

grant aid assistance from the government of Japan. The scope of work to be carried out by each side is as follows:

1) Scope of work by the government of Japan

● Facilities

- Construction of the buildings as described in this basic design study report

- Electrical, mechanical and sanitary works for these buildings

● Equipment

- Procurement of the equipment listed in this basic design study report

- Installation of this equipment

● Infrastructure

- Low tension power line from the substation which shall be installed by the Nepal side.

- NDF and telephone facilities within the project site excluding central office line

● Exterior work

- Septic tanks

● Transportation and other related works

- Packing, insurance, loading, marine transportation, unloading, and inland transportation of equipment and materials necessary for the Japanese work.

2) Scope of work by the Government of the Kingdom of Nepal

① Site Preparation work	0
② Infrastructure development work	0
③ Construction work	5,268,000

1. Extension of the third floor of the administration building:	Rs.1,700,000
2. VIP ward:	Rs. 600,000
3. Extension of the second floor of the workshop:	Rs.1,500,000
4. Remodeling of the washing room:	Rs. 100,000
5. Toilets:	Rs.1,368,000
④ Construction of outdoor structures	Rs 770,000
⑤ Equipment	0
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Total	Rs 6,038,000

The estimated project cost to be borne by the government of the Kingdom of Nepal does not include taxes, charges and administration expenses.

It is desirable that the government of the Kingdom of Nepal make budgetary appropriations for the above items and conduct the design work and the construction work at the right time so that this project may be implemented smoothly and that the projected facilities may be used effectively.

**CHAPTER 5 EXPECTED EFFECTS OF
THE PROJECT AND CONCLUSION**

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5-1 Expected Effects of the Project

When this project is implemented and the projected facilities and equipment are operated and managed properly by the Nepalese side, it is expected that the following positive effects will be brought about.

Present condition and problems	Measures to be taken under this project	Expected effects and improvement
<p>The existing facilities of Kanti Children's Hospital, which is to serve as the base for the promotion of child health care in the country, are too small and, part of them are considerably superannuated. For this reason, the hospital is unable to properly examine and treat its inpatients and outpatients. During the busiest season, ancillary beds are placed in the corridors and a tent ward is built in the front garden. Thus the hospital finds it very difficult to offer medical services.</p>	<p>A clinical building should be established so that the hospital may become a medical institution provided with basic functions and facilities required of a children's hospital. Its existing facilities, after the relocation of its functions in the new facilities, should be remodeled in order to revitalize the overall operations of the hospital.</p>	<p>The number of beds will be increased from 156 to 203, the daily numbers of emergency patients, outpatients, and ORT patients from 79, 182 and 20 to 149, 363 and 84, respectively. The yearly number of inpatients will also be increased from 6,789 to 8,000. Furthermore, the daily number of operations will be increased from 4 to 7, and that of clinical tests from 203 to 519. Thus it will be possible for the hospital to meet the minimum demand expected in the year 2000.</p>
<p>Since its inception, the hospital has extended and remodeled its facilities without any viable future plan. As a result, the floor plans for its existing facilities is inefficient, which is a major hindrance to the hospital's operations.</p>	<p>The master plan for the hospital's facilities should be revised taking into consideration not only the projected facilities but also its all facilities.</p>	<p>The existing facilities will be rearranged to attain an efficient hospital function and in a manner that makes it possible to increase the number of beds to as many as 300 in the future. The new facilities will be so designed as to make it easy to expand then in the future.</p>
<p>This hospital forms a part of the country's highest level referral network, which is centered around Bir Hospital, as a central hospital specializing in pediatrics. But in actuality it is unable to accept all patients referred from other hospitals due to its limited facilities.</p>	<p>The scale of the hospital itself will be expanded. Facilities of its operation department will be improved. And facilities of the intensive care department will be secured with sanitary cleanliness.</p>	<p>The number of beds will be increased by 38. As a result, it will become possible to accept more patients referred from other hospitals. In addition, its referral services will be improved through the expansion and improvement of its examination/treatment functions.</p>
<p>As the hospital attached to the Tribhuvan University, Institute of Medicine does not have a pediatric department, the medical school's students are trained in pediatrics at Kanti Children's Hospital. But the hospital's examination rooms, treatment rooms and operating rooms are too small to provide a space for the medical students.</p>	<p>A minimum space for clinical training of the medical students will be secured in each of the examination/treatment facilities.</p>	<p>Facilities of the hospital's outpatient, emergency, operation and clinical laboratory department will be expanded so that training of the medical students can be conducted smoothly there. In addition, seminar rooms will be added to increase the effects of practical training in pediatrics and thereby to contribute to the nurturing of medical personnel to specialize in pediatrics and related fields.</p>

5-2 Appropriateness of the Implementation of the Project

This project is aimed primarily at expanding and improving the facilities and functions of Kanti Children's Hospital. After the completion of this project, therefore, it is expected that the projected facilities, the existing facilities and facilities which are now being constructed by the government of Nepal will be integrated and served to generate positive effects. In working out the basic design for this project, the master plan for the hospital was revised on the basis of the results of surveys on the present condition of the hospital and the government of Nepal's plan to increase the numbers of beds to 300 and staff members of the hospital to 900. In determining the scale of this project, the estimated value of the hospital's workload in the year 2000, which was obtained on the basis of data for changes in the number of outpatients and the medical service load over the past five years, was used. The revised master plan for the hospital's facilities was drawn up on the basis of the result of such estimation, and then the facility/equipment maintenance and operation aspect of the hospital was examined. As a result, it was concluded that the possibility of securing funds for the operation of the projected facilities/equipment after the implementation of this project should be explored with caution in view of the fact that the Kingdom of Nepal is faced with economic difficulties. For this reason, it was decided to minimize the operating cost. With little hope for a dramatic increase in the hospital's personnel in the near future, it was concluded reasonable to have the projected facilities and equipment operated by a staff of 313 (about 17 new staff members can be added to the present staff of 296). It will be relatively easy to expand the projected facilities and equipment when it becomes possible to further increase the hospital's staff in keeping with further increases in the hospital's workload.

As is clear from the above descriptions, this project is very practical in terms of the operating system, budgetary appropriations and maintenance. Furthermore, this project envisages not only future plans for the hospital but also the self-help effort through the K.C.H. Development Board. Thus it was concluded that there was no problem with the implementation of this project. In this chapter, the hospital's operating system, budgetary appropriations and facility and equipment maintenance/operation system are reviewed.

(1) Operating System

Kanti Children's Hospital is operating under the supervision of the Ministry of Health, but it is granted substantial autonomy. The K.C.H. Development Board, is responsible mainly for making policies of the hospital. Its decisions are implemented by the director of the hospital. The facilities and equipment procured under this project are, together with the existing ones, to be operated and managed by the present staff of the hospital. It is estimated that after the completion of this project, the hospital will need a total of 313, an increase of 17 over the present scale. The additional personnel are to be employed by the hospital since the hospital income is expected to increase after the completion of this project.

