy from the Philippine government amounts to approx. 120 million pesos (approx. JYen 886 million) for the entire budget of the Philippine General Hospital, of which the Out-patient department occupies only 6%.

Therefore, when the subsidy from the government necessary for the Out-patient Department reaches approx. twice that of 1987, it can be judged to be sufficiently dealt with, in consideration with the total budget scale of the Philippine General Hospital.

Therefore, the contents of Out-patient Department facilities are feasible from a financial view point.

CHAPTER 8
PROJECT EVALUATION

CHAPTER 8 PROJECT EVALUATION

In spite of the OPD of PGH occupying the preeminent position in the Philippines and its treatment of more than 1,000 patients per day, due to its obsolete buildings and medical equipment, it is difficult for it to effectively complete its role.

In this respect, it is an urgent necessity to improve and expand the said buildings and equipment and, in order to accomplish this, to develop proper organization and administration.

With the implementation of OPD construction, which contains the treatment facilities for as many as 2,000 out-patients/day, the following effects are expected:

(1) Effects of the Project

- a) By doubling the current scale of diagnosis and providing an ambulatory medical treatment service facility, medical service for regional people will be greatly improved.
- b) By fulfilling the function of the OPD as a referral hospital, it should become one of the best of its kind in the Philippines.
- c) By providing educational facilities as a hospital affiliated with UP, this will play an important role for the domestic improvement of medical workers, thus contributing to the improvement of future medical techniques.
- d) By being equipped with the optimal medical equipment and facilities, this facility can act as a model hospital for other Philippine public hospitals.
- e) As the above points are realized, the improvement of medical techniques in the Philippines and the amelioration of sanitation and health condition in the Philippines will come into effect; thus contributing greatly to the increased number of medical workers and further, to an increase in the employed population.

(2) Suitability of the Project

The issues of manpower and maintenance and operation costs raise questions. In regard to manpower, there are many people who wish to work both in Manila, the capital of the Philippines, and also at a hospital possessing the latest facilities. Thus the personnel plan which is a part of the implementation of the new OPD seems to be realistic.

In regard to maintenance and operation costs, a full investigation has been conducted to enhance operation and maintenance at minimum costs through the selection of facilities and equipment. In contrast to private hospitals, the PGH patients are charity patients. Therefore, it is impractical to expect sufficient medical treatment revenues from patients and it is probable that the OPD will be totally dependent upon the state budget. However, as this Project is being promoted under the instructions of the Office of the President, preferential measures concerning the state budget are expected to support the maintenance and operation costs after its completion.

As mentioned above, the implementation of this Project will have a great and widespread effect. Therefore, this Project can be evaluated as appropriate and will play an important role in the execution of the National Development Plan.

CHAPTER 9

CONCLUSION AND RECOMMENDATIONS

CHAPTER 9 CONCLUSION AND RECOMENDATIONS

9-1 Conclusion

After studying the previous information, the construction of OPD and the supply of medical equipment are found to be appropriate as Grant Aid Assistance from Japan to the Philippines. Therefore, the implementation of this Project is judged to be of great significance.

9-2 Recommendations

In order to further ensure the effect of the execution of this Project, the following points will be taken into account by the Philippine side:

- (1) The New Central Block is expected to take a long time to be completed and installed with the new medical equipment. For this reason, this Project allows independent functioning as an Out-patient Department. Nevertheless it is hoped that the New Central Block will be completed at the earliest date.
- (2) In order to develop the OPD, it is necessary to develop not only the facility but also its management system.

The following points should be improved and developed:

- a) To increase the number of medical workers in charge of OPD by at least 50%.
 - b) To increase medical supplies, consumables and medicines.
 - c) To ameliorate the reception procedure and medical record systems.
 - d) To advance the consultation hours by 1 hour (1 hour each in both morning and afternoon)
 - e) To provide clinical services for functional disorders, a pain clinic and out-patient surgery.
- (3) The income from patients should be increased to secure the budget required for the maintenance and operation planning. To achieve this

goal, maximizing the budget for the maintenance and operation planning, it is better to examine the methods in which diagnosis services will be undergone for patients from every social class, by utilizing a part of the facility, while respecting the Out-patient Department's role as a charity hospital.

APPENDICES

1. MEMBER LIST OF THE BASIC DESIGN STUDY TEAM

- *Dr. Toru Ise Team Leader
Managing Director, Expert Dispatch Services Division,
International Medical Cooperation Department, National
Medical Center, Ministry of Health and Welfare
- Dr. Chiaki Miyoshi Hospital Manager/Officer,
Expert Dispatch Services Division, International
Medical Cooperation Department, National Medical
Center, Ministry of Health and Welfare
- *Mr. Toshio Namai Project Coordinator
Officer, First Basic Design Study Division, Grant Aid
Planning and Survey Department, Japan International
Cooperation Agency
- *Mr. Ichiro Kanagawa Architectural Planner
Nihon, Architects, Engineers & Consultants, Inc.
- *Mr. Takashi Kuwano Architectural Designer
Nihon, Architects, Engineers & Consultants, Inc.
- Mr. Shigeo Nagase Electrical Facilities Engineer
Nihon, Architects, Engineers & Consultants, Inc.
- Mr. Yutaka Saito Mechanical Facilities Engineer
Nihon, Architects, Engineers & Consultants, Inc.
- Mr. Koji Nakamoto Structural Planner
Nihon, Architects, Engineers & Consultants, Inc.
- Mr. Kyoichi Izawa Medical System Planner
Nihon, Architects, Engineers & Consultants, Inc.
- * Mr. Isamu Nyui Medical Equipment Planner
Nihon, Architects, Engineers & Consultants, Inc.

* Draft Explanation Team Member

2. List of Persons Concerned in the Republic of the Philippines

Dr. Conrado Ll. Lorenzo, Jr. - Chancellor
Dr. George Emfemio - Vice Chancellor
Dr. Juanito Billoe - Vice Chancellor
Dr. Jose T. Domingo - Vice Chancellor
Dr. Felipe A. Estrella - Jr. Director
Dr. Mario de Villa - Asst. Director for Health Operation
Dr. Roberto Reodica - Asst. Director for Fiscal Services
Mrs. Josefina T. Fermin - Asst. Director for Administration
Mrs. Anesia B. Dionisio - Asst. Director for Nursing
Dr. Mario T. Gutierrez - Project Team Member
Dr. Herminio J. Germer - Project Team Member
Elena P. Yu - Project Team Member
Dra. Cabanos - NEDA
Mrs. Helen A. Pedro - Chief, Dietary division
Mrs. Eva A. Guntang - Chief, Medical Social Service Division
Mrs. Naida Castor-Mendoza - Chief, Pharmacy Department
Mrs. Honorata M. Gonzales - Chief, Medical Records Division

Department of Laboratories

Dr. Jaime Zamuco -Chairman
Dr. Amelia de mesa - Assistant Chairman
Dr. Gemma Coronel Pastolero - Medical Consultant and Faculty
Dr. Ariel Vergel de Dios - Medical Consultant and Faculty

Department of Medicine

Dr. Herminio J. Germer - Officer in Charge
Dr. Ray G. Rayel - Chief Resident Physician
Dr. Georgina Pastorfide -Resident Physician, Dermatology
Dr. Amelia Lazaro-Medina - Medical Consultant and Faculty

Department of Surgery

Dr. Faustino T. Domingo Jr. - Chairman
Dr. Armando Crisostomo - Chief Resident Physician
Dr. Serafin C. Hivano - Medical Consultant and Faculty

Department of Pediatrics

Dr. Amelia R. Fernandez - Chairman
Dr. Jose Edgar L. Lucena - Chief Resident Physician

Department of Obstetrics and Gynecology

Dr. Jose Relacion - Medical Consultant and Faculty
Dr. Mildred Pareja - Medical Consultant and Faculty
Dr. Antonio Alferez - Medical Consultant and Faculty
Dr. Virginia Santos-Abalos - Chief Resident Physician

Department of Otorhinolaryngology

Dr. Armando T. Chiong - Chairman
Dr. Mariano Caparas - Medical Consultant and Faculty
Dr. Ernest A. Neuva Espana - Medical Consultant and Faculty
Dr. Romualdo Aragon - Resident Physician
Dr. Jose Acuin - Chief Resident Physician

Department of Ophthalmology

Dr. Mario V. Aquino - Chairman
Dr. Carlos Naval
Dr. Norman Aquino - Resident Physician

Department of Radiology and Cancer Institute

Dr. Roberto L. Reodica Jr. - Chairman

Department of Anesthesiology

Dr. Iluminada T. Camagay - Medical Consultant and Faculty

Dr. Roman Pesigan - Medical Consultant and Faculty

Dr. Nadine G. Abela - Chief Resident Physician

Department of Family Medicine

Dr. Mario t. Guitierrez - Chairman

Dr. Ramon L. Arcadio - Medical Consultant and Faculty

Miss Trifonia Vergara - Headnurse

Mrs. Mina Garcia - Nurse

Mrs. Luz Yu - Nurse

Department of Orthopedics

Dr. Napoleon Apolinario - Chairman

Dr. Daniel Caro - Chief Resident Physician

Department of Rehabilitation Medicine

Dr. Roberto Lim - Chairman

Dr. Lynn L. Olegario - Chief Resident Physician

Department of Psychiatry

Dr. Baltazar V. Reyes - Chairman

Dr. June Pagaduan-Lopez - Medical consultant and Faculty

Dr. Gilda S. Manalo - Chief Resident Physician

Department of Hospital Dentistry

Dr. Natividad Gervasio - Chairman

Dr, Lucia Valderrama - Dentist

Dr. Agerico Tagco - Dentist

3. Site Survey Schedule

(1) Basic Design Study Team

Mar.16 (Mon.) 10:00 Messrs. Ise, Miyoshi, Namai, Kanagawa, Kuwano, Izawa and Nyui leave Narita for Manila by PR431.

14:30 Arraival at Manila

16:30 Meeting for survey schedule with Messrs. Miyamoto and Oshima at JICA office

17:15 Meeting with Mr. Adachi, First Secretary in Embassy of Japan, about the purpose and scedule of this study

18:00

Mar. 17 (Tue.) 09:00 Courtesy call on NEDA. Explanation about purpose and schedule of this study

13:00 Official visit to PGH. Submittance & explannation of inception report

17:00 Team meeting

Mar. 18 (Wed.) 09:00 Site inspection of actual OPD within PGH

10:00 Meeting with PGH about the facility function of New Central Block and master plan of PGH

12:15

14:00 Meeting with PGH about situation of management operation and staff in PGH, and function of actual OPD and flow of patients

17:00 Team meeting

18:00

Mar. 19 (Thu.) 09:00 Site inspection of actual OPD within PGH
 11:30
 12:30 Inspection of Operation Dept. within PGH
 13:30 Meeting with PGH. Explanation about system of Grant
 Aid Assistance
 15:30 Investigation of existing equipment and materials of
 actual OPD
 18:00

Mar. 20 (Fri.) 09:00 Investigation of actual OPD; Examination Dept., OPD
 Operation Dept., General OP Surgery and storing
 situation of medical records
 11:30 Site inspection of BFAD
 13:30
 14:30 Investigation of facility of actual OPD
 18:00 Team meeting

Mar. 21 (Sat.) 09:00 Site inspection of new central block within PGH
 10:30 Meeting with PGH about list for medical equipment and
 materials
 12:00
 13:00 Team meeting, filing
 17:00

Mar. 22 (Sun.) 10:00 Team meeting, filing
 12:00
 14:30 Messrs. Saito, Nagase and Nakamoto arrive at Manila
 by PR431.
 18:00 Team meeting, schedule arranging
 19:00

Mar. 23 (Mon.) 09:00 Inquiry with Consultant in charge of construction of
PGH

10:30 Site inspection of actual OPD. Interview survey with
out clinic patients

12:00

14:00 Minutes of Discussions signed

15:00

17:00 Expanation about outline of Minutes and future
schedule to Mr. Miyamoto, Representative of JICA
Philippine Office and Mr. Oshima, Vice Representative

18:00

Mar. 24 (Tue.) 09:30 Report to NEDA Minutes signed

10:00

10:30 Meeting with Consultant under construction of PGH

12:00

14:30 Hearing from persons concerned of DPWH

16:00 Discussion with representatives of each section of
PGH about content of medical equipment and materials

18:00

Mar.25 (Wed.) 09:00 Hearing from Kajima Corp. about construction
situation

10:30 Discussion with representatives of each section of
PGH about content of medical equipment and materials

12:00 Mr. Ise, Leader, and Messrs. Miyoshi and Namai leave
for Japan by PR432.

13:00 Hearing from Zenidaka Corp. about construction
situation

14:30 Meeting with Philippine architect

18:00 Filing and team meeting

Mar.26 (Thu.) 08:00 Visit to Philippine Children's Medical Center
 10:15 Visit to National Lung Center of the Philippines
 11:30 Visit to National Kidney Institute
 12:20
 13:45 Visit to Qurino Memorial General Hospital
 15:15
 15:45 Hearing from Kumagai Corp. about construction
 schedule
 17:00 Team meeting
 18:00

Mar.27 (Fri.) 09:00 Visit to site of BFDA
 12:00
 13:00 Hearing from each person concerned of DPWH
 15:45 Hearing about pile foundation from Taisei Corp. at
 the site of International Trade Center
 17:00 Team meeting
 19:00

Mar.28 (Sat.) 10:00 Meeting with each person concerned of DPWH at the
 site office of PGH
 12:00 Infrastructure survey at the OPD area
 13:00 Team meeting, filing
 19:00

Mar.29 (Sun.) 10:00 Team meeting, filing
 14:00
 15:00 Preparation of report
 17:00

Mar.30 (Mon.) 08:45 Visit to Hospital of Manila

10:45 Plain shape survey of each examination and clinic Dept. in actual OPD

12:00 Discussions with authorities concerned to infrastructure

13:30 Visit to Makati Medical Center

15:15 Meeting with DATABANK. Procuration of cost list of construction materials

16:00 Hearing from Foundation Specialist about pile foundation

17:15 Hearing from Philippine architect about onstruction material cost and labor cost

19:00

Mar.31 (Tue.) 09:00 Hearing from each authority concerned to electricity and equipment

11:00 Hearing from Consultant in charge of new central block

12:00 Exposure and explanation to PGH of block plan of the new OPD

13:15 Hearing from each authority concerned in electricity and equipment

14:45 Visit to Philippine Normal Colledge

17:00 Team meeting and filing

18:30

Apr.01 (Wed.) 08:45 Draft report arranging. Procuration of local cost

12:00 Investigation of manufacturers in the Philippines

13:00 Team meeting

15:00 Meeting with DPWH at the PGH site office. Procuration of cost list

17:30 Hearing from Philippine architect

19:00

Apr.02 (Wed.) 08:45 Team meeting and preparation of specifications for loading test

12:00 Discussions with PGH about new OPD block plan

13:00 Data collected at NEDA

15:45 Meeting with PGH. Request for loading test and meeting about plain shape

17:30 Meeting with DPWH at PGH site office

18:30

Apr.03 (Fri.) 08:45 Team meeting. Reconfirmation of necessary data

12:00 Investigation of Philippine manufacturers

13:45 Report of survey results to Mr. Oshima, Vice Representative at the JICA Philippine Office

14:30 Report of survey results to Mr. Adachi, 1st Secretary of the Japanese Embassy

15:30 Necessary data procured at PGH
Confirmation of schedule of the loading test

17:00 TEAm meeting

18:30

Apr.04 (Sat.) 09:00 Team meeting and filing

12:00

15:00 Messrs. Kanagawa, Kuwano, Saito, Nagase, Nakamoto, Izawa leave for Japan by PR432.

(2) Draft Explanation

June 15 (Mon.)	10:00	Dr. Ise, Messrs Namai, Kanagawa, Kuwano and Nyui Leave Narita by PR 431
	14:30	Arrival at Manila
	16:30	Report and discussions with Messrs Miyamoto and Shima at JICA Manila office.
June 16 (Tue.)	09:00	Meeting with the Team
	14:00	Explanation of the Final Draft Report
June 17 (Wed.)	09:00	Discussions of the Final Draft Report
		Confirmation of the Responsibilities and the Budget.
June 18 (Thu.)	09:00	Discussion on the allocation of each department in the Out-Patient Department
June 19 (Fri.)	09:00	Discussion on the allocation of the each department
	12:00	Minutes Sign
	14:00	Discussion
June 20 (Sat.)		Dr Ise and Mr. Namai leave Manila by PR 432
	09:00	Mr. Kanagawa, Kuwano, Nyui visit the New
	11:30	Central Block in PGF construction site.
	14:00	Preparation of the report on the study result.
June 21 (Sun.)	09:00	Plan adjustment and preparation of the Final Report
June 22 (Mon.)	09:00	Final discussion with the PGH
	10:30	Report to Mr. Oshima at JICA Manila office
	14:20	Messers Kanagawa, Kuwano and Nyui leave Manila by PR 432 for Tokyo.

