

NATIONAL SPORTS COMMITTEE
PRIME MINISTER'S OFFICE
LAO PEOPLE'S DEMOCRATIC REPUBLIC

**BASIC DESIGN STUDY REPORT
ON
THE PROJECT FOR CONSTRUCTION OF
LAO-JAPAN BUDO CENTER
IN
LAO PEOPLE'S DEMOCRATIC REPUBLIC**

JULY, 2007

JAPAN INTERNATIONAL COOPERATION AGENCY
AZUSA SEKKEI CO.,LTD.

G M

J R

07-123

NATIONAL SPORTS COMMITTEE
PRIME MINISTER' S OFFICE
LAO PEOPLE' S DEMOCRATIC REPUBLIC

BASIC DESIGN STUDY REPORT
ON
THE PROJECT FOR CONSTRUCTION OF
LAO-JAPAN BUDO CENTER
IN
LAO PEOPLE' S DEMOCRATIC REPUBLIC

JULY, 2007

JAPAN INTERNATIONAL COOPERATION AGENCY

AZUSA SEKKEI CO., LTD.

PREFACE

In response to a request from the Government of Lao People's Democratic Republic, the Government of Japan decided to conduct a basic design study on the Project for Construction of Lao-Japan Budo Center and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to Lao People's Democratic Republic a study team from 14th October to 9th November, 2006 and from 21st January to 1st February, 2007.

The team held discussions with the officials concerned of the Government of Lao People's Democratic Republic, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to Lao People's Democratic Republic in order to discuss a draft basic design, and as this result, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly, relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of Lao People's Democratic Republic for their close cooperation extended to the teams.

July, 2007

Masafumi Kuroki
Vice-President
Japan International Cooperation Agency

July, 2007

LETTER OF TRANSMITTAL

We are pleased to submit to you the basic design study report on the Project for Construction of Lao-Japan Budo Center in Lao People's Democratic Republic

This study was conducted by Azusa Sekkei Co., Ltd. under a contract to JICA, during the period from 2nd October, 2006 to 10th August, 2007. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of Laos and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

Finally, we hope that this report will contribute to further promotion of the project.

Very truly yours,

Hozumi Ogawa
Project manager,
Basic design study team on The Project for
Construction of Lao-Japan Budo Center,
Lao People's Democratic Republic
Azusa Sekkei Co., Ltd.

SUMMARY

Summary

① Overview of the Country

Lao People's Democratic Republic (hereinafter called Lao PDR) is an inland country located in the center of Indochina Peninsula, bordered by five countries; Thailand, Cambodia, Vietnam, China and Myanmar. The land area is approximately 236,800km², almost equal to that of the main island of Japan. 70% of the country is plateau and mountainous area, with a mountain range spreading from north to south along the eastern border with Vietnam. The Mekong River flows in the western region, forming a portion of the border with Thailand. It flows through approximately 1,900km of Lao territory, giving major influence on the people's lifestyle as well as serving as a basis of the daily life. According to the Third National Census, conducted in March 2005, the population of Lao PDR is 5,609,000. The country has a hot and humid tropical monsoon climate which is divided into two seasons: the rainy season (May to September) and the dry season (October to April). The average yearly temperature is approximately 28°C, April to May being the hottest months of the year. January is the coldest month in Vientiane, marking a low minimum temperature of about 17°C. The annual mean rainfall in Vientiane is between 1,500mm to 2,00mm. There has been no record of earthquakes in Vientiane.

Laos introduced "Chintanakan Mai" (New Thinking) in 1986, and since has been promoting economic reform and implementing open economy policies (New Economic Mechanism: NEM) including the introduction of the market principle. However, due to the geographic condition of being a landlocked country and the impact of the civil war that continued long, the national economy is underdeveloped and the country remains to be a least developed country. The per capita nominal GNI in 2004 was US\$ 390. According to the definition of poverty set by the Lao Government, 30% of the national population is below the poverty line. Laos is faced with many problems concerning economic development. While measures for poverty eradication and the provision of socio-economic infrastructures to ensure it are urgently needed, development of human resources in the fields with shortage of workers is also an important challenge.

The country's industry (during the period of 2001-2002) was structured by primary, secondary and tertiary sector each occupying 51.2%, 23.6% and 25.2% of GDP. The growth in manufacturing and service sectors (especially the increase of exports by the private sector) has been leading the country's economic growth since 1990s, and a rapid expansion in the field of electricity and minerals is expected in the coming future.

To overcome the geographical restriction of being a landlocked country, Laos has been actively participating in regional economic integration and cooperation. With an eye to the start of the ASEAN Free Trade Agreement (AFTA; a scheme aiming at the abolition of tariffs in the region) in 2008 and the country's entry into the World Trade Organization (WTO), Laos is now undertaking preparatory works in the country. Laos is also trying to accelerate the economic development of the country, making use of the multilateral frameworks of regional development, such as Mekong Development Initiative led by Asian Development Bank and the Ayeyawady Chao Phraya Mekong Economic Cooperation Strategy (ACMECS) led by the Thai

Government.

② Background and Outline of the Requested Project

The Lao Government has been addressing poverty reduction through the National Growth and Poverty Eradication Strategy (NGPES) formulated in 1996, with an objective of “eradicating extreme poverty by 2010, and growing out of the status of a least developed country by 2020”. This strategy, which is positioned as the action plan of poverty eradication in the National Development Plan, has been formulated focusing on the four areas that are closely linked to poverty eradication: agriculture, education, healthcare, and transportation infrastructure.

The importance of sports for healthy development of youths is well recognized in the field of education, and the Lao Government recognizes the importance of policies for development and popularization of sports in the country.

Ball games such as soccer and sepak takraw have long been popular in Laos. With respect to Budo, there are approximately 400 athletes in Budo including Karatedo, Judo, and Aikido players. Partly owing to the instructions given by members of Japan Overseas Cooperation Volunteers and Senior Volunteers dispatched from time to time since 1966, the technical skills of these Budo players have risen to a remarkable level, and Laos has produced several medalists at international events such as Southeast Asian Games (hereinafter called SEA Games). Stimulated by the achievements of these athletes, the number of persons who want to participate in Budo practice has been increasing in recent years. However, there is no Budo center satisfying the international standard in Laos at the present. Athletes are practicing mostly making use of spaces such as meeting rooms and lecture halls. In addition to the aging of facilities, these buildings have problems because they are not designed specifically for sports. Large spaces are not available. In some cases, athletes are practicing in a space with pillars at intervals of several meters. In some cases, players in different Budo disciplines are using the same place for practice at different times. Thus, most Budo players are practicing in an environment that is far from sufficient.

The purpose of this Project is to solve the problem that the environment for Budo practice is insufficient in Laos and the country lacks a facility for Budo tournament that can host international events such as SEA Games. For this sake, this Project plans to construct a Budo Center in Vientiane, Laos, and supply necessary equipment so that the environment for Budo will be improved.

The implementation of this Project is expected to enable Budo practice and competitions to be performed in better conditions, promote Budo education in Laos, and improve the level of Budo players in Laos. In addition, it will enhance the popularity of Budo among Lao people and deepen their understanding of Japanese culture. It is also expected that Budo will be recognized as a part of youth education.

Based on this situation, the Lao Government made a request for grant-in-aid cooperation concerning the construction of a Budo Center and the supply of equipment, including tatami mats, electric scoreboards, and training equipment, in July 2005.

③ Outline of Study Results and Contents of the Project

In response to this request, the Japanese Government decided to conduct a basic design study and Japan International Cooperation Agency dispatched a basic design study team from October 14, 2006 to November 9, 2006 (arrival in Japan) and from January 21, 2007 to February 1, 2007 (arrival in Japan). The study team met with relevant officials of the Lao Government for the purpose of consultation and confirmation regarding the background and contents of this Project, and collected information. Following later analysis conducted in Japan and the explanation of the Basic Design Summary conducted in Laos in the period from May 23, 2007 to June 2, 2007 (arrival in Japan), the Basic Design Study Report was completed.

To provide the minimal facility that can host international events, the Budo Center was designed as a facility with 2 Budo competition areas, infirmary, judge rooms, changing rooms, etc.

While the Lao side had requested a facility with a larger scale, the plan was reduced to a facility that can be operated and maintained within the capacity of the Lao side, considering the facts that this would be the first case for the National Sports Committee (hereinafter called NSC) to conduct direct operation of a sports facility, much manpower may not be allocated to the Budo Center, and a larger facility would require larger maintenance costs for a facility itself and equipment. A large-scale facility would increase the cost burden, causing difficulties in the operation of the Budo Center and undermining sustainability.

While the Budo Center will be used chiefly for Budo practice and competition events, it was planned as a multipurpose facility that can be used for other sports such as sepak takraw and table tennis, as well as concerts, seminars, lectures, etc., to improve the facility utilization rate of the Budo Center.

While the request from the Lao side included sports gym rooms and supervisor rooms, these were excluded from the Project, because the inclusion of these rooms would excessively expand the scale of the facility.

The equipment procured in this Project will be placed in the Budo hall and equipment storage rooms of the new Budo Center. These are planned to meet the function and activities of the Budo Center and to be consistent with the facility plan. The training equipment and office items for the administration office contained in the request were excluded from the plan.

The major contents of the facility are as shown below.

Building	Contents of Facility	Structure and Scale	
Main Budo Hall Building	Budo hall, stage, administration office, federation rooms, spectator seats, hall, etc.	RC, 3 story	1,352.58 m ²
West Annex	Judge rooms, infirmary, equipment storage rooms, etc.	RC, 1 story	211.56 m ²
East Annex	Changing rooms for men and women, lavatories for men and women, multipurpose lavatories, etc.	RC, 1 story	232.06 m ²
Total			1,796.20 m ²

The major items of equipment are as shown below.

Equipment	Major Specifications or Configuration	Quantities	Purpose of Use
Tatami mats for Judo	1. Green Tatami for Judo: 110 pcs. 2. Red Tatami for Judo: 18 pcs. Judo Tatami for official events approved by International Judo Federation, size 1 x 2 m 3. Tatami placing frames (linear): 30 pcs. 4. Tatami placing frames (corners): 4 pcs. 5. Carts for transportation: 2 pcs.	1 set	Mainly used for daily practice. The size of Tatami will be the international size defined by International Judo Federation. Because Judo Tatami will also be used for Aikido practice and demonstration, they will be shared with Lao Judo Federation.
Mats for Karate	1. Blue mats for Karate: 232 pcs. 2. Red mats for Karate: 56 pcs. Karate mats for official events approved by Japan Karatedo Federation, size 1 x 1 m	1 set	Mainly used for daily practice. Karate mats are effective in minimizing the risk of injury and accidents of players during competitions.
Folding chairs	1. Folding chairs: 750 pcs. Standards: JIS, with steel frames and vinyl seats 2. Carts for storage: with capacity to store at least 36 chairs	1 set	Used by attendants during the multipurpose use of the Budo Center including lectures, seminars, concerts, etc.
Floor protection sheets	1. Floor protection sheets: 29 rolls Standards: complying with Japan Building Disaster Prevention Association standards Size: 1.5 (T) x 1100 mm (W) x 20 m (L) Material: rubber and vinyl 2. Roll core adapters: 29 sets 3. Sheet lifters: 4 sets 4. Carts for storage: 2 pcs.	1 set	Used to protect the floor of the Budo hall during the multipurpose use of the Budo Center.

④ Validation of the Appropriateness of the Project

The cooperation works in this Project are the construction of a Budo Center with 2 Budo competition areas needed for hosting international events and the procurement of equipment related to Budo. The effects from the implementation of this Project are summarized as follows.

- By constructing a new and well-equipped Budo center, the number of athletes and trainees is expected to rise.
- Through this project, it will be possible to host international competitions for Judo and Karatedo.
- The implementation of this project is expected to increase the number of athletes, and hopefully the number of participants in those international Budo events.

The relevance of this project as a Japanese Grant Aid project has been confirmed based on the following five reasons:

- (1) It is the first Budo center to be constructed in Laos, that has the capacity to hold international competitions. Therefore, the direct beneficiaries of the project are the Budo athletes and trainees,

approximately 400 people. Their technical levels have improved in the recent years, owing to the instructions of JOCVs and SVs, and the increasing number of medalists is resulting in the increase of trainees. Since 2003, Budo performance demonstrations have been given every year as part of the cultural exchange project of overseas establishments, which has also contributed in increasing the public interest in Budo. Additionally, by hosting international events of Budo, newspaper and television coverage will increase and the general public who are interested in Budo will indirectly benefit from the project.

- (2) After the handover of the Budo center, the management of facilities and equipment will not require excessively high skills and will be possible by only a few number of staff assigned from NSC. The operation of the Budo center will be jointly managed by NSC and the Budo Associations, and events other than Budo, such as concerts and seminars, will be held to realize the multi-purpose usage of the facility.
- (3) The Lao Government has been addressing the problem of poverty through the National Growth and Poverty Eradication Strategy (NGPES). This strategy, which is positioned as the action plan of poverty eradication of the National Development Plan, has been formulated focusing on the four areas which are closely linked to poverty eradication: education, agriculture, healthcare and transportation infrastructure. The importance of sports for a healthy development of youth is widely acknowledged. This project, which plans to construct a Budo center and supply the necessary equipment, will therefore comply with the promotion of sports under the umbrella of education, and will contribute to the implementation of the overall plan of the Lao Government.
- (4) The construction site is located in an area where many national stadiums and sports facilities are found. Therefore, the negative impact caused by noise and traffic congestion will be minimal to the neighboring residents. With regard to waste disposal, no wastes of special nature are to be expected and the waste water will be discharged from septic tanks to the public sewage facilities. Therefore, this project is expected to have no negative impact on the surrounding environment.
- (5) The construction site occupies approximately 6,600 m² of land acquired in the premises of Anou Primary and Secondary School, located adjacent to the National Stadium in the center of Vientiane city. The land is almost flat, and neither the demolition cost of the existing building nor the land renovation cost is expected to be of excessive burden to the Lao side. The surrounding area is served with infrastructure including water, sewage system, electricity, and telephone line; therefore, no additional installations will be required. Furthermore, as the Lao Government already has the experience of implementing Japanese Grant Aid projects, hence no problems are to be anticipated in implementing this project under the framework of Grant Aid.

Listed below, are the challenges to be overcome by NSC, in order to maximize the use of the facilities constructed and the equipments provided by the project.

(1) Establishment of a Preparation Committee and a Coordinating Committee (tentative names)

The Budo center is planned to be handed over to the Government of Laos in March 2009. It will be the first Budo center in Laos that has a capacity to hold international events. The operation of the facility will be under the responsibility of the Lao side, and the establishment of a committee will be essential for the smooth operation and maintenance of the Budo center. In concrete terms, a Preparation Committee will be established by NSC, together with the representatives from the Judo Association, Karatedo Association and Aikido Club, which will formulate the terms of use (general rules, purpose, projects, membership, meetings, accounting etc). By jointly organizing the Preparation Committee between the NSC and the Budo organizations, operational know-how of each organization can be shared and promote a strengthened cooperation. After the completion of construction, the Preparation Committee will become the Coordinating Committee, which will regularly hold meetings to manage the operation and maintenance of the Budo center. In order to ensure stable management of operation and maintenance, an establishment of the Preparation Committee at an early stage will be recommended.

(2) Securement of Income of the Budo center

With a multi-purpose use of the Budo center, the income can be separated into two kinds: the facility usage fee from Budo performance demonstrations, competitions of sepak takraw and table-tennis, and other events, and the membership fee from the Associations/Club. In view of sustainability, although the cost of operation and management will be covered by the budget of NSC, it is recommended that appropriate user fees are collected to fund the operation and management. From such point of view, it is encouraged to achieve consistent increase of income from Budo performance demonstrations, sepak takraw and table-tennis competitions, and other events.

(3) Maintenance of facility and equipment

While maintenance management of the Budo center will be handled by the maintenance technician assigned by NSC, Tatami and mats will be installed by each Association, and the management of public address and acoustic systems as well as the lighting facilities during multi-purpose use of the center will be under the responsibility of the event organizers. Therefore, main duties of the maintenance technician will be routine maintenance of the facility, such as exchanging lighting fixtures and the daily checkup of the air-conditioners. These duties do not require special skills, so a training session prior to handover at the time of completion of construction will be sufficient. Therefore, NSC must ensure the assignment of technicians who will conduct the maintenance tasks. Moreover, since the facility and equipment maintenance costs are not expected to vary greatly from year to year unless particular problems arise, a fixed budget amount should be secured every year.

CONTENTS

Preface	
Letter of Transmittal	
Summary	
Contents	
Location Map / Perspective	
List of Figures & Tables	
Abbreviations	
Chapter 1 BACKGROUND OF THE PROJECT	1-1
1 - 1 Current Situation of the Relevant Sectors, and Challenges	1-1
1-1-1 Current Situation and Challenges	1-1
1-1-2 Development Plan	1-2
1-1-3 Socio Economic Situation	1-3
1 - 2 Background and the Overview of the Grant Aid Request	1-4
1 - 3 Trend of Japanese ODA	1-5
1 - 4 Assistance from Other Donors	1-6
1 - 5 Environmental and Social Considerations	1-7
Chapter 2 CONTENTS OF THE PROJECT	2-1
2 - 1 Basic Concept of the Project	2-1
2-1-1 Objectives of the Project	2-1
2-1-2 Outline of the Project	2-2
2 - 2 Basic Design of the Requested Japanese Assistance	2-4
2-2-1 Design Policy	2-4
2-2-2 Basic Plan	2-10
2-2-3 Basic Design Drawings	2-32
2-2-4 Implementation Plan	2-44
(1) Implementation Policy	2-44
(2) Implementation Conditions	2-46
(3) Scope of Works	2-46
(4) Consultant Supervision	2-48
(5) Plan of Quality Control	2-49
(6) Procurement Plan	2-50
(7) Operational Guidance Plan	2-52
(8) Soft Component Plan	2-52
(9) Implementation Schedule	2-52

2 - 3	Obligation of the Recipient Country	2-54
2 - 4	Project Operation Plan.....	2-56
2-4-1	Administration Plan.....	2-56
2-4-2	Maintenance System.....	2-58
2 - 5	Project Cost Estimation	2-59
2-5-1	Initial Cost Estimation.....	2-59
2-5-2	Operation and Maintenance Cost	2-60
2 - 6	Other Relevant Issues	2-68

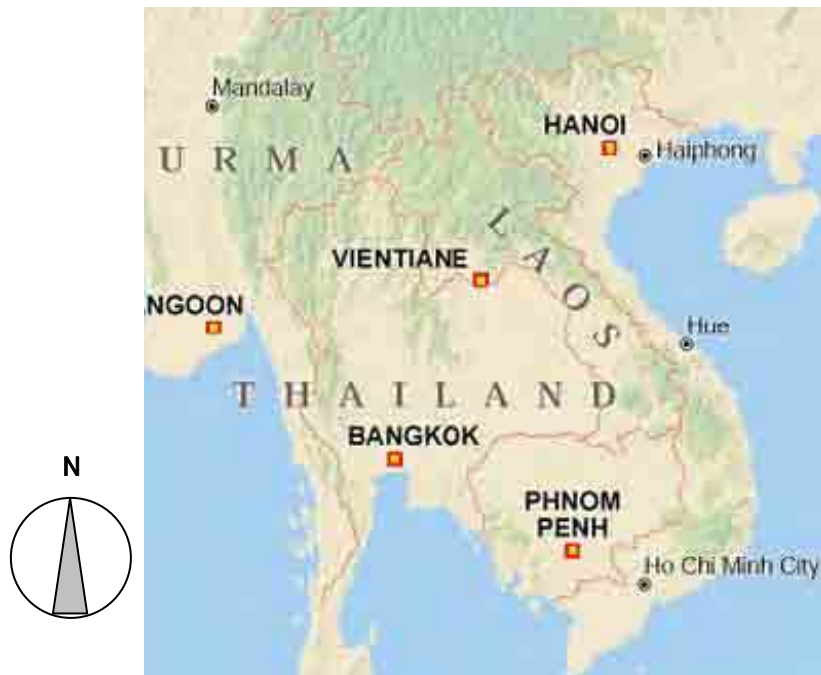
Chapter 3 PROJECT EVALUATION AND RECOMMENDATIONS..... 3-1

3 - 1	Project Effect.....	3-1
3 - 2	Recommendations	3-2
3-2-1	Challenges to be Overcome by Laos/Recommendations	3-2
3-2-2	Technical Cooperation/Working in Partnership with Other Donors.....	3-3
3 - 3	Relevance of the Project.....	3-4
3 - 4	Conclusion.....	3-5

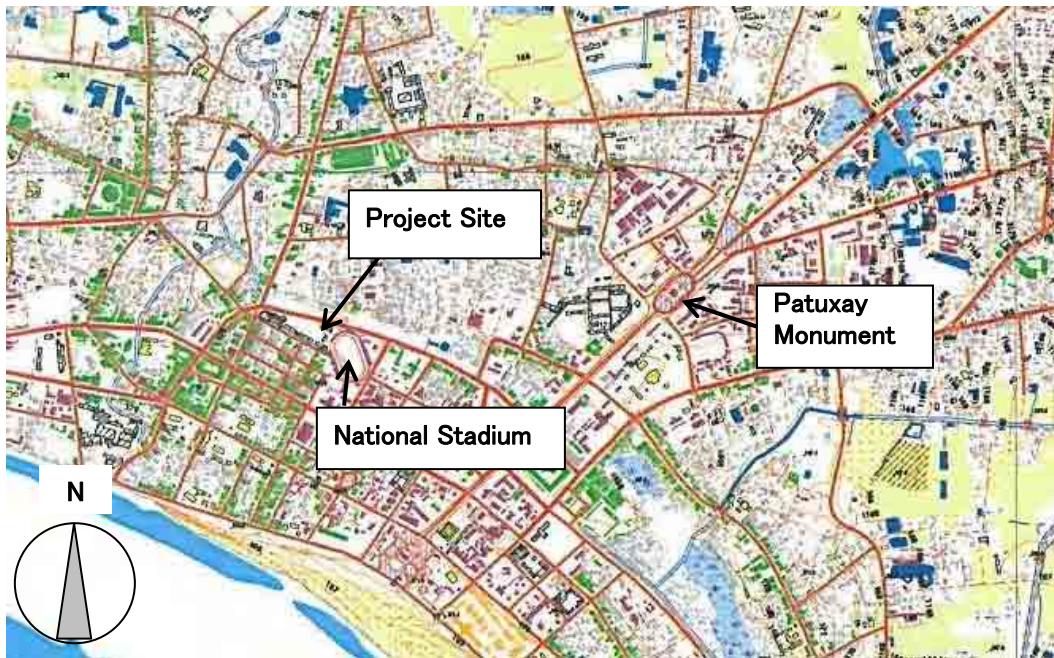
[Appendices]

1.	Member List of the Study Team.....	1
2.	Study Schedule.....	2
3.	List of Parties Concerned in the Recipient Country.....	7
4.	Minutes of Discussions	9
5.	Equipment	34
6.	Complementary Reference on Execution of Events.....	38

LOCATION MAP



LAO P.D.R. 0 500 1000 (km)



VIENTIANE 0 500 1000 (m)



THE PROJECT FOR CONSTRUCTION OF
LAO-JAPAN BUDO CENTER-1



THE PROJECT FOR CONSTRUCTION OF
LAO-JAPAN BUDO CENTER-2

LIST OF FIGURES & TABLES

Table 2-1	Existing Budo Halls in Laos.....	2-4
Table 2-2	Budo Demonstrations	2-5
Table 2-3	Calculation of Planned Floor Areas.....	2-14
Table 2-4	Representative Live Load.....	2-21
Table 2-5	Types of Air Conditioners	2-22
Table 2-6	Ventilation Turnover Rate.....	2-22
Table 2-7	Types of Sanitation Appliances and Facilities	2-23
Table 2-8	Fire Extinguishing Facilities.....	2-24
Table 2-9	Lighting Fixtures and Intensity of Illumination	2-25
Table 2-10	Rooms Requiring Telephone and Number of Circuits.....	2-26
Table 2-11	Specifications for Public Address Equipment	2-26
Table 2-12	Table of Exterior Finish.....	2-27
Table 2-13	Table of Interior Finish.....	2-27
Table 2-14	Content of Project.....	2-32
Table 2-15	Procurement of Construction Materials and Equipment	2-51
Table 2-16	Project Implementation Schedule.....	2-52
Table 2-17	Implementation Schedule	2-53
Table 2-18	Cost to Be Borne by the Lao Side.....	2-59
Table 2-19	Analysis of Budget of NSC	2-60
Table 2-20	Budget of National Sports Committee over Past 5 Years and Maintenance Cost of the Budo Center	2-63
Table 2-21	Facility Running Cost and Equipment Running Cost.....	2-63
Table 2-22	Income Forecast	2-65
Table 2-23	Balance Simulation-1	2-66
Table 2-24	Balance Simulation-2	2-67
Table 2-25	Balance Simulation-3	2-67
Table 3-1	The effectiveness of the project and the level of improvement.....	3-1
Table 3-2	Success indicators.....	3-2
Figure 2-1	Premises of Anou Primary and Secondary School and Construction Site for the Budo Center	2-10
Figure 2-2	Layout Plan	2-11
Figure 2-3	Floor plan of Budo Hall.....	2-15
Figure 2-4	Floor plan of Men's and Women's Changing Rooms.....	2-16
Figure 2-5	Floor plan of Equipment Storage Room.....	2-17

Figure 2-6	Floor plan of Multi-purpose Room.....	2-17
Figure 2-7	Floor plan of Infirmary.....	2-18
Figure 2-8	Floor plan of Administrative Office	2-18
Figure 2-9	Section.....	2-19
Figure 2-10	Supervision System	2-49

ABBREVIATIONS

Abbreviation	Idiom	Original Name
ACMECS	English	Ayeyawady–Chao Phraya–Mekong Economic Cooperation Strategy
ADB	English	Asian Development Bank
AFTA	English	ASEAN Free Trade Area
ASEAN	English	Association of Southeast Asian Nations
BHN	English	Basic Human Needs
BOD	English	Biochemical Oxygen Demand
COD	English	Chemical Oxygen Demand
CL	English	Clear Lacquer
DCPTC	English	Department of Communication, Transport, Post and Construction of Vientiane Capital
DDFI	English	Department of Domestic and Foreign Investment
ECI	English	Electrical Construction Installation Stated Enterprise
EDL	English	Electricite du Laos
E/N	English	Exchange of Notes
EP	French	Emulsion Paint
EU	English	European Union
GDP	English	Gross Domestic Product
GL	English	Ground Level
GNI	English	Gross National Income
ICTC	English	International Cooperation and Training Center
IDA	English	International Development Association
IEE	English	Initial Environment Examination
IMF	English	International Monetary Fund
JICA	English	Japan International Cooperation Agency
JIS	English	Japanese Industrial Standard
JOCV	English	Japan Overseas Cooperation Volunteers
LDC	English	Least Developed Countries
MRC	English	Mekong River Commission
NEM	English	New Economic Mechanism
NGO	English	Nongovernmental Organization
NGPES	English	National Growth Poverty Eradication Strategy

Abbreviation	Idiom	Original Name
NNL	English	Nampara Nakhone Luang
NSC	English	National Sport Committee
PVC Tile	English	Polyvinyl Chloride Tile
RC	English	Reinforced Concrete
SEA Games	English	South East Asia Games
STEA	English	Science, Technology Environment Agency
SV	English	Senior Volunteer
UNICEF	English	UN Children's Fund
UNDP	English	UN Development Programme
WFP	English	UN World Food Program
WTO	English	World Trade Organization

Chapter 1 BACKGROUND OF THE PROJECT

Chapter 1 Background of the Project

1-1 Current Situation of the Relevant Sectors, and Challenges

1-1-1 Current Situation and Challenges

Lao People's Democratic Republic (hereinafter called Lao PDR) is an inland country located in the center of Indochina Peninsula, bordered by five countries; Thailand, Cambodia, Vietnam, China and Myanmar. The land area is approximately 236,800km², almost equal to that of the main island of Japan. 70% of the country is plateau and mountainous area, with a mountain range spreading from north to south along the eastern border with Vietnam. The Mekong River flows in the western region, forming a portion of the border with Thailand. It flows through approximately 1,900km of Lao territory, giving major influence on the people's lifestyle as well as serving as a basis of the daily life. The country has a hot and humid tropical monsoon climate which is divided into two seasons: the rainy season (May to September) and the dry season (October to April). The average yearly temperature is approximately 28°C, April to May being the hottest months of the year. January is the coldest month in Vientiane, marking a low minimum temperature of about 17°C. The annual mean rainfall in Vientiane is between 1,500mm to 2,00mm. There has been no record of earthquakes in Vientiane.