Even at present, of its 296 staff members, 131 were employed and are paid by the use of funds from the development board, which include the hospital income, donations and the committee's fund. Thus there will be no problem with the operation of the hospital after the completion of this project.

(2) Budgetary Appropriations

The hospital's budget is compiled on the basis of contribution from the central government and the hospital income. The amount of the hospital's

annual income for 1995 is estimated at 24,935,600 rupees (contribution 17,977,500 rupees; the hospital income: 6,958,100 rupees). On the other hand, the hospital's annual operating cost for the same year is estimated at 24,030,000 rupees. The possible surplus is 905,600 rupees.

In the above estimation, concerning government contribution the average annual growth rate of 7 percent for the past five years was used. It is very likely that a similar average annual growth rate will be realized through 1995. The amount of the hospital's annual income was calculated by multiplying the annual amount as revised in November 1992 by the projected number of patients or a certain coefficient, and is therefore a very realistic figure.

(3) Maintenance and Operation

The new facilities were so designed that they may be easily maintained and operated by the hospital's present staff. In the construction materials plan, priority is given to highly durable materials, as well as to those can be procured locally. In the equipment procurement plan, special emphasis is placed on the maintenance and operation capabilities of local suppliers of equipment which require special maintenance and operation techniques. In the architectural plan, special attention is paid to the need to prevent heating and lighting expenses from rising further by making full use of natural ventilation and lighting. In the personnel plan, due consideration is given to the importance of the staff member's ability to do simple repairs and troubleshooting.

5-3 Conclusion

In the Kingdom of Nepal, measures to improve the quality of children's welfare had long been taken as part of the country's primary health care services, and therefore it was only in the current (8th) five-year plan that the central government began to tackle the issue of children's welfare. Noteworthy in the area of health care is the fact that about 90 percent of the country's population live in rural areas and that many children under the age of 14, particularly infants, are suffering from some disease or other. It goes without saying, therefore, that primary health care that meets the actual needs of residents of rural areas is the most important. But any effort to realize such primary health care must be supported by a viable referral system. Kanti Children's Hospital, where this project is to be implemented, forms a part of the country's highest level referral system which has Bir Hospital at its core, as a central hospital specializing in pediatrics. It is also serving as a pediatric teaching hospital for Tribhuvan University, Institute of Medicine, which is the country's only institution for the training of medical personnel. If the facilities of Kanti Children's Hospital are expanded and improved through this project, it will greatly contribute to the improvement in the hospital's ability to accept patients referred from other hospitals in not only Kathmandu and its environs but also other rural areas and to train medical personnel to specialize in pediatrics. In recent years, there has been a marked increase in number of outpatients and the hospital has been operating beyond capacity. More to that the facilities are small and superannuated. It is therefore necessary and proper to implement this project under Japanese grant aid assistance. There should be no problems with the hospital's operating system, budgetary appropriations and facility/equipment maintenance and operation after the completion of this project.

5-4 Recommendations

The following recommendations are made so that this project may materialize as soon as possible and that the projected facilities and equipment may be operated and managed effectively.

- 1) The Nepalese Side's Quick Actions Regarding Contracts and Certification

This project is to be implemented within the framework of Japanese grant aid assistance, and therefore there are time restrictions on its implementation. For this reason, it is necessary that the government of Nepal promptly conclude the Exchange of Notes and the consulting contract, approve the detailed design drawings and specifications prepared on the basis of this basic design study report, and follow the procedures related to the construction work.

- 2) Smooth Implementation of the Work Within the Scope of Work by the Government of the Kingdom of Nepal

The basic design study team has already explained the Japanese grant aid assistance system to representatives of the government of the Kingdom of Nepal. It is expected, therefore, that the work to be executed by the government of the Kingdom of Nepal will be executed efficiently. It is necessary, however, that the government of the Kingdom of Nepal make budgetary appropriations for such work at the right time in its fiscal year. It should be noted that the expansion plan of the road running on the northern side of the project site by Kathmandu Municipality must be determined, the gate and the road as a service access to the site must be completed, the building permit must be obtained.

3) Quick and Smooth Relocation After the Completion of Phase 1

This project is to be implemented in two phases. The facilities and functions of the outpatient, central diagnosis, emergency, operation, central supply, intensive care and clinical laboratory departments are to be relocated in the new facilities immediately after the completion of Phase 1. It is necessary that such relocation be planned well in advance and carried out without interrupting the hospital's operations.

4) Suspension or Temporary Relocation of Part of the Hospital's Functions During Phase 2

Phase 2 will be started as soon as the relocation of the facilities and functions of Phase 1 are completed. During Phase 2, the work to renovate the existing building will be conducted in two or three stages. It is necessary, therefore, to partially relocate the hospital's functions as the construction work advances. It is also necessary to make preparations for this well in advance.

5) Securing the Necessary Number of Personnel and Necessary Operating Expenses

The expected effects of this project will not materialize unless the necessary number of personnel and necessary operating expenses are secured to meet the demand for health care which is projected to continue to increase through the year 2000, after the completion of this project. For this reason, it is hoped that the government of the Kingdom of Nepal and Kanti Children's Hospital will make every effort to secure the necessary number of personnel and necessary operating expenses for the smooth operation of the facilities and equipment procured under this project.

ANNEX

1. Member List of Basic Design Study Team

(1) Basic Design Study (December 6, 1992 ~ January 6, 1993)

Dr. Makiko Kinoshita	Team Leader	Department of International Cooperation National Medical Center Hospital Ministry of Health and Welfare
Mr. Yuji Ogura	Grant Aid Planner	Grant Aid Division Economic Cooperation Bureau Ministry of Foreign Affairs
Mr. Ken Majima	Architectural Planner	Yamashita Sekkei Inc.
Mr. Fumio Arai	Architectural Designer	〃
Mr. Kazuhiko Kon	Mechanical & Sanitary Engineer	〃
Mr. Takashi Yoza	Medical Equipment Planner	〃

(2) Explanation of Draft Final Report (March 28 ~ April 6, 1993)

Dr. Seiki Tateno	Team Leader	Department of International Cooperation National Medical Center Hospital Ministry of Health and Welfare
Mr. Koji Noguchi	Grant Aid Planner	Grant Aid Division Economic Cooperation Bureau Ministry of Foreign Affairs
Mr. Ken Majima	Architectural Planner	Yamashita Sekkei Inc.
Mr. Takashi Yoza	Medical Equipment Planner	〃

2. Study Schedule

(1) Basic Design Study (December 6, 1992 ~ January 6, 1993)