4. Formal Request

CONSTRUCTION AND EQUIPPING
OF
THE OUT-PATIENT DEPARTMENT
THE PHILIPPINE GENERAL HOSPITAL

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A. PGH OUT-PATIENT DEPARTMENT:

ITS ORIGINS AND PRESENT STATE

A. 1.0 HISTORY OF THE PHILIPPINE GENERAL HOSPITAL OUT-PATIENT

DEPARTMENT (1910 - 1985)

The Philippine General Hospital (PGH) Out-Patient Department, (OPD) started out with dispensary/out-patient work by responding to calls of government beneficiaries and private patients and attending to the patrons of the free dispensary and clinic. This free dispensary and clinic was formerly conducted at the St. Paul's Hospital by the staff of the Medical College but transferred to the PGH in January 1, 1911.

The clinic was then divided into three sections, namely:

(1) medical tuberculosis, obstetrical, skin, children, neurology and genito-urinary clinics with 50-150 patients, flocking in daily; (2) the EENT clinic and (3) the surgical clinics. As early as its first few years of operation, the OPD was already faced with the basic problems be setting fee dispensary work such as the proper selection/qualification of patients as charity cases, how far charity should extend to those in actual need of certain medical supplies/items, number of hours the busy physicians should devote to out-patient work, etc.

Overcoming these odds, the OPD attended to the medical needs of 24,335 patients during its first year of operation and this figure almost tripled until 1914 when it grew to 66,993. With the new regulations, however, of requiring a twenty centavo ticket for patients who were able to pay, the number

of cases did not grow as rapidly. In 1923, a nominal fee of P0.05 (later increased to P0.20) was charged against free patients to cover part of the cost of medicines dispensed at the PGH Pharmacy and this created a recorded decrease of patients by 2,049. Despite these recorded decrease in patient load, the average number of patients treated daily still grew from 82 in 1910 to 459 in 1924 and to 594 in 1932.

The continuing rise in the patient treatment at PGH thus necessitated the extension of one of the wings of the dispensary in 1928. With an allotment of P50,000, the dispensary addition to the southwest end was completed in 1929 and occupied a ground space of 337 m². This led to an enlargement of the EENT clinic which enabled it to have a laboratory of its own and accommodated 14 patients of treatment at one time. Formerly one of the most congested clinics, it became divided into two sections namely, ophthalmology, and oterhinolaryngology, holding clinics separately in the afternoon and morning respectively. Similarly, the gynecology clinic was expanded, the dental clinic relocated from the dispensary building to the newly built annex, and the surgical clinic transferred to the entire ground floor of the dispensary additional.

In 1939, the Dispensary had to undergo another construction which was completed and formally inaugurated on Nov. 12, 1940 by the President of the Philippines (Commonwealth). The new building consisted of three (3) stories - mainly an additional adjoining the old section and the south annex.

With the outbreak of World War II, the dispensary continued its work despite the bombing and even during the Japanese Occupation. All clinics were functioning in spite of the shortage of medicine and supplies. Funds available from the War Damage Commission allowed the reconstruction of the destroyed parts of the dispensary in 1948.

Under Executive Order 391, effective January 1, 1951 the Philippine General Hospital was reorganized but continued under the supervision and control of UPS. Fifty one positions were abolished and the Dispensary clerical section was merged with the Statistics and Record Section and was renamed the General Records Section.

In 1953, the Diabetic and Thyroid Clinics were added as Medical Specialties and in 1955, the following specially clinics are opened. Obstetrics-Post Partum Clinic, Surgery, Neurology, Gynecology-Sterility and Fertility, and the EENT. Lacrimal Apparatus Clinic. The year 1958 likewise saw the organization of the audiology, allergy and nasopharyngeal clinics.

The out-patient department presently takes care of ambulatory cases, screens patients before admission to the hospital; serves as a follow-up station discharged patients, and acts a venue for the teaching training of medical and nursing students and those from allied medical science, schools. Clinics are held morning and afternoon by the medical, surgical, pediatrics, EENT, and dental department while obstetrics and gynecology hold clinics in the morning. Specialty clinics are held on definite days of the week, as scheduled and patients are seen by appointment.

2.0 OPD CONCEPT OF ORGANIZATION

General:

The Out-Patient Department belongs to the Department of Family Medicine of PGH with the OPD staff reporting directly to the Department Chairman. There is an OPD Service coordinator who takes charge of all administrative matters relative to OPD operations. He coordinates with the various clinical departments for the formulation of clinical Out-Patient program and administrative rules for their medical- staff and trainees. He is directly responsible for the operation of the infirmary, and Family Medicine clinic (Triage and Follow-up) and exercise administrative supervision over the clinical out-patient sections of the various PGH Departments. He is also responsible for the provision and control of the non-human resources needed in the OPD.

Linkage with other Department:

- 2.1 In each clinical section there is a medical staff and trainees rendering professional medical consultation and treatment service to Out-Patients supervised by a consultant-in-charge. There is a head nurse responsible for the unit management and supervision as well as clinical functions.

- 2.2 The Nursing service department is responsible for the development and formulation of nursing program in the OPD and provision of the required nursing personnel for each OPD clinic/session.

- 2.3 The office and custodian services division is responsible for the provision of custodian service workers and the maintenance of cleanliness and sanitation of the OPD.
- 2.4 The medical records division is responsible for the registration of patients and safekeeping of records.
- 2.5 On the matters of policy, the Assistant Director for Health Operations acts/decides particularly on problems involving more than one hospital unit. Depending upon the nature of the problem, he may call on a standing committee consisting of hospital officials to act on the problem at hand.

3.0 OPD OPERATIONAL CONCEPT

The basic flow of activities in the OPD are as follows:

3.1 Patient Reception and Registration

Old and new patients in need of ambulatory care registered at the OPD Admitting Section, after which they are directed as follows: New patients - to the OPD Triage; old patients to the specialty clinic where they have been previously scheduled. At this state, a patient Case Record has been initially accomplished and the Patient Card already issued for each new patient.

3.2 Initial Medical Attention and Screening of New Patients

All new patients are given initial medical attention at the OPD Triage for screening purposes. Following then, the approved guidelines on disposition, the patient may be:

3.2.1 Given a referral to his health center for his subsequent medical requirements and send home,
or

3.2.2 Referred to the general clinic of a specialty department.

3.3 Care of Patients in the General Clinic of a Specialty Department

Patients seen in the general clinic of a specialty department include referrals from the OPD Triage, or

another department and the old patients of the clinic/department. At this point, the patient is placed under further medical assessment and treatment. Additional data/documents are entered/attached to the patient's chart. At the end of a session, the patient maybe:

- 3.3.1 Given instructions and scheduled for a follow-up visit to the same clinic; or
- 3.3.2 Referred to another department's general clinic; or
- 3.3.3 Referred to a specialty clinic of the department

3.4 Patient Care in a Specialty Clinic

In a specialty clinic, a patient is placed under specialized diagnostic procedures and/or given specialized out-patient treatment. These are undertaken either as the actual set of curative measures or as a work-up prior to surgical operations and/or the patient's admission to a ward.

The results of this stage include:

- 3.4.1 Patients worked up for admission
- 3.4.2 Patients treated and cured

4.0 PRESENT NEEDS

The OPD just like all the other units of the hospital is not without the major problems of the institutions. Perennial problems of lack of equipment and instruments, insufficient medical supplies, scarcity of personnel to handle daily

transactions, minimal space allocation, deficiency in other support resources continue to hinder the efficient delivery of ambulatory services leading to queuing of patients. Moreover, the need to reaffirm the importance of the OPD in relation to the goals of the bigger organization still clouds the smooth coordination among hospital personnel. In this regard in all effort to put the OPD in its proper perspective, PGH has identified the following problems or needs for improvement in its OPD:

4.1 On the Clinical/Academic Programs

4.1.1 There is a need to emphasize the importance of the OPD in the training/academic programs of all the clinical department. Also, there is a need to reorient the staff to such importance.

4.1.2 There is a need for an in-depth review of the OPD component of the clinical/academic programs especially in light of the present status of the PGH Development Project.

4.1.2.1 There is a need to redefine the objectives of all clinical departments with regard to their out-patient activities.

4.1.2.2 There is a need to identify which programs should belong to OPD and which of these programs should be centralized and expanded into the OPD Complex.

4.2 On the OPD Support Resources

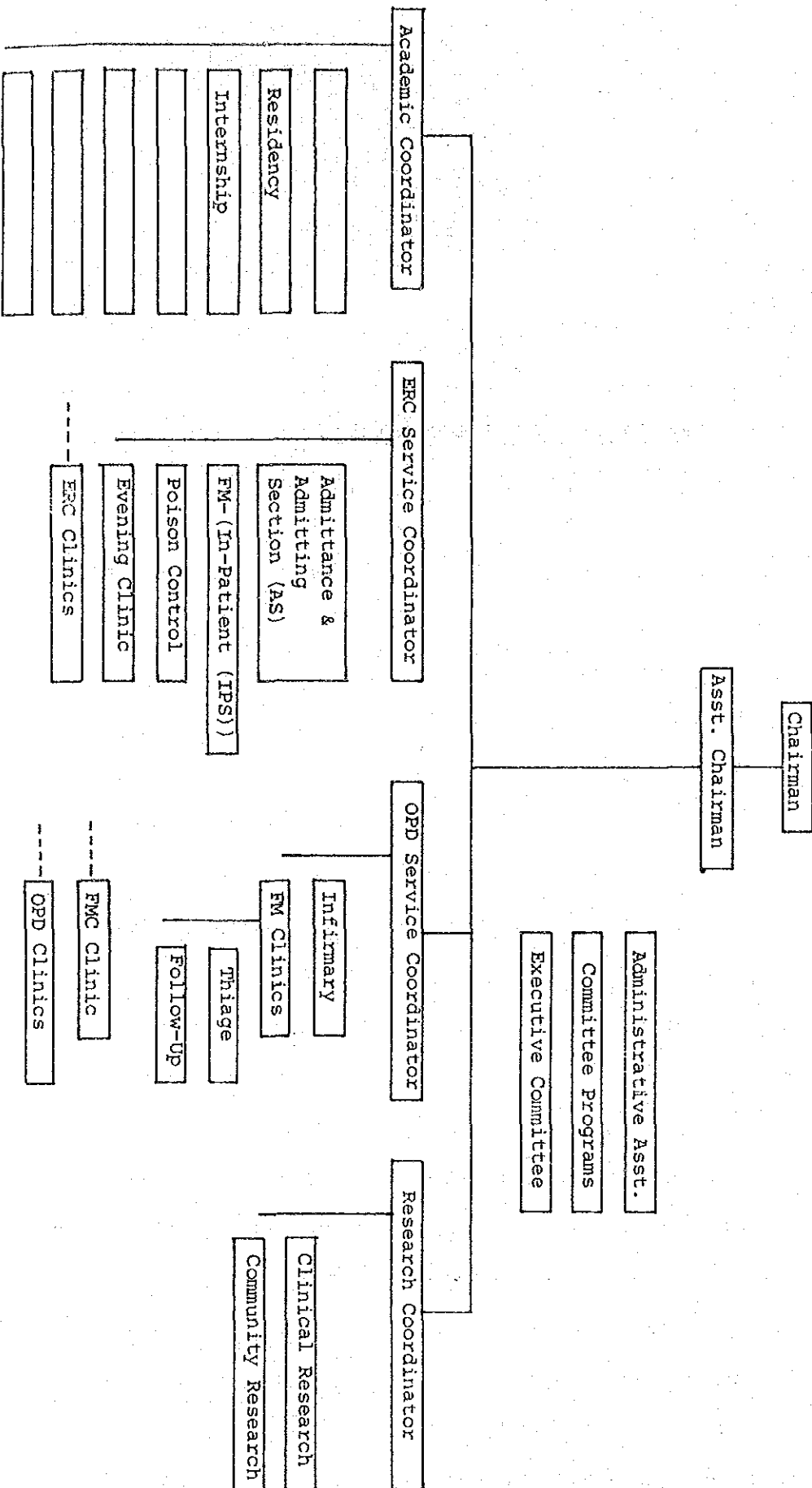
- 4.2.1 There is a need to build a modern OPD Complex that will accommodate at least 2,000 patients per day as planned for the new PGH.
- 4.2.2 There is a need for additional/replacement of equipment and instruments; a need for repair of serviceable ones.
- 4.2.3 There is a need to increase the allocation of medical supplies.
- 4.2.4 There is a need for further review of OPD space allocation for purposes of maximization.

4.3 On the Administration of OPD

- 4.3.1 There is a need to define the operating guidelines regarding the administration of the academic and other patient-oriented programs/activities.
- 4.3.2 There is a need to redefine the duties and authorities of the key positions in the OPD, e.g. the Nurse Supervisor, the Head Nurse, the Consultant-in-charge of a section, etc.
- 4.3.3 There is a need to appoint/designate the OPD Administrator who shall be responsible for the planning, supervision, and control of administrative matters relative to OPD operations.
- 4.3.4 There is a need to review the present OPD personnel complement for purposes of maximum manpower allocation.

DEPARTMENT OF FAMILY MEDICINE
 ORGANIZATIONAL CHART

1985



B. PROJECT PROPOSAL FOR THE JAPANESE GOVERNMENT

Concept Paper

=====

1. PROJECT TITLE : Construction and Equipping of the
OUT-PATIENT DEPARTMENT, Philippine
General Hospital
2. PROJECT PROPONENT : Philippine General Hospital
3. BACKGROUND AND RATIONALE

The Philippine General Hospital (PGH) is a national resource in health. Established 75 years ago "to provide medical and surgical care to non-infective diseases among the general population", the PGH has also been mandated to undertake teaching-training and research in medicine. As such, it is often referred to as a medical center.

Table 1 shows the output of the PGH Medical Center in 1984 demonstrating its strategic roles.

Table 2 shows the 5 inter-related functional components, each performing a primary role and all contributing to the overall task of a hospital system. Despite the establishment of the other government hospitals in different parts of the country, from those performing primary health care as the health units, secondary medical care as the provincial hospitals and tertiary medical services as the specialty centers, the PGH remains the premier hospital of the government.

In preparing PGH to cope up with the health and medical care needs of the Filipino people of the future, the Board of PGH officially approved and supported the current expansion and renovation.

PGH is currently concerned with two major agendas:

1. Expansion and renovation of the physical facilities, and
2. Development and institutionalization of mechanisms for organizational growth and viability. Central to this is the establishment of extra-governmental source of funds to help attain self-sufficiency in the provision of medical services to the indigent Filipino patients.

These concerns are made of imperative by the following:

1. Medical care needs of an expanding population
2. Advances in medical science and technology
3. Policy decisions of the national leadership to adopt Primary Health Care as the key strategy in achieving health for all, restructuring the health care system and the recently announced plan to upgrade the country's facilities for health and medical services.
4. Decreasing opportunities in foreign countries specially in the USA for advanced training in medicine and health professions.
5. Health re-awakening among the medical educators and practitioners to the need for shifting from disease to health and from curative to preventive medicine.
6. The effects of time on the physical facilities of the 75 years old PGH.

4. DEVELOPMENT AGENDA

Cognizant of the continuing need for PGH to be relevant and truly effective in its mandated roles, it has adopted a developmental philosophy in contributing to the resolution of the three universal problems facing the health and medical care system. These problems are (a) increasing cost of medical services, (b) access to medical services, and (c) appropriateness of the health and medical programs.

In hastening the attainment of the expansion and upgrading of the PGH, this concept paper on the Out-Patient Department is specifically written and presented. It is strongly supportive of what is currently being undertaken in the Philippine General Hospital as explicitly presented in Table 2.

5. OBJECTIVES

To expand the facilities of the Out-Patient Department of the PGH.

More specifically, to build a 10,000 sq.m. OPD which is self-contained with the basic facilities for an effective and efficient out-patient care of a daily 2,000 ambulatory cases from 9 in the morning to 10 in the evening. Equally important, the new OPD will function as a support facility to the Outreached Health Units, meaning the medical and health team with appropriate transportation and basic facilities will leave the hospital and be physically present in the health units located in various parts of

Metro Manila. In this role, the OPD will only provide health and medical services beyond the expertise of the health workers but train the latter and at the same time provide health information drives through audio-visual means. Finally, the third function of the new OPD is to undertake operation research to formulate, test and institutionalize innovative means of health and medical care appropriate for the rural and urban Philippines. These three functions make the envisioned OPD truly new and innovative!