According to the Third National Census, conducted in March 2005, the population of Lao PDR is 5,609,000. The country's industry (during the period of 2001-2002) was structured by primary, secondary and tertiary sector each occupying 51.2%, 23.6% and 25.2% of GDP. The growth in manufacturing and service sectors (especially the increase of exports by the private sector) has been leading the country's economic growth since 1990s, and a rapid expansion in the field of electricity and minerals is expected in the coming future.

Although the situation of Lao PDR has improved in the recent years, the standard is still below other neighboring countries, as shown by most of the basic indicators in Table 1-1.

Table 1-1 Basic indicators: Comparison of Lao PDR and neighboring countries

	Total population (1,000 people)	Population annual growth rate (%)	GNI per capita (US\$)	Average annual rate of inflation (%)	Life expectancy (years)	Adult literacy rate (%)	Primary school enrolment ratio (%) 2000-2005		Secondary school enrolment ratio (%) 2000-2005	
	2005	'90-'05	2005	'90-'05	2005	'00-'04	Male	Female	Male	Female
Lao PDR	5,924	2.4	440	27	55	69	87	82	40	34
Cambodia	14,071	2.5	380	3	57	74	100	96	30	22
Vietnam	84,238	1.6	620	10	71	90	97	91	46	21
Myanmar	50,519	1.4	220	24	61	90	89	91	38	37
Thailand	64,233	1.1	2,750	3	71	93	100	95	72	74

Source: UNICEF The State of the World's Children 2007

Lao PDR became independent as a socialist country in 1975, but as the former Soviet Union, Vietnam and other countries that had supported Lao PDR began abandoning the

socialist centralized planned economy policy, it also had to make a sharp turn toward the liberalization policy. In 1986, a new policy called “The New Thinking” was adopted to implement an omni-directional foreign policy, and a New Economic Mechanism (NEM) was introduced as a new goal. The basic concept of these policies was to introduce the principles of liberalization and market economy. Furthermore, in 1997, Lao PDR joined the Association of the South-East Asian Nations (ASEAN) and the Association of South-East Asian Nations Free Trade (AFTA), in the aim to pursue economic development through economic consolidation with the other nation of the region.

Laos is also actively involved in the economic integration/cooperation in the Region, and is preparing the domestic grounds for the enforcement of AFTA (aiming for the elimination of tariffs within the Region) from 2008, and the accession to the World Trade Organization (WTO). Furthermore, the Lao Government intends to build a momentum for the country’s economic development by utilizing the multi-national regional development framework, such as the ADB-lead Mekong Regional Development Initiative and the Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS) of lead by the Government of Thailand.

However, the geographical disadvantage of this landlocked country and the effect of the long-term civil war in the past have impeded the economic development, and Laos still remains to be one of the least developed countries. The **nominal** GNI per capita was 390 dollars in 2004, and 30 percent of the population is below the poverty line defined by the Lao Government. There are many challenges of economic development that lie before the Lao Government. Eradication of poverty, supported by the development of social and economic infrastructure, is in urgent need, but addressing the shortage of manpower by human resource development is also an important issue.

1-1-2 Development Plan

The Lao Government is currently implementing “The Five Year National Socio-Economic Development Plan”. At the sixth Congress of the Lao People’s Revolutionary Party held in 1996, a clear development goal was set to “grow out of the status of a least developed country by 2020”. At the seventh Congress held in March 2001, further clarification was made on the 2020 Vision, as the poverty reduction goals to be achieved by the years 2005, 2010, and 2020 were specified. In response, the Government formulated “The Fifth Five Year National Socio-Economic Development Plan” (The Fifth Plan).

Meanwhile, in January 2004, the Lao Government also formulated a comprehensive strategy for growth and poverty eradication – “The National Growth and Poverty Eradication Strategy (NGPES)” - through consultations at national and local levels, with donor countries and agencies, NGOs and other community-based organizations. NGPES, together with “the Fifth Plan”, is positioned as the core development plan of the country.

At the completion of “the Fifth Plan”, the Government of Laos formulated “The Sixth Five Year National Socio-Economic Development Plan” targeted on 2006 to 2010, which is currently being implemented after having been endorsed at the National Assembly in June 2006. “The Sixth Plan” integrates NGPES, focuses on poverty reduction, and sets the goals to achieve 7.5% economic growth rate and per capita GDP of US\$700~750. These goals are based on the future prospects of contributions that will be made by the infrastructures developed in the past, and on the expectations of the growth in the area of electricity, minerals and tourism.

Table 1-2 The Five Year Socio-Economic Development Plan and The National Growth and Poverty Eradication Strategy NGPES

“The Fifth Five Year National Socio-Economic Development Plan (2001-2005)”	
<Major issues>	Achieving and sustaining economic growth, stable supply of food, reduction of poor households, departure from dependence on shifting cultivation, prohibition of poppy cultivation, social order and political stability
<Targets>	GDP growth rate 7.0-7.5%, per capita GDP US\$500-550
<Achievements>	GDP growth rate 6.3%, per capita GDP US\$491/496 (as of September 2005)
“The National Growth and Poverty Eradication Strategy (NGPES)”	
<Major issues>	Macro economic reform, agriculture and forestry development/ education development/ healthcare development with a focus on poverty eradication, transport infrastructure development, community-based village development
<Cross-cutting issues>	Environment, drugs, unexploded bomb disposal, gender, HIV/AIDS
<Poverty eradication>	72 of 142 districts are designated as poor areas and 47 of 72 districts are specially designated as priority areas of poverty reduction measures. Poor districts are mostly residential areas of ethnic minorities, and are concentrated in the eastern region adjacent to the Vietnam border and in the northern mountainous areas.
<Economic growth>	Construction of Nam Thrun 2 Dam that could attract large amount foreign currency, promotion of large-scale projects e.g. mining development, invitation of overseas investment, focus on small and medium-sized enterprises.
“The Sixth Five Year National Socio-Economic Development Plan (2006-2010)”	
<Issues>	Incorporate the content of NGPES Economic and employment reform, improvement of investment/business environment, development of small and medium-sized enterprises, investment for socio-economic development (infrastructure development, focus on poor areas), trade expansion/ integration to international economy, financial/monetary system reform, improvement of educational/occupational training, economic growth in harmony with social development and environmental conservation, administrative reform, social and political stability
<Targets>	Economic growth rate 7.5-8.0%, per capita GDP US\$700-750(2010)

Source: Ministry of Foreign Affaires “Country Assistance Plan for Lao PDR, July 2006”

1-1-3 Socio-Economic Situation

Since the adoption of NEM in 1986, self-support accounting system and privatization were introduced to state/publicly-owned enterprises, domestic economy/trade liberalization policies were promoted, and a gradual shift occurred from planned economy to market economy. With the rapid economic growth of the neighboring ASEAN countries in the late 1980s to the late 1990s, Lao PDR also maintained good growth and marked a real GDP average annual growth rate of 7% between 1992 and 1997. During the Asian monetary crisis that occurred in 1997,

Laos, having close economic ties with Thailand, experienced a serious inflation due to the drastic drop in the value of its currency (Kip). This resulted in the GDP growth rate to drop to 3.4% in 1998, which recovered by 1999, and the country was able to maintain the average growth rate from 1999 to 2003 at 5.8%. The growth rate in 2004 is 6.4% (estimation), and the forecasts for 2005, 2006 and 2007 are 7.0%, 7.1% and 6.0% respectively. Although agriculture and forestry sector occupy just below 50% of GDP and involve 80% of the working population, the economic growth of the country has been lead by manufacturing and service industries since 1990s and electricity and mineral industries are expected to show rapid expansion in the near future.

Table 1-3 Major Macro-Economic Indicators (2001-2007)

	2001	2002	2003	2004	2005	2006	2007
GDP growth rate (year-on-year)	5.8%	5.8%	6.1%	6.4%	7.0%	7.1%	6.0%
Consumer Price Index (year-on-year)	7.5%	10.6%	15.5%	10.5%	7.2%	6.8%	5.0%
Trade balance (million US\$)	-288	-263	-244	-478	-457	-461	-550
Foreign direct investment (million US\$)	24	60	42	256	265	205	327
External debt/GDP ratio	82.7%	88.8%	101.5%	101.2%	102.9%	102.4%	102.1%
Foreign currency reserves (months)	2.9	3.1	3.7	3.4	3.1	3.1	3.2

*Estimate values for 2004, predictive values for 2005~2007. Trade balances of all years are in deficit.

Source: World Bank, East Asia Update

1-2 Background and the Overview of the Grant Aid Request

The Lao Government has been addressing poverty reduction through the National Growth and Poverty Eradication Strategy (NGPES) formulated in 1996, with an objective of “eradicating extreme poverty by 2010, and growing out of the status of a least developed country by 2020”. This strategy, which is positioned as the action plan of poverty eradication in the National Development Plan, has been formulated focusing on the four areas that are closely linked to poverty eradication: agriculture, education, healthcare, and transportation infrastructure. However, within the arena of education, sports have not been a priority in Laos. As in other developing countries, the emphasis of education is placed on mathematics, language, and other basic subjects rather than practical subjects such as physical education, art and music.

Aside from the sports in school curriculums, the importance of sports for healthy development of youths is well recognized, and soccer, sepak takraw, and volleyball are particularly popular. With respect to Budo, there are approximately 400 athletes in Budo including Karatedo, Judo, and Aikido players. Partly owing to the instructions given by members of Japan Overseas Cooperation Volunteers and Senior Volunteers dispatched from time to time since 1966, the technical skills of these Budo players have risen to a remarkable level, and Laos has produced several medalists at international events such as Southeast Asian Games (hereinafter called SEA Games). Stimulated by the achievements of these athletes, the

number of persons who want to participate in Budo practice has been increasing.

However, there is no Budo center satisfying the international standard in Laos at the present. Athletes are practicing mostly making use of spaces such as meeting rooms and lecture halls. In addition to the aging of facilities, these buildings have problems because they are not designed specifically for sports. Large spaces are not available. In some cases, athletes are practicing in a space with pillars at intervals of several meters. In some cases, players in different Budo disciplines are using the same place for practice at different times. Thus, most Budo players are practicing in an environment that is far from sufficient.

Laos is planned to host the 25th SEA Games in 2009. As Karatedo and Judo will be adopted as the official events of the SEA Games, the construction of a Budo center that satisfies the international standard is essential. However, in view of the technical capacity and the financial situation of Laos, the construction of such a center is highly problematic.

Under the circumstances described above, the Lao Government has put forward a request for a Grant Aid to the Government of Japan.

The details of the request are as follows.

Table 1-4 Details of the request

<p>1. Facilities</p> <ul style="list-style-type: none">◆ Budo center with two competition areas for Judo/ Karatedo/ Aikido◆ Spectator's seats (approximately 600 fixed seats, 300 movable chairs)◆ Entrance hall, office rooms, meeting rooms, Manager's office, Association office, VIP room, Press room etc.◆ Training gym, warming up rooms, multi-purpose rooms, doctor's room, referee rooms, storage etc.◆ Changing rooms, shower rooms, lavatories, machinery rooms <p>2. Equipment</p> <p>32 items listed below</p> <ul style="list-style-type: none">◆ Budo equipment: Tatami mats, electric score boards (large and small size) for Karatedo, timers for Judo (large and small size), Judo flags, Karatedo mats, folding chairs, dumbbells, lift weights, training benches, sandbags, bars, training bicycles, honor platform, flag poles, scales, treadmills, floor protection sheets, etc.◆ Office section and other equipment: desks, chairs, air conditioners, collapsible bed, blankets, pillows, mattresses, computers, printers, OS, DVD Videos, DVD players, DVD discs, televisions etc
--

1-3 Trend of Japanese ODA

Since 1991, Japan has been the top donor country of bilateral assistance to Lao PDR, and provides approximately 75 to 90 million US dollars of bilateral assistance per year. Based on the policy dialogue held by the economic cooperation study team that was dispatched to Laos in March 1998, the underlying principle of Japanese assistance has been the establishment of economic and social foundation which is the precondition of the economic independence of Laos. Hence, Japan has set (i) human resource development, (ii) support for BHN, (iii)

agriculture and forestry, and (iv) infrastructure development as the priority areas for assistance, and has been actively implementing development aid to Laos since 1999.

For bilateral assistance by scheme, grant aid projects have been implemented with transportation and other infrastructure development, support for BHN, agriculture and forestry development as some of the priority areas. The cumulative assistance amount for the seven-year period from fiscal year 1999 to 2005 is approximately 39.8 billion yen. In addition, technical cooperation projects focused on human resource development, social infrastructure development, agriculture/rural development, and healthcare have been implemented, and the cumulative amount for the same seven years is approximately 23 billion yen

With regard to Budo, Japanese assistance has been in the form of dispatch of Senior Volunteers (SV) and Japan Overseas Cooperation Volunteers (JOCV) specialized in Judo, Karatedo, Aikido, as well as the Grass-roots grant aid scheme for the supply of Karatedo equipment. The results of these schemes are as below.

Table 1-5 Grant Aid and SV/JOCV dispatch in the field of Budo (2003~)

Grass-roots grant aid scheme			
Fiscal year	Scheme	Maximum amount (hundred million yen)	Content
2003	Grass-roots grant aid	0.059	Supply of makiwara, karate helmet, protectors and other equipment for the promotion of Karatedo.
Dispatch of Senior Volunteers/ Japan Overseas Cooperation Volunteers			
Fiscal year	Budo	Content	
2003.5-2006.5	Judo	Senior Volunteer Assignment: Laos Judo Association	
2004.4-2006.3	Aikido	Senior Volunteer Assignment: Laos Aikido Club	
2004.10-2006.10	Karatedo	Senior Volunteer Assignment: Laos Karatedo Association	
2006.8-2007.2	Judo	Japan Overseas Cooperation Volunteer Assignment: Laos Judo Association	
2007.2-2009.2	Judo	Japan Overseas Cooperation Volunteer Assignment: Laos Judo Association	
2007.5-2009.5	Judo	Senior Volunteer Assignment: Laos Judo Association	

Source: JICA

1-4 Assistance from Other Donors

The annual amount of foreign aid to Laos is approximately 400 million US dollars, which is almost equivalent to the annual budget of the Lao Government. Therefore, it can be said that the development of Lao PDR is supported mainly by foreign aid. The ratio of Grant Aid to Loans was 57:43 for the fiscal year 2003~2004, and the ratio of bilateral assistance to multilateral assistance was 52:48.

Other major donor countries of bilateral assistances are Sweden, France, Australia, Germany, China and Vietnam. International organizations that are providing support to Laos are the World Bank/ International Development Association (IDA), International Monetary Fund (IMF), Asian Development Bank (ADB), United Nations agencies (15 organizations including United Nations Development Programme (UNDP), United Nations Children's Fund (UNICEF), World Food Programme (WFP)), European Union (EU) and the Mekong River Commission (MRC), among others.

Since Laos will be hosting the 25th SEA Games in 2009, it is requesting donor assistance in relation to the SEA Games, including the construction of relating facilities and the training of the athletes. The projects which have been authorized, at present, are listed below.

Table 1-6 Assistance from other donor countries/organizations (for sports) (Unit: 1000US\$)

Fiscal year	Organization	Project name	Amount	Scheme	Content
2007~2008	Government of Vietnam	Construction of Lao Training Center	4,000	Grant aid	Construction of a training center for the SEA Games
2005~2008	International Olympic Committee (IOC)	Olympic Indoor Sports Project	350	Technical cooperation	Training of athletes of indoor sports (partially funded by the Lao Government)
2007~2009	China Development Bank	Construction of Sports Complex	100,000	Loan/Technical cooperation	Construction of sports complex for the SEA Games, consisting of the main stadium, swimming pool, indoor stadium, tennis courts, rifle range etc.

Source: Lao National Sports Committee (NSC)

1-5 Environmental and Social Considerations

This Project is the construction of a sports facility called a Budo Center, which is adjacent to the National Stadium and located in a district forming a major sports complex including other sports facilities. Therefore, because little environmental and social impact on the surroundings is expected, it is considered to fall under "category C" in the classification according to "JICA Guidelines for Environmental and Social Considerations."

Because the environmental and social impact of this Project is minimal, NSC has confirmed that Initial Environmental Examination (IEE) procedures are not needed according to Lao legislation related to environment. Anou Primary and Secondary School is planned to undergo total renovation. No problems of acoustic noise, exhaust gas, and vibration are expected to occur because the site is surrounded by the National Stadium on the eastern side and the building of Anou Primary and Secondary School on the western side, although there is a residential area on the southern side across a road. While the waste water from septic tanks will be discharged to the gutter on the western side of the project site, this gutter flows from south to north in a culvert, and is not expected to cause the problem of foul odor. In view of these facts, this Project is considered to have no environmental and social impact.

Chapter 2 CONTENTS OF THE PROJECT

Chapter 2 Contents of the Project

2-1. Basic Concept of the Project

2-1-1 Objective of the Project

Laos is a developing country with the per-capita GNI of \$390 (data for 2004, the World Bank). The Lao Government has been addressing the problem of poverty through the National Growth and Poverty Eradication Strategy (NGPES) pursuing the national objectives of eradicating extreme poverty by 2010 and growing out of the status of a least developed country by 2020. This strategy, which is positioned as the action plan covering poverty eradication in the National Development Plan, has been formulated focusing on the 4 areas of agriculture, education, healthcare, and transportation infrastructure, which are strongly related to poverty eradication. Within the area of education, the position of sports has not been so important. Similarly to other developing countries, the emphasis of education in Laos is placed on mathematics, language, and other basic subjects rather than practical training subjects such as physical education, art, and music. For instance, although the Guidelines for the Course of Study recommend that physical education should be taught at primary and secondary schools for 2 hours per week, 66 hours in a year, many schools do not provide physical education at all.

Aside from the sports in school curriculums, the importance of sports for healthy development of youths is well recognized, and soccer, sepak takraw, and volleyball are particularly popular. With respect to Budo (Japanese martial arts), there are approximately 400 athletes in Budo including Karatedo, Judo, and Aikido players. Partly owing to the instructions given by members of Japan Overseas Cooperation Volunteers and Senior Volunteers dispatched from time to time since 1966, the technical skills of these Budo players have risen to a remarkable level, and Laos has produced several medalists at international events such as SEA Games. Stimulated by the achievements of these athletes, the number of persons who want to participate in Budo practice has been increasing.

However, there is no Budo center satisfying the international standard in Laos at the present. Athletes are practicing mostly making use of spaces such as meeting rooms and lecture halls. In addition to the aging of facilities, these buildings have problems because they are not designed specifically for sports. Large spaces are not available. In some cases, athletes are practicing in a space with pillars at intervals of several meters. In some cases, players in different Budo disciplines are using the same place for practice at different times. Thus, most Budo players are practicing in an environment that is far from sufficient.

Laos is planned to host the 25th SEA Games in 2009. According to the planning document for this event entitled "Economic-Technical Feasibility Study Preparation for the Host of 25th SEA GAMES in 2009, " major objectives of hosting these games are (1) to promote national development in human resources, socioeconomy, and national defense; (2) to help the stable development of the country; and

(3) to improve the technical skill of sports players in Laos so that they can approach the level in neighboring countries and the international standard. The achievement of these objectives is expected to support national development, infrastructure construction, human resources development, promotion of tourism, and stabilization of politics. Because Karatedo and Judo will be adopted as the official events of the SEA Games, a Budo center needs to be constructed.

The implementation of this Project will enable Budo players to practice in more appropriate conditions, promote Budo education in Laos, and boost level of Budo players in Laos. This Project will also promote the popularity of Budo among Lao people and the recognition of Budo as a part of youth education. In addition, the facilities constructed in this Project is planned to be the venue of Budo events in the 2009 SEA Games.

2-1-2 Outline of the Project

This Project aims to promote cultural interchange and international friendship between Laos and Japan through popularization of Budo including Judo, Karatedo, Aikido, etc., which are rooted in the traditional culture of Japan. This Project plans to construct the first Budo center in Laos with the capacity to serve for the increasing number of players reflecting the recent popularization of Budo. The planned construction site of this Project is located in the premises of Anou Primary and Secondary School in Vientiane. The direct beneficiaries of this Project are approximately 400 athletes in Judo, Karatedo, and Aikido, and the expected indirect beneficiaries are the entire population of Laos numbering approximately 5.6 millions.

The planned construction site of this Project is located in the premises of Anou Primary and Secondary School, which is adjacent to the National Stadium in the central part of Vientiane, the capital of Laos. The construction site occupies the land area of 6,600 m², and is served by well-developed infrastructure facilities including water supply and drainage, electricity, telephone, etc. The north end of the premises faces Khoun Boulom Road, which is a main road running in east-west direction. The site borders on the National Stadium to the east and Anou Primary and Secondary School, which is planned to undergo renovation, to the west. To the south is a road in a residential district. The area to the north of the National Stadium contains National Sports Committee (NSC), which is the government agency responsible for this Project. Forming the principal sports complex in Vientiane, this area also contains tennis courts, Taekwondo training hall, boxing gym, shooting range, swimming pool, bowling center, and other facilities under the control of NSC.

This cooperation Project consists of the construction of a Budo center comprising a Budo hall with 2 Budo competition areas (including a stage), offices including a reception counter, manager's room, changing rooms for men and for women, association rooms (for Judo, Karatedo, and Aikido associations), spectator seats, referee room, infirmary, equipment store, machinery room, etc., and the procurement equipment including tatami, timing clocks, floor protection sheets, etc. The facilities will

be used for table tennis and sepak takraw in addition to Budo, but not for basketball, badminton, handball, etc. In addition, the Budo center will be designed for multiple purposes including concerts, seminars, lectures, etc.