No.	Date	Place	Schedule
1	Dec. 6 (Sun)	Transit	Lv. Tokyo, Ar. Bangkok (Mr. Majima, Mr. Arai, Mr. Kon, Mr. Yoza), Meeting at JICA office
2	Dec. 7 (Mon)	Kathmandu	Lv. Bangkok, Ar. Kathmandu (Mr. Majima, Mr. Arai, Mr. Kon, Mr. Yoza)
3	Dec. 8 (Tue)	◇	Meeting at Kanti Children's Hospital (KCH) Submission of Questionnaires and Inception report Explanation of Japan Grant Aid System and Study Schedule Investigation of KCH's Present Condition
4	Dec. 9 (Wed)	◇	Meeting and Survey (Infrastructure at KCH) Investigation of Tribhuvan University Teaching Hospital (TUTH), Survey of the Local Condition
5	Dec. 10 (Thu)	◇	Meeting and Survey (Infrastructure, Outpatient Dept.) at KCH, Survey of the Local Condition
6	Dec. 11 (Fri)	◇	Meeting and Survey (Emergency Dept. and Clinical Lab. Dept.) at KCH Survey of the Local Condition, Survey of TUTH
7	Dec. 12 (Sat)	◇	Survey at KCH
8	Dec. 13 (Sun)	◇	Meeting and Survey (Operation Dept.) at KCH Survey of the Local Condition Team Meeting
9	Dec. 14 (Mon)	◇	Meeting and Survey (ICU) at KCH Survey of the Local Condition
10	Dec. 15 (Tue)	◇	Meeting and Survey (Outpatient Dept. and Clinical Lab.) at KCH Lv. Tokyo, Ar. Bangkok (Dr. Kinoshita, Mr. Ogura)
11	Dec. 16 (Wed)	◇	Meeting at KCH Lv. Bangkok, Ar. Kathmandu (Dr. Kinoshita, Mr. Ogura)
12	Dec. 17 (Thu)	◇	Meeting at KCH Courtesy call on Ministry of Health Team Meeting
13	Dec. 18 (Fri)	◇	Meeting at KCH Courtesy call on Ministry of Finance Meeting with Medical Equipment Expert Team
14	Dec. 19 (Sat)	◇	Survey of the Proposed site
15	Dec. 20 (Sun)	◇	Meeting and Survey (Clinical Lab. Dept.) at KCH Survey of the Local Condition

No.	Date	Place	Schedule
16	Dec. 21 (Mon)	Kathmandu	Meeting at KCH Team meeting Report to Ministry of Health
17	Dec. 22 (Tue)	◇	Meeting and Survey at KCH Survey of the Local Condition
18	Dec. 23 (Wed)	◇	Meeting at KCH, Collection of Questionnaire and Additional Questionnaire Team meeting, Discussion on Minutes
19	Dec. 24 (Thu)	◇	Signing of Minutes of Discussion Report to JICA office
20	Dec. 25 (Fri)	◇	Report to Embassy of Japan Lv. Kathmandu, Ar. Bangkok (Dr. Kinoshita, Mr. Ogura) Lv. Bangkok Report to JICA office
21	Dec. 26 (Sat)	◇	Ar. Tokyo (Dr. Kinoshita, Mr. Ogura) Work at KCH
22	Dec. 27 (Sun)	◇	Meeting and Survey at KCH Survey of the Local Condition
23	Dec. 28 (Mon)	◇	Meeting and Survey of the Existing Buildings at KCH Collection of Questionnaire and Additional Questionnaire
24	Dec. 29 (Tue)	◇	Survey of the Existing Building of KCH Collection of Questionnaire and Additional Questionnaire
25	Dec. 30 (Wed)	◇	Meeting and Survey (Clinical Lab.) at KCH Discussion on Collected Questionnaire
26	Dec. 31 (Thu)	◇	Meeting and Survey of the Existing Building at KCH Discussion on the Collected Questionnaire
27	Jan. 1 (Fri)	◇	Meeting and Survey of the Existing Building at KCH Discussion on the Collected Questionnaire
28	Jan. 2 (Sat)	◇	Discussion on the Collected Questionnaire and Review of the Collected Data
29	Jan. 3 (Sun)	◇	Survey of the Existing Building Meeting at KCH
30	Jan. 4 (Mon)	◇	Report to JICA and Embassy of Japan Survey of NTC
31	Jan. 5 (Tue)	Transit	Lv. Kathmandu, Ar. Bangkok (Mr. Majima, Mr. Arai, Mr. Kon, Mr. Yoza)
32	Jan. 6 (Wed)		Lv. Bangkok, Ar. Tokyo (Mr. Majima, Mr. Arai, Mr. Kon, Mr. Yoza)

(2) Explanation of Draft Final Report (March 28 ~ April 6, 1993)

No.	Date	Place	Schedule
1	Mar. 28 (Sun)	Transit	Lv. Tokyo, Ar. Bangkok (Dr. Tateno, Mr. Noguchi, Mr. Majima, Mr. Yoza)
2	Mar. 29 (Mon)	Kathmandu	Lv. Bangkok, Ar. Kathmandu (Dr. Tateno, Mr. Noguchi, Mr. Majima, Mr. Yoza) Courtesy call on and Meeting at JICA office
3	Mar. 30 (Tue)	◇	Meeting at Kanti Children's Hospital (KCH) Courtesy call on Ministry of Health (MOH)
4	Mar. 31 (Wed)	◇	Meeting at KCH, Courtesy call on Embassy of Japan
5	Apr. 1 (Thu)	◇	Investigation of Tribhuvan University, Teaching Hospital (TUTH), Meeting at KCH
6	Apr. 2 (Fri)	◇	Meeting at KCH and MOH Signing of Minutes of Discussion
7	Apr. 3 (Sat)	◇	Team Meeting
8	Apr. 4 (Sun)	◇	Lv. Kathmandu (Mr. Noguchi) Investigation of NTC Meeting at KCH
9	Apr. 5 (Mon)	◇	Report to Embassy of Japan and JICA office Lv. Kathmandu, Ar. Bangkok (Dr. Tateno, Mr. Majima, Mr. Yoza)
10	Apr. 6 (Tue)	◇	Lv. Bangkok, Ar. Tokyo (Dr. Tateno, Mr. Majima, Mr. Yoza)

3. Member List of Concerning Party in Nepal

(1) Ministry of Health

Dr. Ram Baran Yadav (Minister)
Mr. Jagadishwar Upadhyaya (Secretary)

(2) Ministry of Finance

Mr. R. B. Bhattarai (Joint Secretary)