Specifically, the new OPD will have the following:

1. For ambulatory care in the OPD:
 - a. Consultation for patients referred from the health centers and other hospitals.
 - b. Diagnostic and therapeutic radiology, diagnostic laboratories.
 - c. Minor surgeries and selected cases of major surgeries on an Out-Patient basis (strategy to cost containment) without endangering the life of the patient.
 - d. Pharmacy
 - e. Same consultation facilities for indigent patients shall also be used for pay-patients are different schedules.
 - f. Waiting areas for patients, specially for the indigents shall be provided audio-visual facilities on health education and self-care.
 - g. Computerization of administration, records keeping and retrieval system.

2. Out-Reached Health Services:
 - a. Mobile clinics with fluoroscopic and minor surgical procedures.
 - b. Health education information audio-visuals for community.
 - c. Training of health workers of the health units
 - d. Transportation facilities for medical and health teams of the PGH to include the medical students of the UP College of Medicine.
3. Facilities for Operation Research - innovative ways for health conservation and promotion in support of the Primary Health Care Strategy of the Ministry of Health.

6. STRATEGIES

1. The OPD Project Proposal to NEDA for a Japanese Grant in Aid (JICA) has been submitted to Japanese Government officially.
2. Formulate the Functional Plans which will be inputs to the Architectural and Engineering Plans and the identification of the medical and other essential equipment including ambulances, mobile clinics and transportation facilities.
3. Cost (Japanese Grant in Aid)

Building
<u>Equipment</u>
Total

7. BENEFITS

Beyond the realization of another important component of a hospital system engaged in health and medical care of people and patients, training of future medical and health professionals, and solutions to technical and operational health problems, the "new OPD concept" will help resolve the three crucial problems facing the health care system which are (a) increasing cost of medical care, (b) access to health and medical services and (c) irrelevance of many of the present health and medical progress.

As the interface between the community on the one hand and the hospital on the other, the new OPD shall work on the following:

1. Change the undue dependence of people on hospitals for their medical needs and to begin relying of themselves - self-reliance.
2. Expand physical presence especially of government physicians in communities outside of the hospital and thus increase accessibility to them.
3. With increased interactions between the health workers and the people in communities, better identification of the real and true needs of people relative to their health and disease shall be realized.

8. Table 1. 1984 PGH ACCOMPLISHMENTS IN THE PURSUIT OF ITS THREE
FUNCTIONS

Functions	Group Totals	Totals
A. Patient Care		
Total Number of Patients Attended to		325,111 (1)
B. Teaching-Training		
Total Number of Students Trained		1,281
Undergraduate Medical Students	420 (2)	
Medical Interns	165	
Residents and Fellows	361 (3)	
Nursing Students	39	
Dietetic Residents	18	
Nutrition Students	48	
Pharmacy Interns	52	
Dental Externs	71	
Medical Technology Externs	55	
Medical Social Worker Students	3	
Physical Therapy Interns	39	
Occupational Therapy Interns	10	
C. Research		
Total Number for Projects for 1984		409 (4)

- (1) 319,113 (98.0%) were indigent and 5,976 (2.0%) were pay-patients.
- (2) Exposure to hospital training starts during the second until the fourth year medical educations.
- (3) 114 completed training in 1984 as new medical specialist.
- (4) 173 projects were completed in 1984.

9. Table 2. MAJOR COMPONENTS OF A HOSPITAL SYSTEM

FUNCTIONS/ACTIVITIES	HOSPITAL COMPONENT
1. ENTRY/SEPARATION POINT of Non-Emergency Ambulatory Patients	OUT-PATIENT DEPARTMENT (1)
2. ENTRY/SEPARATION POINT of VERY-ILL, Emergency Patients Requiring Life-Saving Medical Services	EMERGENCY ROOM COMPLEX (2)
3. Nursing-Care Facilities Where Patients are confined in the Hospital	NURSING-CARE PAVILIONS (3)
4. DIAGNOSTIC/TREATMENT Shared-Services	DIAGNOSTIC-THERAPEUTIC RADIOLOGY, DIAGNOSTIC LABORATORIES, PHARMACY, NUCLEAR MEDICINE LABS., OPERATING ROOM COMPLEX, ANESTHESIA, RECOVERY ROOMS, INTENSIVE CARE UNIT, LABOR-DELIVERY ROOMS, NURSERY (4)
5. ADMINISTRATIVE AND OTHER SUPPORT	ADMINISTRATION, MEDICAL-SUPPORT SERVICE COMPLEX, KITCHEN-DIE-TRAY (5)

(1) OPD PROJECT PROPOSAL TO NEDA, March 1985

(2) Awaiting Funding : P40 Millions.

(3) Nursing Care for Indigence Patients Funded with P200 Million Social Security Loan to University of the Philippines to be paid by the PGH Foundation (Project is 95% Completed as Aug. 25, 1985).

Nursing Care for Pay-Patients included in the Government Funding for the 7-Storey Central Block building to be housed in the last 4 Floors: This is central to the aspiration of Incentives to Medical and other hospital personnel.

(4) Under construction with financial support from the national government. Located in the first 3 floors of the 7-Storey Central Block Building, this will help PGH Centralize and Strategically deploy common and shared facilities leading to more institutional and productivity.

LIST OF ANNEXES

- A. The Average Number of PGH Trainees Per Year
1977-81

- B. Number of Medical Researches Completed and On-Going in PGH
1977-81

- C. Physical Plans for the New PGH-OPD
 - C1 - Summary of Present Floor Area
 - C2 - Proposed Section Requirements
 - C3 - Proposed Floor Plans for OPD (Preliminary)
 - C4 - OPD Location Map (within PGH)

- D. List of Additional New Equipment

- E. List of Existing Serviceable Equipment at OPD

- F. Maintenance and Other Operating Expenditures of the OPD

- G. Proposed Additional Personnel for the OPD

ANNEX A

THE AVERAGE NUMBER OF PGH TRAINEES PER YEAR 1977-81

Undergraduate medical students (2nd-4th year medicine)	420
Interns	148
Postgraduate Specialization (Residency)	237
Fellows	118

Other Health Workers Trained

Dentistry Fellows	8
Dentistry Externs	4
Pharmacy Students	50
Nursing Students	344
Postgraduate Nursing Trainees	188
Postgraduate Medical Technicians	17
X-ray Technicians	15
Social Work Students	11
Dietetic Interns	117
Nutrition Students	137
Occupational/Physical Therapy Trainees	20

ANNEX BNUMBER OF MEDICAL RESEARCHES, COMPLETED AND ONGOING IN PGH, 1977-81

<u>SPECIALITY AND STATUS OF RESEARCH</u>	<u>YEAR AND QUANTITY</u>				
	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
Dept. of Medicine					
- Completed	28	23	27	3	27
- Ongoing	100	62	49	84	84
Dept. of Pediatrics					
- Completed	1	17	12	17	10
- Ongoing	11	23	21	17	17
Dept. of Surgery (incl. Anesthesiology)					
- Completed	13	10	16	25	27
- Ongoing	28	19	20	21	28
Dept. of OB-Gyne					
- Completed	5	4	3	18	4
- Ongoing	14	22	8	10	22
Dept. of Psychiatry					
- Completed	1	0	1	2	4
- Ongoing	4	2	1	0	0
Dept. of Eye					
- Completed	29	41	46	27	59
- Ongoing	59	55	19	55	68
Dept. of ENT					
- Completed	7	7	3	18	17
- Ongoing	12	13	3	0	0
Dept. of Orthopedics					
- Completed	2	2	1	4	9
- Ongoing	3	5	5	6	0
Dept. of Radiology					
- Completed	0	0	1	2	1
- Ongoing	DNA	3	2	1	0
Dept. of Rehabilitation-Medicine					
- Completed	1	2	3	4	
- Ongoing	9	6	2	1	1
Dept. of Family Medicine					
- Completed	8	6	29	29	15
- Ongoing	8	19	DNA	16	16
Dept. of Dental					
- Completed	DNA	DNA	DNA	2	0
- Ongoing	DNA	DNA	DNA	0	2
TOTAL					
- Completed	95	112	142	151	174
- Ongoing	243	229	130	211	234

Legend:

1. Completed refers to researches which were completed during the given year.
2. Ongoing refers to those which were still being undertaken as of the last day of the given year.
3. DNA means data not available.

ANNEX C1

SUMMARY OF PRESENT FLOOR AREA

OPD

<u>Unit/Section</u>	<u>Existing</u>
Medicine	334.21 M2
OB-Gyne	198.75
Dentistry	187.74
Eye	83.16
E.N.T.	57.42
Q.I. Extension	151.09
Surgery	282.96
Pediatrics	193.59
Family Medicine	214.65
C.I.	85.24
Rehab Medicine	50.03
Orthopedics	44.10
Medical Records Division	
Outpatient Section	166.53
Admitting Section	97.99
<hr/>	
Total	2,156.46 M2

ANNEX C2

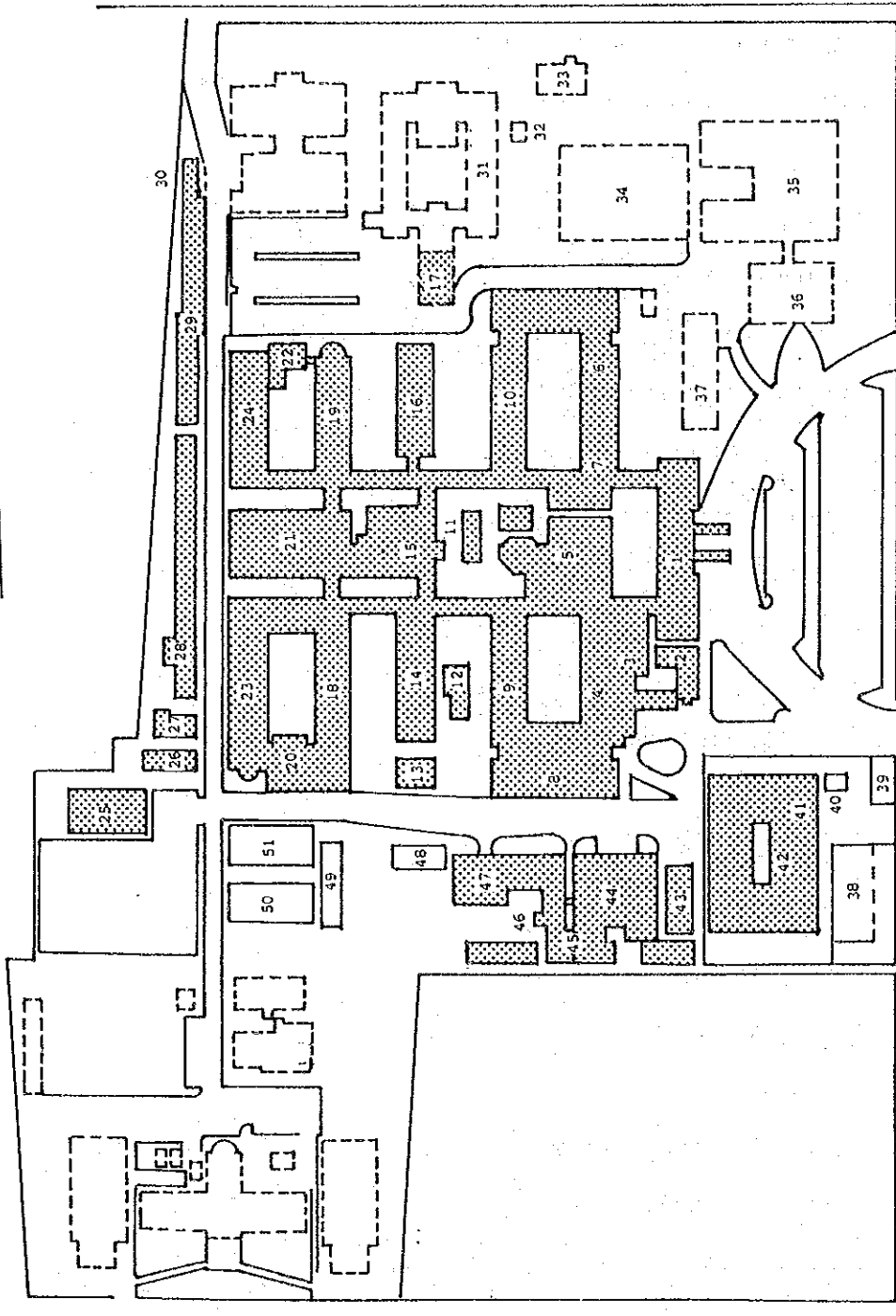
PROPOSED SECTION REQUIREMENTS

1. Radiology & Cancer
 2. Laboratories
 3. Nuclear Medicine
 4. OR
 5. Integrated Critical Care Units
 6. Diagnostic Laboratories
 7. Family Medicine
 8. Dietary
 9. Pharmacy
 10. Medical Records
 11. Central Sterile Supply
 12. Delivery Room
 13. Medical Illustration
 14. Pay Patient Services
 15. Biomedical & Physics
 16. Dental
 17. Rehabilitation Medicine
 18. Surgery
 19. OB-Gynecology
 20. Pediatrics
 21. Ophthalmology
 22. Otolaryngology
 23. Psychiatry
 24. Medical Social Service
 25. Office Services
 26. Administration
- Total 10,000 sq.m.

ANNEX C4

LEGEND:

1. ADMINISTRATION BUILDING
2. BLOOD BANK
3. TRAIGE
4. WARDS 7 & 8
5. SURGERY
6. WARDS 3 & 4
7. PHIL. EYE RESEARCH
8. EMERGENCY ROOM COMPLEX
9. WARDS 9 & 10
10. WARDS 5 & 6
11. POWER HOUSE
12. CENTRAL SUPPLY
13. MALNUTRITION BUILDING
14. WARDS 11 & 12
15. OLD KITCHEN
16. SCIENCE HALL
17. COBALT
18. WARDS 14A & 14B
19. WARDS 21 & 22
20. NURSERY
21. DIETARY BUILDING
22. LABORATORY
23. WARDS 17 & 18
24. WARDS 19 & 20
25. DORM 3
26. DORM 3 ANNEX
27. SOCIAL HALL
28. REHABILITATION MED. & WARDS 23 & 24
29. ORTHOPEDICS ANNEX
30. UP MAINTENANCE
31. CANCER INSTITUTE
32. REST HOUSE
33. DIRECTOR'S COTTAGE
34. TENNIS COURT
35. NURSES HOME
36. DORM 1
37. CHAPEL
38. REST HOUSE
39. WAITING SHED
40. GUARD HOUSE
41. PHARMACY
42. DISPENSARY
43. FAMILY PLANNING CENTER
44. ENGINEERING
45. TRANSPORTATION
46. MAINTAINANCE
47. SUPPLY STATION
48. PURCHASING
49. SAMP STUDENT HALL
50. DORMS
51. BASKETBALL COURT



PHILIPPINE GENERAL HOSPITAL FACILITY LAY OUT

ANNEX F

MAINTENANCE AND OTHER OPERATING EXPENDITURES

OF THE PGH

Incremental Requirements

Housekeeping	P 123,258.48
Office Supplies	62,396.16
Construction and Gasoline	88,372.24
Linen Materials	34,648.72
	<hr/>
TOTAL:	P 308,657.
	<hr/> <hr/>

ANNEX G

PROPOSED ADDITIONAL PERSONNEL
FOR THE PGH OPD

	<u>Position Title</u>	<u>Number</u>	<u>Annual Budget Requirements</u>
A.	Resident Staff		
1.	Resident Physician I	8	P 221,856
2.	Resident Physician II	8	221,856
3.	Resident Physician III	8	221,856
B.	Nursing Staff		
1.	Head Nurse	1	14,582
2.	Staff Nurse	26	325,166
3.	Clinic Clerk	9	79,488
4.	Nursing Attendant	3	23,976
5.	Institution Worker	3	20,664
C.	Administrative Staff		
1.	Public Assistant	1	10,260
2.	Clerk Typist	1	9,756
3.	Clerk	2	17,664
	TOTAL	70	P 1,167,064
		=====	=====

Based on existing salary rates

Source of Data : Budget Division, PGH

5. Minutes of Discussions

5-1 At the Time of Field Survey

MINUTES OF DISCUSSIONS
ON
THE BASIC DESIGN STUDY
ON
THE PROJECT FOR CONSTRUCTION
OF
THE OUT-PATIENT DEPARTMENT,
PHILIPPINE GENERAL HOSPITAL
IN
THE REPUBLIC OF THE PHILIPPINES

In response to the request made by the Government of the Republic of the Philippines for Grant Aid for the Project for Construction of the Out-Patient Department, Philippine General Hospital (hereinafter referred to as "The Project"), the Government of Japan decided to conduct a Basic Design Study on the Project and entrusted the Japan International Cooperation Agency (JICA) to send a Basic Design Study Team headed by Dr. Toru ISE, Managing Director, Experts Dispatch Services Division, International Medical Cooperation Department, National Medical Center, Ministry of Health and Welfare to the Philippines from March 16 to April 4, 1987.