2-2. Basic Design of the Requested Japanese Assistance

2-2-1 Design Policy

(1) Basic Policy

1) Extent of Cooperation and Grade Setting

At the present, there are several Budo halls in Laos as listed below and these are used for practice. There are no Budo halls with spectator seats. There are no facilities suitable to large events such as SEA Games. While a Judo hall is in Savannakhet, all other Budo halls (practice halls) are in Vientiane.

Table 2-1 Existing Budo Halls in Laos

		Location	Used by	Present Situation
Judo	1	National Stadium	Vientiane High School Judo Club	An indoor practice site adjacent to the National Stadium. Donated by the Metropolitan Police Department of Japan. Tatami-floored facility with 1 practice area. It shares the same location with a Muay Lao practice site.
	2	Lao Yout Organization	Vientiane Judo Club	A dedicated single-storey building with 1 tatami-floored practice area. A small practice area (tatami-floored) is attached next to it.
	3	Metropolitan Police	Metropolitan Police Judo Club	An indoor tatami-floored facility. Very small.
	4	Police Academy	Police Academy Judo Club	This was an indoor tatami-floored facility. Relocated to the Police School.
	5	Police School	Police School Judo Club	Partly outdoor. The storage condition of tatami and mats is poor.
	6	Savannakhet	Savannakhet Judo Club	Located in Savannakhet National Stadium.
Karatedo	1	Communication School	Vientiane Karate Club	A classroom in the communication school is used as a karate training hall. There is a training room (8 m x 8 m) and a storeroom for equipment. The equipment provided through a grass-root grant-in-aid project are used and stored here.
	2	Private firms	Beer Lao, Lao Telecom, etc.	Karate clubs in private firms.
Aikido	1	Lao Youth Organization	Vientiane Aikido Club	The training hall of the Judo Club of Lao Youth Organization is shared on a time basis.

The present Police School is planned to be reorganized as a college and merged to the Police Academy. Consequently, the Judo Club will also be absorbed, and tatami and other equipment have already been moved from the Police Academy to the Police School. However, these have been kept in poor storage condition, and tatami mats are not in usable condition. As a result, the Judo Club of the Police School is rather inactive at the present.

Since 2003, demonstrations of Budo including Judo, Karatedo, and Aikido have been performed as the cultural projects of the Japanese Embassy in cooperation with NSC. Because there are no Budo halls with spectator seats, these demonstrations were held at the lecture hall of Laos National University Faculty of Economy and Management (built under Japan's grant aid scheme) and National Culture Hall (built with the aid from China).

Table 2-2 Budo Demonstrations

Year and Month	Budo Demonstration	Main Sponsors	Venue
Nov. 2003	1st Japanese Budo Demonstration	Marunouchi Judo Club	National Culture Hall
Aug. 2004	2nd Japanese Budo Demonstration	Marunouchi Judo Club	Laos National University
Mar. 2005	3rd Japanese Budo Demonstration Commemorating the 50th Anniversary of Diplomatic Relations	Tokai University Judo Club	National Culture Hall
Mar. 2006	Joint Demonstration of 3 Budo Disciplines	Marunouchi Judo Club	National Culture Hall
Aug. 2006	Karate Demonstration	National Sports Committee	Laos National University

The operation and maintenance of the facility after completion will be conducted directly by NSC. While the Lao side had initially requested a facility with a larger scale, the plan was reduced to a facility that can be operated and maintained within the capacity of the Lao side, considering the facts that this would be the first case for the NSC to conduct direct operation of a sports facility, much manpower may not be allocated to the Budo Center, and a larger facility would require the imbursement of larger maintenance cost. A large-scale facility would increase the cost burden, causing difficulties in the operation of the Budo Center and undermining sustainability.

This Project aims to promote cultural interchange between Laos and Japan through popularization of Budo including Judo, Karatedo, Aikido, etc., which are rooted in the traditional culture of Japan. This Project plans to construct the first Budo center in Laos with the capacity to serve for the increasing number of players reflecting the recent popularization of Budo. The Budo center will have a Budo hall with 2 competition areas, and satisfy the minimal conditions for holding international competitions.

2) Basic Policy in Equipment Selection

In the formulation of the equipment plan, the equipment should be consistent with the expected functions of the new facility, comprehensively considering the positioning of the Budo center to be constructed, the maintenance and management ability of the Lao side, and their financial ability to support the facility. The policy concerning equipment selection is as follows.

① Scope of the Cooperation Project

In this cooperation Project, the equipment plan is developed for the Budo center constructed by the Japanese side, and its content is limited to the items needed for the activity of the relevant facility. While the request included other facilities managed by the Lao side such as office equipment and furniture, these are excluded from the plan.

② Content of Equipment Plan

The content of the equipment plan in this cooperation Project consists of the equipment needed for Judo, Karatedo, and Aikido, as well as the equipment considering multi-purpose use such as lectures. The equipment for Judo, Karatedo, and Aikido is limited to the items satisfying the minimal requirement for daily practice and tournaments. For multi-purpose use, the plan includes folding chairs to be used during lectures.

It has been confirmed through mutual discussion that office equipment, office furniture and general furniture are not included in the plan.

(2) Policy on Natural Conditions

Laos belongs to the tropical monsoon climate zone. A year is divided into the rainy season and the dry season. The rainy season lasts from the end of May to the end of October, and rainfall peaks during the 2 months (from September to October) in the latter half of the rainy season. There is almost no rainfall in the dry season from early November to mid-May, and temperature exceeds 37°C in the period from March to April. Considering these climate conditions, the building is planned to have eaves that ensure the comfort of people in the Budo center by preventing the entry of direct sunshine and rain. The layout is designed considering natural ventilation for occasions other than multi-purpose use such as concerts, when an air conditioning system will be used. Air conditioning is considered indispensable for gaining competitive advantage over other venues in inviting events. However, an agreement should be made so that air conditioning will not be used during daily practice for the purpose of saving maintenance costs. Although no earthquakes have been recorded in Laos, the structure of the building is designed to have sufficient safety and durability. Because there are no building standards and design codes for general buildings in Laos, the plan is developed according to the building standards in Japan.

(3) Policy on Socioeconomic Conditions

The typical architectural style of ordinary private houses in Laos is wooden raised-floor houses with pitched roofs. This style, considering ventilation and prevention of water leakage, is well adapted to natural conditions. Layers of steep roofs are also characteristic to the style of traditional temple architecture. While old temples are constructed with the combination of wood and bricks, relatively new ones consist of the main structure of reinforced concrete supporting complicated light-gauge steel roofs.

Construction in this Project will also be based on common local construction methods. The structural body of the Budo center will be constructed as a reinforced concrete structure, and roofs will be constructed with steel frame structure. Exterior walls will be made of concrete blocks with a mortar layer and elastic spray paint finish. Annex buildings will be constructed using common local construction methods based on reinforced concrete structure.

(4) Policy on Construction and Procurement Conditions

1) Facility Plan

Large-scale construction projects are rarely conducted in Laos, even in the capital city, Vientiane. Skilled construction workers are hardly found in this situation, and projects requiring a certain level of quality are often conducted using skilled workers from Thailand and Vietnam. In this Project, it is essential that Japanese personnel provide guidance regarding work supervision. Design involving complicated and difficult assembling should be avoided, and simple methods achieving sufficient rigidity should be considered. Construction materials that are available in Laos should be used. Process

management is particularly important for this reason, and adequate quality inspection and confirmation of inventory should be practiced. Although there is no need for procedures such as building permit application before the beginning of construction, necessary documents will be submitted via NSC to the Ministry of Land Management, Urban Planning and Construction and permission will be obtained.

The following summarizes the present state and planning policy regarding major infrastructure elements.

•Electricity :

- From the high-voltage overhead line (22 kV) laid in the premise, electric power will be taken in via an overhead line supported by private poles. After voltage reduction with an outdoor overhead transformer, low-voltage (380/220V) power is sent to the electricity room in the building. The wiring of the service line to the transformer will be borne by the Lao side. An integrating wattmeter (work by ECI) and a switchboard will be installed on the secondary side of the transformer, and power is then drawn to the electricity room in the building.

•Water Supply :

- A 150-mm water main has already been installed beneath the road to the north of the project site. Water will be branched from this water main into the premises. The work to the meter installed in the premises will be conducted by the Nampara Nakhone Luang (NNL, cost will be borne by the Lao side), and the work beyond the meter will be conducted in this Project.

•Wastewater Discharge :

- In the part of the project site near the border with the Stadium to the east, there is a drainage ditch (approximately 1 m in width) flowing from the residential area to the south. In this Project, wastewater after treatment in a septic tank according to the STEA standards will be discharged to this ditch.

•Telephone Facilities

- The telephone line located in front of the project site has the capacity of 5000 circuits, and up to about 20 circuits can be provided at any time. Telephone lines will be led to the building via overhead lines supported by private poles. The cost of the wiring to the entrance terminal board will be borne by the telephone company.

2) Equipment Plan

None of the requested equipment related to Budo is produced in Laos. Because Judo and Karatedo are Budo disciplines that are traditional in Japan, most products available in the market are of Japanese make.

Equipment such as folding chairs for lectures and other multi-purpose use of the facility will be selected referring to specifications for Japanese products. Procurement of third-country products should also be considered, such as the products of Thailand where manufacturers have factories.

(5) Policy on Practical Use of Local Contractors

1) Facility Plan

At the present, about 180 local construction companies are active in Laos, and several Japanese constructors have offices in Vientiane. Major companies among local constructors have experience in

working under Japan's grant aid projects. Generally speaking, the awareness about quality control and safety management is low in Laos, and it can hardly be said that constructors have sufficient all-round ability to perform work. It is necessary to provide adequate instruction in Japanese management methods. Because local skilled workers are few, Japanese supervisors should be sent and adequate work guidance should be given. In addition, it should be considered to make the best use of the assets of local contractors.

2) Equipment Plan

There are no manufacturer's agents dealing in Budo-related equipment in Laos. While the equipment plan in this Project does not include items requiring special maintenance ability, repair of Judo timers will have to be conducted directly by the manufacturer in Japan, because there are no agents in Laos and neighboring countries.

While there are no manufacturer's agents providing folding chairs and other items, repair and other services regarding these items can be obtained from the agents in Thailand, a neighboring country.

(6) Policy on Operation and Maintenance Abilities of the Execution Organization

1) Facility Plan

The facility to be constructed in this Project is planned to be operated and maintained within the technical ability of NSC personnel, and the facility and equipment are selected to minimize maintenance cost. The facility is also planned to minimize running cost.

2) Equipment Plan

To ensure appropriate use and maintenance of the procured equipment, the following training should be given by the dealer at the time of delivery, and technical material needed for maintenance, operation and maintenance manuals, and other documents should be provided.

- Method of operation (equipment overview, procedures, checklists, etc.)
- Method of regular maintenance (cleaning and adjustment, repair of minor damage, etc.)

Because few persons at NSC speak English, some of the operation manual must be translated into Lao language.

(7) Policy on setting grade of Building and Equipment

1) Facility Plan

The grade of the building facility should be determined referring to existing facilities in Vientiane and paying attention to avoid excessive technical and economic burden in the operation and maintenance of the Budo center.

With respect to the maintenance of buildings, construction materials should be selected from materials that can be repaired easily, can be renewed and replaced, and are commonly used in local buildings. Construction methods that are commonly practiced in the local area should be employed, avoiding the use of special construction methods. Electric and mechanical incidental facilities should be planned considering the ease of maintenance and operation and duration.

2) Equipment Plan

① Specifications for Equipment

In principle, the equipment related to Budo should be the authorized products complying with the requirements of respective sports associations. Avoiding unnecessary features, products with basic specifications should be selected.

For items that are sensitive to voltage fluctuations (Judo timer (small)), the use of voltage stabilizers to prevent trouble should be considered.

② Quantities of Equipment

The quantities of equipment should match the quantities required for the activities in the Budo center. The equipment for Judo should be planned in quantities based on the use of 1 competition area, and that for Karatedo should be planned in quantities based on the use of 2 competition areas.

The equipment for multi-purpose use should be planned in quantities appropriate for the facility.

(8) Policy on Method of Construction and Procurement and Schedule

1) Facility Plan

Because the supply of construction materials and equipment, including structural materials, finishing materials, and incidental equipment, largely depends on importation, construction methods that are suitable to the technical level of local workers and constructors should be selected, sufficiently considering maintenance and other works that may be needed in the future. Regarding procurement of materials, it will be necessary to perform careful preparation including temporary work and labor management plans, importation and transportation plans, construction plan, etc. In particular, if finishing work needs to be performed during the rainy season, construction works should be scheduled with sufficient allowance of time for curing of base structures. The plan for procurement of construction materials should include consideration of measures to prevent early deterioration of the facility, such as the prevention of molds and rust due to moisture. Finishing works should be performed using dry methods whenever possible. Because most of construction materials will be imported products that can be procured locally, the procurement of materials and equipment will have considerable impact on the progress of construction works. Therefore, the planned quantities of materials and equipment and the current inventory should be checked regularly, and plans should be made so that the shortage of materials should not cause a delay in the construction process.

2) Equipment Plan

The delivery and installation of equipment should be scheduled in accordance with the facility construction process. Sufficient attention should be paid regarding the securing of the spaces for placement of equipment and the route for installation of equipment.

2-2-2 Basic Plan

(1) Site Plan

The project site is a plot of land ceded from the premises of Anou Primary and Secondary School located next to the National Stadium in the central part of Vientiane, the capital of Laos. The land with the area of approximately 6,600 m² adjoining the National Stadium has been secured. The project site faces 2 roads, a main road caked Khoun Boulom Road (approximately 12 m in width) to the north and a road (approximately 7 m in width) facing the residential area to the south. Anou Primary and Secondary School supplying the project site is the oldest of primary and secondary schools in Vientiane. The premises with the area of approximately 12,000 m² contain a 2-storey school building, an 1-storey school building, and a prefabricated school building (constructed with grass root grant-in-aid from Japan) used as the primary and secondary school. In addition, the premises include a preschool building constructed by a Japanese NGO, a 70-year-old decrepit 2-story building, lavatories, and other small buildings. The schoolyard has several large trees with the crown diameter of about 30 m and looks somewhat like a forest. There is a gate between the school and the adjacent National Stadium, providing a passage between the 2 facilities.

The District of Chanthaburi governing Anou Primary and Secondary School has been developing a plan to demolish old school buildings and reorganize and rebuild the entire school. The provision of the site for the Budo center was proposed in line with this reorganization plan. The District of Chanthaburi plans to preserve the preschool constructed by the Japanese NGO and relocate the prefabricated school building constructed with the grass root grant-in-aid. All other existing buildings will be demolished, the ground will be leveled, and the reorganized school will be built. Site preparation for the Budo center will be conducted by NSC according to this schedule.

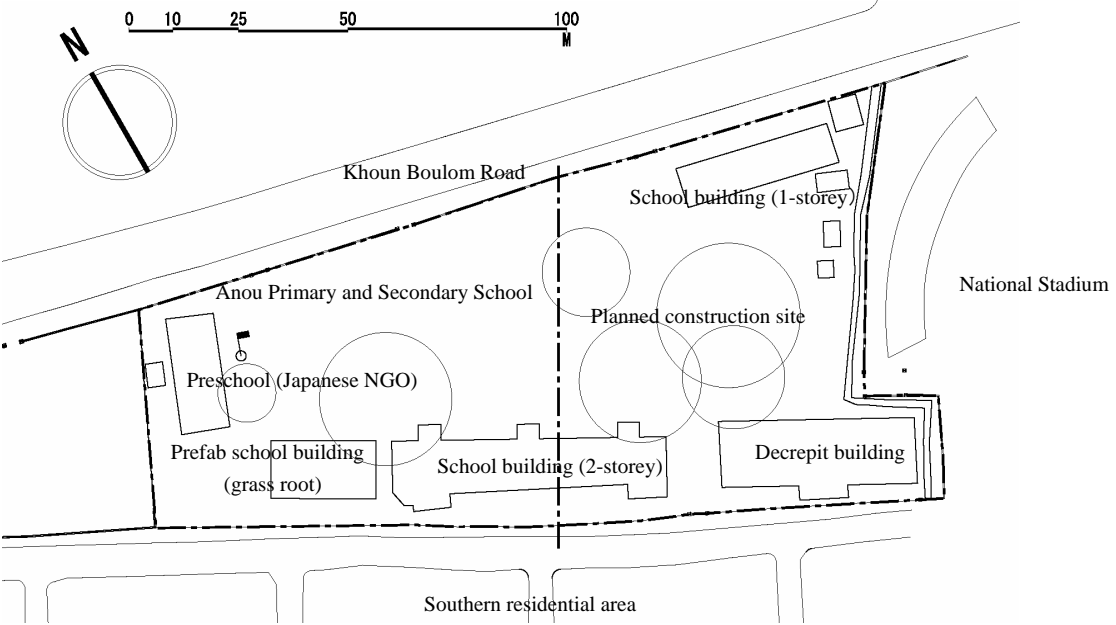


Figure 2-1 Premises of Anou Primary and Secondary School and Construction Site for the Budo Center

The layout of the Budo center will be determined primarily considering the access from roads, the connection with the National Stadium, and the relationship with the reorganized primary and secondary school.

Because Khoun Boulom Road is a main road, this road is assumed to provide the main access to the Budo center. Because the school is planned to have the buildings on the southern side and the schoolyard facing Khoun Boulom Road, the Budo center is also located the southern part, leaving an open space facing the road. This layout is also convenient for the use of the southern road for backyard access. Regarding the connection with the National Stadium, the layout of buildings should be designed with sufficient space to allow the traffic of cars using the existing gate. There is a public drainage ditch (approximately 1 m in width) of Vientiane City along the eastern edge of the project site. The Budo center should be positioned avoiding interference with this ditch as much as possible.

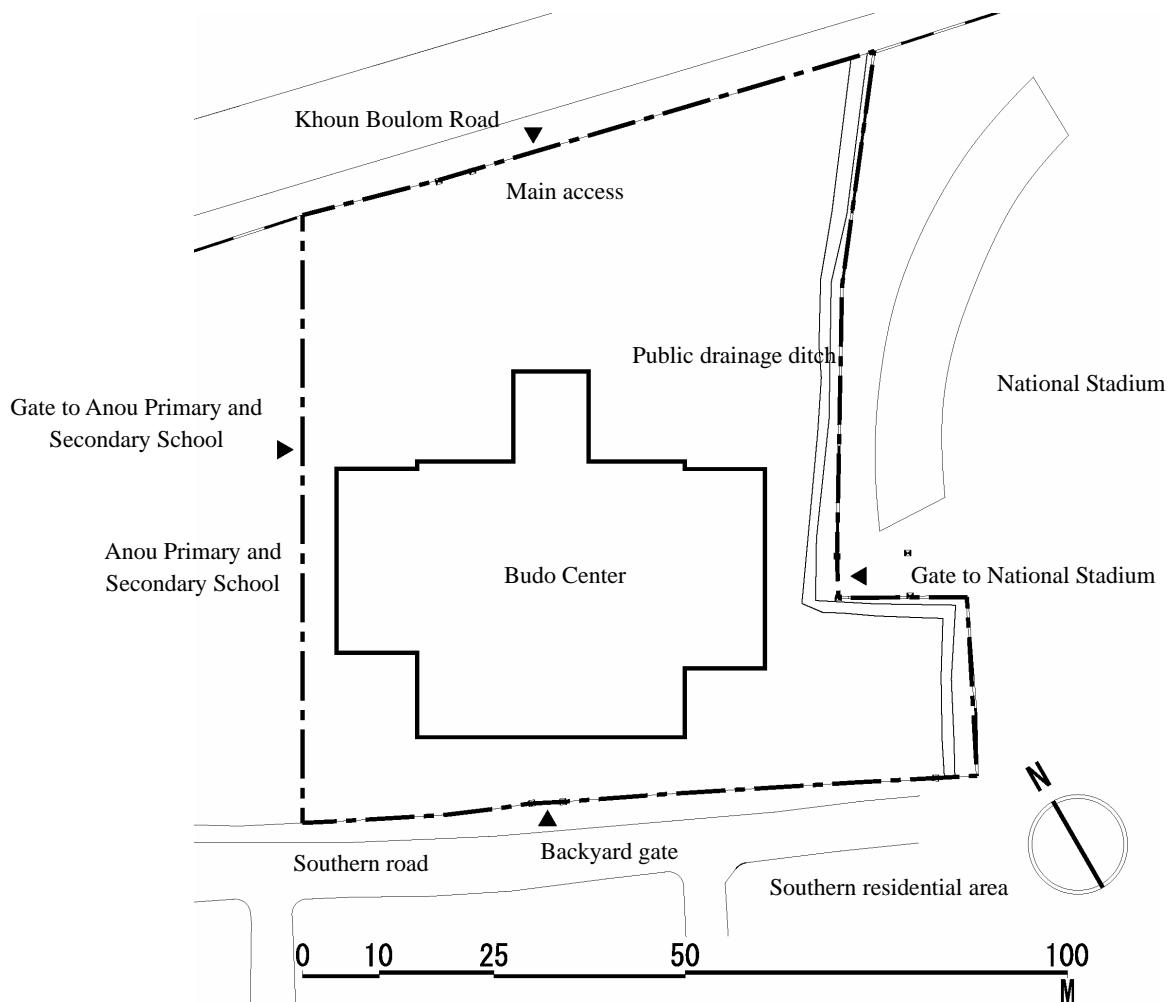


Figure 2-2 Layout Plan

(2) Building Plan

1) Floor Planning

① Discussion of Project Segments

This Budo center is planned chiefly for the purpose of providing the place for daily practice in Judo, Karatedo, and Aikido. In addition, the center will have spectator seats, changing rooms, and waiting rooms for small-scale tournaments and Budo demonstrations. For the purpose of increasing the utilization rate of the facility, publicizing the presence of the Budo center, and gaining revenue to support a part of maintenance cost, the Budo center is also planned to serve as a concert and lecture hall with the audience capacity of about 800 persons, which is considered to match the needs in Vientiane.

i Budo Hall

The facility is planned for the 3 Budo disciplines of Judo, Karatedo, and Aikido. The Budo hall is planned assuming that 1 Judo competition area and 1 Karatedo competition area are provided at ordinary times.

The size of the tatami-floored competition area for Judo will be 14m x 14m, including the 8m x 8m contest area and 3m safety zones. There are 2 possible options in the size of the Judo competition area: Kodokan size (based on a tatami sized 900mm x 1,810mm) and international standard size (based on a tatami sized 1,000mm x 2,000mm). While both are used officially in different events and different practice halls, the international standard will be employed in this Project. This standard is popular in the world and increasingly regarded as the standard for international events.

The competition area for Karatedo will be a 12m square, including the 8m x 8m contest area and 2m safety zones. Although the practice and competition in Karatedo are traditionally performed on a wooden floor, a matted floor is required by the competition rules, and players usually practice on mats in the world. Therefore, a matted floor will be provided in this Project.

Aikido has no rules regarding the size of competition area, because Aikido is performed only in the form of demonstrations and no competitions are held. Traditionally, the practice in Aikido is performed in Judo halls. Therefore, this Project assumes that the practice and demonstration in Aikido are performed in the same conditions as Judo.

ii Related Rooms

Assuming that approximately 50 Judo and Karatedo players normally participate in practice at a time and the gender ratio is 50% males and 50% females, the facility is planned to have changing rooms for 25 men and 25 women.

In the administration segment, a manager's room and an office will be provided for the manager of the Budo center. Equipment storage rooms for storing tatami, mats for Karatedo, floor protection sheets, folding chairs, etc. will be provided.

iii Spectator's Seats

Spectator's seats are provided for the spectators and audience of Judo and Karatedo competitions,

Aikido demonstrations, concerts, and lectures. The spectator's seats consist of fixed seats on the 2nd floor and movable folding chairs on the 1st floor. The maximum capacity is planned to be about 800 persons, both floors combined, so that the requirements for air conditioning, lavatories, and other facilities would not be excessive.

iv Miscellaneous Rooms

As the minimal requirement for a facility for small Budo competitions, multi-purpose rooms, an infirmary, and a meeting room will be provided.

To serve as a place for supporting and promoting Judo, Karatedo, and Aikido, an office to be shared by the 3 sports associations will be provided.

Multi-purpose rooms will be used by referees on occasions of small and medium-scale competition events, and by artists and other personnel during concerts. These rooms will be equipped with toilet facility, because the persons using these rooms need to be separated from the ordinary paths of people. The infirmary will be provided as the first-aid station providing emergency care. This room will be equipped with toilet facility because of the needs in first-aid activities.

The meeting room will be used for meetings needed in daily operation, briefing to athletes, and workshops. On occasions of Judo and karate competition events and concerts, the meeting room will be used by persons related to the events.

② Calculation of the Scale of Facility

To a certain extent, it is possible to hold a Judo competition event using only 1 competition area. On the other hand, Karatedo usually requires at least 2 competition areas (courts), because one needs to be used for "kata" and another for "kumite."

The layout of the venue of a competition event largely depends on the discrimination of the organizer and the authoritative competition committee, and there are no general rules determining the necessary size of the facility. Based on the examples of small and medium-scaled events in Japan, and the scale of the Budo center will be determined so that the minimal ability to hold competition events will be ensured.