(3) Kanti Children's Hospital

Mr. Narsingh Bdr Shrestha (Chairman of the board)
Mr. Binod Shanker Shrestha (Member of the board)
Dr. Manindra R. Baral (Director and Head of Medical Dept.)
Dr. K. B. Rajbhandari (Head of Surgical Dept.)
Dr. R. P. B. Shrestha (Head of NICU Dept.)
Dr. G. B. Shrestha (Head of Pathology & Blood Bank Dept.)
Dr. A. D. Shrestha (Head of Casualty Dept.)
Dr. K. D. Khand (Head of OPD Dept.)
Dr. J. Maskey (Head of Anaesthesia Dept.)
Mrs. Sabitri Singh (Matron)
Mrs. Vidya Laxmi Rajbhandari (Sister)
Mr. Pradeep Bhattarai (Administrative Officer)
Mr. R. L. Maharjan (Accounts Officer)
Mr. Bishop K. Joshi (P. A. to the Director)

(4) Medical Education Project at The Institute of Medicine Tribhuvan University

Dr. Sanae Kanda Team Leader
Dr. Daisuke Masaki Surgical
Dr. Takashi Kubo Microbiology
Mr. Tadashi Miyazaki Project Coordinator
Mr. Kenzo Sasagawa Medical Equipment

(5) Embassy of Japan in Nepal

Mr. Chuichi Ito	Ambassador
Mr. Masaei Matsunaga	Second Secretary

(6) JICA Nepal Office

Mr. Yasuyuki Kohori	Resident Representative
Mr. Hiroshi Murakami	Deputy Resident Representative
Mr. Toshikazu Masaki	Deputy Resident Representative
Mr. S. Bhattachan	Deputy Resident Representative

(7) Medical Equipment Revitalization Team

Mr. Yoshiaki Nagano	Medisun
Mr. Ken Matsumoto	◇
Mr. Hiroshi Hoshi	◇
Mr. Kazuhiro Suzuki	◇

(8) Nepal Electricity Authority

Mr. N. K. Shah	Manager
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(9) Nepal Telecom Corporation

Mr. Ashok Thapa	Manager
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(10) NTC Project

Mr. Tsutomu Kagawa	Team Leader
Mr. Takuji Date	Expert

4. Minutes of Discussion

(1) Basic Design Study

MINUTES OF DISCUSSIONS
ON
THE BASIC DESIGN STUDY ON THE PROJECT FOR
EXPANSION OF KANTI CHILDREN'S HOSPITAL
IN
THE KINGDOM OF NEPAL

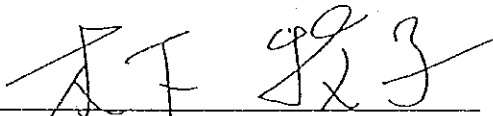
Based on the results of the Preliminary Study, the Japan International Cooperation Agency (JICA) decided to conduct a Basic Design Study on the Project for Expansion of Kanti Children's Hospital (hereinafter referred to as "the Project").

JICA sent to the Kingdom of Nepal a study team, which is headed by Dr. Makiko Kinoshita, M.D., Department of International Cooperation, National Medical Center Hospital, Ministry of Health and Welfare from December 7, 1992 to January 5, 1993.

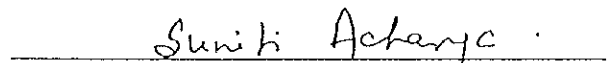
The team had a series of discussions with the officials concerned of the Government of Nepal and conducted a field survey at the study area.

As a result of discussions and field survey, both sides have confirmed the main items described in the attached sheets. The team will proceed to further works and prepare the Basic Design Study Report.

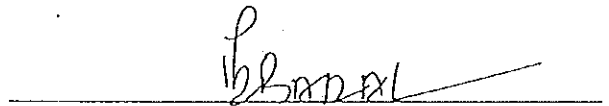
Kathmandu, December 24, 1992



Dr. Makiko Kinoshita, M.D.
Leader
Basic Design Study Team
JICA



Dr. Suniti Acharya
Chief, Planning Division
Ministry of Health
His Majesty's Government of Nepal



Dr. Manindra R. Baral
Director
Kanti Children's Hospital
His Majesty's Government of Nepal

ATTACHMENT

1. Objective

The objective of the Project is to improve the medical services at the Kanti Children's Hospital by constructing and renovating necessary facilities and providing necessary equipment for the clinical activities in the field of pediatrics.

2. Project Site

The Project site is located at Maharajgunj, Kathmandu, with the total area of approximately 14,000 m², as shown in Annex I.

3. Executing agency

The Kanti Children's Hospital is responsible for the administration and execution of the Project.

4. Items requested by the Nepal side

After discussions with the Basic Design Study team, the following items were finally requested by the Nepal side.

- 1) Construction, renovation and demolition of the facilities described in Annex II
- 2) Provision of equipment related to the Project which are described in Annex II

5. Comments by the Japanese side on the requested items mentioned in 4. above

- 1) The Japanese side will review the necessary facilities and equipment for the Project according to the priority order proposed by the Nepal side.
- 2) The final components of the Project may differ, when considered necessary after further studies in Japan.

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6. Japan's Grant Aid system

- 1) The Nepal side understands the system of Japan's Grant Aid as explained by the team.
- 2) The Nepal side will take necessary measures, as described in Annex III for the smooth implementation of the Project on condition that the Grant Aid by the Government of Japan is extended to the Project.

7. Other relevant issues

On condition that Japan's Grant Aid is extended to the Project;

- 1) His Majesty's Government of Nepal as well as the Kanti Children's Hospital will allocate the necessary budget to the Project for securing sustainable and proper operation and maintenance of the Kanti Children's Hospital.
- 2) the Ministry of Health as well as the Kanti Children's Hospital will recruit the necessary personnel for the Kanti Children's Hospital for securing proper operation and maintenance of the said Hospital.
- 3) the Kanti Children's Hospital will make an inventory list on the major equipment included in the project and maintain the adequate performance and utilization data on the facilities and equipment included in the Project. And these data will be submitted to the Japanese side annually.

8. Schedule of the Study

- 1) The consultants will proceed to further studies in Nepal until January 5, 1993.
- 2) Based on the Minutes of Discussions and the results of the study, JICA will compile a draft report and dispatch a mission in order to explain its contents in March 1993.
- 3) Upon approval of the said draft report by the Nepal side, JICA will complete the final report and send it to the Government of Nepal around May 1993.