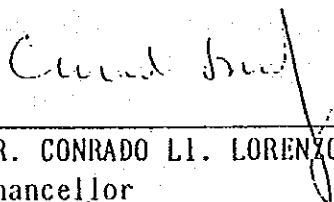
The Team had a series of discussions with the Authorities concerned of the Government of the Republic of the Philippines and conducted a field survey in Manila. As the result of the study, both parties have agreed to recommend to their respective Governments that the major points of understandings reached between them as attached herewith should be examined towards the realization of the Project.

Manila, March 23, 1987


DR. TORU ISE

Leader

The Basic Design Study Team
Japan International Cooperation
Agency (JICA)


DR. CONRADO LI. LORENZO, JR.

Chancellor

University of the Philippines Manila

ATTACHMENT

1. The objectives of the Project is to establish a new Out-Patient Department(OPD) of the Philippine General Hospital(PGH) which will provide an integrated function for medical services for out-patient care and medical education through construction of out-patient building, and supply and installation of medical equipment.
2. The Project site is located at the north-east side of New Central Block of the PGH, Manila City as seen in Annex I. The whole site area which is owned by the University of the Philippines System is 8,500 square meters.
3. The functions of the OPD are as follows:
 - (1) To provide the basic functions for an effective and efficient out-patient care of a daily 2, 000 ambulatory cases.
 - (2) To provide the teaching and training functions for future medical and health professionals.
 - (3) To provide the out-reached health services for example using ambulances.
 - (4) To undertake operation research for formulating health and medical care of the rural and urban areas in the Philippines.
4. The University of the Philippines System is responsible for the administration and execution of the Project.
5. The Japanese Study Team will convey to the Government of Japan the desire of the Government of the Republic of the Philippines that the former takes necessary measures to cooperate by providing the buildings and other items listed in Annex II within the scope of Japanese economic cooperation programme in grant form.
6. The Philippine side has understood Japan's Grant Aid System explained by the Team which includes a principal of use of a Japanese Consultant Firm, a Japanese General Contractor for the construction of building and a Japanese Supplier for the provision of medical equipment. 67

7. The Government of the Republic of the Philippines will take necessary measures listed in Annex III on condition that the Grant Aid would be extended to the Project.

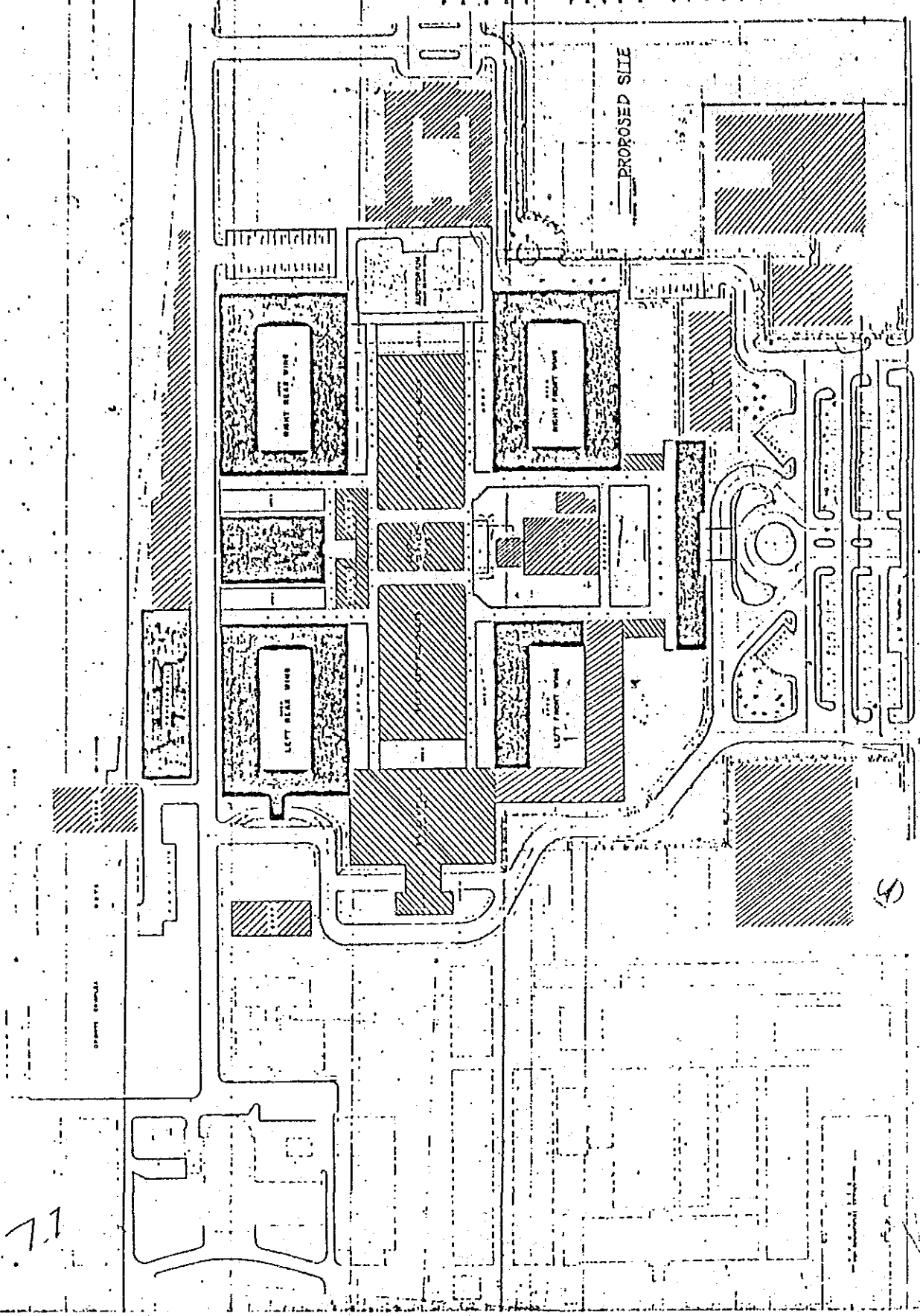
8. Both sides have confirmed that the Basic Design for the Project will be studied and designed based on the latest Master Plan of the PGH Expansion-Renovation Project (as attached in Annex I) presented and explained by the Philippine side.

ANNEX I

LEGEND:

A legend box containing several symbols used in the site plan: a hatched rectangle, a dashed rectangle, a solid rectangle, a rectangle with diagonal lines, a rectangle with horizontal lines, a rectangle with vertical lines, a rectangle with a grid pattern, and a circle with a dot.

PROPOSED SITE



DATE DEVELOPMENT PLAN

7.1

ANNEX II

THE REQUEST MADE BY THE GOVERNMENT OF THE REPUBLIC OF THE PHILIPPINES

1. Construction of the Out-Patient Department of the Philippine General Hospital with the facilities of the following sections;
 - (1) Medicine
 - (2) Surgery Clinic
 - (3) Pediatrics
 - (4) Obstetrics and Gynecology
 - (5) Orthopedics
 - (6) Otorhinolaryngology
 - (7) Ophthalmology
 - (8) Dental Clinic
 - (9) Rehabilitation
 - (10) Psychiatry
 - (11) Family Medicine
 - (12) Radiology
 - (13) Laboratory
 - (14) ECG
 - (15) Pharmacy
 - (16) CSSD
 - (17) Medical Record
 - (18) Medical Illustration/Graphic
 - (19) Medical Social Services
 - (20) Operating Complex
 - (21) Anesthesia Complex including Pain Clinic
 - (22) Engineering and Technical Services
 - (23) Administration Services

2. Provision of equipment and materials to the above mentioned facilities such as:
 - (1) Medical equipment
 - (2) Surgical equipment
 - (3) Gynecology and Obstetrics equipment
 - (4) Pediatric equipment
 - (5) Teaching equipment
 - (6) Others

71

ANNEX III

MAJOR UNDERTAKINGS TO BE TAKEN BY THE PHILIPPINE SIDE

1. To secure the site for the Project.
2. To clear, level and reclaim the site prior to the commencement of the construction.
3. To undertake incidental out-door work such as gardening, fencing gates and exterior lighting in and around the site.
4. To construct the access road to the site prior to the commencement of the construction as needed.
5. To provide facilities for distribution of electricity, water supply, telephone, drainage and other incidental facilities before the commencement of the Project.
 - (1) Electricity distributing line to the site;
 - (2) City water distribution main to the site;
 - (3) Drainage city main to the site;
 - (4) Telephone trunk line to the main distribution panel of building.
6. To provide general furnitures such as carpets, curtains, tables, chairs and others.
7. To bear commissions to the Japanese foreign exchange bank for the banking services upon the Banking Arrangement.
8. To take necessary measures for customs clearance of the materials and equipment brought for the Project at the port of disemberkation.
9. To exempt Japanese nationals from custom duties, internal taxes and other fiscal levies which may be imposed in the Republic of the Philippines with respect to the supply of the products and services under the Verified Contracts.
10. To accord Japanese nationals whose services may be required in connection with the supply of products and the services under the verified contract such facilities as may be necessary for their entry into the Philippines and stay therein for the performance of their work.

11. To maintain and use properly and effectively those facilities constructed and equipment purchased under the Grant.
12. To bear all the expenses other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and the installation of the equipment. *2/*

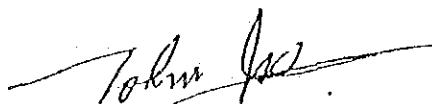
MINUTES OF DISCUSSIONS
ON
THE DRAFT REPORT OF THE BASIC DESIGN STUDY
ON
THE PROJECT FOR CONSTRUCTION
OF
THE OUT-PATIENT DEPARTMENT,
PHILIPPINE GENERAL HOSPITAL
IN
THE REPUBLIC OF THE PHILIPPINES

At the request of the Government of the Republic of the Philippines for Grant Aid for the Project for Construction of the Out-Patient Department, Philippine General Hospital(hereinafter referred to as "The Project"), the Government of Japan decided to conduct a Basic Design Study on the Project and entrusted the study to the Japan International Cooperation Agency (JICA) . JICA sent the Basic Design Study Team headed by Dr. Toru ISE, Managing Director, Experts Dispatch Services Division, International Medical Cooperation Department, National Medical Center, Ministry of Health and Welfare to the Philippines from March 16 to April 4, 1987.

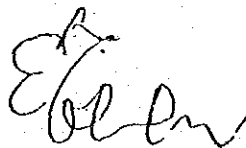
As the result of the survey and discussions, JICA prepared a Draft Final Report on the study and dispatched a Mission to explain and discuss the Report starting from June 15 to June 22, 1987.

Both parties had a series of discussions on the Report and have agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.

Manila, June 19, 1987



DR. TORU ISE
Leader
The Basic Design Study Team
Japan International Cooperation
Agency(JICA)



DR. ERNESTO G. TABUJARA
Officer-in-Charge
Office of the President
University of the Philippines System

ATTACHMENT

1. The Philippine side principally has agreed to the basic design proposed in the Draft Final Report (with minor but appropriate alterations in design, facilities and equipment, mutually agreed upon to be incorporated in the Final Report).
2. The Final Reports (10 copies in English) on the Project will be submitted to the Philippine side by the end of July, 1987.
3. The Philippine side understood the system of Japan's Grant Aid Programme and confirmed the arrangements to be taken by the Government of the Republic of the Philippines for the realization of the Project as agreed upon in the "Minutes fo Discussions" dated March 23, 1987.
4. The Government of the Republic of the Philippines will release the necessary budget at the proper time in conjunction with the Japanese side construction.

E. O. O.

J. J.

6. List of the Hospitals Visited

o Philippine Children's Medical Center

This is a typical Children's Hospital in the Philippines. with reinforced concrete structure and 2 stories.

It is divided into 6 wings; 3 wings for pay-patients and 3 wings for charity patients. Total floor area is approx. 70,000 m².

However, the shortage of medical equipment is a major concern, compared with its enormous space. Especially, equipment for pre-treatment and after treatment is not well maintained.

Patients of Out-patient Department: 150 to 180 persons/day

Patients of Emergency Department: 30 to 50 persons/day

o National Lung Center of the Philippines

It is of reinforced concrete structure and is composed of 2 blocks having 2 stories, 1 underground and a court yard. The lobby of 1st floor has a void space with top light. It is a very modern building.

Administration department is situated at 1st floor and uses Personal Computers for administrative affairs.

Although the medical equipment of which the running cost is expensive, is equipped, it is not effectively used. It is not helpful in designing OPD.

Patients of Out-patients Department: approx. 100 persons/day

Patients of Emergency Department: 15 to 20 persons/day

complete air conditioning system is adopted for overall buildings.

o National Kidney Institute

It is of reinforced concrete structure and is a hexagonal modern building having 2 stories, 1 underground and a court yard. The main objective of the medical treatment is to perform artificial dialysis by the transplantation of kidneys.

Out-patients: 200 to 300 persons/day

Number of operations for transplantation: approx. 50 cases/year

Using 12 units of nursing for kidney diseases, it gives artificial dialysis for 7 patients in a day. Central system is adopted for providing RO.

Air conditioning system is adopted for overall building.

o Quirino Memorial General Hospital

It is of reinforced concrete structure and is a rectangular building having 2 stories, central corridors. It is a prefectural hospital, as a medical center, located in Quezon city. Most of patients are charity ones. It has very poor medical equipemnt. However, the patients exceeding its capacity are accommodated and treated, by the devices and ideas of its staff. Partial medical equipment is equipped by the Grant Aid Assistance from JICA in 1986.

Its patients are similar to those of OPD, so it is very helpful in designing OPD.

Number of Out-patients: approx. 500 persons/ day

Operations executed: 5 cases/day

Number of beds: 200 beds of which the occupancy is more than 100 %;

1 bed can be shared by two persons.

Number of staff: 49 doctors

21 consultants

59 nurses

8 engineers for examination

o Makati Medical Center

It is of reinforced concrete structure and is a rectangular building having 8 stories, 1 underground and central corridors. It is a modern building situated in Makati Commercial Center area.

Air conditioning system is adopted for the main building.

Each doctor has a consultation room and treat only introduced patients.

The Out-pateient department is located in underground floor and charity patients can be consulted there.

Out-patient Department has a poor environment with a narrow space and natural ventilation system.

Number of patients: 100 persons/day

o Hospital of Manila

It is of reinforced concrete structure and is combined with rectangular floor having 4 stories, and central corridors.