Table 2-3 Calculation of Planned Floor Areas

Room	Requested (m ²)	Planned (m ²)		Remarks
Budo hall	875.0	575.25	Budo hall	
		52.19	Stage	
Multi-purpose room	50.0	25.78	Referee room	
		25.00	Infirmary	
Sports gym room	50.0			
Supervisor room	62.5			Including lavatories for men and women
Office 1	27.5	26.10	Administration office	
Office 2	27.5	14.18	Manager's room	
Meeting room	35.0	25.00	Meeting room	
Men's changing room	55.0	37.50	Men's changing room	
Women's changing room	55.0	38.28	Women's changing room	
Women's lavatory	40.0	44.53	Women's lavatory	
Men's lavatory	40.0	31.25	Men's lavatory	
Equipment storage room	97.5	50.78	Equipment storage room 1	
		13.05	Equipment storage room 2	
		10.15	Equipment storage room 3	
Air conditioning machine room 1	17.5	27.23	Machine room 1	
Air conditioning machine room 2	17.5	27.23	Machine room 2	
		13.05	Electric room	
Staircase 1	15.0	24.20	Staircase	
Staircase 2	15.0			
		176.12	Entrance and entrance hall	
		165.5	Corridors of east and west annexes	
Total of 1st floor	1,480.0	1,402.37		
2F multi-purpose room 1	15.0	26.66	Association office	
2F multi-purpose room 2	15.0	26.10	Foyer	
		24.20	Staircase	
2F seats and passages	578.5	198.87	Seats	
Total of 2nd floor	608.5	275.83		
3F seats and passages		118.00	3F seats and passages	
Total of 3rd floor		118.00		
Total floor area	2,088.5	1,796.20		

③ Floor Planning

i Budo Hall

- The size of a Judo competition area is assumed to be 14m x 14m, and that of a Karatedo competition area is assumed to be 12m x 12m. The floor plan of the Budo hall must be able to accommodate competition areas in 3 patterns: (1) 1 Judo area and 1 Karatedo area for practice, (2) 1 Judo area for competition events, and (3) 2 Karatedo areas for competition events. The plan can accommodate 2 sepak takraw courts.

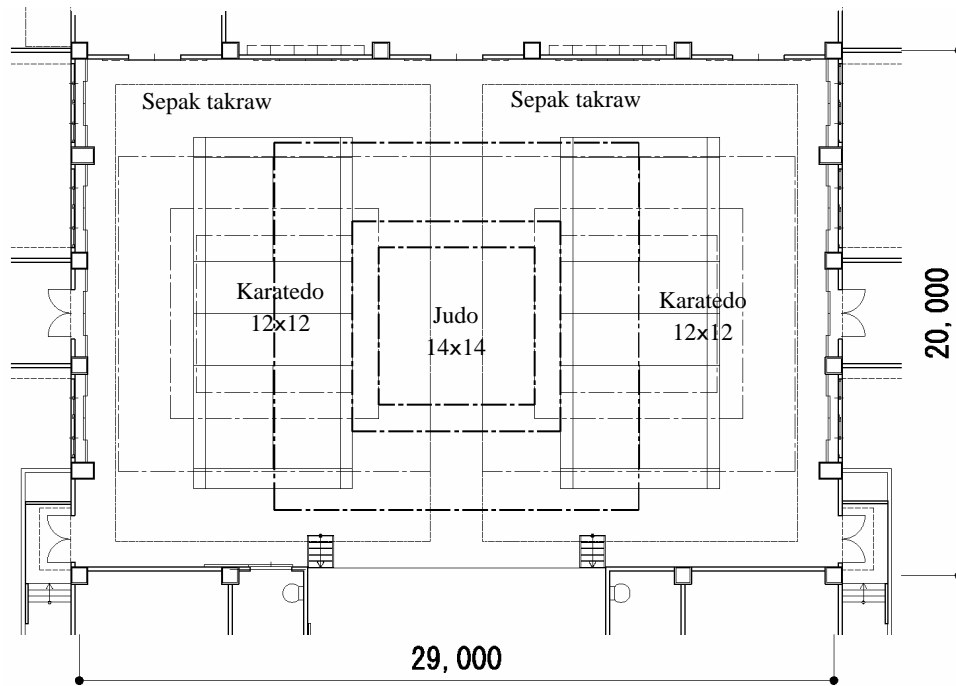


Figure 2-3 Floor plan of Budo Hall

ii Men's and Women's Changing Rooms

- Lockers, showers, toilets, and washstands are provided assuming the use by 25 men and 25 women.

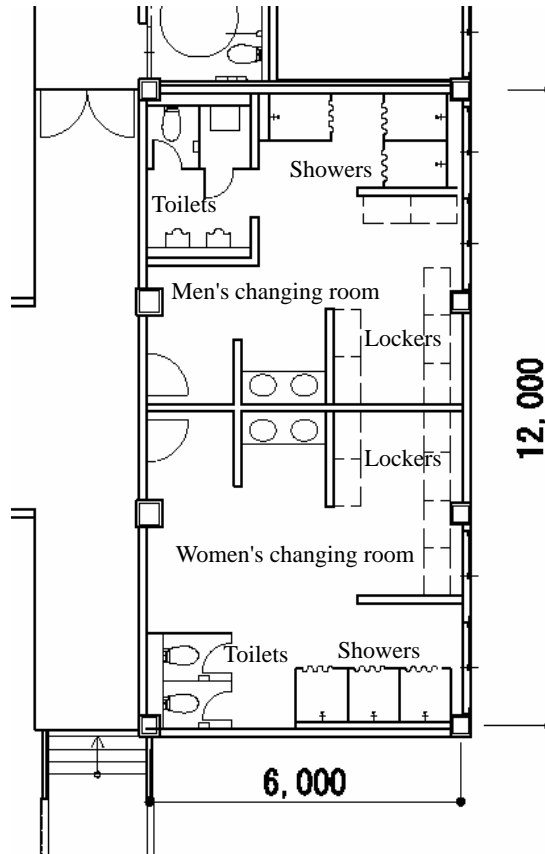


Figure 2-4 Floor plan of Men's and Women's Changing Rooms

iii Equipment Storage Rooms

- These rooms are planned to have sufficient area for storing tatami, karate mats, folding chairs, floor protection sheets, and net and poles for sepak takraw. These rooms are furnished similarly to living rooms, so that they can be used as waiting rooms and for other purposes during competition events. A toilet and washstand are provided in the corridor.

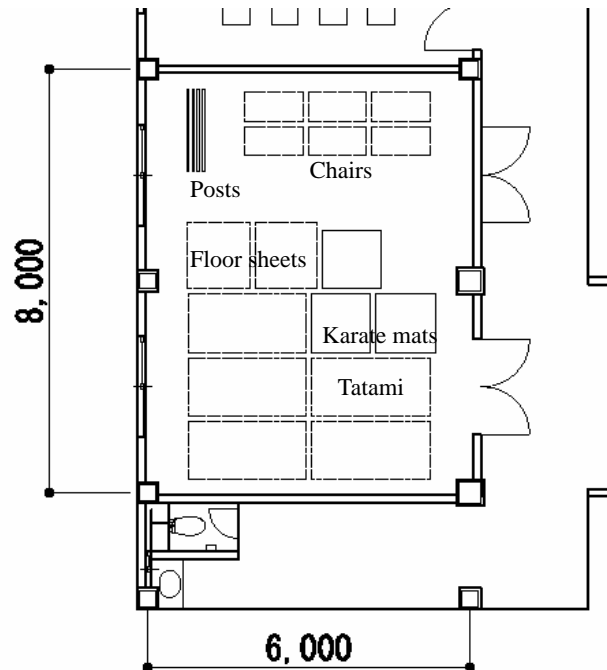


Figure 2-5 Floor plan of Equipment Storage Room

iv Multi-purpose Rooms

- These rooms are furnished as meeting rooms accommodating about 8 persons, so that they can be used for multiple purposes. Assuming the use as referee rooms, a dedicated toilet and washstand are provided.

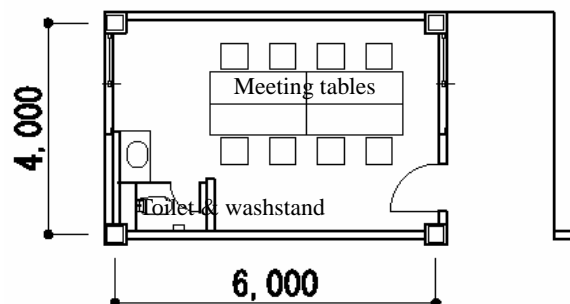


Figure 2-6 Floor plan of Multi-purpose Room

v Infirmary

- The infirmary is assumed to have 2 beds, a desk, and shelves. A dedicated toilet and washstand are provided because of the needs in hygiene and emergency care.

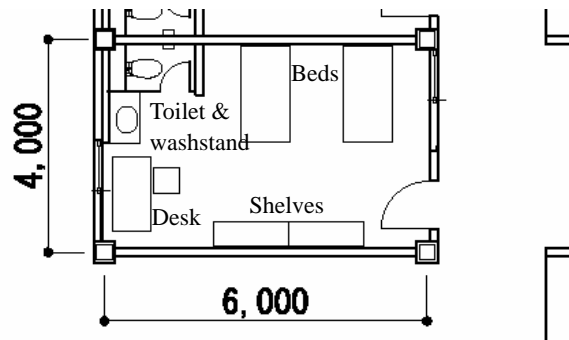


Figure 2-7 Floor plan of Infirmary

vi Administrative Office

- This office is assumed to have 4 desks. A counter for reception of visitors will be provided.

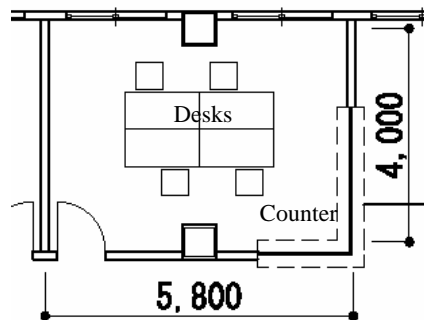


Figure 2-8 Floor plan of Administrative Office

2) Section Planning

- The road level to the north of the project site is EL + 170.0, and the level of the flat part of the site is EL + 169.0. There is a level difference of approximately 1m. To minimize the workload of land leveling while respecting the present ground level, the design ground level (GL) will be set at EL +169.0.
- To prevent flooding during severe rain, the standard floor level of the 1st floor will be 20cm higher than GL.
- Roof is constructed by steel frame with tie bar structure .
- Inhabited rooms will have ceilings so that the air volume above the ceiling serves for thermal insulation.
- Each building will have deep eaves to prevent the entry of direct sunshine to the hall and protect walls from rain.
- Storey height (the height from floor surface to the upper edge of roof beams) will be determined as follows:
 - Main Budo hall building The lower end of ceiling finish will be +2400mm from the floor level of spectator's seats on the highest story.
 - East and west annexes Determined from the 3m ceiling height of inhabited rooms.

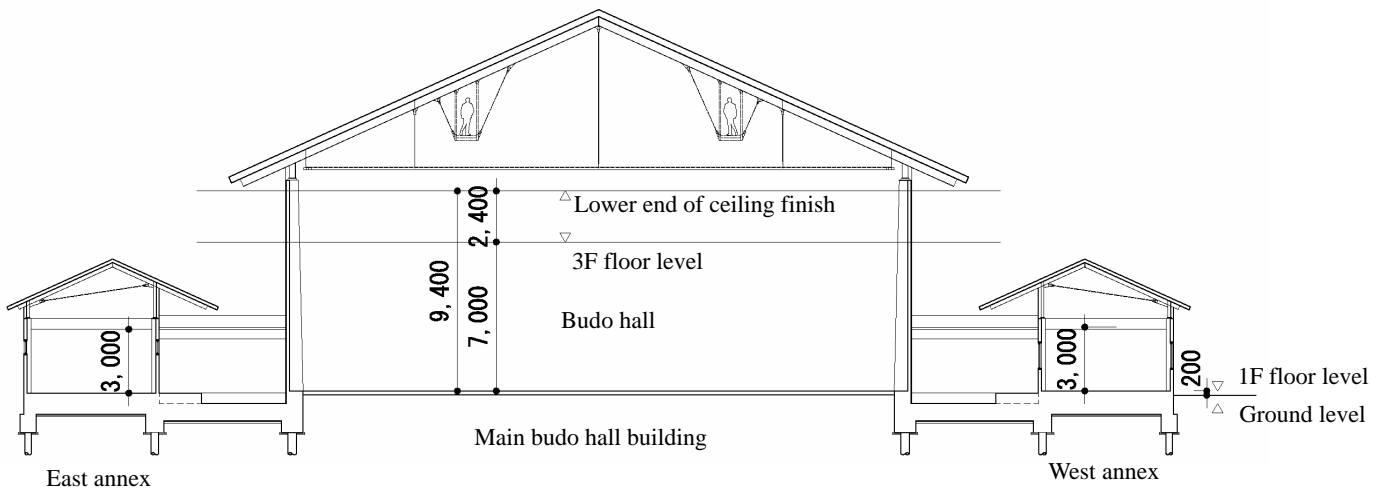


Figure 2-9 Section

3) Structure Planning

① Conditions for Structure Planning

- No earthquakes have been recorded in Vientiane City. The Lao Department of Meteorology and Hydrology, Ministry of Agriculture of Laos recommends the standard shear coefficient of $C_0 = 0.02$. In this Project, referring to similar buildings, the standard shear coefficient will be set at $C_0 = 0.05$, which is 25% of the lateral strength in primary design (calculation of allowable stress) specified by Japanese Building Code. The criterion will be the clearance of short-term allowable stress. The evaluation of ultimate lateral strength will be omitted.
- No incidents of strong winds such as typhoons have occurred in Vientiane City. However, considering gusts during monsoon, Japanese Building Code will be employed as specified in Article 87 "Wind Pressure" of the government ordinance (design standard wind velocity: 30m/s, roughness of terrain: class III). The criterion will be the clearance of short-term allowable stress.
- Ground condition: The data from geotechnical investigation in the construction site show that cohesive soil occurs at the depth of about 5.5 – 7.5m from the surface, sandy clay about 10.0m from the surface, and sandy soil at larger depths. N values are 9 – 27 for cohesive soil, about 3 – 12 for sandy clay at intermediate depths, and 50 or more for sandy soil underneath.

② Structure Planning

- Main Budo hall building: The part containing the Budo hall will be a 29m space with no pillars. The roof will be constructed with steel, as long-span beams need to be used. The main frame structure of the 1st floor will be a reinforced concrete structure using locally available concrete and steel bars. Pure rigid frame structure will be used here. Except for simple partition walls, walls will be concrete block walls using locally available materials.
- Annex buildings: Roofs will be steel structures. The main frame structures will be reinforced concrete using locally available concrete and steel bars. Pure rigid frame structure will be used here. Except for simple partition walls, walls will be concrete block walls using locally available materials.

③ Foundation Planning

- Although the planned building is 1-storeyed except for a part of spectator's seats, the weight of the building is estimated to be large, because it has a larger storey height than ordinary buildings and is used for the gathering of the general public. Therefore, the foundations for the pillars supporting roofs will be pile foundations using locally available PC piles with impact pile driving. Because the upper ground layer has the bearing capacity of 30kN/m^2 , the Budo hall on the 1st floor will have an earth floor.
- With respect to the foundations of annex buildings, the bearing capacity of 30kN/m^2 of the layer in the present condition is barely sufficient for supporting the foundations and the slabs and pillars of the 1st floor, and will not support the weight of walls and roofs. Therefore, pile foundations will be used.
- Because the pillars around the Budo hall will be cantilevered, the bending stress in pillar pedestals will be treated by means of the connection of foundation beams with annex buildings.
- The bearing capacity of the ground is estimated to be 30kN/m^2 , according to the result of plate bearing

tests conducted 1.0m below the ground surface in the present condition.

④ Design Loads

- Earthquake load: There are no past records of earthquakes and earthquake load will not be considered. However, considering past records, evaluation using 25% of the Japanese standard will be conducted.
- Wind load: Although there are no records of damage from typhoons, the Japanese standard for inland areas will be employed. The classification of the roughness of terrain in the construction site is assumed to be III (coastal area).
- Live load: Live load is determined as shown in the Table below, referring to (Japanese) Building Code and applicable implementation rules.

Table 2-4 Representative Live Load

Room	Live Load (N/m ²)			Remarks
	For Floor	For Framing	For Earthquake	
Roof	600	400	200	
Spectator's seats	2900	2600	1600	Fixed seats
Budo hall	5000	3200	2100	
Office and related rooms	2900	1800	800	

Source: Japanese Building Code and other sources.

⑤ Materials to be Used

- Concrete: Cement made in Laos will be used. The design standard strength of concrete should be F_c 21N/mm².
- Steel bars: Deformed bars SD30 (DB16 or less) and SD40 (DB20 and DB25) made in Laos will be used.
- Steel bar joints: Lap joints will be used because pressure welding of bars is not possible on the site.
- Steel frame: Steel materials made in Thailand that are equivalent to JIS G 3101 SS400 will be used.
- Piles: Piles made in Thailand will be used. PC Spun Pile (ϕ 300 – ϕ 600) impact pile driving, 1/3 (300NAp).

4) Incidental Facility Planning

① Air Conditioning and Ventilation Facilities

i Air Conditioning Facilities

Air conditioning facilities will be planned with air conditioners that are appropriate for the use of rooms. The use of natural ventilation will be incorporated. The Budo hall will be equipped with air conditioners to be used on occasions of competition events and multi-purpose use such as concerts. Natural ventilation without air conditioning will be used at ordinary times when the Budo hall is used for practice.

Air conditioners that are commonly used in Laos will be selected.

Table 2-5 Types of Air Conditioners

Rooms with Air Conditioning	Types of Air Conditioners
Budo hall, spectator's seats, stage	Floor-standing duct type air conditioners with combined use of outdoor air treatment packages and indoor load packages
Administrative office, manager's room, multi-purpose room, infirmary, meeting room	Separate type air conditioners

ii Ventilation Facilities

Ventilation is basically provided by natural ventilation. Ventilation facilities will be provided for rooms with odor or moisture, rooms with heat generation, and air-conditioned rooms.

The following shows the ventilation turnover rate for rooms requiring ventilation.

Table 2-6 Ventilation Turnover Rate

Rooms with Ventilation	Turnover Rate	Remarks
Changing room	10/h	
Lavatory	15/h	
Electric room	10/h	
Machine room	5/h	
Air-conditioned room (general)	Depends on number of persons	0.5 m ² /person, 30 m ³ /person
Air-conditioned room (Budo hall)	Depends on number of persons	800 persons, 20m ³ /person (ventilation using outdoor air treatment package)
West annex Equipment storage room 1	Depends on number of persons	0.5 m ² /person, 30 m ³ /person
Equipment storage room 2	Depends on number of persons	0.5 m ² /person, 30 m ³ /person

② Mechanical Facilities

i City Water Supply

The city water of Vientiane is supplied from the elevated cisterns of the Water Supply State Enterprise located in the city. There are no problems regarding the quantity, pressure, and quality of water.

a. Water Receiving Facilities

City water will be taken from the water main (φ150 pipe diameter) beneath the road to the north of the project site and led to the reservoir in the eastern part of the site.

The works from the branch from the water main to the position of the meter will be conducted by the Water Supply State Enterprise, and the works beyond the meter will be conducted in this Project.

b. Water Supply equipment

A reservoir will be installed, from which water will be distributed to various locations via a pressure water supply pump. The reservoir will be a two-tank reservoir with a pump room. A water level control (with a sliding ball tap) will be used, so that the water level in the reservoir can be manually switched between normal use and high demand times such as competition events, concerts and other multi-purpose uses.

ii Sanitation Appliances and Facilities

Types of sanitation appliances and facilities are as shown below.

Table 2-7 Types of Sanitation Appliances and Facilities

Sanitation Appliances and Facilities	Type	Remarks
Urinal	Flush valve	
Toilet bowl	Western style (low tank type)	Each toilet booth will be equipped with a small hand shower that is customary in Laos and a roll paper holder.
Washstand	Counter type, single faucet	
Toilet bowl for Physically handicapped users	Flush valve	With lever-operated valve
Washstand for physically handicapped users	Wall mounted, lever faucet	
Mirror for physically handicapped users	Large mirror	
Shower faucet	Fixed type	

iii Drainage Facilities

Wastewater and rainwater will be drained separately in the project site.

Wastewater will be treated in an aerated septic tank that can be maintained easily, and discharged to the drainage ditch after treatment. In the case of this building, the standard for septic tanks in Laos requires 50ppm or less BOD and 350ppm or less COD. There is no standard for the number of

persons served by a septic tank in Laos. The calculation in this Project will be based on the Japanese standard "Estimation of Population for Waste Water Purifier of Buildings" (JIS A 3302-2000), applying the building use classification of "1. Building Use: Assembly Facilities; c. Viewing Stands and Gymnasiums."

Wastewater and rainwater will be discharged, via the terminal catch basin to be installed in the project site, to the drainage ditch in the eastern part of the project site. The connection to the drainage ditch will be included in the works of this Project.

iv Fire Extinguishing Facilities

Fire laws have not been established in Laos. Although a law similar to that in Japan is planned to be enacted in the near future, there is none at the present. Therefore, fire extinguishing facilities according to the standard in Japan will be installed in this Project.

Table 2-8 Fire Extinguishing Facilities

Fire Extinguishing Facilities	Location
Fire extinguishers	Installed so that there will be 1 unit within 20m walk distance from any point (construction works)

④ Electric Facilities

i Power Receiving Facilities

Electric power will be received from the high-voltage overhead line (22kV, 50Hz) along the road in front of the project site via an overhead line. A transformer will be installed on the 1st leading-in pole in the project site. After stepping down to low voltage (380/220V), power is drawn to the electric room in the building. The Lao side will be responsible for the works upstream of the connection to the switch on the transformer primary side.

An integrating wattmeter (provided by the electric power company) and a switchboard will be installed on the transformer secondary side, from which power is drawn to the electric room in the building.

Power generators will not be installed, because power failures occur only as a result of lightning damage during the rainy season (about 2 or 3 times a year), the supply of electric power at ordinary times is stable, and the purposes of this facility will not involve the use in emergencies.

Power is then distributed from the electric room to respective switchboards via under-floor wiring (rated for exposed outdoor use). The wiring for air conditioners will be equipped with switchboxes for maintenance. Alarms regarding abnormal condition of the pump and abnormal water level in the tank will be displayed on respective power switchboards. The signals are collectively transmitted to the power switchboard in the machine room, and alarms will be displayed on the alarm board in the administrative office.

ii Lighting Fixtures and Outlets

a. Lighting Fixtures

Lighting of ordinary rooms will be planned basically using fluorescent lamps, which are

commonly used and easily available in Laos and have high illumination efficiency. The intensity of illumination will be planned based on JIS standards.

Considering the large ceiling height, the Budo hall will be illuminated with metal halide lamps so that the intensity of illumination sufficient for ordinary competitions and exhibitions (500Lx) will be attained. When a higher intensity of illumination (1,000Lx or more) is required for official competition events, additional lighting will be provided by the organizer of such events. The provision of sufficient power supply capacity and branch breakers will be included in this Project.

Stage lighting for theatrical effects will also be provided by the organizer of events. This Project will cover only the provision of general lighting fixtures.

To ensure the safety of audience and other persons during emergency evacuation, emergency lights and guiding lights will be installed in the places providing evacuation routes including spectator stands, entrance, foyer, and corridors.

The intensity of illumination and lighting fixtures in main rooms will be as shown in the Table below.

Table 2-9 Lighting Fixtures and Intensity of Illumination

Room	Lighting Fixtures	Intensity of Illumination	Remarks
Budo hall (general competition)	Shaded fixture	500Lx	Intermediate value for general competitions. For 400W lamp.
Budo hall (practice)	Shaded fixture	150Lx	For 400W lamp.
Spectator stand	Shaded fixture	150Lx	For 400W lamp.
Stage (main lighting)	Shaded fixture	500Lx	For 400W lamp.
Stage	Spotlight		About 2 lamps.
Manager's room	Recessed fixture	300Lx	
Administrative office	Recessed fixture	300Lx	
Multi-purpose room	Strip fixture with inverted triangular cross-section	300Lx	
Infirmary	Strip fixture with inverted triangular cross-section	300Lx	
Meeting room	Strip fixture with inverted triangular cross-section	300Lx	
Equipment storage room	Strip fixture with inverted triangular cross-section	75Lx	300Lx in West annex equipment storage room.
Changing room	Strip fixture with inverted triangular cross-section	75Lx	
Entrance & foyer	Down light	200Lx	
Lavatory	Strip fixture with inverted triangular cross-section	75Lx	
Changing room	Strip fixture with inverted triangular cross-section (waterproof type)	75Lx	
Association office	Strip fixture with inverted triangular cross-section	300Lx	
Corridor	Wall light (waterproof type)	75Lx	
Exterior (car parking & bicycle parking)	Lighting pole (waterproof type)	75Lx	
Exterior (courtyard)	Garden light (waterproof type)	75Lx	

b. Outlets

Outlets will be provided in quantities according to the needs in each room.