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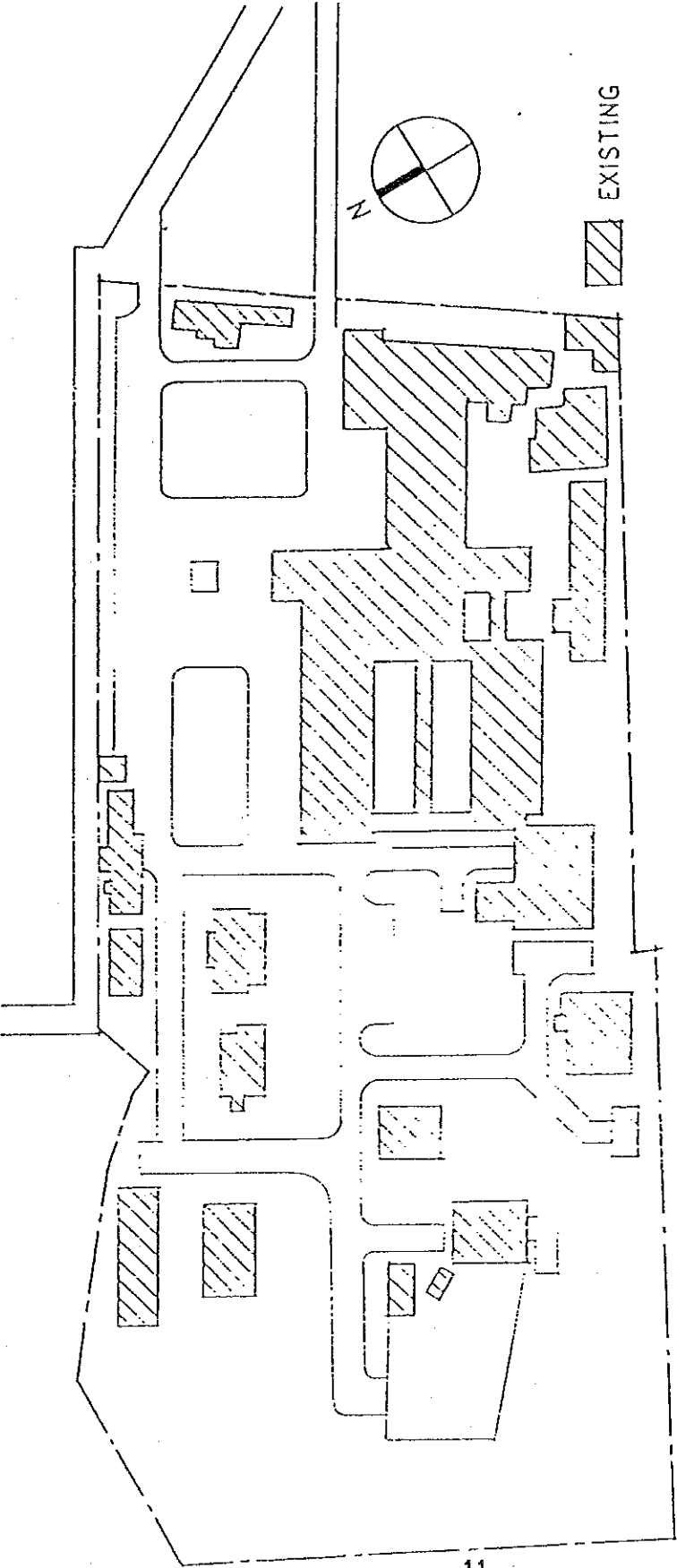
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9. Technical Cooperation

The Nepal side requested the team to dispatch Japanese experts and to accept trainees from Nepal in the field of pediatrics and maintenance of the equipment.

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THE BASIC DESIGN STUDY SHALL BE CONDUCTED UNDER THE FOLLOWING SITE CONDITION.

1. THE NORTHERN ROAD WILL BE EXPANDED 1 METER TOWARD KCH.
2. BUILDING SET-BACK IS 1 METER FROM BOUNDARY LINE.

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Annex II

1. Facilities

(1) Construction of the facilities

- 1) Outpatient Department
- 2) Inpatient Department
- 3) Operation Theatre
- 4) CSSD
- 5) Intensive Care Unit (NICU, PICU, SICU)
- 6) Diagnostic Department
- 7) Casualty Department

(2) Renovation of the existing facilities

- 1) Outpatient Department
- 2) Laboratory Department
- 3) X-ray Department
- 4) NICU, PICU

(3) Demolition of a part of the existing facilities

2. Provision of equipment related to the Project

- 1) Equipment for Clinical Services
- 2) Equipment for Training Services
- 3) Equipment for Administration Services

3. Transportation and installation of the equipment described in 1. and 2. to/at the project site

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Annex III

Necessary measures to be taken by His Majesty's Government of Nepal on condition that Japan's Grant Aid is extended;

1. To secure the site for the Project
2. To limit the expansion of the northern road toward the Kanti Children's Hospital project site by one (1) meter
3. To clear, level and reclaim the site prior to the commencement of the construction
4. To undertake incidental outdoor works such as gardening, fencing, gates and exterior lighting within and around the site
5. To provide facilities for distribution of electricity, water supply, drainage, sewage and other incidental facilities to the Project site
 - 1) Distribution line to the site
 - 2) City water distribution main to the site
 - 3) City drainage main to the site
 - 4) City gas main to the site
 - 5) Telephone trunk line to the main distribution frame/panel (MDF) of the building
 - 6) General furniture such as carpets, curtains, and others
5. To exempt taxes and to take the necessary measures for customs clearance of the materials and equipment brought for the Project

7. To exempt Japanese nationals from customs duties (including customs duties for record purposes), internal taxes and other fiscal levies which may be imposed in Nepal with respect to the supply of the products and services under the verified contracts
8. To accord Japanese Nationals, whose services may be required in connection with the supply of products and the services under the verified contracts, such facilities as may be necessary for their entry into Nepal and stay therein for the duration of their work
9. To use and maintain properly and effectively all the facilities constructed and equipment purchased under the Grant
10. To bear all the expenses other than those to be borne by the Grant

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P. B. B. B.

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(2) Explanation of Draft Final Report

MINUTES OF DISCUSSIONS

ON

THE BASIC DESIGN STUDY ON THE PROJECT FOR

EXPANSION OF KANTI CHILDREN'S HOSPITAL

IN

THE KINGDOM OF NEPAL

(CONSULTATION ON DRAFT REPORT)

In December 1992, the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study Team on the Project for Expansion of Kanti Children's Hospital (hereinafter referred to as "the Project") to the Kingdom of Nepal, and based on the discussions with the Nepal side and the examination of the results of the field survey, JICA has prepared the draft report of the study.

In order to explain and discuss the contents of the draft report, JICA sent to Nepal a study team, which is headed by Dr. Seiki Tateno, M.D., of the Department of International Cooperation, National Medical Center Hospital, Ministry of Health and Welfare from March 29 to April 5, 1993.

As a result of discussions, both sides have confirmed the main items described in the attached sheets.

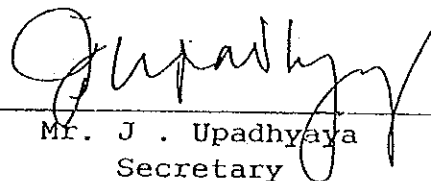
Kathmandu, April 2, 1993



Dr. Seiki Tateno, M.D.