7. Ground Surveying Data of the Project Site

The boring survey was performed at 4 points on the site of PGH, and its report was submitted. Among borings surveys at 4 points, 2 points of borings were carried out on the OPD prooject site and the rest was performed in the site of Central Block. Very loose sand exists with 5 to 6 m of layer thickness from the ground surface (N-value; 1 to 5). In the deeper layer, there exists silt or silty clay of which N-value is 1 to 30, proportionally to the deeper direction. There continuously exists very hard cohesive soil layers with approx. 50 of N-value, from G.L. -40.0 m. The boring plot plan, boring log and supposed ground section are shown as follows: Further, the plate loading tests were performed in the OPD site. So the results are shown as follows:

BORING LOG & GEOTECHNICAL DATA

PROJECT: PROCESSED PGM COMPLEX
 LOCATION: PGM TAILING WAREHOUSE
 GROUND SURFACE ELEVATION: 652.861 0

BORING NO: _____
 DRILLING METHOD: ROTARY SHIELD
 DATE COMPLETED: 04.10.2021

DESCRIPTION	GRAPH	DEPTH (M)	DIAMETER (M)	PERCENT	NO. OF SAMPLES PER 30 CM
VERY LOOSE BROWN SILTY FINE SAND with pebbles on top		0.00 - 2.80			
VERY LOOSE DARK GRAY SILTY FINE SAND with traces of shells		2.80 - 3.00			
VERY SOFT DARK GRAY SANDY SILT with traces of shells		3.00 - 10.00			
VERY SOFT GRAY SILTY CLAY with shells in big groups		10.00 - 12.00			
greenish brown to rusty brown VERY STIFF CLAY to SILTY CLAY		12.00 - 20.00			
yellowish		20.00 - 27.00			
olive yellow light gray with horizontal inclusions		27.00 - 30.00			
VERY STIFF olive green to dark gray CLAY with few yellowish inclusions and shells		30.00 - 40.00			
CLAY with hard yellowish inclusions and shells		40.00 - 42.00			
STIFF DARK GRAY SILTY CLAY with shells		42.00 - 45.00			
VERY STIFF GRAY CLAY		45.00 - 48.00			
HARD VERY STIFF HARD brownish yellowish		48.00 - 50.00			
CLAYEY material sometimes silty		50.00 - 52.00			

DESCRIPTION	GRAPH	DEPTH (M)	DIAMETER (M)	PERCENT	NO. OF SAMPLES PER 30 CM
with hard inclusions		0.00 - 33.00			
VERY DENSE SILT & SAND		33.00 - 40.00			
VERY DENSE ARGILLITE		40.00 - 41.00			
HARD Influenced silty CLAY		41.00 - 43.00			
HARD Influenced silty to sandy CLAYEY MATERIAL		43.00 - 45.00			
dark gray SILTSTONE and HARD clayey SILT		45.00 - 47.00			
HARD brownish to greenish SANDY CLAY		47.00 - 50.00			
VERY DENSE SAND		50.00 - 52.00			
HARD olive yellowish influenced material (SANDY CLAY to CLAY)		52.00 - 53.00			
VERY DENSE SILTY SAND to HARD TUFF in SANDSTONE		53.00 - 54.00			
HARD light brownish		54.00 - 56.00			
influenced sandy CLAY		56.00 - 57.00			
bluish HARD TUFF		57.00 - 58.00			
VERY DENSE SILTY SAND to SANDSTONE		58.00 - 59.00			
HARD brownish sandy SHALE		59.00 - 61.00			
yellowish HARD TUFF		61.00 - 62.00			
HARD greenish to brownish influenced sandy SHALE		62.00 - 63.00			
gray SILTSTONE / SANDSTONE		63.00 - 64.00			
END OF BOREHOLE AT 70.40 M		70.40			

BORING LOG & GEOTECHNICAL DATA									
PROJECT		PHILIPPINE GENERAL HOSPITAL		TAYT AVENUE, MANILA					
BOREHOLE NO.		SURFACE ELEVATION		Ground Level					
METHOD OF INVESTIGATION		Rotary Drilling & NSPT		DATE Dec. 27, 1946					
DEPTH (m)	DESCRIPTION	GRAPH	DEPTH (m)	MC	LL	PL	PI	TEST NO.	BLOWS PER 30 cm.
0		W A S K I N G							
0.48	Very soft grey clayey silt with traces of shells throughout		0	4.8				N1	
0.42			0	4.2				N2	
0.46			0	4.6				N3	
1.20	From 10 to 12 cm. brown and yellow clay		12	0				N4	
1.20	Soil is very stiff green to light olive green silty clay - clay		12	4.2	86	35	51	N5	
1.6			16					N6	
2.7	From brown to rusty sandy silt with some pebbles		27	2.9				N7	
2.8			28					N8	
3.0	Very stiff yellowish with greenish rusty clay		30	4.4	146	54	92	N9	
3.6			36					N10	
4.4	Hard brown to rusty clayey silt - silt with some fine sand		35	4.4	84	64	20	N11	
5.8	Siltstone		58					N12	
29.40			29	4.0				N13	
34.48	Hard brown to dark brown clayey silt with shales becoming rare		34	4.8	87	65	22	N13	

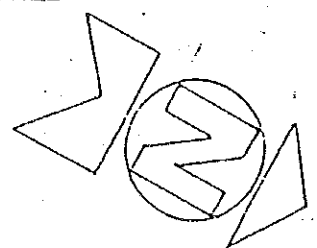
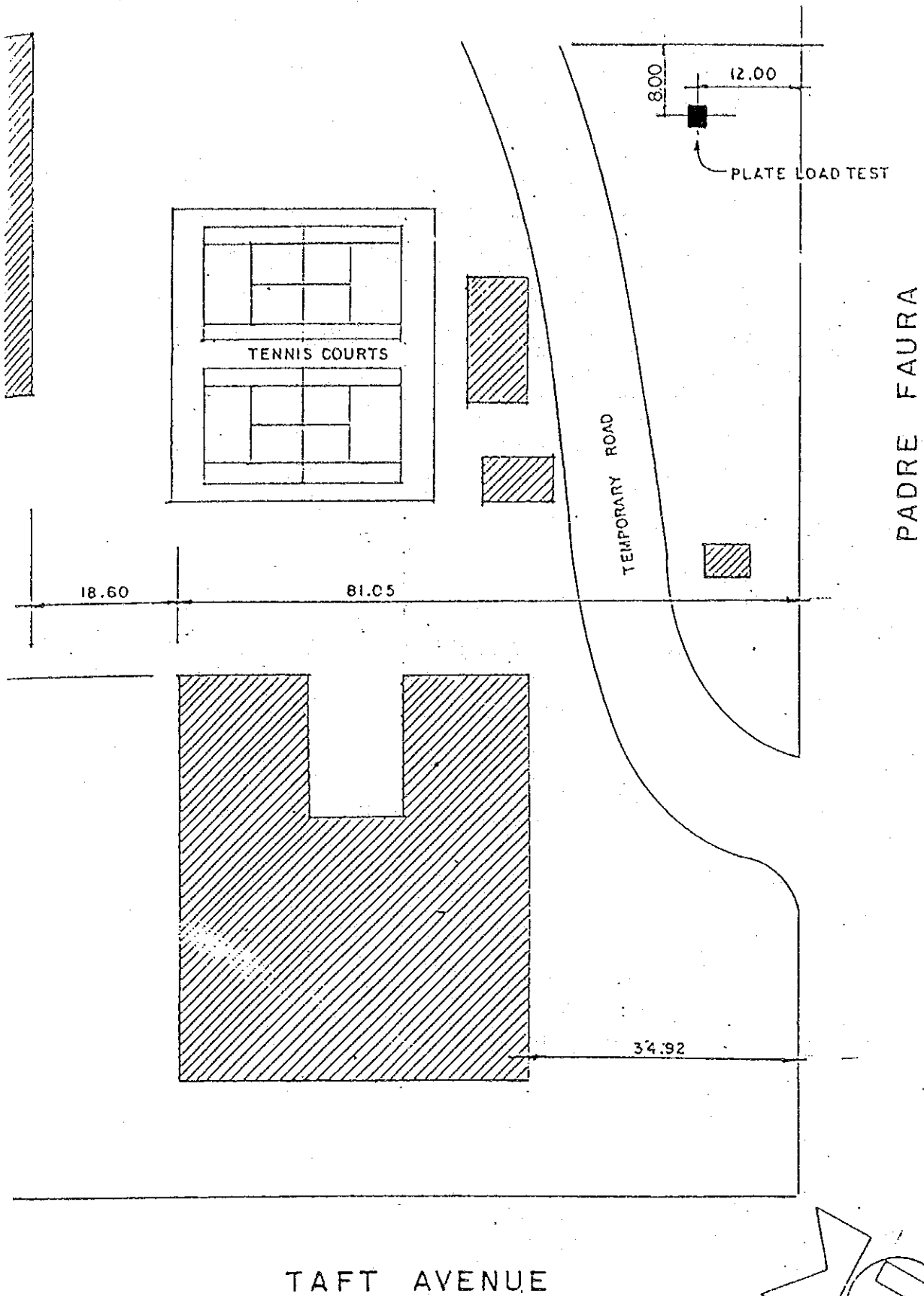
LEGEND: SHELBY NSPT CORING WATER TABLE

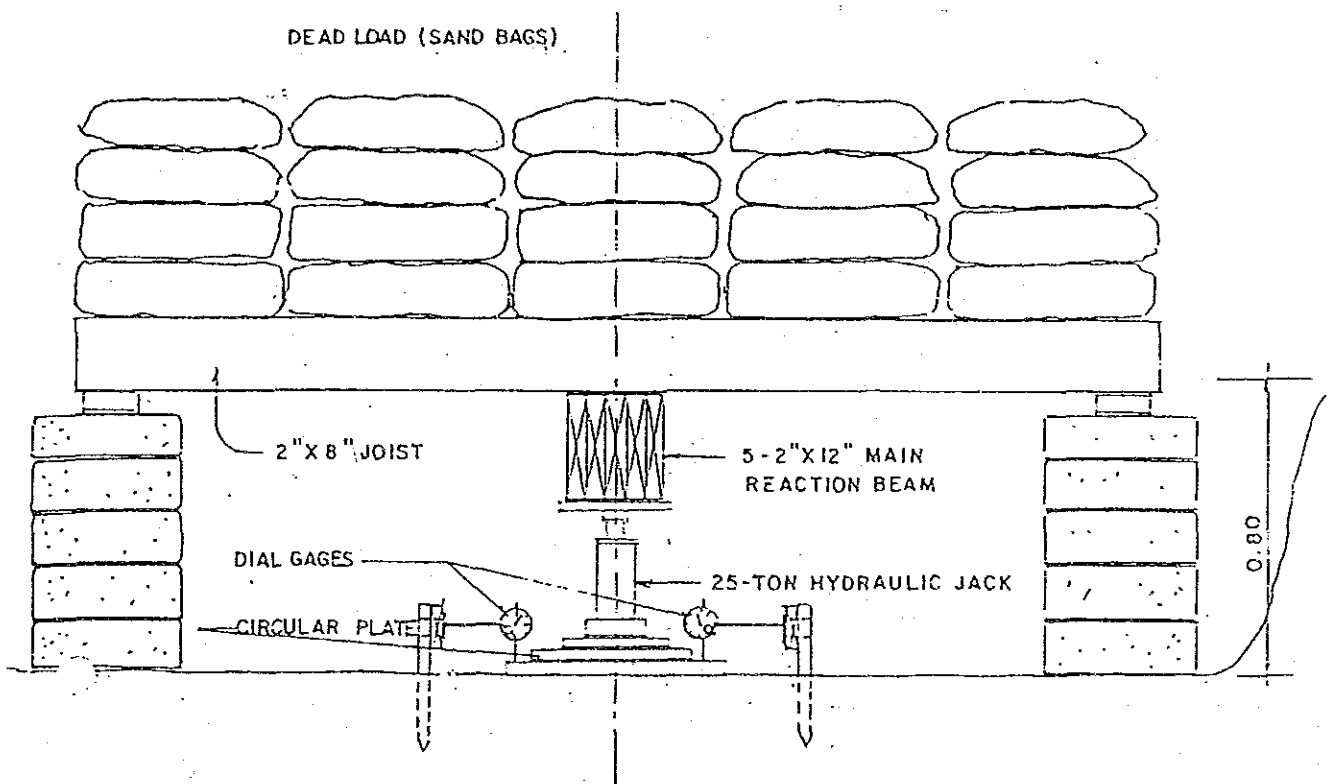
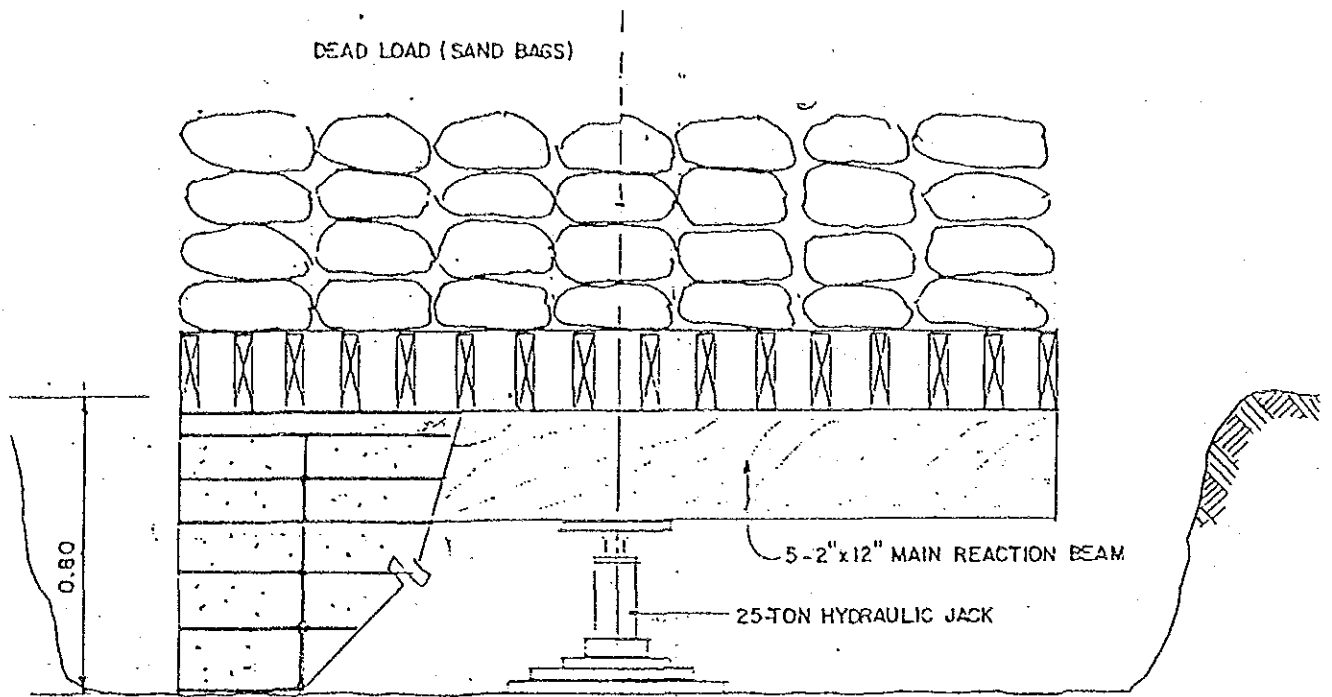
DEPTH (m)	DESCRIPTION	GRAPH	DEPTH (m)	MC	LL	PL	PI	TEST NO.	BLOWS PER 30 cm.
37	Hard brown to dark brown clayey silt. MH		37	34				N14	
57			57	4.0				N15	
34	Very dense sand grain to bone well cemented fine SAND		34	31				S5	
31	Greenish to bluish argillaceous to brownish gray of different type of rock masses, well cemented		31	22.2				N16	
30	Intense grey interbedded coarse and fine SAND cemented		30	11.9				N17	
47	Grey argillaceous fine SAND - SANDSTONE & SILTSTONE greens becoming coarser with some pebbles		47						19.0
47	Light green SILTSTONE		47						
51	Dark grey to black very fine SAND with some cement		51						
51	Black SILTSTONE with some sand		51	43					14.27
52	Dark grey to black very fine SAND interbedded with silt cemented		52	32					15.52
61			61						16.39
61	Black, very fine, SANDSTONE		61	27					18.89
62			62	4.2					15.0
63	Pinkish green, fine to brown, micaceous SILT SAND and CLAY cemented with material becoming massived and cemented		63						28.25
63			63	33					
65			65						13.75
65	Stratified alternate layers of well cemented SILT SAND SANDSTONE SANDSTONE and CLAYSTONE vertical range of strength is very low		65	41					17.57
70	END OF BOREHOLE		70						