The stage will be equipped with outlets for lectures and cleaning. For use in events, a switchboard (about 10–20kW) will be installed in equipment storage room 2. The outlets for timer displays used during Budo competition events will have dedicated circuits. The outlets in places involving water and moisture will be grounded. In addition, power will be supplied to air conditioners, pumps, septic tank, etc.

iii Telephone Facilities

There are 3 telephone companies, Lao Telecom, ETL, and Lao Asian Telecom, in Laos. These companies have the ability to provide up to 20,000 telephone circuits in Vientiane City. The number of subscribed telephone circuits at the present is about 15,000, and there is ample reserve capacity for the provision of telephone circuits.

Telephone lines will be taken from the road in the north of the project site via overhead cables to the leading-in pole in the project site, from where lines are led into the building via buried cables. The cable installation works to the main distributing frame (MDF) will be conducted by the Lao side.

The MDF will be installed in this Project, as well as telephone duct wiring and telephone sets at appropriate positions in various rooms.

Table 2-10 Rooms Requiring Telephone and Number of Circuits

Rooms requiring telephone	Manager's room and administrative office: 1 circuit each Association office: 1 circuit each for 3 sports associations, 3 circuits in total
---------------------------	---

iv Public Address Facilities

Public address facilities will be provided for the purpose of paging, announcing, competition events, lectures, etc. in the Budo center. The public address amplifier will be installed in the administrative office, and speakers will be installed at appropriate positions in the entrance, foyer, Budo hall, west annex, east annex, and corridors.

Table 2-11 Specifications for Public Address Equipment

Specifications for equipment	Desktop PA amplifier, CD player, microphones, wireless microphones, antenna for wireless microphones, microphone receptacles (1 on the stage and 4 places in the Budo hall)
------------------------------	---

v Automatic Fire Alarm Equipment

Fire alarm equipment will be provided to support early detection of a fire and early firefighting activities. Because there are no explicit legal standards in Laos, automatic fire alarm equipment will be provided according to the Japanese fire laws. The receiver of the automatic fire alarm equipment will be installed in the office.

vi Lightning Protection Equipment

Lightening protection equipment using the conductor rod will be installed on the roof of the main

Budo hall building. Because there are no standards for lightening protection equipment in Laos, this equipment is planned according to JIS A 4201:1992 in Japan.

5) Construction Material Planning

Most of the construction materials commonly available in Laos are imports from Thailand. The materials used in this Project should be those that are commonly used in Laos and are suitable to future maintenance performed by the Lao side.

The following shows major elements of exterior finish and interior finish.

Table 2-12 Table of Exterior Finish

Part	Finish
Roof	Colored galvanized steel sheet roofing with the underlay of polyisocyanurate board and wood wool board
Exterior wall	Concrete blocks with a mortar layer and washed gravel finish. Partly, Colored galvanized steel sheet
Windows	Aluminum sash

Table 2-13 Table of Interior Finish

Building	Floor	Room	Finish			
			Floor	Base	Wall	Ceiling
Main Budo Hall Building	1F	Entrance	Poured Floor	Poured Floor	EP on mortar	T-bars, rock wool sound absorbing boards
		Entrance hall	Vinyl sheet	Vinyl	EP on mortar	T-bars, rock wool sound absorbing boards
		Staircase	Poured Floor	—	—	—
		Administrative office	PVC tiles	PVC plinth	EP on mortar	T-bars, rock wool sound absorbing boards
		Manager's room	PVC tiles	PVC plinth	EP on mortar	T-bars, rock wool sound absorbing boards
		Budo hall	Vinyl sheet floor for gymnasiums	Veneer plywood	(Lower) Veneer plywood (Upper) Perforated veneer	Perforated glass wool board, exposed
		Stage	Vinyl sheet	Veneer plywood	Veneer plywood	Perforated glass wool board, exposed
		Machine room 1	Polymer poured flooring	EP on mortar	EP on mortar	EP on plaster board
		Machine room 2	Polymer poured flooring	EP on mortar	EP on mortar	EP on plaster board
		Electric room	Polymer poured flooring	EP on mortar	EP on mortar	EP on plaster board
		Equipment storage room 2	Polymer poured flooring	EP on mortar	EP on mortar	T-bars, rock wool sound absorbing boards
		Equipment storage room 3	Polymer poured flooring	EP on mortar	EP on mortar	T-bars, rock wool sound absorbing boards

Building	Floor	Room	Finish			
			Floor	Base	Wall	Ceiling
	2F	Association office	PVC tiles	PVC plinth	EP on mortar	T-bars, rock wool sound absorbing boards
		Spectator's stand	Poured Floor	Poured Floor	EP on mortar	Perforated glass wool board, exposed
		Foyer	Poured Floor	Poured Floor	EP on mortar	T-bars, rock wool sound absorbing boards
		Staircase	Poured Floor	—	—	T-bars, rock wool sound absorbing boards
	3F	Spectator stand	Poured Floor	Poured Floor	EP on mortar	Perforated glass wool board, exposed
West Annex	1F	Referee room	PVC tiles	PVC plinth	EP on mortar	T-bars, rock wool sound absorbing boards
		Infirmary	PVC tiles	PVC plinth	EP on mortar	T-bars, rock wool sound absorbing boards
		Meeting room	PVC tiles	PVC plinth	EP on mortar	T-bars, rock wool sound absorbing boards
		Equipment storage room 1 (press room)	Polymer poured flooring	EP on mortar	EP on mortar	T-bars, rock wool sound absorbing boards
		Lavatory (common use)	Ceramic tiles	Ceramic tiles	Ceramic tiles	EP on calcium silicate board
		Corridor	Poured Floor	Poured Floor	EP on mortar	EP on calcium silicate board
		Connecting corridor 1	Poured Floor	Poured Floor	EP on mortar	EP on calcium silicate board
		Connecting corridor 2	Poured Floor	Poured Floor	EP on mortar	EP on calcium silicate board
East Annex	1F	Women's changing room	Ceramic tiles	Ceramic tiles	Ceramic tiles	EP on calcium silicate board
		Men's changing room	Ceramic tiles	Ceramic tiles	Ceramic tiles	EP on calcium silicate board
		Wheelchair accessible lavatory	Ceramic tiles	Ceramic tiles	Ceramic tiles	EP on calcium silicate board
		Men's lavatory	Ceramic tiles	Ceramic tiles	Ceramic tiles	EP on calcium silicate board
		Women's lavatory	Ceramic tiles	Ceramic tiles	Ceramic tiles	EP on calcium silicate board
		Corridor	Poured Floor	Poured Floor	EP on mortar	EP on calcium silicate board
		Connecting corridor 3	Poured Floor	Poured Floor	EP on mortar	EP on calcium silicate board

Note) EP: emulsion paint, CL: clear lacquer

(3) Facility Utilization Plan

The Budo Center will be used for the practice of Budo including Judo, Karatedo, and Aikido at ordinary times and for Budo competition events and demonstrations on weekends and on predetermined dates in the yearly schedule. In addition, this Project plans the Budo Center as a facility for multipurpose use that can serve for other sports such as sepak takraw and table tennis and also can host concerts, seminars, and other events for the purpose of improving the facility utilization rate of the Budo Center. Hosting of these events will generate additional income in the form of facility use fees, which ideally should be reserved for the maintenance of facility and equipment.

Except for Budo and those mentioned above, other non-Budo indoor sports such as basketball, volleyball, handball, and mini soccer are not included in the planned use of the Budo Center, as a result of the discussion with the Lao side.

With respect to the types of events, the demand for a venue of music concerts is considered high in view of the situation in Vientiane as summarized below. In addition, the Budo Center is planned as a multipurpose facility that can host seminars and lectures.

- Among the genres of events, the need for Budo Center as a venue of exhibitions and trade fairs is considered low, because there are other large-scale indoor and outdoor facilities. The need as a venue of festivals and wedding parties is also considered low, because these are held in large facilities with a capacity of 1,000 persons or more. On the other hand, music concerts are held in various forms, and there is a boom in corporate-sponsored music concerts linked up with product campaigns. The need for the Budo Center as an indoor facility for music concerts is therefore considered high.
- The city of Vientiane already has a theater holding 1,500 persons, international conference halls holding up to 700 persons, and large scale indoor and outdoor facilities for exhibitions and trade fairs. On the other hand, medium- and small-sized facilities holding 300 to about 1,000 persons are scarce. Therefore, the Budo Center holding up to about 1,000 persons is expected to achieve a high utilization rate.

Considering the above factors, a facility suitable to the multipurpose use other than Budo and meeting the realistic needs in Laos will be planned. (See Appendices "6. Complementary Reference on Execution of Events".)

(4) Equipment plan

1) Examination of Requested Equipment

The necessity and appropriateness of requested equipment were examined in detail based on the design policy and considering the result of field survey regarding the function and role of the Budo center, technical skill level, financial bearing power, and maintenance ability. Overall judgment was made as described below. Judgment regarding individual equipment items is given in Appendices "5-1

Examination of Requested Equipment."

1-1) Criteria for Selection of Equipment

① Examination of Purpose of Use

- : The equipment is a basic item that is consistent with the activities in the project facility.
- ×: The equipment is not consistent with the activities in the project facility and can be replaced by a simpler alternative. The equipment is an item that should be considered separately from the rest of the request.

② Examination of Necessity

- : The equipment is considered necessary and indispensable for current activities.
- ×: The equipment is not much needed for activities and has limited beneficial effects. The equipment can be substituted by existing equipment. General furniture and office supplies.

③ Examination of Technical Skill Level

- : The equipment is suitable to current technical skill level or improvement of technical skill level can be expected through technical cooperation or other means.
- ×: The equipment requires advanced technical skill and there is little possibility for future improvement of technical skill level.

④ Examination of Organization for Operation

- : Personnel have been or will be assigned for the use of the equipment.
- ×: Personnel will not be assigned for the use of the equipment.

⑤ Examination of Organization for Maintenance

- : Maintenance of the equipment is easy and can be managed by existing personnel.
- ×: Maintenance of the equipment is difficult and likely to be a cause of problem after installation of the equipment. Expendable supplies and spare parts for the equipment are difficult to procure locally.

⑥ Examination of Operation and Maintenance Cost

- : The equipment requires minimal operation and maintenance cost. The equipment will not impose a burden on the budgetary arrangement on the Lao side.
- ×: New or additional installation of the equipment will require excessive operation and maintenance cost and cause a budgetary problem.

⑦ Examination of Quantities

The quantities of equipment will be planned based on the activities in the project facility and the number of athletes.

⑧ Overall Judgment

- : Equipment that is considered appropriate and included in the Project.
- ×: Equipment that is not included in the Project.

1-2) Outline of the Examination Regarding Major Equipment

•Tatami mats for Judo

These are used mainly for daily practice. The size of tatami will be the international size (1,000mm x 2,000mm) specified by International Judo Association. Tatami mats for 1 competition area will be provided for the purpose of practice and competition events. Although tatami mats for Judo are also used for the practice and demonstrations of Aikido, Aikido players will share tatami mats with Laos Judo Association.

•Mats for Karatedo

These are mainly used for daily practice. Mats for Karatedo is needed for the purpose of minimizing the possibility of athlete's injury and accidents during competitions, and the use of mats is specified in the competition rules. Because the competition in Karatedo usually includes "kumite" and "kata" programs, the quantity for 2 competition areas will be provided.

•Folding Chairs

These are provided for the audience of lectures, seminars, concerts, etc. as the multi-purpose use of the Budo center. Although various government agencies of Laos have their own facilities, they are using external facilities because their halls are small with the capacity of 300 persons or less. On the other hand, private-sector facilities are much larger with the capacity of 1,500 persons or more. Facilities holding 500 to 700 persons are available at Laos National University (Japan's grant aid in 1999) and International Cooperation and Training Center (Japan's grant aid in 2002). There is a need for a facility with the capacity of about 700 persons, reflecting the recent increase in lectures, seminars, concerts, etc. Folding chairs for 750 persons will be provided.

•Floor Protection Sheets

Floor protection sheets are used for the purpose of protecting the floor (wood) of the Budo hall during the multi-purpose use of the Budo center. Floor protection sheets covering the 29m x 20m (580 m²) floor of the Budo hall will be provided to achieve preservation of floor.

1-3) Examination of Quantities

The quantities of equipment will be designed for Budo competition events and multi-purpose use.

2) Overall Plan

The equipment procured under this cooperation project will be placed in the Budo hall and equipment storage rooms of the newly constructed Budo center. The equipment should be planned in accordance with the function and activities of the Budo center and considering the coherence with the facility plan.

The allocation of equipment will be as shown in Appendices "5-2 List of Equipment Allocation."

3) Equipment Plan

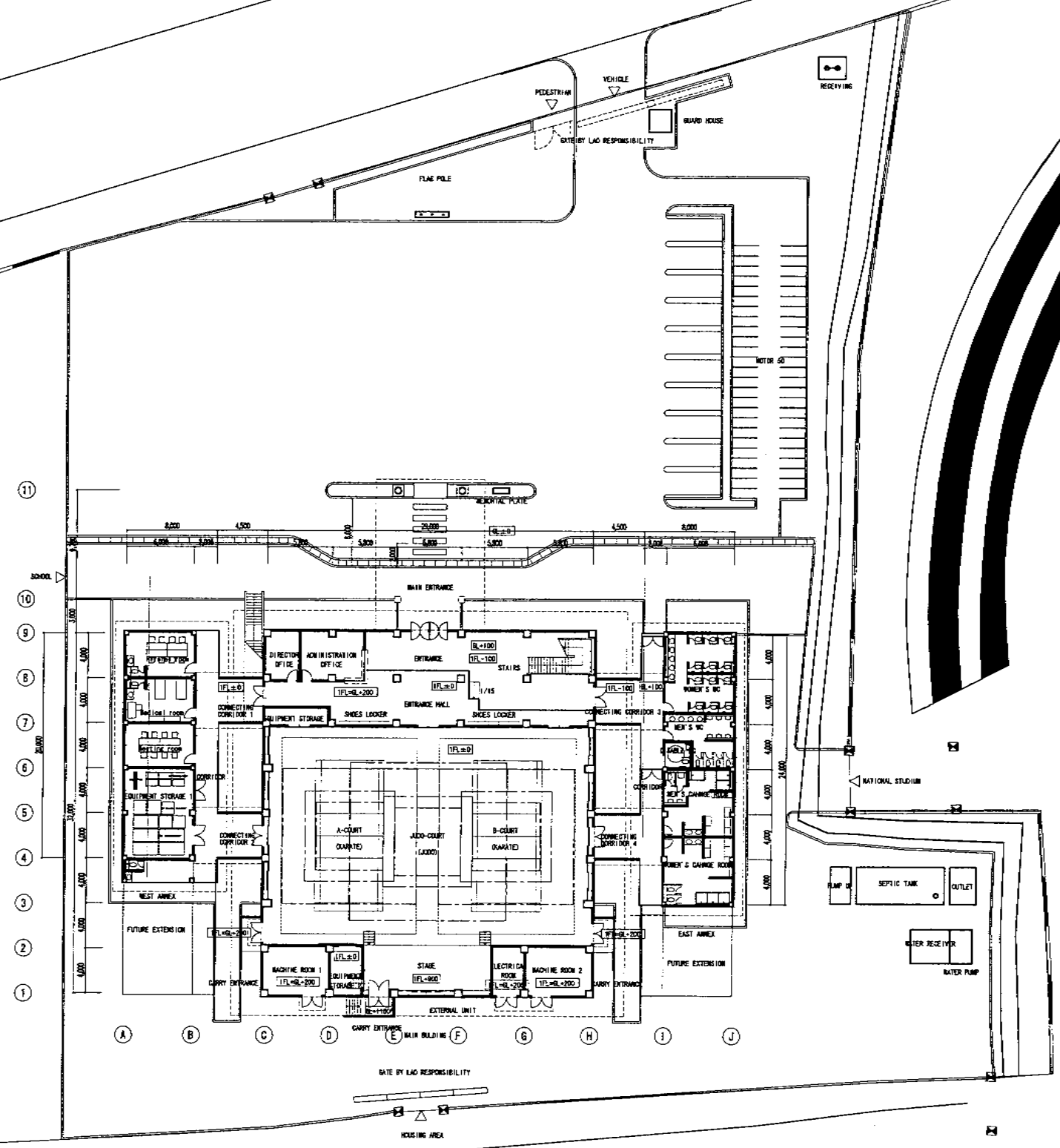
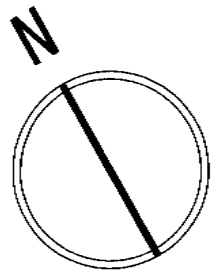
The summary of major equipment and the final content of equipment decided after the examination of the requested equipment are attached hereto. (Appendices "5-3 Summary of Major Equipment" and Appendices "5-4 List of Planned Equipment").

2-2-3 Basic Design Drawings

A-1	Overall Layout Drawing	Layout Drawing	1/500
A-2	1F Floor Plan	1F Floor Plan	1/200
A-3	2F Floor Plan	2F Floor Plan	1/200
A-4	3F Floor Plan	3F Floor Plan	1/200
A-5	North Elevation	Elevation	1/200
A-6	West Elevation	Elevation	1/200
A-7	South Elevation	Elevation	1/200
A-8	East Elevation	Elevation	1/200
A-9	East & West Annex Elevation	Elevation	1/200
A-10	A-A' Section	Section	1/200
A-11	B-B' Section	Section	1/200

Table 2-14 Content of Project

Building	Structure and Scale		
Main Budo Hall Building	RC Structure with Steel Frame	3-storey	1,352.58 m ²
West Annex	RC Structure	1-storey	211.56 m ²
East Annex	RC Structure	1-storey	232.06 m ²
Total			1,796.20 m ²

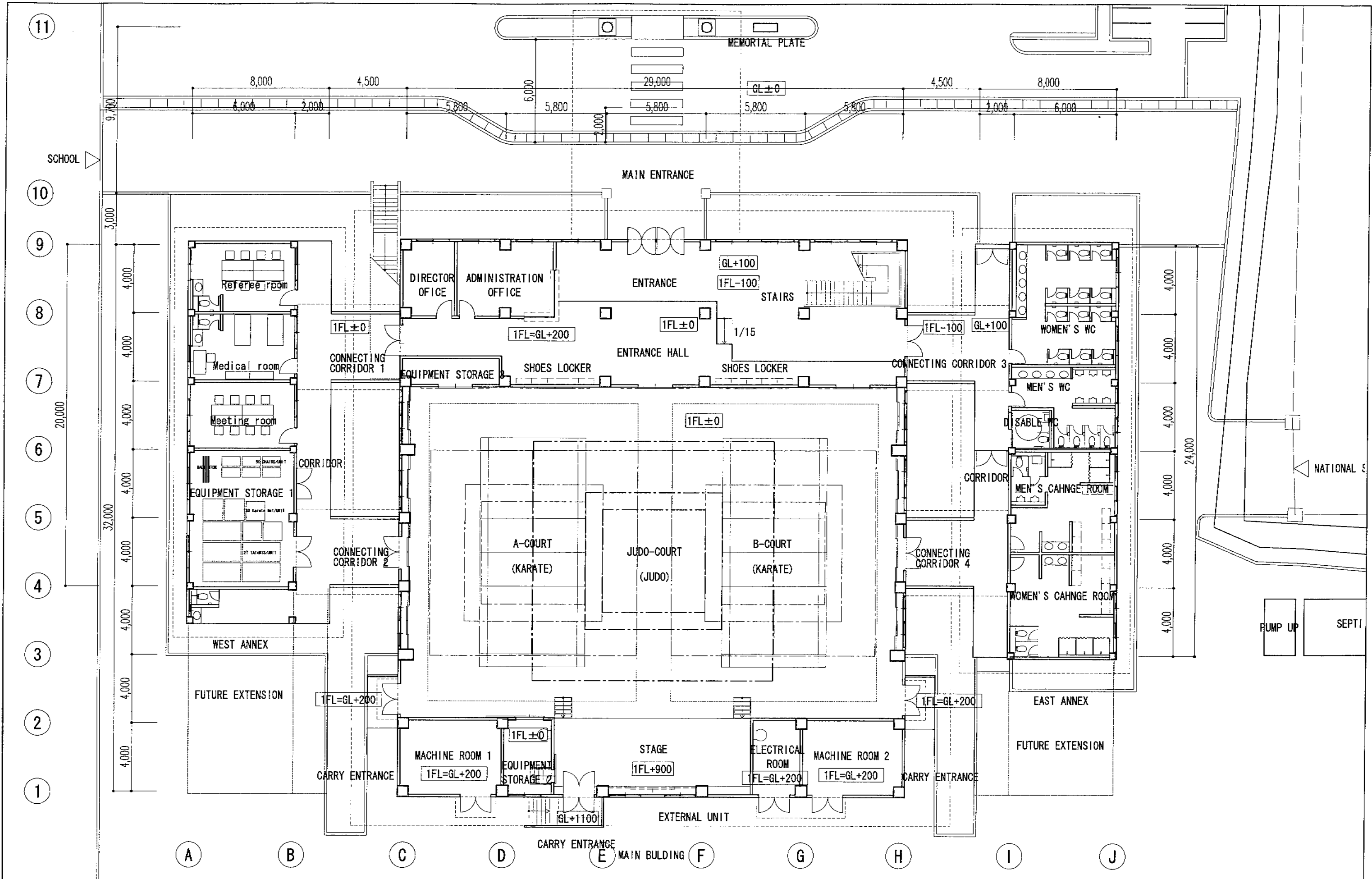


LAOS-JAPAN BUDO CENTER

SITE PLAN

SCALE
S=1/500

NO
A-1

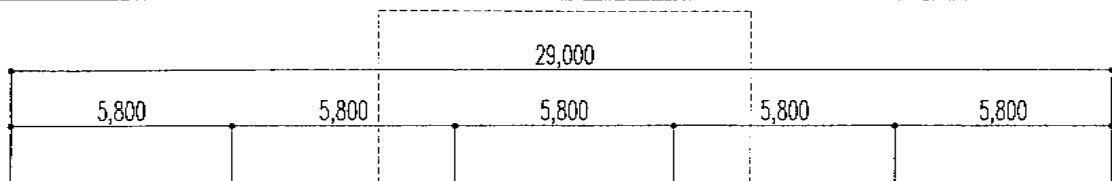


LAOS-JAPAN BUDO CENTER

1ST FLOOR PLAN

SCALE
S=1/200
NO
A-2

11



10

9

8

7

6

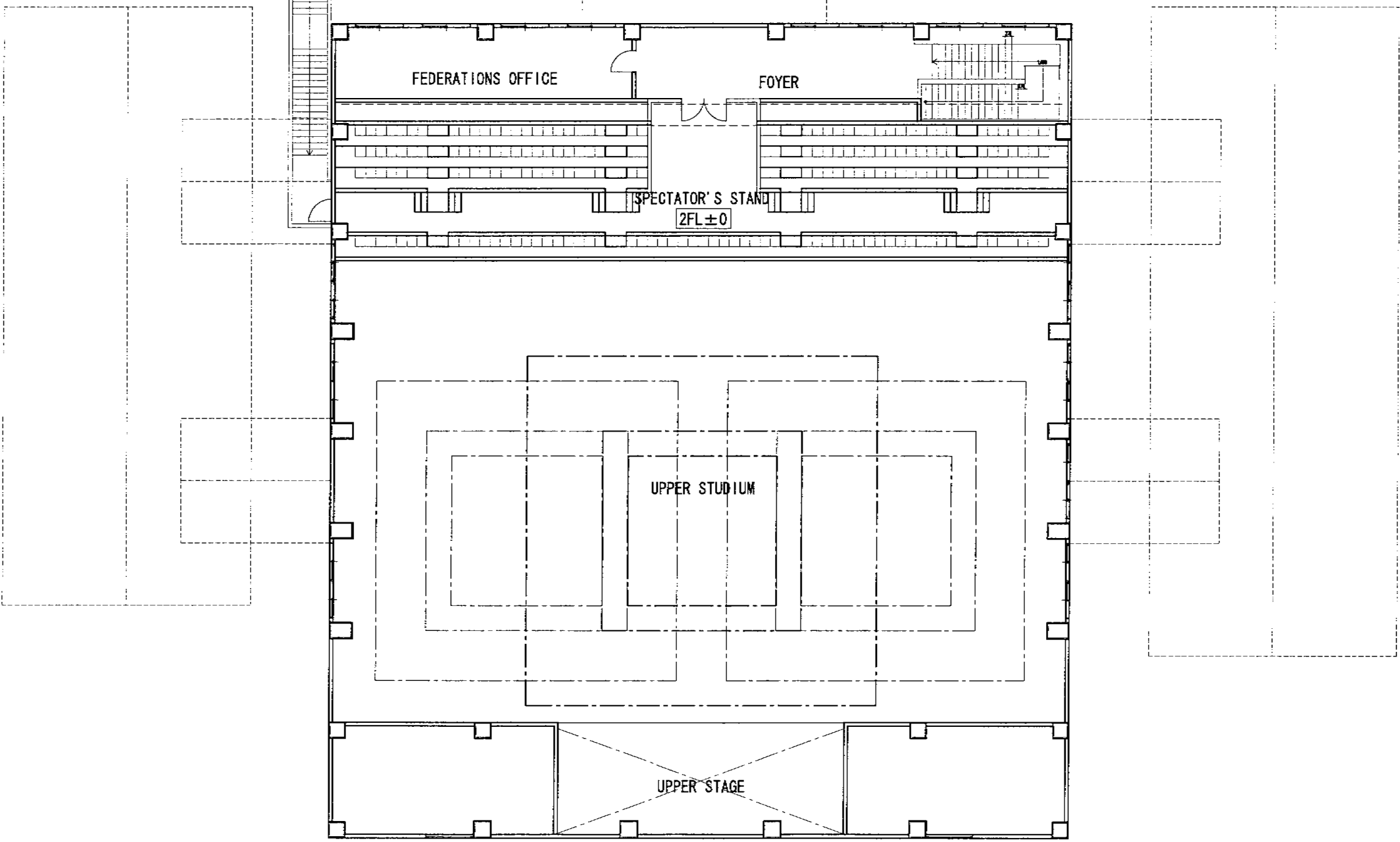
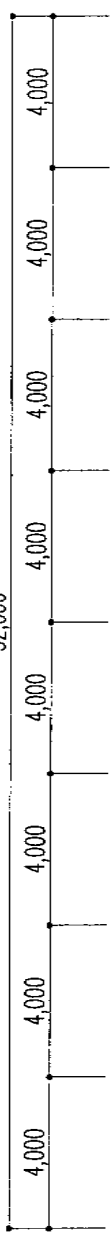
5