Leader

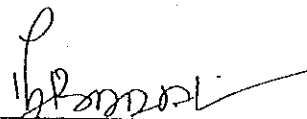
Draft Report Explanation Team
JICA



Mr. J. Upadhyaya
Secretary

Ministry of Health

His Majesty's Government of Nepal



Dr. Manindra R. Baral

Director

Kanti Children's Hospital
His Majesty's Government of Nepal

ATTACHMENT

1. Contents of the Draft Report

The Nepal side has agreed and accepted in principle the contents of the Draft Report proposed by the team.

2. Japan's Grant Aid system

- 1) The Nepal side understands the system of Japan's Grant Aid as explained by the team.
- 2) The Nepal side will take the necessary measures, as described in the Annex I for the smooth implementation of the Project on condition that the Grant Aid by the Government of Japan is extended to the Project.

3. Other relevant issues

On condition that Japan's Grant Aid is extended to the Project;

- 1) His Majesty's Government of Nepal as well as the Kanti Children's Hospital will allocate the necessary budget to the Project for securing sustainable and proper operation and maintenance of the Kanti Children's Hospital.
- 2) the Ministry of Health as well as the Kanti Children's Hospital will recruit the necessary personnel for the Kanti Children's Hospital for securing proper operation and maintenance of the said Hospital.
- 3) the Kanti Children's Hospital will make an inventory list on the major equipment included in the Project and maintain the adequate performance and utilization data as described in the Annex II on the facilities included in the Project. And these data will be submitted annually to the Japanese side.

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4. Further Study

JICA will complete the final report with the confirmed items, and send it to His Majesty's Government of Nepal around April 1993.

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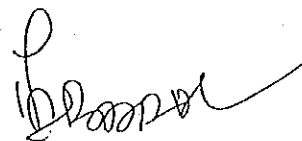
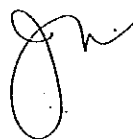
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S.T.

Annex I

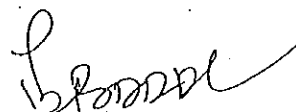
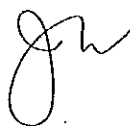
Necessary measures to be taken by His Majesty's Government of Nepal on condition that Japan's Grant Aid is extended:

1. To secure the site for the Project
2. To limit the expansion of the northern road toward the Project site of Kanti Children's Hospital by one (1) meter
3. To clear, level and reclaim the site prior to the commencement of the construction
4. To provide areas for the temporary site office, workshops and yards
5. To provide power, water and telephone facilities to the site for the Japanese work
6. To undertake incidental outdoor works such as gardening and fencing within and around the site
7. To provide facilities for distribution of electricity, water supply, telephone, drainage, sewage and other incidental facilities to the Project site
 - 1) High tension power supply line and substation
 - 2) City water lead-in pipe up to the water meter
 - 3) Telephone Central Office line up to the main distribution frame and necessary pay-telephone equipment
 - 4) Drainage city mains to the site
 - 5) City gas main to the site
 - 6) General furniture such as carpets, curtains, and others



8. To conclude a Banking Arrangement (B/A) with an authorized Japanese foreign exchange bank and bear the necessary commissions to the Japanese foreign exchange bank for the banking services based upon the B/A
9. To issue necessary Authorization(s) to Pay (A/P) and bear the necessary payment commissions for A/P based upon the B/A
10. To ensure prompt tax exemption and customs clearance of imported materials and equipment brought for the Project
11. To pay customs, internal taxes, value added taxes and other fiscal levies for unloading, customs clearance, inland transportation, etc. of imported materials and equipment for the Project
12. To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in Nepal with respect to the supply of the products and services under the verified contracts
13. To accord Japanese Nationals, whose services may be required in connection with the supply of products and the services under the verified contracts, such facilities as may be necessary for their entry into Nepal and stay therein for the duration of their work
14. To obtain building permission and other necessary permission for the Project
15. To use and maintain properly and effectively the facilities constructed and equipment purchased under the Grant
16. To bear all the expenses other than those to be borne by the Grant

S.T.



ANNUAL DATA/PERFORMANCE OF KANTI CHILDREN'S HOSPITAL

		ITEM -	93	94	95	96	97	98	99	2000	2001	2002
1	Outpatient Activities											
	1) Number of Outpatient (S)											
	2) Number of Outpatient (M)											
	3) Number of Outpatient (E)											
	4) Number of Immunization											
	5) Number of Nutrition Guidance											
2	Inpatient/Operation Activities											
	1) Number of Inpatient (S)											
	2) Number of Inpatient (M)											
	3) Number of Operation											
	3) Number of NICU Patient											
	4) Number of PICU Patient											
3	Mortality	5) Number of SICU Patient										
		1) Number of Death										
		2) Number of Early Neonatal Death (less than 8 days old)										
4	Training Activities (By Each Courses)	3) Number of Neonatal Death (less than 29 days old)										

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Note: (S)=Surgery (M)=General Medicine (E)=Emergency

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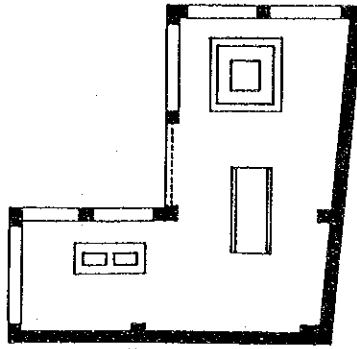
SP

Blom

5. Existing Facilities of Kanti Children's Hospital

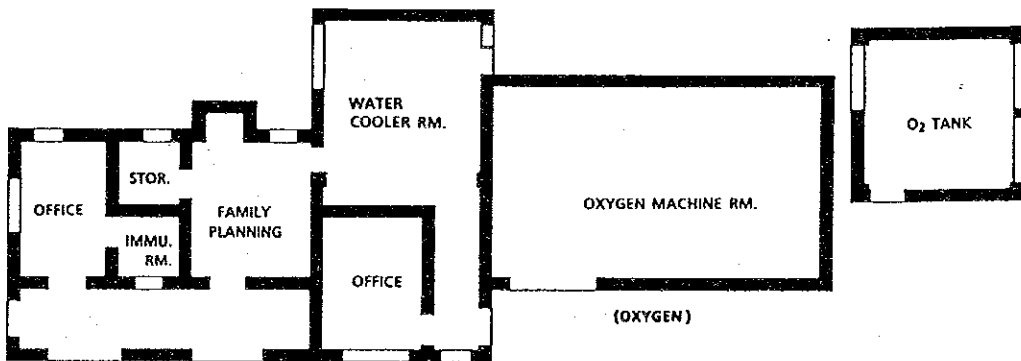
Existing Building	8,857 m ²
Main Building	5,480 m ²
Building	1,292 m ²
New Building	4,188 m ²
Annexes	3,377 m ²
Oxygen Plant Building	70 m ²
EPI Building	97 m ²
Garage	85 m ²
Workshop	140 m ²
Housing for Patient's Families	391 m ²
Housing for Nurses	619 m ²
Generator Building	60 m ²
Warehouse	375 m ²
Mortuary	40 m ²
Tenant's Building	105 m ²
Housing for Doctors	480 m ²
Housing for Staff Members	850 m ²
Others	65 m ²

The present drawings of the main annex buildings are shown below.