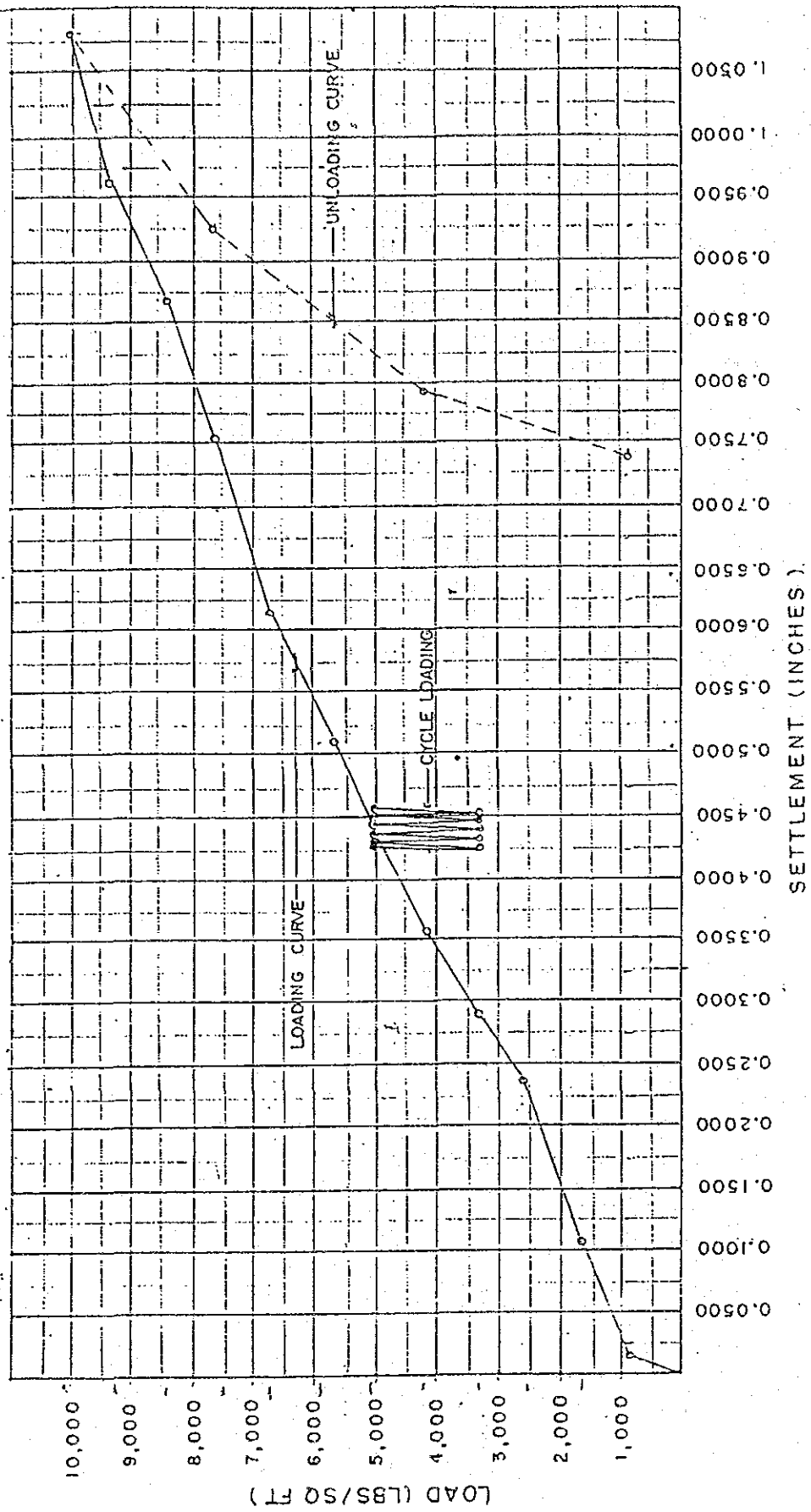
LEGEND: SHELBY NSPT CORING WATER TABLE

BORING LOG & GEOTECHNICAL DATA									
PROJECT PHILIPPINE GENERAL HOSPITAL					TAYT AVENUE MANILA				
BOREHOLE NO. _____					SURFACE ELEVATION Ground Level _____				
METHOD OF INVESTIGATION Rotary Drilling & NEPT					DATE Dec. 25, 1956				
DESCRIPTION	GRAPH	DEPTH (m)	W.C. (m)	LL (m)	PL (m)	PI (m)	TEST NO.	BLOWS PER 30 cm.	
Dark grey silty SAND with some gravel		0.50							
Dark grey silty SAND with shells		1.8							
Dark grey silty SAND with shells		2.15	45				N1		
Very soft grey silty SAND with traces of crush shells		0.56					N2		
		0.58					N3		
		0.58					N4		
Medium to high greenish silty CLAY		8.52					N5		
Dense brown to rusty fine to medium SAND		47.34					N6		
		36					N7		
CL		24.50					N8		
		27					N9		
Very stiff light brown sometimes rusty and grey silty SAND		30.53					N10		
		32					N11		
Clay becoming numerous		33.55					N12		
Very stiff dark brown silty CLAY		38.52	99	40	59		N13		
		30.47					N14		
Color changed this section, to grey		41					N15		
		47.50					N16		
Very stiff to hard grey silty CLAY consolidated with rather indistinct when press.		46.49	91	39	52		N17		
		80.41					N18		
		80					N19		
SM		80							

DESCRIPTION	GRAPH	DEPTH (m)	W.C. (m)	LL (m)	PL (m)	PI (m)	TEST NO.	BLOWS PER 30 cm.	
Dense to hard dark grey heavy SILT SM		81.36					N20		
		68					N21		
		84.37							
Very Dense dark grey to brown cemented SAND and SILT		29							
Brown medium to fine SAND		37							
Brown to dark brown cemented SAND and SILT		32							
coarse sand and gravel cemented to 120 m.		41							
weakly bonded brownish grey to unconsolidated Greenish sandy SILT		45							
bleaching hard		43.0							
Very Dense dark brown SILT sandy SILT sometimes cemented		37							
		43.50							
Sand becoming less and more changing from light brown to grey		57							
Stiff yellowish silty CLAY - CLAY		78	34	44					
		53							
Very Dense brown-greenish silty SAND		55	41						
		59							
Hard mottled yellow green and brown SILT with some fine sand		35							
		41.8							
Very Dense greenish to yellowish sandy SILT - silty siltstone to coarse SAND		28							
Hard mottled yellow green sometimes impregnated with black SILT - silty CLAY		76	33	45					
		41							
Very Dense to hard alternate layers of silty cemented SAND / SILT sometimes claystone with grains ranging from medium to coarse for sand		30							
		39							
		34							
		28							
Hard well-sorted cemented SILT sometimes claystone interbedded by very thin fine beds with laminae and will become numerous in the lower part. Color ranging from yellow-green to dark green with lamination of white.		52	47						
		20.50							
END OF BOREHOLE									







LOAD - SETTLEMENT CURVE

J. M. GARCIA & ASSOCIATES

Engineers • Architects • Consultants
51 Buendia Ave., Makati, M. M.
Tel. No. 87-51-57

PROJECT <u>THE QUI-PATIENT DEPT., PGH</u> LOCATION <u>Padre Faura, PGH Compound</u> SUPERVISOR <u>J. E. GASTLE</u> RECORDER <u>G. P. SUAN</u>	DATE STARTED <u>April 28, 1987</u> DATE COMPLETED <u>April 30, 1987</u> PLATE LOAD TEST NO. <u>U</u> PILE DESIGNATION NO. _____	JOB NO. _____ SHEET NO. <u>1</u> OF <u>6</u> PILE TESTED _____
--	--	--

DATE	TIME	LOAD INCREMENT (lbs)	TOTAL LOAD (lbs)	GAGE READING BEFORE LOADING (Left)	GAGE READING BEFORE LOADING (Right)	GAGE READING AFTER LOADING (Left)	GAGE READING AFTER LOADING (Right)	TIME INTERVAL (hrs)	SETTLEMENT	TOTAL CUMULATIVE	REBOUND	REMARKS
4-28-87	1:30	2650 lbs	2650 lbs	0.957	0.947	0.978	0.978		0.0330	0.0330		265.51 DS
	:40					0.917	0.915		0.0010	0.0340		
	:50					0.916	0.915		0.0005	0.0345		
	2:00					0.915	0.915		0.0005	0.0350		
	:10					0.915	0.915		0	0.0350		
	:20					0.915	0.915		0	0.0350		
	2:30					0.915	0.915		0	0.0350		
	2:37	2650 lbs	5300 lbs			0.877	0.905		0.0265	0.1085		468.04 DS
	:40					0.872	0.882		0.0040	0.1130		
	:50					0.871	0.795		0.0020	0.1150		
	3:00					0.870	0.795		0.0010	0.1160		
	:10					0.870	0.792		0.0005	0.1165		
	:20					0.870	0.795		0.0005	0.1170		
	3:30					0.870	0.796		0	0.1170		
	3:37	2650 lbs	7950 lbs			0.800	0.850		0.0065	0.2235		2530.50 DS
	:40					0.790	0.802		0.0110	0.2345		
	:50					0.789	0.825		0.0065	0.2380		
	4:00					0.788	0.827		0.0020	0.2400		
	:10					0.787	0.830		0.0015	0.2415		
	:20					0.785	0.828		0.0015	0.2430		
	4:30	2650 lbs	10600 lbs			0.785	0.822		0.0005	0.2435		137.00 DS
	:40					0.755	0.820		0.0035	0.2470		
	:50					0.755	0.800		0	0.2470		
	5:00					0.755	0.820		0.0005	0.2475		
	:10					0.756	0.825		0.0005	0.2480		
	:20					0.756	0.825		0	0.2480		
	:30					0.756	0.825		0	0.2480		

Note: Area of 24" RO. bearing Plate = 3.14 Ft² Each increment, Load is 2650 lbs = 843.5 lbs/Ft.sc.
3.14 Ft.sc.

J. M. GARCIA & ASSOCIATES

Engineers • Architects • Consultants
51 Buendia Ave., Makati, M. M.
Tel. No. 87-51-57

PROJECT <u>THE QUI-PATIENT DEPT., PGH</u> LOCATION <u>Padre Faura, PGH Compound</u> SUPERVISOR <u>J. E. GASTLE</u> RECORDER <u>G. P. SUAN</u>	DATE STARTED <u>April 28, 1987</u> DATE COMPLETED <u>April 30, 1987</u> PLATE LOAD TEST NO. <u>1</u> PILE DESIGNATION NO. _____	JOB NO. _____ SHEET NO. <u>2</u> OF <u>4</u> PILE TESTED _____
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DATE	TIME	LOAD INCREMENT (lbs)	TOTAL LOAD (lbs)	GAGE READING BEFORE LOADING (Left)	GAGE READING BEFORE LOADING (Right)	GAGE READING AFTER LOADING (Left)	GAGE READING AFTER LOADING (Right)	TIME INTERVAL (hrs)	SETTLEMENT	TOTAL CUMULATIVE	REBOUND	REMARKS
4-28-87	5:30	2650 lbs	13,250 lbs	0.756	0.825	0.678	0.805		0.0275	0.3595		1217.61 DS
	:40					0.677	0.801		0.0015	0.3610		
	:50					0.677	0.803		0	0.3610		
	6:00					0.676	0.801		0.0005	0.3615		
	:10					0.676	0.801		0	0.3615		
	:20					0.675	0.800		0.0110	0.3625		
	:30					0.675	0.800		0.0015	0.3640		
	6:40	2650 lbs	15,900 lbs			0.672	0.808		0.0005	0.3645		
	:50					0.600	0.825		0.0735	0.4380		5061.13 DS
	7:00					0.597	0.822		0.0015	0.4395		
	:10					0.596	0.822		0.0005	0.4400		
	:20					0.596	0.822		0	0.4400		
	:30					0.596	0.822		0	0.4400		
	7:40					0.596	0.822		0.0010	0.4410		
	:45	15,300 lbs	29,600 lbs			0.596	0.822		0.0015	0.4425		1179.00 DS
	:50	15,300 "	44,900 "			0.595	0.815		0.0065	0.4490		1806.50
	8:00	15,300 "	60,200 "			0.594	0.815		0.0005	0.4495		1377.00
	:10	15,300 "	75,500 "			0.590	0.816		0.0025	0.4520		1806.50
	:20	15,300 "	90,800 "			0.589	0.815		0.0010	0.4530		1377.00
	:30	15,300 "	106,100 "			0.587	0.817		0.0015	0.4545		1806.50
	:40	15,300 "	121,400 "			0.585	0.815		0.0015	0.4560		1377.00
	:50	15,300 "	136,700 "			0.583	0.815		0.0040	0.4510		1806.50
	9:05	15,300 "	152,000 "			0.585	0.815		0.0005	0.4515		1377.00
	9:10	15,300 "	167,300 "			0.579	0.813		0.0035	0.4550		1806.50
	:20	15,300 "	182,600 "			0.493	0.800		0.0540	0.5090		5004.65 DS
	:30					0.495	0.800		0.0035	0.5110		
	:40					0.497	0.800		0.0005	0.5115		

J. M. GARCIA & ASSOCIATES

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Tel. No. 87-51-57

PROJECT INC. <u>OUT-PATIENT DEPT. BLDG.</u> LOCATION <u>Padre Laura, PGH Compound</u> SUPERVISOR <u>J. M. GARCIA</u> RECORDER <u>S. F. BUAN</u>	DATE STARTED <u>April 26, 1987</u> DATE COMPLETED <u>April 30, 1987</u> PLATE LOAD TEST NO. <u>1</u> PILE DESIGNATION NO. _____	JOB NO. <u>1</u> SHEET NO. <u>1</u> OF <u>1</u> PILE TESTED _____
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DATE	TIME	LOAD INCREMENT (tons)	TOTAL LOAD (tons)	GAGE READING BEFORE LOADING Left	GAGE READING BEFORE LOADING Right	GAGE READING AFTER LOADING Left	GAGE READING AFTER LOADING Right	TIME INTERVAL (min.)	SETTLEMENT	TOTAL CUMULATIVE	REBOUND	REMARKS
4-26-87	0:50			C. 482	D. 390	C. 487	D. 397		0	C. 513		
	10:00					C. 495	D. 397		C. 0010	C. 512		
	:10					C. 485	D. 390		0	C. 512		
	10:20	2550 lbs	21,200 lbs			C. 484	D. 396		C. 0005	C. 513		
	:30					C. 360	D. 306		C. 0025	C. 515		6748.1785
	:45					C. 357	D. 306		C. 0020	C. 517		
	:55					C. 357	D. 306		0	C. 517		
	11:00					C. 356	D. 306		C. 0005	C. 518		
	:10					C. 356	D. 306		0	C. 518		
	:25					C. 355	D. 307		C. 0010	C. 519		
	:45					C. 355	D. 307		0	C. 519		
	01:30	2550 lbs	23,850 lbs			C. 202	D. 172		C. 0115	C. 260		7581.6905
	:40					C. 200	D. 172		C. 0015	C. 262		
	:55					C. 200	D. 172		0	C. 262		
	02:00					C. 199	D. 172		C. 0005	C. 263		
4-26-87	:10					C. 199	D. 172		0	C. 263		
	:20					C. 199	D. 172		0	C. 263		
	:30					C. 199	D. 172		0	C. 263		
	:40					C. 197	D. 172		C. 0015	C. 265		
	12:50					C. 195	D. 172		C. 0005	C. 265		
	12:55	2550 lbs	26,500 lbs			C. 096	D. 072		C. 1035	C. 060		8446.2105
	1:00					C. 084	D. 072		C. 0015	C. 070		
	:10					C. 083	D. 072		C. 0005	C. 070		
	:20					C. 083	D. 072		0	C. 071		
	:30					C. 083	D. 072		0	C. 071		
	:40					C. 083	D. 072		0	C. 071		
	1:50					C. 083	D. 072		0	C. 071		

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PROJECT INC. <u>OUT-PATIENT DEPT. BLDG.</u> LOCATION <u>Padre Laura, PGH Compound</u> SUPERVISOR <u>J. M. GARCIA</u> RECORDER <u>S. F. BUAN</u>	DATE STARTED <u>April 29, 1987</u> DATE COMPLETED <u>April 30, 1987</u> PLATE LOAD TEST NO. <u>1</u> PILE DESIGNATION NO. _____	JOB NO. <u>1</u> SHEET NO. <u>6</u> OF <u>6</u> PILE TESTED _____
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DATE	TIME	LOAD INCREMENT (tons)	TOTAL LOAD (tons)	GAGE READING BEFORE LOADING Left	GAGE READING BEFORE LOADING Right	GAGE READING AFTER LOADING Left	GAGE READING AFTER LOADING Right	TIME INTERVAL (min.)	SETTLEMENT	TOTAL CUMULATIVE	REBOUND	REMARKS
4-29-87	1:50AM	2550 lbs	29,150 lbs	C. 083	D. 072	C. 092	D. 082		C. 0010	C. 060		5,278.73 PSF
	2:00					C. 090	D. 082		C. 0015	C. 065		
	:15					C. 090	D. 082		C. 0005	C. 066		
	:20					C. 090	D. 082		C. 0005	C. 066		
	:30					C. 090	D. 082		0	C. 066		
	:40					C. 090	D. 082		C. 0005	C. 067		
	2:50					C. 090	D. 082		0	C. 067		
	2:55	2550 lbs	31,800 lbs			C. 067	D. 060		C. 0215	C. 086		11,122.2505
	3:00					C. 066	D. 060		C. 0005	C. 087		
	:10					C. 066	D. 059		0	C. 087		
	:20					C. 066	D. 059		C. 0015	C. 088		
	:30					C. 065	D. 059		C. 0005	C. 088		
	:40					C. 065	D. 059		C. 0005	C. 088		
	3:50					C. 064	D. 059		0	C. 088		
	3:50	-7950 lbs	23,850			C. 026	D. 026		C. 1640	C. 025		7581.6905
	4:00					C. 026	D. 026		0	C. 025		
	:15					C. 026	D. 026		0	C. 025		
	14:20					C. 026	D. 026		0	C. 025		
	14:25	-10,600 lbs	13,250 lbs			C. 157	D. 152		C. 1305	C. 204		1431.6105
	:30					C. 157	D. 152		0	C. 204		
	:40					C. 157	D. 152		0	C. 204		
	14:50					C. 157	D. 152		0	C. 204		
	14:55	10,600 lbs	23,850 lbs			C. 211	D. 207		C. 0535	C. 761		1471.5705
	15:00					C. 211	D. 207		0	C. 761		
	:10					C. 211	D. 207		0	C. 761		
	:20					C. 211	D. 207		0	C. 761		
4-30-87	17:24 P.M.					C. 212	D. 208		C. 0310	C. 760		

8. Water Quality Survey Data

8-1. National Standards for Drinking Water, 1978

Parameter	Max. Permissible	Parameter	Max. Permissible
Turbidity	5 units	Organic Chemicals	
Color	5 unit (s) **	Synthetic	
Odor	Unobjectionable	Detergents(MBAS)	0.5
Threshold odor number	Not more than 3	Oil & Grease	Nil
Taste	Unobjectionable		
		Persistent Pesticides	
Total Solids	500 (s)	Aldrin	0.001
pH	6.5 - 8.5	DDT	0.05
Phenolic substances	0.001	Dieldrin	0.001
		Chlordane	0.003
		Endrin	0.0002
Radioactive Subs.		Heptachlor	0.0001
Gross Alpha	3 pCi/l	Lindane	0.004
Gross Beta	30 pCi/l	Toxaphane	0.005
		Methoxychlor	0.1
Trace Elements		2,4-D	0.1
Arsenic	0.05	2,4,5-T	0.01
Barium	1.0	PCB	Nil
Cadmium	0.01		
Chromium	0.05	Other Chemicals	
Copper	1.0	Calcium	75
Cyanide	0.05	Chloride	200 (s)
Fluoride	0.6	Magnesium	50 (s)
Iron	0.3 - 1.0 (s)	Nitrate (NO ₃)	30
Lead	0.05	Sulfate	200 (s)
Manganese	0.5 (s)	Hydrogen sulfide	0.05 (s)
Mercury	0.002		
Selenium	0.01		
Zinc	5.0 (s)		

* All units are in mg/l unless, otherwise stated.