4

3

2

1



A

B

C

D

E

F

G

H

I

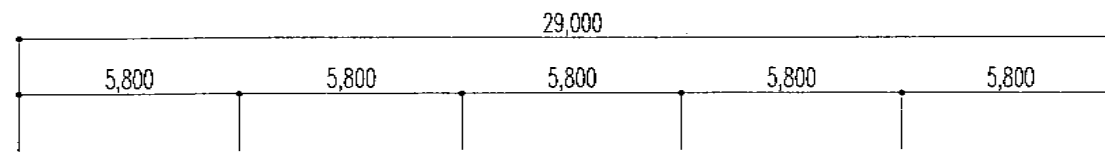
J

LAOS-JAPAN BUDO CENTER

TITLE
2ND FLOOR PLAN

SCALE
S=1/200
NO
A-3

11



10

9

8

7

6

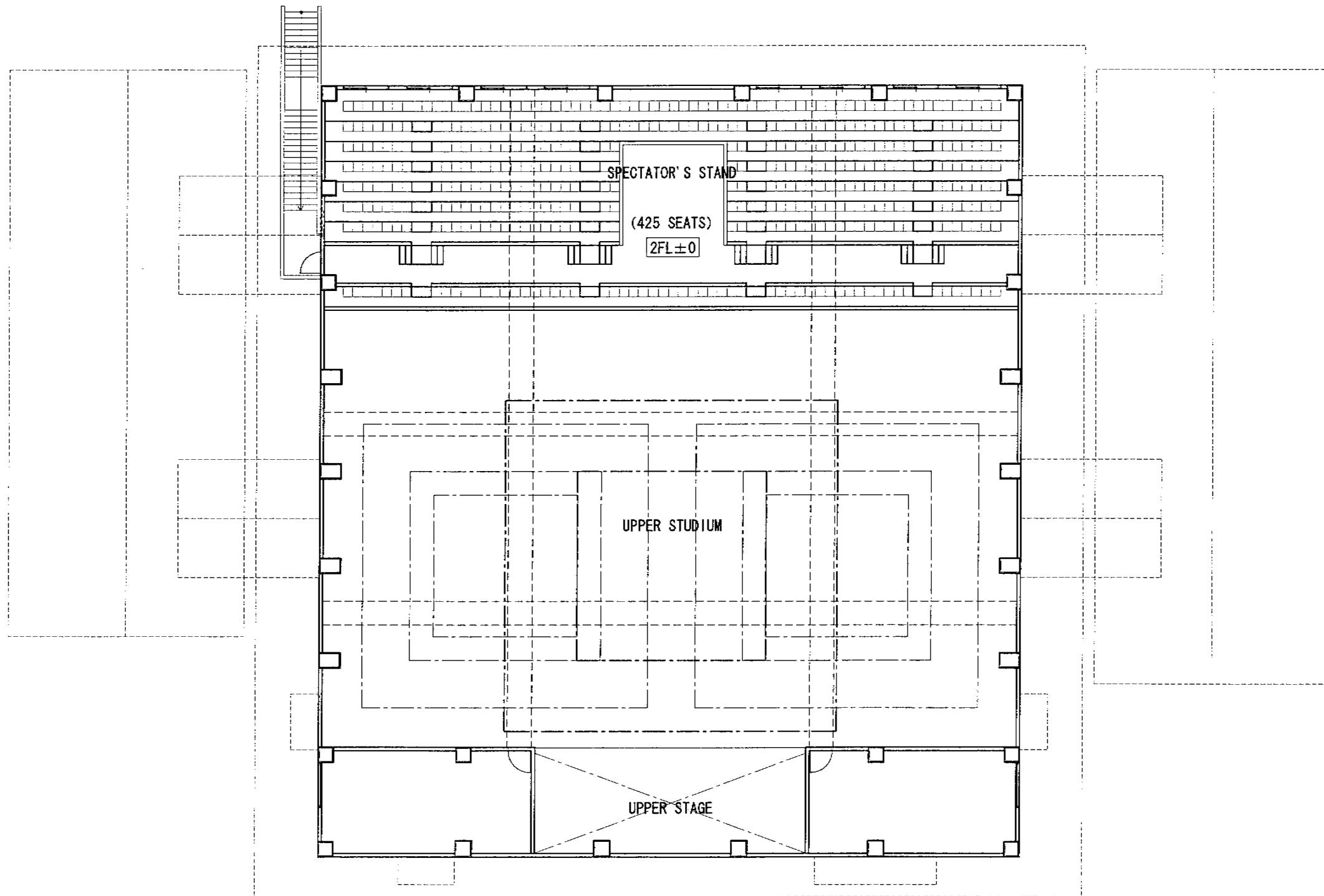
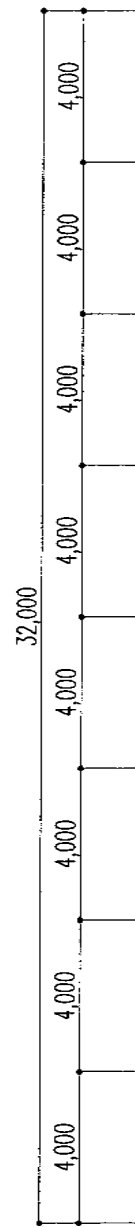
5

4

3

2

1



A

B

C

D

E

F

G

H

I

J

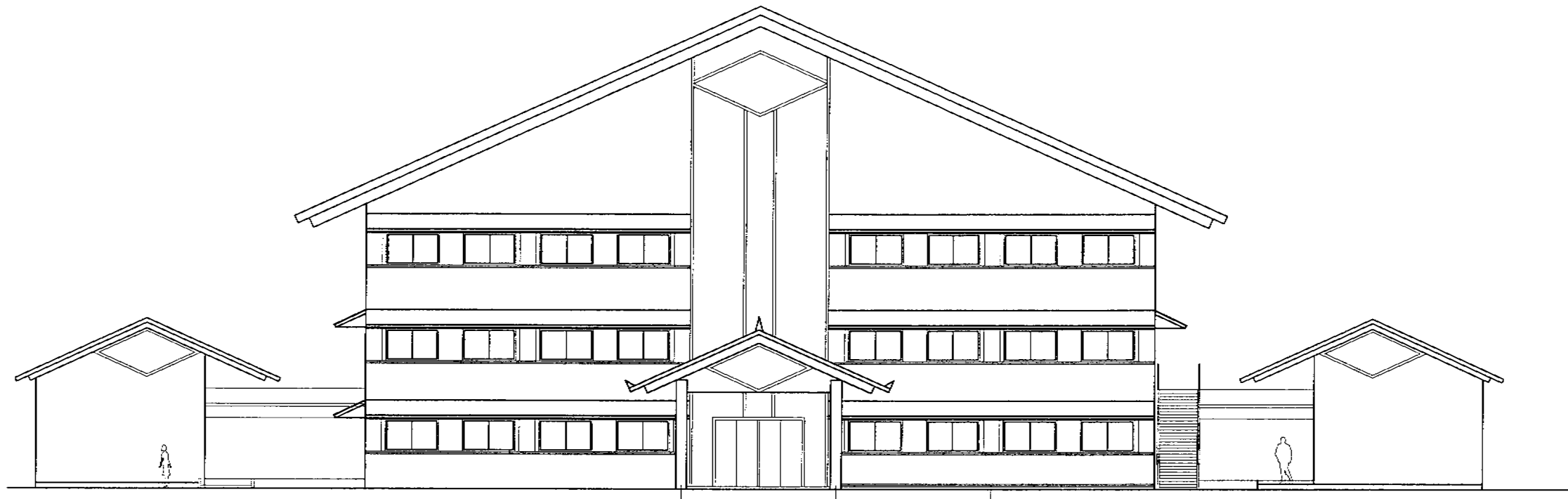
LAOS-JAPAN BUDO CENTER

TITLE

3RD FLOOR PLAN

SCALE
S=1/200

NO
A-4



J

I

H

G

F

E

D

C

B

A

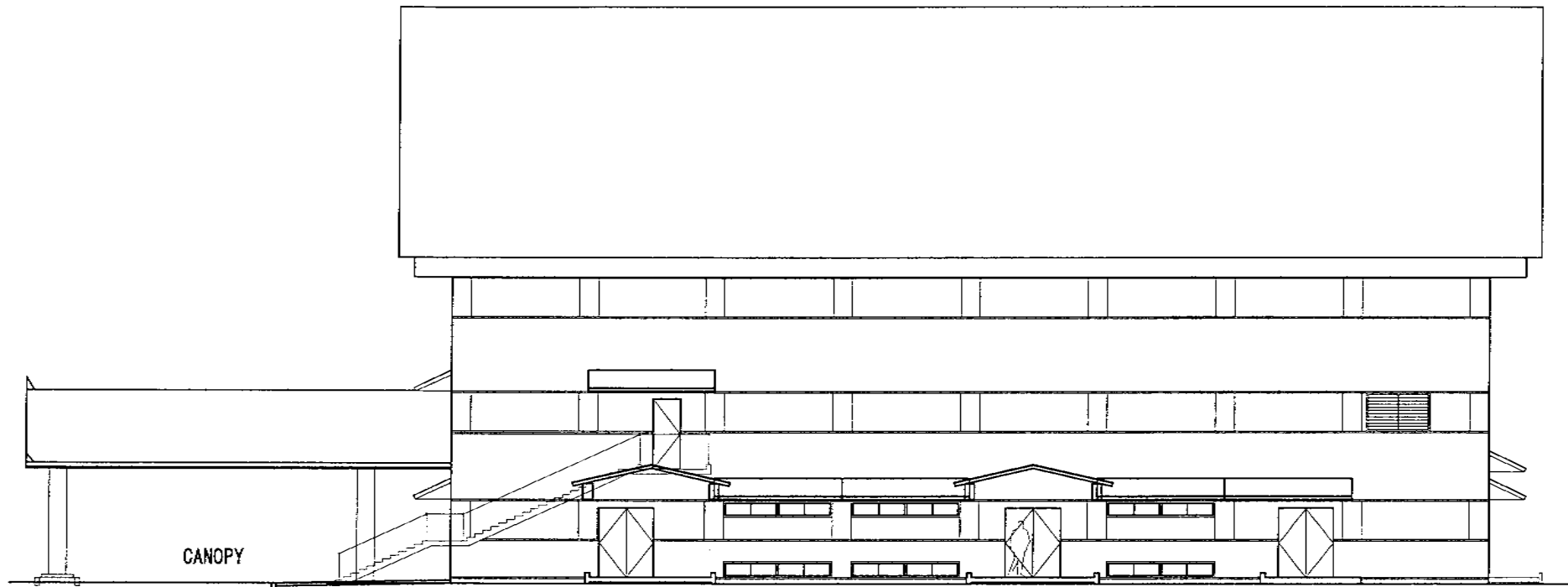
LAOS-JAPAN BUDO CENTER

TITLE

NORTH ELEVATION

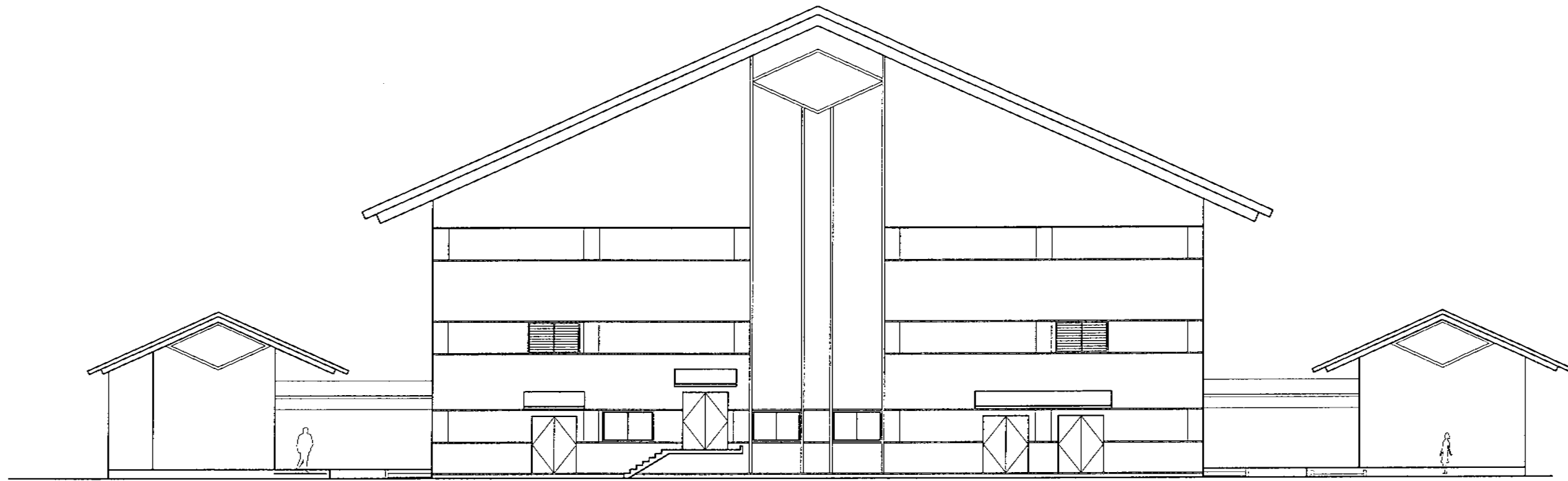
SCALE
S=1/200

NO
A-5



- 11
- 10
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1

	LAOS-JAPAN BUDO CENTER	WEST ELEVATION	SCALE S=1/200
			NO A-6



A

B

C

D

E

F

G

H

I

J

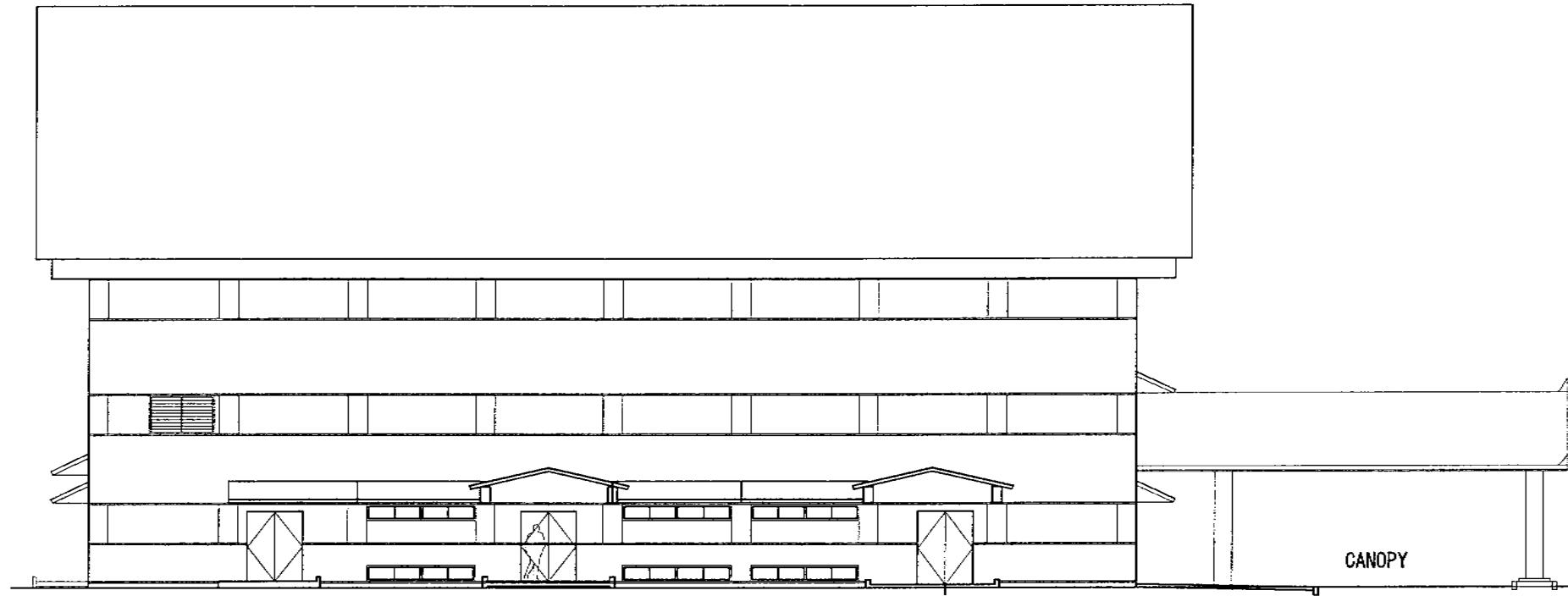
LAOS-JAPAN BUDO CENTER

TITLE

SOUTH ELEVATION

SCALE
S=1/200

NO
A-7



- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

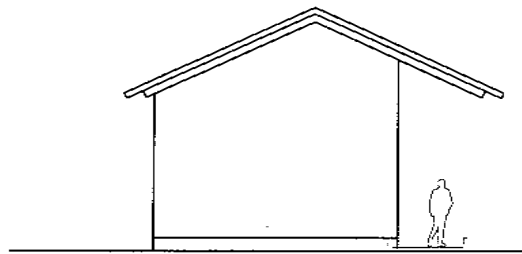
LAOS-JAPAN BUDO CENTER

TITLE

EAST ELEVATION

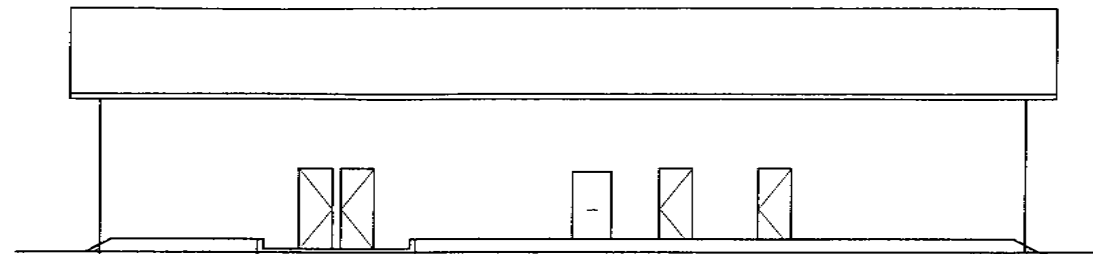
SCALE
S=1/200

NO
A-8



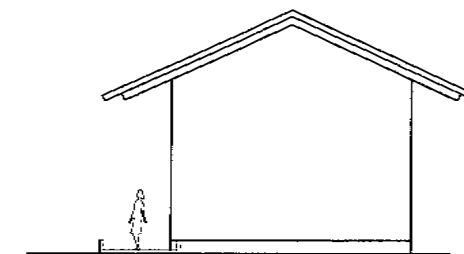
ⓐ ⓑ

EAST ANNEX NORTH ELV.



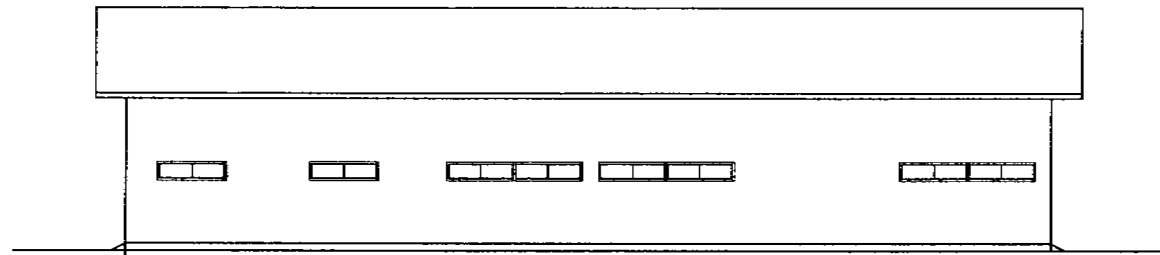
ⓑ ⓑ ⓑ ⓑ ⓑ ⓑ ⓑ

EAST ANNEX WEST ELV.



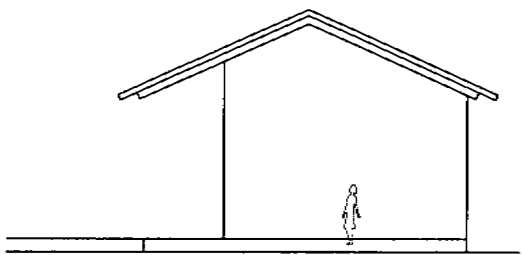
ⓑ ⓑ

EAST ANNEX SOUTH ELV.



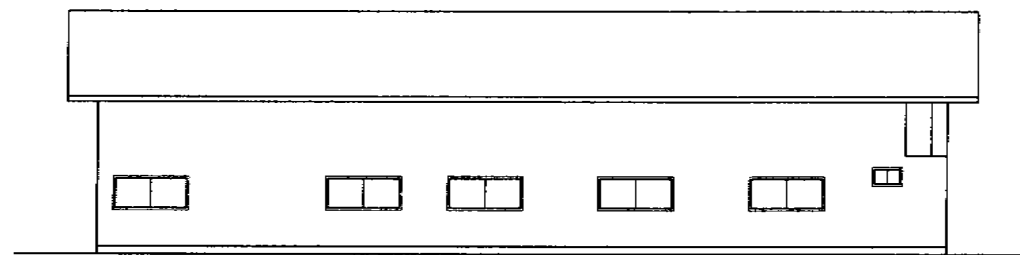
ⓑ ⓑ ⓑ ⓑ ⓑ ⓑ ⓑ

EAST ANNEX EAST ELV.



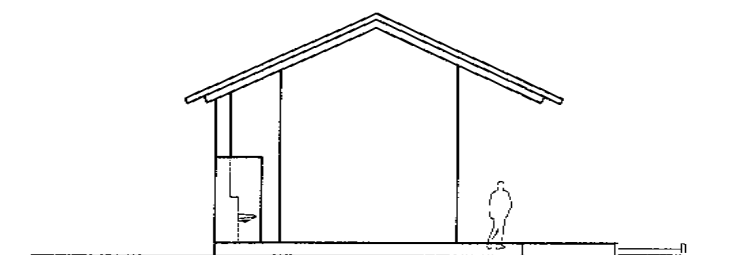
ⓑ ⓑ

WEST ANNEX NORTH ELV.



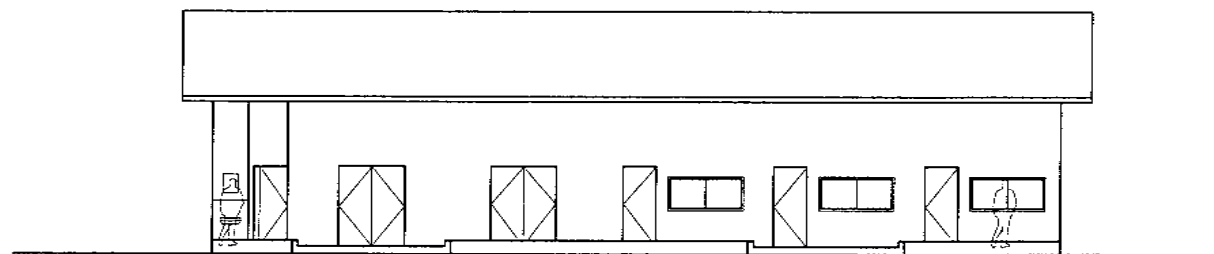
ⓑ ⓑ ⓑ ⓑ ⓑ ⓑ ⓑ

WEST ANNEX NORTH ELV.



ⓑ ⓑ

WEST ANNEX SOUTH ELV.