GROUND FLOOR PLAN

Generator Building

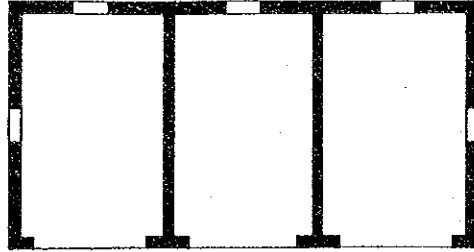


(EPI)

GROUND FLOOR PLAN

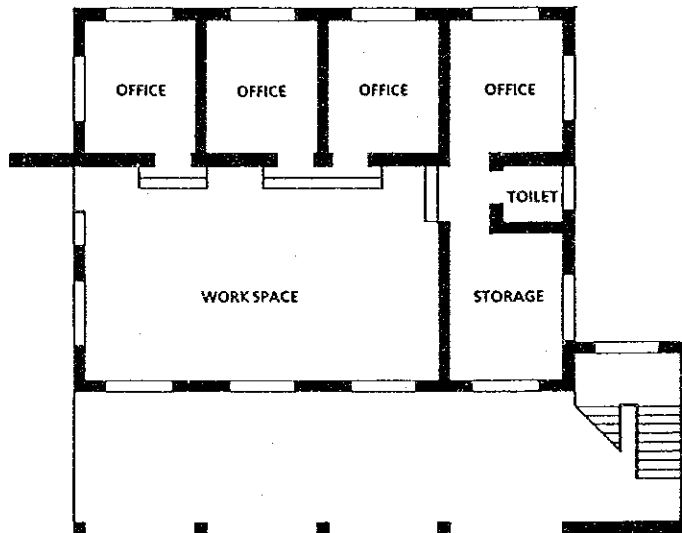
EPI Building

Oxygen Plant Building



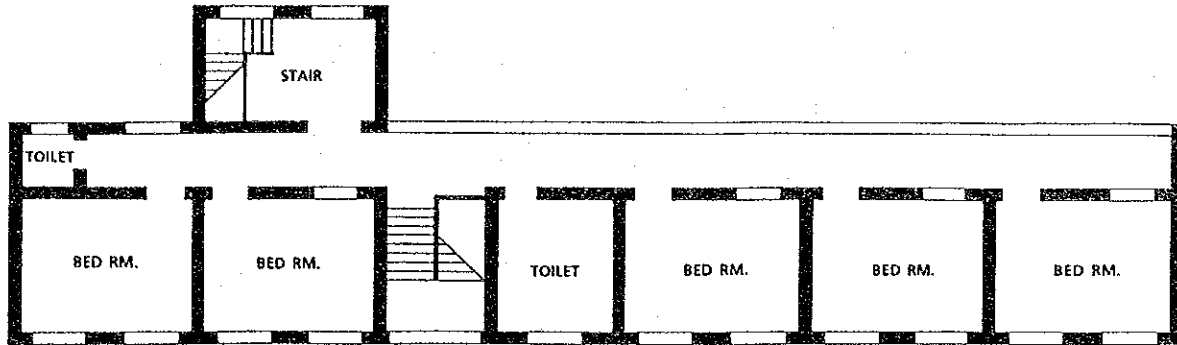
GROUND FLOOR PLAN

Garage

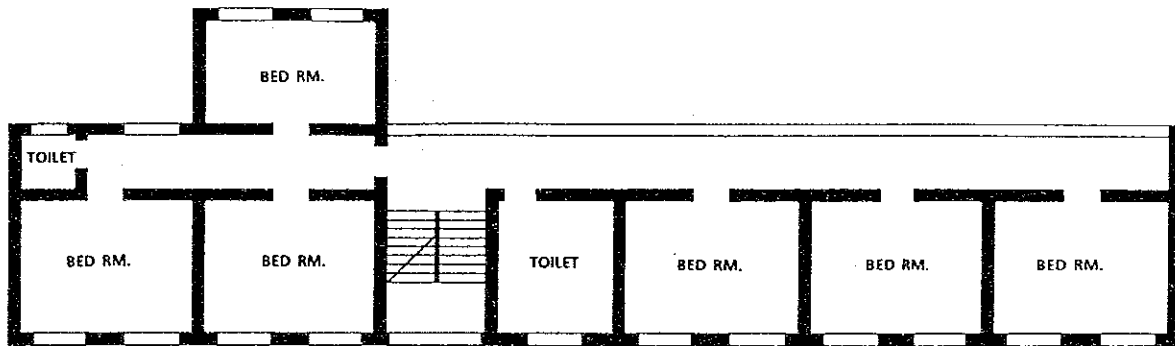


GROUND FLOOR PLAN

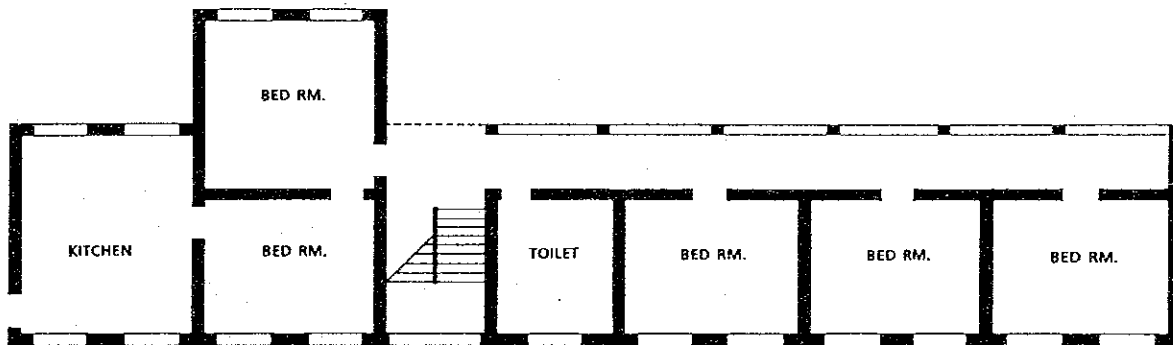
Workshop



2 nd FLOOR PLAN



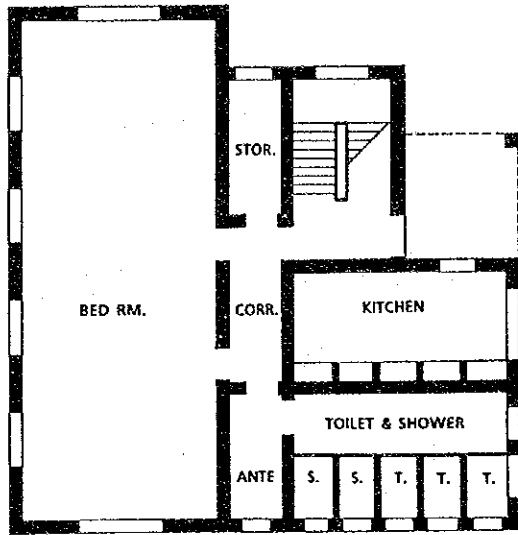
1 st FLOOR PLAN



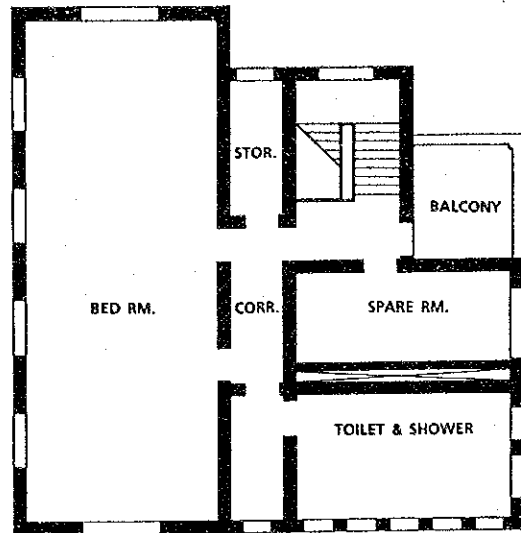
GROUND FLOOR PLAN

Housing for Nurses

EXISTING FACILITIES

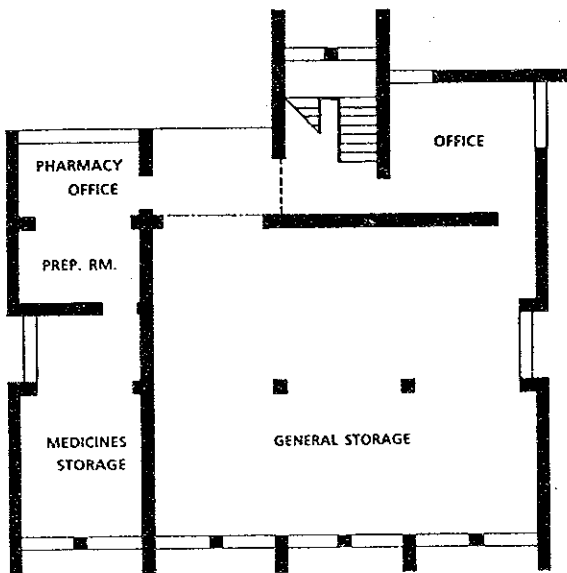


GROUND FLOOR PLAN

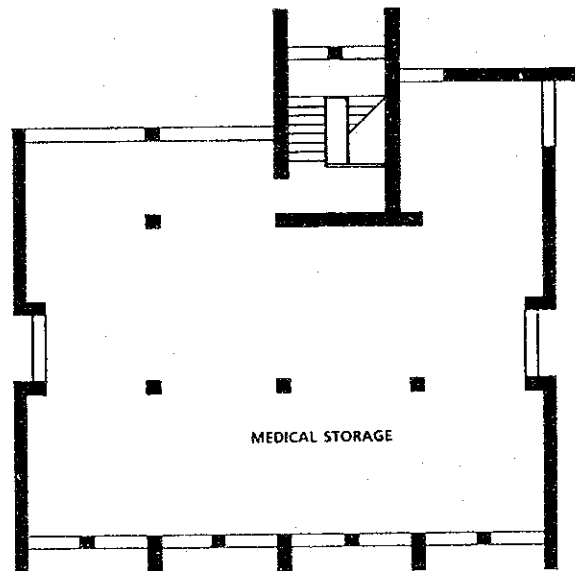


1st FLOOR PLAN

Housing for Patient's Families



GROUND FLOOR PLAN



1st FLOOR PLAN

Warehouse

EXISTING FACILITIES

6. Result of Water Analysis

Analysis data of city water, well water and tap water are shown in the following table.

Item	Japanese Resulation Value	Sample in the site		
		city water	well water	tap water
Nitrate Nitrogen	10 mg/ℓ or less	0.5 mg/ℓ	0.5 mg/ℓ	0.7 mg/ℓ
Chloride Ion	200 mg/ℓ or less	1.0 mg/ℓ	11 mg/ℓ	7.2 mg/ℓ
Potassium Permanganate Consumed	10 mg/ℓ or less	4.6 mg/ℓ	4.8 mg/ℓ	5.7 mg/ℓ