** (s) - Secondary standards ; compliance with the standard and analysis are not obligatory.

8-2. Sample Water Analysis of Tap Water at Herran-Taft
Near PGH of February 9, 1987

pH	6.90	units
Taste	bland	
Color	5.00	units
Odor	nil	units
Turbidity	3.55	units
T - Alkalinity	56.00	mg/L
Bicarbonates	68.30	mg/L
Acidity	6.00	mg/L
Free CO ₂	5.30	mg/L
Chlorides	6.00	mg/L
Iron	0.05	mg/L
Hardness	56.00	mg/L
Residual Chlorine	0.30	mg/L

8-3. Sample Water Analysis of Balara Filtration Plant, Quezon City

	August, 1986 (Ave.)		January, 1987 (Ave.)	
	Raw	Finished	Raw	Finished
PH	7.36	6.92	7.34	7.16
Turbidity	25.56	2.53	7.06	2.77
Acid	7.39	9.29	5.32	4.88
Alkalinity	44.34	38.67	59.69	56.54
Hardness	45.75	42.90	51.59	52.0
Chlorides	6.04	6.98	8.74	11.41
Iron	0.1	0.1	0.09	0.08
Residual Chlorine	-	0.76	-	0.75
Remarks	Rainy Season		Dry Season	

9. Medical Statics Data

	Estimate			Targets			Annual average	
	1986	1987	1988	1989	1990	1991	1992	1987-92
POPULATION								
Total population level (million persons) ^a	56.0	57.4	58.7	60.1	61.5	62.9	64.3	
Population growth rate (%)	2.44	2.41	2.38	2.34	2.30	2.26	2.21	2.32
Urban population (share to total population)	40.5	41.0	41.6	42.1	42.7	43.2	43.8	42.7 ^b
Rural population (share to total population)	59.5	59.0	58.4	57.9	57.3	56.8	56.2	53.3
Population density (persons/sq.km.)	186.7	191.2	195.7	200.3	204.9	209.6	214.2	202.7
Health								
Life expectancy (in years) ^a	63.4	63.7	64.0	64.3	64.6	64.9	65.2	64.3
Crude birth rate (per 1,000 population) ^a	31.7	31.3	30.8	30.3	29.8	29.2	28.6	30.0
Crude death rate (per 1,000 population) ^a	7.8	7.6	7.5	7.4	7.2	7.1	7.0	7.3
Infant (below 1 year) mortality rate (per 1,000 live birth) ^a	55.5	54.2	52.9	51.6	50.3	49.0	47.8	51.0
Child (aged 1-4) mortality rate (per 1,000 population)	4.9	4.7	4.5	4.3	4.1	3.9	3.7	4.2
Maternal mortality rate (per 1,000 live birth)	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.8
Nutrition								
Percentage of preschool children with weight less than 75% of standard weight-for-age ^b	21.7	20.3	18.8	17.4	16.0	14.5	13.0	16.7
Percentage of schoolchildren aged 7-10 years old with weight less than 90% of standard height-for-age ^c	13.1	12.7	12.3	11.8	11.3	10.8	10.3	11.5
Percentage of schoolchildren aged 7-10 years old with weight less than 75% of standard weight-for-age ^c	14.1	13.2	12.2	11.2	10.3	9.4	8.4	10.8
								(growth rate)
Health Infrastructure Program								
Hospital bed requirement (in '000)	95.5	101.0	106.5	112.0	117.5	123.0	128.5	4.9
Ratio to population	1:581	1:570	1:554	1:539	1:527	1:515	1:504	-
RHU requirement	2,041	2,226	2,401	2,566	2,721	2,866	3,001	6.2
Ratio to population	1:27,507	1:25,852	1:24,563	1:23,549	1:22,747	1:22,114	1:21,618	-
BHS requirement	7,991	8,065	8,164	8,198	8,257	8,311	8,360	0.7
Ratio to population	1:7,026	1:7,135	1:7,224	1:7,371	1:7,496	1:7,626	1:7,761	-
Manpower Development Program								
No. of physicians	8,965	9,430	9,918	10,431	10,971	11,539	12,137	5.2
Ratio to population	1:6,098	1:5,939	1:5,783	1:5,761	1:5,604	1:5,448	1:5,294	-
No. of nurses	10,705	10,994	11,290	11,594	11,907	12,228	12,558	2.7
Ratio to population	1:5,107	1:5,094	1:5,080	1:5,183	1:5,163	1:5,141	1:5,117	-
No. of midwives	9,903	10,015	10,129	10,244	10,360	10,377	10,596	1.1
Rate to population	1:5,520	1:5,592	1:5,662	1:5,868	1:5,934	1:6,001	1:6,064	-

10. PGH Financial Data

10-1 Actual Budgetary Hospital Management Cost

University of the Philippines Manila
ACCOUNTING SERVICES DIVISION

Statement of Expenditures by Unit
December, 1986

Unit : Philippine General Hospital

	To Date Last Year	
	General Fund	Revolving Fund
1) Personal Services		
Salaries	30,192,281.74	
Incentive	6,632,245.78	
Salary Adjustment Fund/NCC 27,35	4,820,860.52	
Salary Adjustment Fund/NCC 41	-	
Commutation	1,235,041.99	
Wages	922,108.07	
Training & Personnel Improvement	52,554.07	
Honorarium		
Consultants	73,787.65	
Allowances		
Representation & Transportation Allow.	114,854.68	
Hazard Pay	68,257.41	
Difficulty Pay	93,142.54	
Incentive	200,899.39	
Union and Laundry	1,510,783.54	
Subsistence	251,340.00	
Night Work Diff.	75,477.15	
Bonus/13th Month Pay	5,872,964.42	
Overtime Pay	-	
Cost of Living Allowance	8,578,740.05	
COLA/NCC 41	-	
SUB-TOTAL	60,695,339.00	0.00
2) Maintenance & Operating Expenses		
Traveling - Foreign	1,200.00	
Local	2,942.40	
Telephone	62,638.08	688,395.86
Telegram & Stamps	2,000.00	
Transportation	4,000.00	
Security Services	79,090.00	674,529.97
Laundry Services	212,154.23	879,292.40
Janitorial Services	18,499.36	
Repair and Maintenance	5,222,901.27	252,044.95
Subscriptions	690.07	1,561.64
Fidelity Bound Premiums	3,992.22	4,622.84
Insurance Premiums	7,695.66	1,715.00
Fees & Licenses	-	4,237.00
Vehicle Registration	10,500.00	-
Advertising & Publication	-	19,459.00
Printing & Binding	20,029.90	16,354.55

	To Date Last Year	
	General Fund	Revolving Fund
Board & Lodging	7,032.00	25,744.90
Computer Usage	10,000.00	27,710.02
Xerox, Maintenance Service & Others	220,596.64	39,128.82
Drugs & Medicines	4,140,644.50	488,633.30
Chemicals & Reagents	1,718,473.37	-
Medical & Laboratory Supplies	4,472,769.17	34,888.07
X-ray Films	921,907.43	-
Oxygen & Derivatives	6,350,636.67	-
Foodstuffs	3,905,277.96	235,051.62
Commissary Supplies	1,177,513.73	-
Subsistence	1,977,260.28	-
Housekeeping Supplies	640,242.91	44,012.42
Office Supplies	918,034.46	162,943.25
Construction & Other Maint. Supplies	504,788.55	194,570.25
Linen Materials	838,662.50	-
Gas	117,018.05	449,620.94
Semi- Expendable Supplies	-	-
Other Express	2,407.50	180.00
Rents	349,891.52	27,318.72
Loan Repayment	-	-
Water	2,040,339.27	2,500,887.05
Light	334,168.04	362,845.67
Gasoline	270,228.44	60,465.18
Repairs & Servicing of Motor Vehicles	3,745.00	792.00
Spare Parts for Motor Vehicles	86,658.82	36,059.58
Representation Expenses	7,380.00	-
SUB-TOTAL	36,664,000.00	7,233,095.00
Equipment	-	100,000.00
Building & Structure Outlay	751,041.00	-
TOTAL CAPITAL OUTLAY	751,041.00	100,000.00
GRAND TOTAL	98,110,380.00	7,333,095.00

10-2 Average Payroll Amount

1. Physicians	
1.1 Medical Consultants	P 2,753,088.00
1.2 Resident Physicians	5,608,800.00
SUB-TOTAL	8,361,888.00

2. Nurses	
2.1 Nurse Supervisor	41,292.00
2.2 Head Nurse	237,612.00
2.3 Staff Nurse	390,612.00
2.4 Nursing Attendant	234,012.00
SUB-TOTAL	903,528.00

3. Clerk	156,336.00
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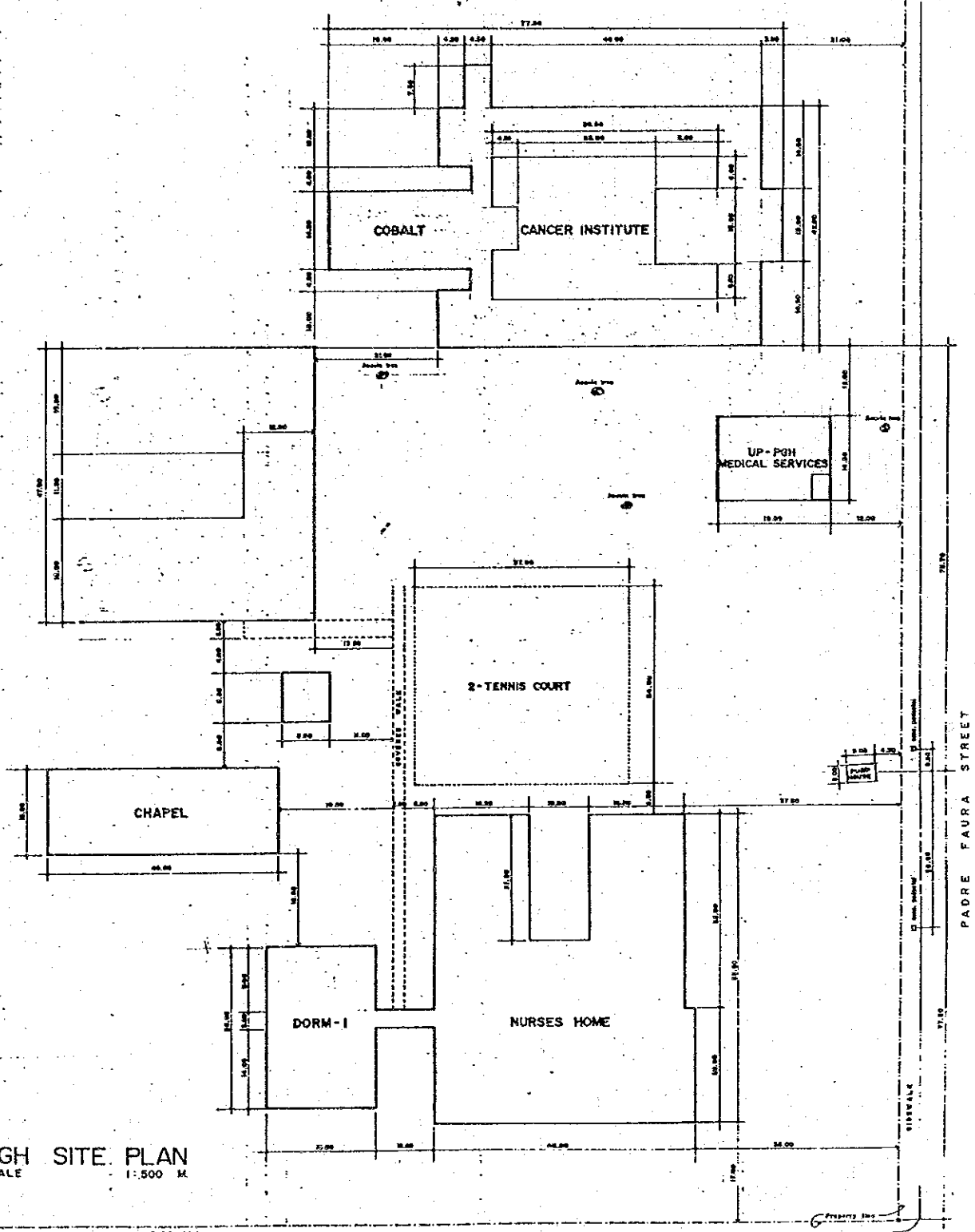
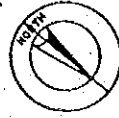
4. Other Personnel (Institutio Worker)	178,248.00
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GRAND TOTAL (for OPD Personnel)	P 9,600,000.00
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10-3 Additional Requirement for The New OPD
 Philippine General Hospital
 Department of Family Medicine