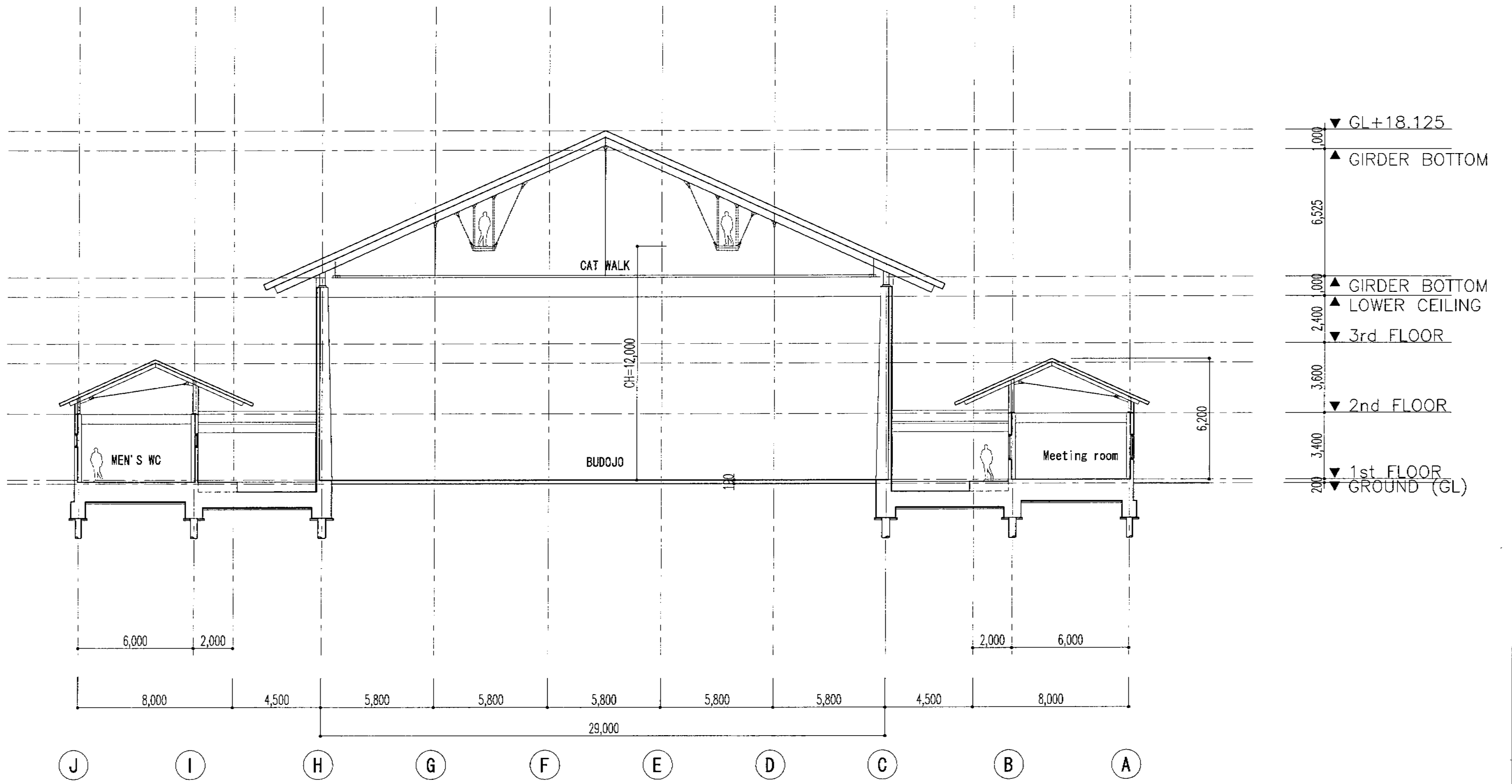
ⓑ ⓑ ⓑ ⓑ ⓑ ⓑ ⓑ

WEST ANNEX EAST ELV.

LAOS-JAPAN BUDO CENTER

ANNEX ELEVATION

SCALE
S=1/200
NO
A-9

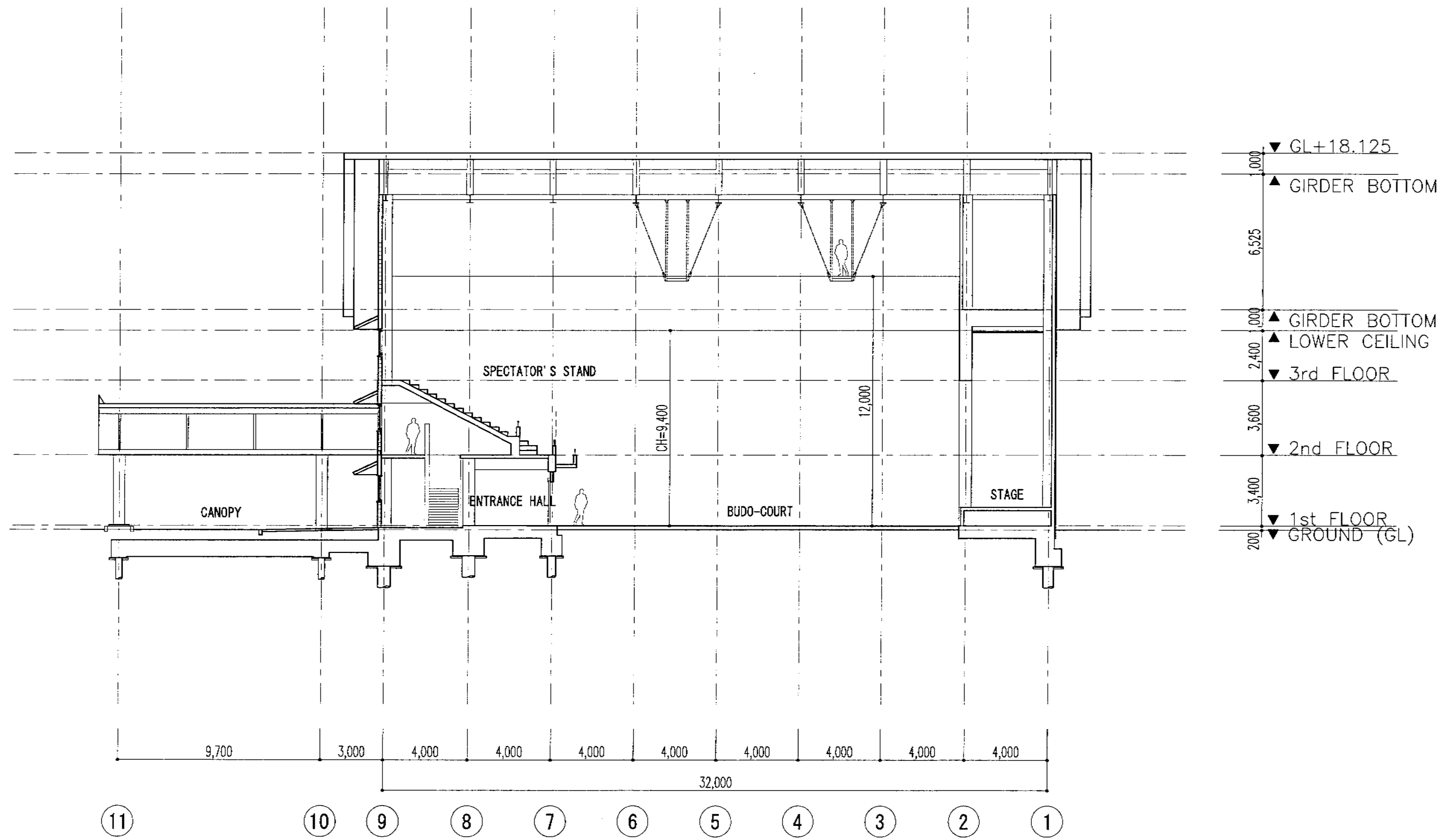


LAOS-JAPAN BUDO CENTER

A-A' SECTION

SCALE
S=1/200

NO
A-10



LAOS-JAPAN BUDO CENTER

B-B' SECTION

SCALE
S=1/200

NO
A-11

2-2-4 Implementation Plan

(1) Implementation Policy

The elements of this project include facility construction work, supply and installation of equipment, and the scope of cooperation regarding to the project undertaken by the Japanese side will be implemented according to the framework of Japanese cultural grant aid. Implementation of this plan shall be initiated officially only after it is approved by the Governments of both countries and the exchange of notes (E/N) is signed. Immediately after signing of the E/N, the Lao organization that is responsible for implementation of this project and the Japanese consultant firm shall enter a contract and initiate the detail design work of the project. When the design is completed, the Japanese construction companies and equipment supply and installation companies participate in the tender for their works. The successful tenderers for construction of facilities and supply and installation of the equipment proceed to their work. The basic principles and items to be proposed for implementation of this project are described below.

1) Executing organization

The implementing entity in the project is NSC of Laos, and the NSC will be responsible for operation and maintenance of the facilities and the equipment provided by Japan.

2) Consultant

After signing of the E/N, the Japanese consultant firm and the Government of Laos enter a consultant contract according to the formal procedure for the Grant Aid System of the Government of Japan. This consultant firm executes the following activities under this Contract.

- ① Detail design of the project: To prepare the design documents (specifications and technical reference materials on the facilities and equipment included in the project).
- ② Tender: To cooperate in selection of the construction firm(s) and equipment supply and installation firm(s) through the tender and in transaction of procedures required under the contract.
- ③ Construction supervision: To supervise so that instructions for construction of facilities, delivery and installation of the equipment, operation and maintenance are given properly.

In the detail design stage, the consultant determines the construction plan and the equipment supply plan in detail based on the basic design investigation of the project, reviews the equipment, and prepares the tender documents consisting of specifications of the project plan, tender terms and conditions, draft of the contracts required for the construction work and procurement of equipment.

Cooperation to the tender procedure means to observe selection of the construction firm(s) and the equipment supply and installation firm(s) through the tender and to help them transact the formal procedures required for execution of their contracts and preparation of the reports to be submitted to the

Government of Japan.

Construction supervision means to check whether or not each work item done by the construction firm and the equipment supply and installation firm as specified in each contract and to confirm that the contents of their contracts are executed appropriately. In addition, to promote smooth implementation of the project, the consultant shall, in the neutral position, provide related parties with advice and guidance and serve as a coordinator among them.

Listed below are major items in the scope of the construction supervision work.

- ① Procedures required for verification and approval of the work implementation plan, implementation drawings, equipment specifications and other documents submitted by the construction firm(s) and equipment supply and installation firm(s).
- ② Inspection and approval prior to shipment of the construction materials, supply, installation and handling of the equipment.
- ③ Confirmation of instructions for the construction machines and materials, supply, installation and handling of the equipment.
- ④ Checking and reporting the progress of the construction.
- ⑤ Observation of handing over the completed facilities and equipment.

The consultant shall execute above items and report to the related authorities of the Government of Japan about the progress of this project, the payment procedure and handing over of the completed facilities.

3) Construction firm(s) and equipment supply and installation firm(s)

The construction firm(s) and the equipment procurement firm(s) shall be selected through the open tender for the Japanese corporations that are qualified to the specific requirements. In principal, contracts will be made through the negotiation between the NSC and the construction firm(s) and the equipment procurement firm(s) that proposed the lowest price and succeed in the subsequent negotiations.

The construction firm(s) and the equipment supply and installation firm(s) shall construct the facilities, supply, deliver and install necessary construction materials and equipment according to the terms and provisions of contracts, and provide technical guidance for operation, maintenance and management of the procured equipment to the Lao side. Furthermore, besides providing guidance for securing a system of supply by suppliers, manufacturers and agencies of spare parts and consumables needed for the different equipment for continuous use of it after it is procured, providing of support to make it possible to receive services such as gratis repair during the period of guarantee, paid repair after the period of guarantee, technical guidance, etc.

4) Japan International Cooperation Agency

The Grant Aid Management Department of Japan International Cooperation Agency shall give due advice to the consultant, construction firm(s) and equipment supply and installation firm(s) so that the project is implemented in conformity with the Cultural Grant Aid System. Also, it shall hold consultations with the executing organizations of this project as necessary for untroubled

implementation of the project.

5) Preparation for implementation plan

The representatives of the executing organization on the Lao side and the consultant shall review the implementation plan during the implementation design period. They shall make clear the scopes of the construction work Japan and Laos take charge, confirm through consultations the starting time and the method of each work and discuss so that all the works carried out smoothly according to the implementation schedule in this report. In particular, the Lao side has to be sure to carry out, at its own expense before commencement of the facility construction work, such as to clear the existing facilities and trees in the project site and to reclaim the land, etc.

(2) Implementation Conditions

Described below are those items to be noted for implementation of the project. They should be fully taken into consideration when making the implementation plan.

1) Schedule Management

Foundation works should be planned avoiding the rainy season. Work schedule should be planned paying attention to the climate conditions and customs in Laos, such as that workers will be in short supply during the Lao new year in April and the busy farming season.

2) Sending of Technicians for Equipment Installation

To ensure the continued and appropriate functioning of the supplied equipment and its sufficient contribution to sports activities after implementation of the Project, it is extremely important that appropriate operation and maintenance methods are transferred. Although the equipment provided in this Project mostly comprises simple items, Judo timers (small) need special attention. Technicians with the expertise in the handling these timers should be selected, and instruction of handling methods (operation techniques, simple repair techniques, and inspection methods) should be given using sufficient time. The instruction should be given carefully making sure the understanding of the responsible persons on the recipient side.

3) Safety Control

In this Project, construction takes place in the premises of a school that is in use, and the site is adjacent to the National Stadium. Therefore, sufficient safety measures should be taken including the construction of temporary fences along the borders with the school and the National Stadium and the placement of traffic control personnel in the construction site.

(3) Scope of Works

It is mutual cooperation between Japan and Laos that makes implementation of this project successful. When this project is implemented under the Japan's Cultural Grand Aid, it is advisable that the Governments of Japan and Laos undertake the scopes of works as described below respectively.

1) Undertakings borne by the Government of Japan

The Government of Japan undertakes consultation of this project and the works related to construction of the facilities, procurement and installation of equipment as described below.

① Consultation

- i. To prepare implementation design documents for the facilities and equipment subject for this project and their tender terms documents.
- ii. To cooperate in selecting the construction firm(s), and equipment supply and installation firm(s) and executing contracts for the project.
- iii. To supervise the instructions for the construction of the facilities and delivery, installation, operation and maintenance of the equipment.

② Construction of facilities, supply and installation of equipment

- i. To construct facilities subject to this project.
- ii. To procure construction materials and equipment subject to this plan, transport and deliver them to the site.
- iii. To instruct installation of the equipment subject to this project, conduct a trial run and make adjustments.
- iv. To explain and instruct operation and maintenance methods for the equipment subject to this project.

2) Undertakings borne by the Government of Laos

The Government of Laos will be responsible for and conducts the following tasks regarding the removal of existing facilities and trees, land preparation of the construction site, the works to provide needed infrastructure facilities into the construction site, and the exemption of taxes.

① Preparation of the construction site

- i. To secure and prepare the project site.
- ii. To clear the existing facilities (structure such as school buildings, lodging houses and lavatories, etc.) and trees and plants in the project site.
- iii. To reclaim the project site.
- iv. To prepare Table-Tennis table
- v. To connect water supply, electricity line and telephone line in the project site and take necessary procedure.

② Outdoor work

- i. Gates and boundary fence work

③ To purchase equipment, furniture and equipment to be procured by the Lao side as well as transfer of the existing machines, furniture and equipment.

④ To make measures so that the Japanese firms will be exempted from the tax, local tax and various financial loads imposed by the Government of Laos on purchase of goods and provision of services executed according to the formally approved contracts.

⑤ To provide measures to facilitate speedy custom clearance and surface transportation procedure for the equipment and materials to be exported from Japan and other foreign countries according to the

approved contracts.

- ⑥ To provide measures to facilitate procedures for those Japanese who enter Laos and stay here to carry out their roles for the project.
- ⑦ To issue approvals and permissions required for implementation of this project.
- ⑧ To pay all the necessary expenses other than those borne by the Government of Japan.

(4) Consultant Supervision

1) Implementation supervision policy

Under the policy of the Grant Aid System of the Government of Japan, the consultant forms, based on the concept of the basic design, a team that is responsible to execute the project including preparation of the implementation design to achieve smooth and successful implementation. The implementation supervision policy for this project is outlined below.

- ① To keep close contact with those who are in charge of the project representing related organizations of both countries so that construction of the facilities and installation of equipment will be completed without delay.
- ② To provide quick and appropriate advice and suggestions from the neutral standpoint to the construction firm(s), equipment supply and installation firm(s) and others concerned.
- ③ To provide appropriate guidance and suggestions regarding suitable equipment layout and adjustment of tie-in with facilities as well as operation and management after handing over. And to confirm that implementation has been completed and terms of each contract are fulfilled, to observe handing over the facilities and equipment and obtain an approval of receipt from the Lao side.

2) Construction supervision plan

As the types of construction works involved in this project are versatile, a resident supervisor (in charge of construction) is appointed and the following engineers are dispatched from time to time, keeping step with the progress of the construction works.

Manager of general affairs (Overall coordination, process control)

Engineer in charge of construction (Confirmation of construction methods, design concept, construction drawings, specifications of materials, etc.)

Engineer in charge of structure (Confirmation of the ground conditions, foundation work, framework)

Engineer in charge of electrical installation (Power supply and distribution system, electric service and substation, etc.)

Engineer in charge of mechanical installation (Utility supply and processing system, air conditioning, water supply, drainage and hygiene system, etc.)

Engineer in charge of equipment (Instruction for equipment installation, adjustment with the facility, confirmation of operation instructions, etc.)

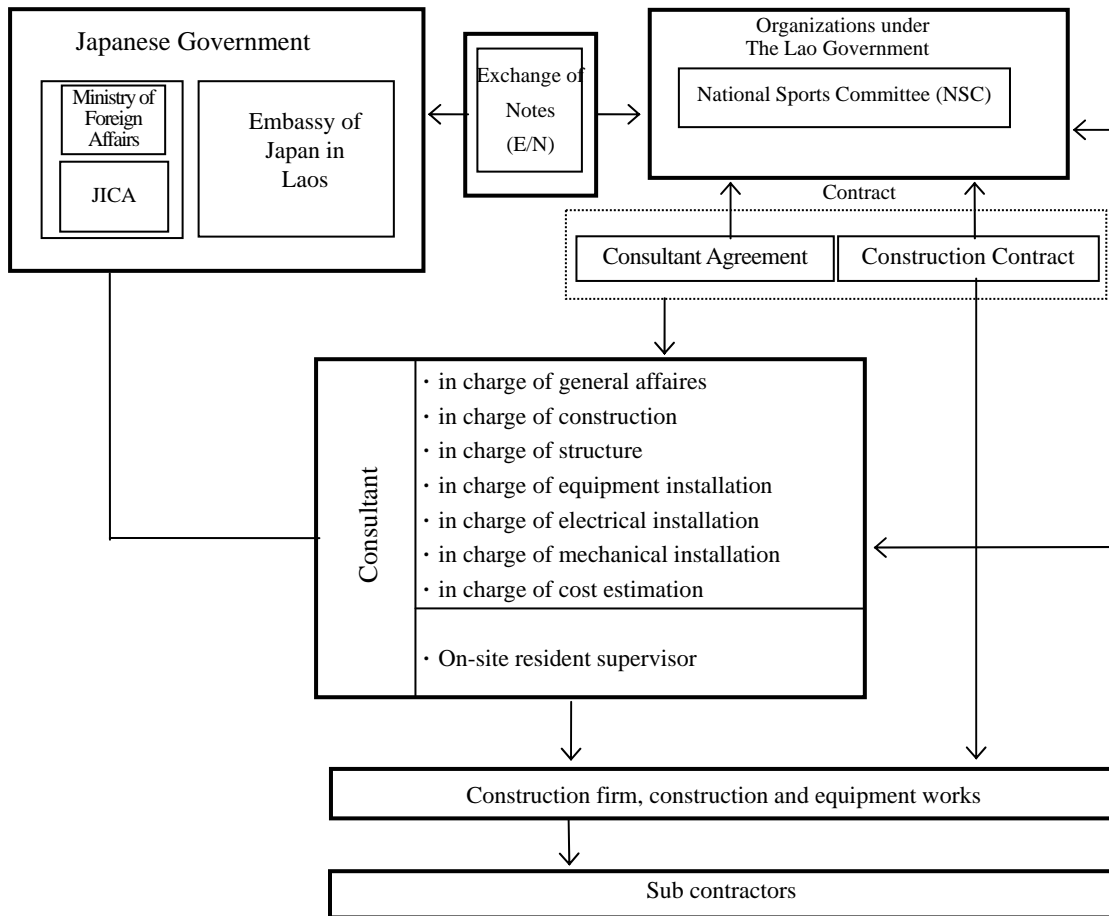


Figure 2-10 Supervision System

(5) Plan of Quality Control

1) Quality Control of Facility

The Construction firm(s) will submit the documents of construction plans in advance to the consultant according to the construction contract (drawings, specifications and etc.) The consultant will verify the adequacy prior to the commencement of construction listing the specific inspection items and indicating the frequency to work for securing high level of quality control.

Major controlling items are listed below.

① Material

On-site resident supervisor will implement the inspection of receiving construction materials.

- i. Reinforcing mill sheets, results of tension strength tests and makers names
- ii. Analysis tables of cement material identification, tables of test results and makers names
- iii. Analysis of salt components in aggregate, size distributions, densities and percentages of

absorption

iv. Reinforced concrete

iv-1 Checking Mixing Plans

Confirmation and determination of the aggregate quantity, slump, cement-water ratio, air quantity and salt components through test mixings

iv-2 Compression Tests

Determination of the standard control values from analysis of result tables

iv-3 Control of material quantity measures and complete control of material storage

iv-4 Prior submittals of concrete casting plans

② Standards of Control

The consultant will carry out the construction supervision with certain standards of control based on the approved construction schedule plans. The standards of control will be basically governed by the standards of Japan.

③ Soil Bearing Capacity

Confirmation of the soil bearing capacity will be carried out with the presence of on-site resident supervisor on the site by implementing plane table loading tests.

2) Quality Control of Equipment

Ready-made equipment to be procured for this project will be selected from the equipment that complies with JIS, UL, IEC, ISO and other international standards. The consistencies between the equipment to be procured and the contents of the contract will be confirmed at the inspections carried out before shipment together with the inspections carried out by the third agencies for the components of shipment and containers.

(6) Procurement Plan

1) Construction material

Construction materials produced in Laos are sand and gravel, wood, hollow bricks, unglazed roof tiles, and concrete blocks, as well as cement and steel bars that have come to be produced recently. Import restrictions are imposed on these items. Many of other construction materials are made in Thailand and imported. Although these can be procured in Laos, procurement from Thailand should be considered regarding piles, steel frame materials, and metal roofing materials because of the problems in quality and quantities.

With respect to labor, skilled workers are scarce in Laos. Due to the small number of construction projects in Laos, workers have few opportunities to develop skills and the number of skilled workers is absolutely insufficient, causing the very tight supply-demand situation for labor. Therefore, it is

essential that supervisors should be sent from Japan in accordance to the progress of work.

Table 2-15 Procurement of Construction Materials and Equipment

Material/ Equipment	Laos	Japan	Third Countries	Note
Sand/Gravel	○			
Pile			○	Thailand
Cement	○			
Brick	○			
Lumber	○			
Steel Bar	○			
Steel Beam			○	Thailand
Concrete Blocks	○			
Stone	○			
Tile	○			
Wooden Fittings	○			
Metal Fittings			○	Thailand
Glass	○			
Waterproofing	○			
Plywood Bed	○			
Metal Roofing Material		○		Thailand
Vinyl Tile	○			
Ceiling Board	○			
Paint	○			
Ready-made Metallic Material	○			
Miscellaneous Metallic Material	○			
Distribution Board			○	Thailand
Lighting Equipment			○	Thailand
Wires, cables			○	Thailand
Wiring Equipment			○	Thailand
Incoming/ distribution Board			○	Thailand
Transformers			○	Thailand
Light Electrical Appliance			○	Thailand
PVC Pipe			○	Thailand
Plumbing Fixtures		○	○	Japan and Thailand
Pump			○	Thailand
Water Reservoir Tank		○		Japan

2) Equipment

While the equipment to be procured under this project shall in principle be procured from Japan or in Laos, some may also be procured in third countries if deemed as more favorable for the project in consideration of the following conditions with prior approval of the Government of Japan.

- The equipment to be procured is not manufactured in Japan.
- Although the equipment is manufactured in Japan, limiting the procurement country to Japan may undermine the fairness in the tender.
- The transportation of equipment is extremely high; the procurement from Japan may have a negative impact on the efficacy of the project.

3) Method of Transportation and the Point of Delivery

The route for the transportation of construction materials and equipment from other countries to Vientiane begins with landing at Bangkok Port in Thailand. Following inland transportation in Thailand, the route crosses the Friendship Bridge from Nong Khai on the Thai side. After customs clearance in Thanaleng on the Lao side, it reaches Vientiane. It takes about 2 weeks from Bangkok Port to Vientiane.

(7) Operational Guidance Plan

To ensure appropriate use and maintenance of the procured equipment, the following training should be provided by the dealer at the time of delivery, and technical material, operation and maintenance manuals, and other documents should be provided for the part of equipment that requires maintenance.

- : Method of operation (equipment overview, procedures, checklists, etc.)
- : Method of regular maintenance (cleaning, etc.)

(8) Soft Component Plan

This Project is not planned to include soft component.