Total Colonies	100 mg/ℓ or less	16000 mg/ℓ	84000 mg/ℓ	13000 mg/ℓ
Coliform Group	(-)	(+)	(-)	(+)
Cyanide	Not be found	0.01 mg/ℓ	0.01 mg/ℓ	-
Mercury	Not be found	0.0005 mg/ℓ	0.0005 mg/ℓ	-
Organophosphate	Not be found	0.1 mg/ℓ	0.1 mg/ℓ	-
Copper	1.0 mg/ℓ or less	0.01 mg/ℓ	0.01 mg/ℓ	-
Iron	0.3 mg/ℓ or less	0.08 mg/ℓ	0.15 mg/ℓ	-
Manganese	0.3 mg/ℓ or less	0.02 mg/ℓ	0.06 mg/ℓ	-
Zinc	1.0 mg/ℓ or less	0.68 mg/ℓ	0.009 mg/ℓ	-
Lead	0.1 mg/ℓ or less	0.01 mg/ℓ	0.01 mg/ℓ	-
Chromium (VI)	0.05 mg/ℓ or less	0.02 mg/ℓ	0.02 mg/ℓ	-
Cadmium	0.01 mg/ℓ or less	0.005 mg/ℓ	0.005 mg/ℓ	-
Arsenic	0.05 mg/ℓ or less	0.005 mg/ℓ	0.005 mg/ℓ	-
Fluoride	0.8 mg/ℓ or less	0.15 mg/ℓ	0.15 mg/ℓ	-
Hardness	300 mg/ℓ or less	34 mg/ℓ	46.1 mg/ℓ	-
Total Residue	500 mg/ℓ or less	129 mg/ℓ	137 mg/ℓ	-
Phenols	0.005 mg/ℓ or less	0.005 mg/ℓ	0.005 mg/ℓ	-
Surface Active Agents	0.5 mg/ℓ or less	0.2 mg/ℓ	0.2 mg/ℓ	-
pH Value	5.8~8.6	6.9	6.7	6.9
Ordor		Normal	Normal	Normal
Color	5 deg. or less	20	7	24
Turbidity	2 deg. or less	1	1	4
Ammonia Nitrogen	0.5 mg/ℓ or less	0.4 mg/ℓ	5.7 mg/ℓ	-

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