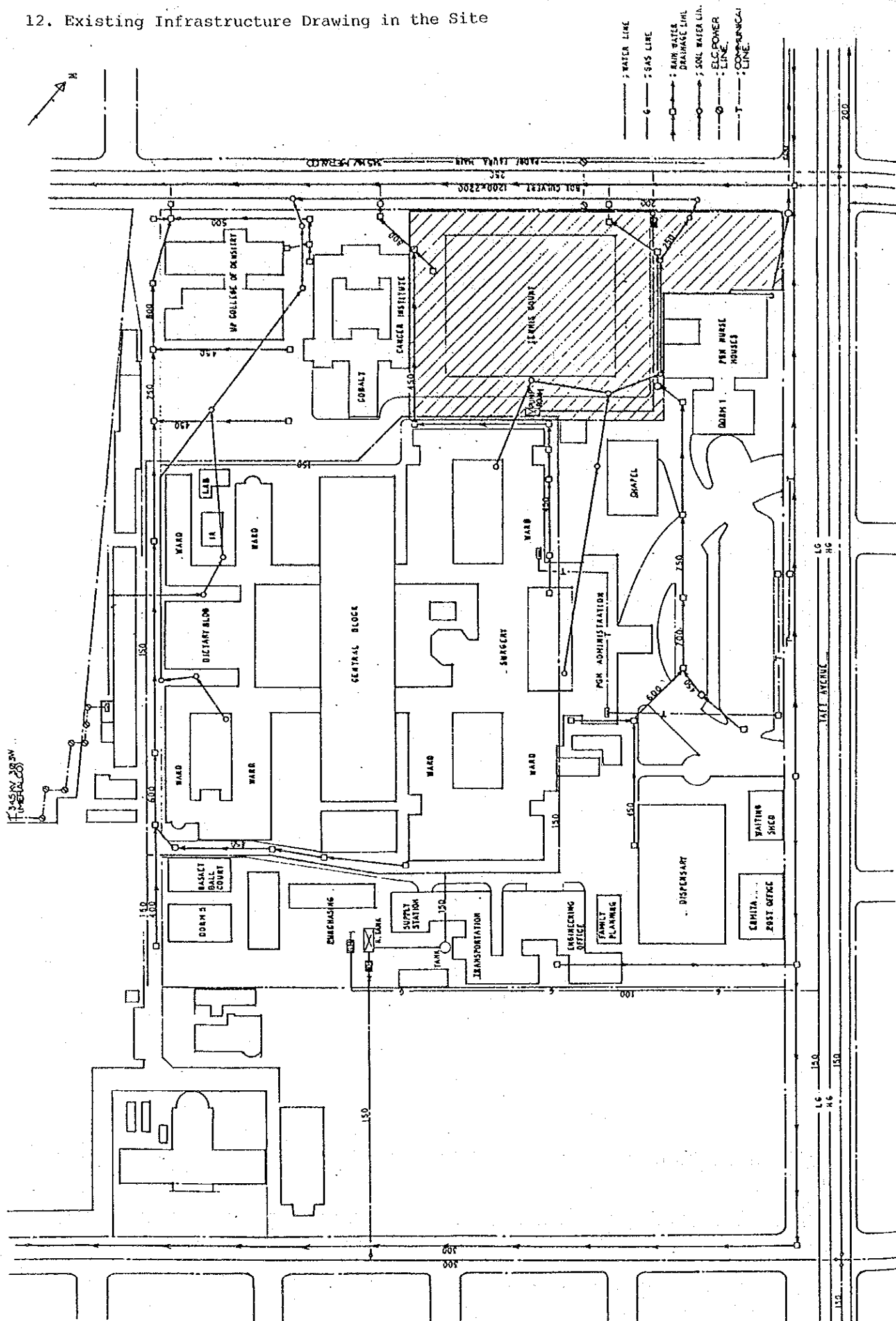
Particulars	Amount
Salaries	2,595,480
Other Allowances	
Union Allowance	38,100
Laundry Allowance	45,720
Cost of Living Allowance	697,800
SUB-TOTAL	781,620
Total Personal Services	3,377,028
Maintenance & Other Oper. Expenditures	1,403,279
Grand Total	4,780,307
Proposed Income	6,220,206

11. Site Surveyed Map

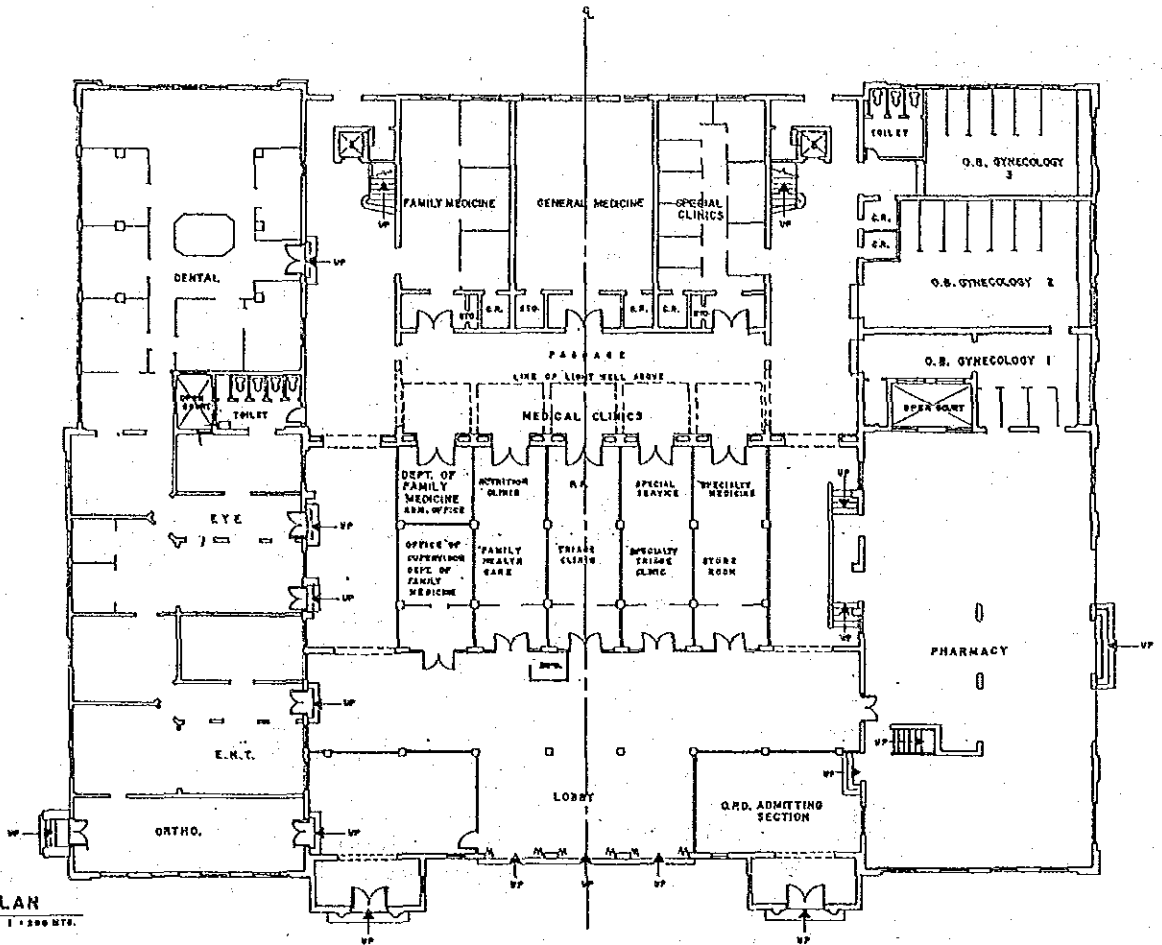


PGH SITE PLAN
SCALE 1:500 M

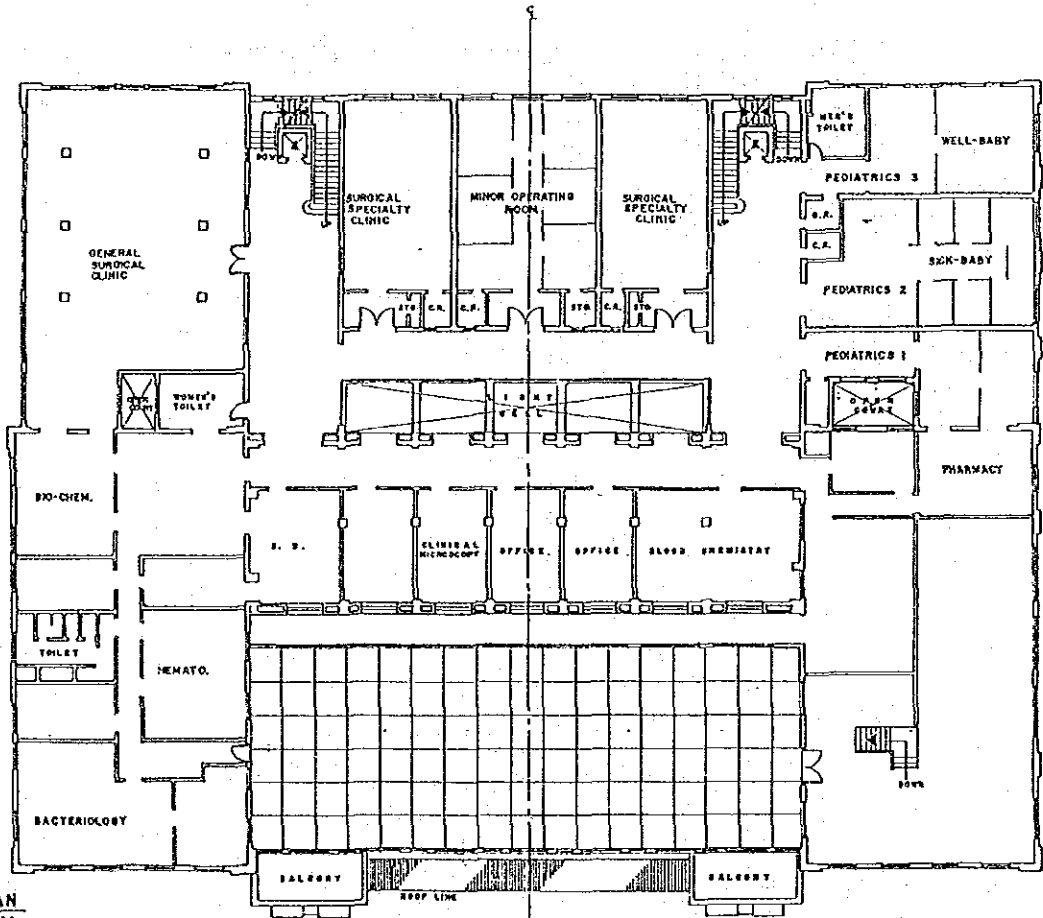
12. Existing Infrastructure Drawing in the Site



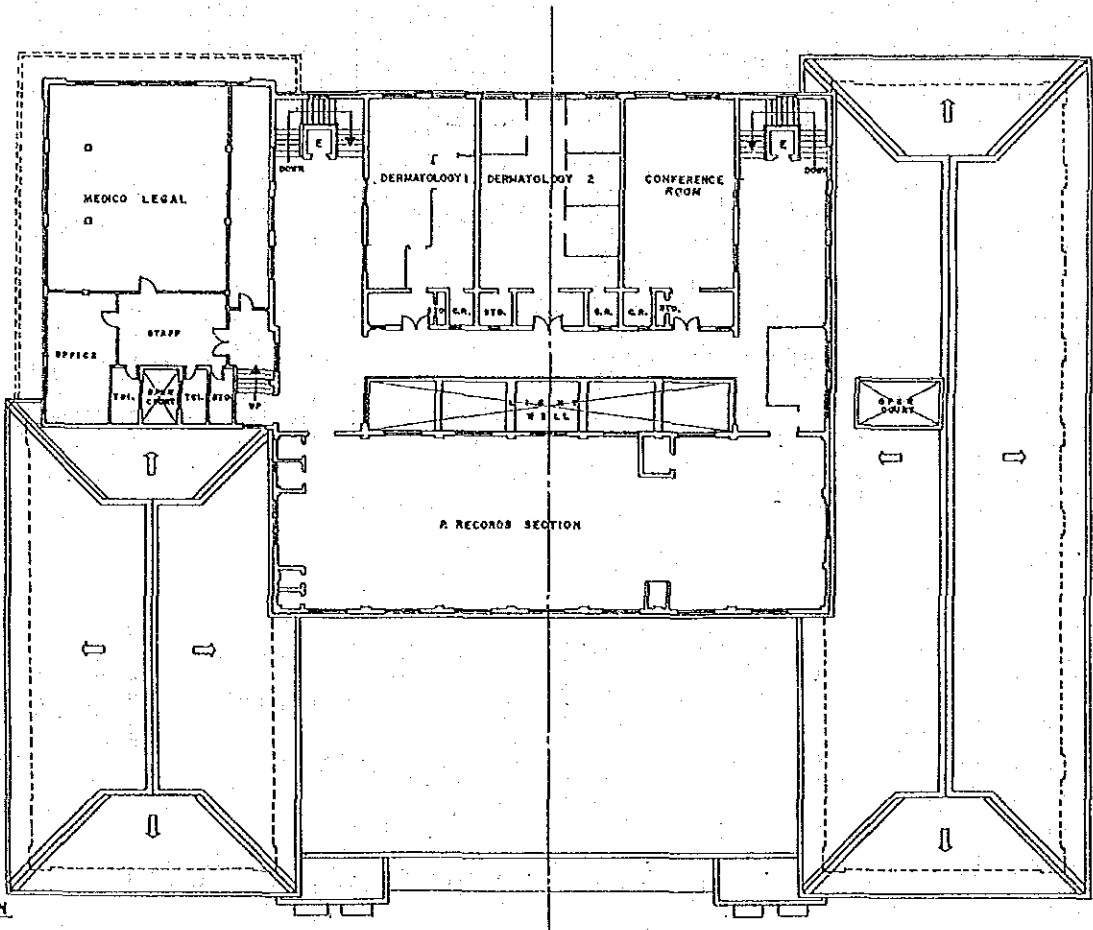
13. PLAN OF EXISTING OPD



FIRST FLOOR PLAN
SCALE 1/8" = 1'-0" N.T.S.

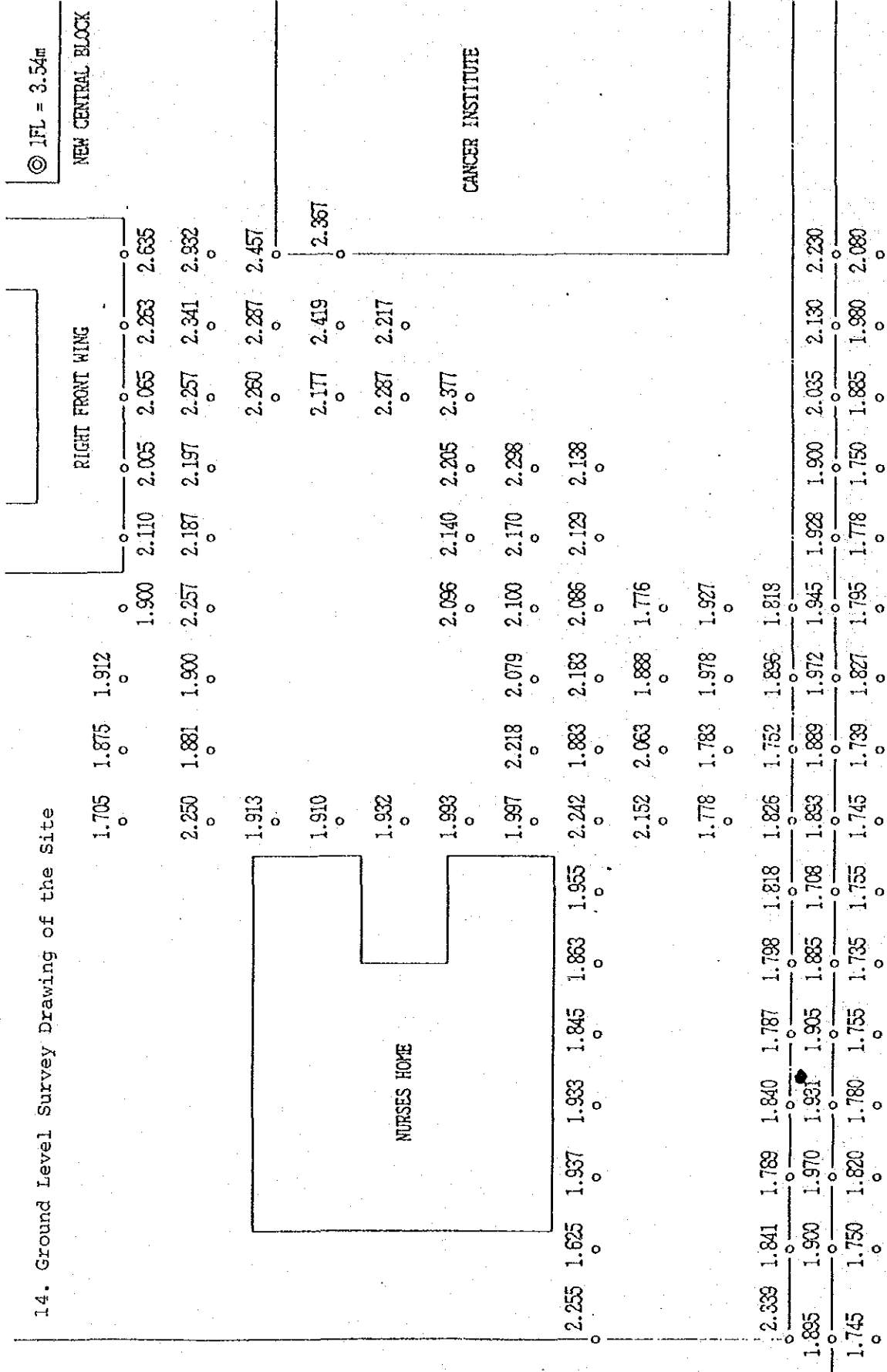


SECOND FLOOR PLAN
SCALE 1/8" = 1'-0" N.T.S.




THIRD FLOOR PLAN
 SCALE 1/4" = 1'-0"

14. Ground Level Survey Drawing of the Site



ADIT