(9) Implementation Schedule

1) Project Implementation Schedule

To implement this project by the Grand Aid from the Government of Japan, E/N will be made and entered by and between the both countries followed by the tender for selecting construction firm(s) and equipment supply and installation firm(s) and Contracts, thereafter construction, equipment supply and installation will be implemented in a single fiscal year. The periods of detail design, tender, construction/procurement and installation stages are as follow.

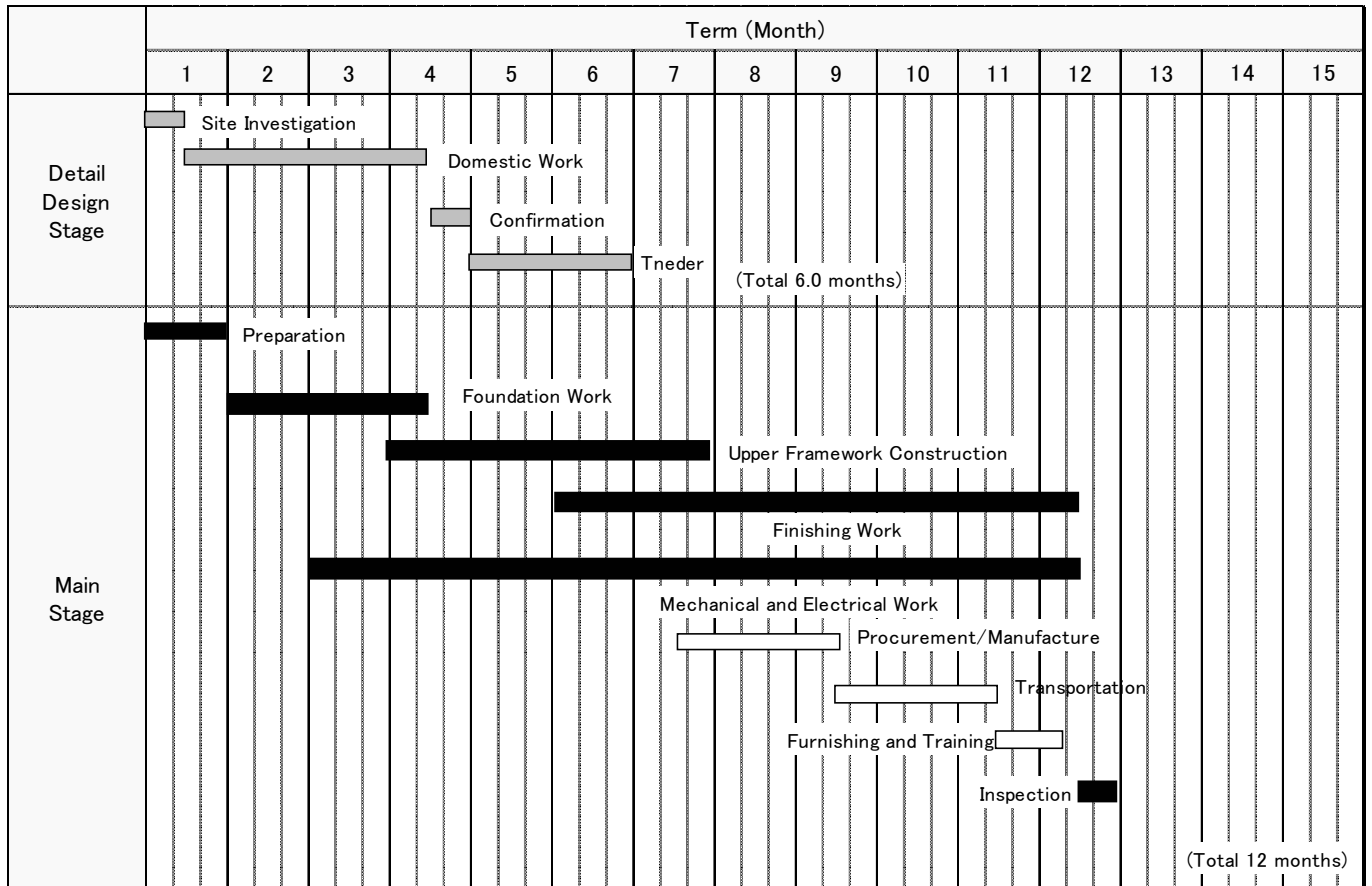
Table 2-16 Project Implementation Schedule

Stage	Period
Detail Design Stage (Including field survey)	4.0 months
Tender Stage	2.0 months
Construction / Procurement & Installation Stage	12 months

2) Implementation Schedule

The following table shows the implementation schedule of this Project.

Table 2-17 Implementation Schedule



2-3. Obligation of the Recipient Country

The sharing of works in this Project between Laos and Japan has been described in "2-2-4 Implementation Plan, (3) Scope of Works ". The NSC has already submitted the budget request to the Department of Domestic and Foreign Investment (DDFI), covering the works to be performed by the Lao side, and this budget is expected to be approved by September 2007. In Laos, all budgets concerning grant-in-aid projects of overseas donors are approved by DDFI, and the projects approved by DDFI are given priority in budget allocation. The NSC has promised to ensure budget allocation to cover the works conducted by the Lao side in this Project.

The following summarizes the works to be performed by the Lao side.

(1) Procedures

1) Acquisition of the site

The authority over the planned construction site has moved from Vientiane Capital to NSC.

2) Exemption from tax

When Japanese companies and building constructors working on this project procure construction materials and equipment within the country, or import from abroad to Laos for this project during the period of execution of construction, the exemptions from custom duty, consumption tax, other inclusive tax, surcharge and etc. will be required. And measures should be taken for the prompt landing procedures required for custom clearances.

3) Accommodation given to the imported materials and equipment from Japan or the third countries

The NSC will provide required accommodations for prompt custom clearances and inland transportation procedures concerning to the imported materials and equipment from Japan or the third countries.

4) Acquisition of Building Permission

The application and acquisition of building permission regarding to this project have to be completed without delay prior to the commencement of construction. The other applications and acquisitions required for the commencement of construction is the same.

5) Issuance of Banking Arrangement and Authorization to Pay

The NSC will be the contact person on this project, and promptly issue the Banking Arrangement and the Authorization to Pay based on the agreement of the consultant and the contract of the executing agency.

(2) Obligation of Laos

The obligations of the Lao side that is essential for smooth implementation of this project are outlined as follows.

1) Clearance of obstacles and grading work in the site

The project site contains 2 school buildings, teachers' lodgings, outdoor lavatories, other buildings, and trees, which all need to be removed. Although the site is generally flat, it is about 1.5m lower than the northern road facing the site. Before beginning of construction, the Lao side needs to perform removal of buildings, structures, trees, etc. and complete the rough land preparation according to the design ground level of the site.

None of the above works does not cost high and require high technology, and certainly could be undertaken by the Lao side.

2) Gates and boundary fence work

The Lao side needs to construct fences along the north and south borders of the project site, as well as two gates.

3) Table-tennis table

The Lao side needs to prepare the table-tennis table.

4) Infrastructure

The Lao side needs to connect water supply, electricity line and telephone line in the project site, and take necessary procedure.

5) Bank charge

The Lao side needs to prepare the bank charge for the banking arrangement of the project.

6) Relocation of Existing Equipment and Furniture

The purchase of furniture and office equipment needed for the new building will be borne by the Lao side. However, if any existing furniture and office equipment will be used in the new building, no cost for relocation of such items will be generated because these can be moved by the staff themselves without using external services.

While tournaments of sepak takraw and table tennis are planned, the cost of table-tennis tables will be borne by the Lao side. The cost to be borne by the Lao side has been calculated assuming the purchase of new table-tennis tables.

Relocation is planned to take place immediately after the completion of construction, although the timing may depend on the progress of works.

2-4. Project Operation Plan

2-4-1 Administration Plan

(1) Operation System and Organization

The government agency supervising and implementing this Project is the NSC, and the NSC takes charge of operation and maintenance after handover. The facility constructed in this Project will be the first Budo Center that can host international competition events in Laos. While it will be operated by the NSC, a coordinating committee must be established to ensure the smooth operation and maintenance of the Budo Center. First, a preparation committee should be organized by the NSC, inviting the representatives of the Judo Federation, Karatedo Federation, and Aikido Club, and rules regarding the operation and management of the Budo Center should be developed. After completion of the Budo Center, the preparation committee will evolve into the coordinating committee and take charge of the operation and maintenance of the Budo Center. In this way, the coordinating committee will play the substantial role in the operation of the Budo Center, and the events during multipurpose use will be managed by the organizer of each event. Therefore, the main task of the NSC will be administrative, and there will be no need to post a large number of personnel to the Budo Center.

(2) Staffing Plan

NSC consists of 70 staff members including the president, two vice-presidents, and four chiefs from Sports for All Department, Sports Elite Department, International Sports Relations Department, and Administration Department. Although the establishment of the Budo center section is planned in this Project, a significant increase in the number of staff members for the Budo center operations will not be needed. At least three positions: the director, maintenance engineer, and administrator, who are exclusively work for the Budo center, are necessary to operate the Budo center. To smoothly operate the Budo center, cooperation with Judo, Karatedo, and Aikido associations and clubs are necessary. Since they are going to be dispatched from NSC, NSC should newly employ them.

(3) Budo Center Operation Plan

A typical usage of the Budo center will be for the practice of Judo, Karatedo, and Aikido on weekday evenings and for Budo competitions, Budo performance demonstrations, and other events including concerts. This section introduces a typical operation plan of the Budo center.

1) Budo Practice

In Laos there are three Budo groups: the Judo Association, the Karatedo Association, and the aikidoan Aikido club. The Judo Association has five clubs as its members; the Karatedo Association, one club as its member. Each club independently conducts its activities. As there is only one Aikido club, no Aikido association has not been organized yet.

The Judo practice for the citizens in Vientiane, excepting for police officers and citizens in local cities, is conducted at the practice hall of Laos Youth Union and Judo practice hall in the National Stadium.

The practice hall of the Laos Youth Union is used by the Vientiane Judo Club (consisting of about 40 members including elementary school children and adults). They practice 90 minutes from 6:30 p.m. everyday excepting on Sunday. Former members of Japan Overseas Cooperation Volunteers and currently dispatched members of Senior Volunteers have been working at this practice hall. The practice hall of the National Stadium is used by the Judo club of Vientiane High School (consisting of 10 members). The National Stadium annexes muay lao and Taekwondo practice hall to the practice hall for Judo.

Karatedo is practiced by the Vientiane Karatedo Club (consisting of 50 members) for two hours from 5:00 p.m. to 7:00 p.m. on Monday through Friday at a classroom of the Communication School. As well as for Judo, wide range of age groups from elementary school children to adults practice Karatedo. Former members of Senior Volunteers worked for this group.

Aikido practice is conducted by the Vientiane Aikido Club (consisting of 55 members) at the practice hall in Laos Youth Union for one and half hours on Monday through Saturday excepting Sunday. This time slot is immediately before the time slot for Judo practice. As in the case for Judo, wide range of age groups from elementary school children to adults practice Aikido.

Judo, Karatedo, and Aikido clubs are going to change their practice halls to the Budo center after it is constructed, and use it as their regular practice hall. Each club conducts its operation and management on its practice by itself. Two areas in the hall may be used by three clubs. Judo and Aikido clubs share the one area by staggering the practice time slot, which enables the three clubs to regularly use the hall. The time for practice will be from 5:00 p.m. to 8:00 p.m. on weekdays.

Presently, facility usage fee is not collected from clubs, but membership fee, US\$1.5 to US\$2.0 a month, is collected from members. This fee is used for utility cost of the facility. When the Budo center is started to be used by clubs, NSC will not collect any facility usage fee as used to be but collect utility cost of the hall only.

2) Budo Competitions and Performance Demonstrations

NSC is planning to hold the following Budo competitions. They are held once a year and are two-day event held on Saturday and Sunday.

- National Judo Competition (Student and General)
- National Karatedo Competition (Student and General)
- International Judo Competition (Competition for neighboring countries)
- International Karatedo Competition (Competition for neighboring countries)
- Student Budo Competitions (Judo and Karatedo) (National competitions for students)
- Police Budo Competition (Judo and Karatedo) (Competition for police officers)
- Army Budo Competition (Judo and Karatedo) (Competition for military service members)

Performance demonstrations of Judo, Karatedo, and Aikido have been held as a cultural event of diplomatic mission abroad which is hosted by the Japanese Embassy in cooperation with NSC since 2003. The demonstrations have been held at National Culture Hall or Laos National University but will be held at the Budo center from next time.

From the plan above, competitions and performance demonstrations will be held eight times (counting Saturday and Sunday as one) in 52 weeks. If occasional dates are reserved for 1/4 of the number of events (two times), 10 times of competitions and demonstrations will be held on Saturdays and Sundays. NSC can collect the hall usage fee as well as utility costs from the hosts.

Other than the events above, irregular competitions will be held. As Judo is one of the competition events in Lao National Game, which is held every three years, the Budo center will be the site for Judo. Moreover, the center will be used for three or four days for Judo and Karatedo competitions in the 25th SEA GAMES, which will be held in 2009. Since such games are not opened every year and may not be scheduled in the weekend, they are not included in the operational and budget planning of the Budo center.

3) Events

Events other than Budo such as concerts will be held on Saturdays and Sundays on which any Budo competitions or demonstrations are not scheduled. By deducting 10 times of Budo competitions and demonstrations from a yearly total of 52 times (Counting Saturday and Sunday as one), 42 times are available. That is, it is possible to open 42 times of events a year. Opening events 3.5 times a month is mathematically possible, but considering the present status of Laos, 24 times a year (48 days), which is twice a year on average is more reasonable count. NSC can expect the usage fee income from events other than Budo. For the frequency of events and incomes, see “Appendices 6 Complementary Reference on Execution of Events.”

The Budo center is provided with equipment of sepak takraw. Also, NSC is planning to provide with table tennis tables. In addition to concerts, sepak takraw and table tennis competitions will be held five times a year each at the Budo center. NSC can expect the usage fee from these competitions.

2-4-2 Maintenance System

(1) Maintenance System of the Budo Center

The maintenance of the Budo Center will chiefly consist of the regular inspection of buildings, equipment, and air conditioning facilities and replacement and repair of lighting fixtures conducted by the maintenance engineers sent from the NSC, as well as regularly planned cleaning. The maintenance of Budo tools, including Tatami and Karate mats, will be conducted cooperatively by Budo federations who use them.

Audio, lighting, and other equipment used in concerts and lecture meetings are assumed to be brought by the organizers of such events. The maintenance engineers of NSC will not be involved directly in the maintenance of such equipment.

The knowledge and skills required for the engineers sent from NSC are not particularly special. These can be instructed adequately through training before the handover of the completed facility.

2-5. Project Cost Estimation

2-5-1 Initial Cost Estimation

When this cooperation project is implemented, the project cost needed on the Lao side will be US\$ 100,944 (App. 11.7 million yen). The breakdown of cost is estimated as follows, according to the estimation condition described in (2) below.

(1) Cost to Be Borne by the Lao Side

Table 2-18 Cost to Be Borne by the Lao Side

Project Cost Category	Total Amount	
1) Removal of existing facilities and land preparation	28,576	(App. 3.3 million yen)
2) Removal of existing trees and land preparation	US 920	(App. 0.1million yen)
3) Construction of fences and gates	US 48,175	(App. 5.6million yen)
4) Table-tennis tables	US 5,470	(App. 0.6million yen)
5) Incoming charge for infrastructure	US 14,28	(App. 1.6million yen)
6) Bank charge	US 3,522	(App. 0.4million yen)
Total	US\$ 100,94	(App. 11.7million yen)

(2) Estimation Condition

- 1) Period of estimation: From May 2006 to October 2006 (average rate over a half year)
- 2) Exchange rate: US\$ 1 = 116.64 yen
- 3) Period of work: Work is assumed to be completed in a single fiscal year.
- 4) Other: This Project is assumed to be implemented in the grant-in-aid cooperation scheme of the Government of Japan.

2-5-2 Operation and Maintenance Cost

(1) NSC Budget and Budo Center Budget

1) NSC Budget

The table below shows the approved budget and performed budget from 2002 to 2006.

Table 2-19 Analysis of Budget of NSC

(US\$1=10,000Kip)

	Year	2002		2003		2004		2005		2006	
	Item	Budget (million Kip)	Share (%)	Budget (million Kip)	Share (%)	Budget (million Kip)	Share (%)	Budget (million Kip)	Share (%)	Budget (million Kip)	Share (%)
Approved budget	1. Salary/Incentives	438.48	25.6	371.56	33.0	365.06	37.4	347.50	31.6	462.48	19.9
	Increase from previous year (%)			-15.3		-1.7		-4.8		33.1	
	2. Administration cost	296.43	17.3	362.97	32.2	344.05	35.3	400.00	36.4	410.00	17.6
	Increase from previous year (%)			22.4		-5.2		16.3		2.5	
	3. Technical activity cost	427.84	25.0	192.29	17.1	26.62	2.7	200.00	18.2	230.00	9.9
	Increase from previous year (%)			-55.1		-86.2		651.3		15.0	
	4. Infrastructure cost	550.00	32.1	200.00	17.7	240.00	24.6	151.38	13.8	1,223.67	52.6
	Increase from previous year (%)			-63.6		20.0		-36.9		708.4	
	Total	1,712.75	100.0	1,126.82	100.0	975.73	100.0	1,098.88	100.0	2,326.15	100.0
Increase from previous year (%)			-34.2		-13.4		12.6		111.7		
Performed budget	1. Salary/Incentives	378.38	23.0	371.48	33.3	355.94	43.7	345.64	31.5	423.65	18.5
	Increase from previous year (%)			-1.8		-4.2		-2.9		22.6	
	2. Administration cost	484.63	29.5	362.42	32.5	341.59	41.9	399.97	36.5	409.28	17.9
	Increase from previous year (%)			-25.2		5.8		17.1		2.3	
	3. Technical activity cost	344.47	21.0	180.44	16.2	18.61	2.3	199.99	18.2	229.95	10.1
	Increase from previous year (%)			-47.6		89.7		974.6		15.0	
	4. Infrastructure cost	436.00	26.5	200.00	18.0	99.12	12.1	150.50	13.8	1,221.52	53.5
	Increase from previous year (%)			54.1		-50.4		51.8		711.6	
	Total	1,643.48	100.0	1,114.34	100.0	815.26	100.0	1,096.10	100.0	2,284.40	100.0
Increase from previous year (%)			-32.2		-26.8		34.4		108.4		
Balance	69.27		12.48		160.47		2.78		41.75		

Source: NSC

The income of NSC totally depends on the budget allocated by the Ministry of Finance. Although Lao Bowling, which belongs to NSC, earns 30 million Kip (US\$3,000) every year, this earning does not become NSC's income because it is included in national revenue.

The remarkable points in expenses of NSC is that the salary/incentives and administration costs, which are regular expenditures, is almost fixed but the technical activities and infrastructure costs significantly change by year. The budget in 2001, which is not shown in the table above, was 11,317.67

million Kip. This amount is larger by an order of magnitude than other years' budgets. This is because the budget includes the facility expense of 9,600 million Kip, which is paid to a Chinese company for repair and enlargement work of National Stadium and salary and reward of 724.95 million Kip, which is paid to a boxing coach from Cuba. The budget of NSC changes significantly when such expenditure is included. Normally the budget does not greatly change when such expenditure is not included. Therefore, irregular expenditure is not likely to occur, and the NSC's budget will be around 2,000 million Kip for several years. When the performed budget is lower than the approved budget, the remained amount is returned to the national treasury; when the performed budget is higher than the approved budget, the national treasury covers the deficit.

In this section analyzes NSC budget items to estimate the expenditure at the time of project handover (2009). The consumer price index is set to 10.0%, which is an average for past five years (Source: World Bank Major Macro Economic Index 2001-2005).

① Salary/Incentives

The share of salary/incentives in expenditure was about 30% from 2002 to 2006. The share percentage may change depending on the amount of the infrastructure expenditure but the amount is almost constant. Actually there is a slight up and down in the salary/incentives. This is due to the change in the number of personnel. It is assumed that NSC does not need to increase a large number of personnel but they need to employ about three people for the Budo center. Accordingly, to estimate the budget after the handover, increase by as much as the cost for three employees and yearly wage increase should be considered. The wages for 3 persons are assumed to be in the classes of a director, a section chief, and a staff, respectively. According to the answer from the NSC side, the per capita increase in wages in 2002 and 2006 was 3.9%. The salary increase can be regarded as the payment increase (3.9%), which should be estimated upon the handover.

② Administration Cost

As well as the salary/incentives, the share of the administration cost in the expenses is about 30% on average from 2002 to 2006. Although the percentage of the administration cost changes depending on the amount of the infrastructure cost, the amount is about 400 million Kip and does not greatly change. The administration cost is broken down to light and fuel cost, maintenance cost, office supplies cost, and consumable cost. After the project, the administration cost will also increase. The total area NSC manages is about 38,800m² now. After the project is completed, the area increase by 1,796 m², an increase by about 4.6%. To estimate the administration cost upon the handover, the largest administration cost from 2002 to 2006 to which is added 9.1%, and a price increase rate of 10.0% to this cost should be considered.

③ Technical Activity Cost

The technical activity cost changes depending on the year. It is assumed that no special activity is made upon the handover and only regular activities are made. To estimate this cost, first we calculate

the average value of the costs excluding the maximum and minimum amounts from 2002 to 2006 is calculated first. This average value is regarded as a regular technical activity cost, and should be added a price increase rate of 10.0% to estimate the technical activity cost.

④ Infrastructure Cost

Like the technical activity cost, the Infrastructure cost changes depending on the year and the fluctuation range is wide. This is because the planned cost of construction, repair, and enlargement work of facilities differs depending on the year. It is assumed that any construction, repair, and enlargement work will not be made upon the handover. Also, it should be regarded the average of the costs from 2002 to 2006 excluding the maximum and minimum values as the normal infrastructure cost. The infrastructure cost can be estimated by adding a price increase rate of 10% to the cost.

2) Budo Center Budget

The Table below shows the breakdown of the annual budget of the NSC in the past 5 years (based on approved budget) and the expected costs for the operation and maintenance of the Budo Center after completion. Each year, the NSC submits the request for budget needed in the next year for approval by the Ministry of Finance. The budget of the NSC has been increasing over the past 3 years, reflecting the sports promotion policy of the Lao Government. The increase in the budget of the NSC is expected to continue in the future, supported by the steady economic growth of Laos.

The costs for the operation and administration of the Budo Center in this Project are expected to be 79.85 million Kip. As compared with the salary/incentives, administration cost, and infrastructure cost in the NSC budget over the past 5 years, the costs for this Budo Center represent 5.3% of salary/incentives, 9.0% of administration cost, and 5.7% of infrastructure cost. These figures suggest that no budgetary difficulty is likely to occur. An estimation of the running cost of facilities and equipment after the completion of the Budo Center is shown below.

Table 2-20 Budget of National Sports Committee over Past 5 Years and Maintenance Cost of the Budo Center (Unit: Million Kip)

	2002	2003	2004	2005	2006	Average (Past 5 Years)	Maintenance Cost of the Budo Center (Estimated)	Remarks
Salary/Incentives	378.38	371.48	355.94	345.64	423.65	375.02	19.73	3 persons are newly employed as the Budo Center personnel.
Administration Cost	484.63	362.42	341.59	399.97	409.28	399.58	35.99	Expected management cost plus utility cost arising from Budo practice, competition events, and other sports events (excluding regular utility charges collected from Budo organizations).
Technical Activity Cost	344.47	180.44	18.61	199.99	229.95	194.69	—	Not generated.
Infrastructure Cost	436.00	200.00	99.12	150.50	1,221.52	421.43	24.13	Depreciation for Judo Tatami and Karatedo mats (1/8 of the cost of replacement, assuming that a half will be replaced after 8 years).
Total	1,643.48	1,114.34	815.26	1,096.10	2,284.40	1,390.72	79.85	

Table 2-21 Facility Running Cost and Equipment Running Cost

Equipment Running Cost
<p>Looking into the administration cost, the following shows the estimation of the running cost concerning utility cost including electric charges, telephone charges, and water charges. Estimation is given for 3 cases: only practice is performed without any events, Budo practice and competitions are performed without other events, and concerts and other events are held in addition to Budo.</p>
<p>[Only Budo Practice and No Event] The total of utility cost will be 43,982,374 Kip (US\$ 4,398).</p> <p>①Electric Charges Watt-hours: Normal times: {160kW (assumed contract demand)×0.1 (daytime demand factor)×8Hr (use time)}×261days + {160kW (assumed contract demand)×0.2 (nighttime demand factor)×3Hr (use time)}×365 days= 68,448kW/year Electric charges: 68,448kW/year×598 kip/kW = 40,931,904 kip/year</p> <p>②Telephone Charges Use time (domestic calls): 4 calls×5 min×261 days = 5,220 min/year Use time (international calls): 0.1 calls×5 min×261 days = 130.5 min/year Telephone charges: Base rate: 1 circuit×12 months×10,900 kip/month = 130,800 kip/year (The charges for telephones used by Judo Association, Karatedo Association, and Aikido Association will be paid by respective associations.) Call charges (domestic calls): 5,220 min/year×400 kip/min = 2,088,000 kip/year Call charges (international calls): 130.5 min/year×1,999 kip/min = 260,869 kip/year <hr/> Total telephone charges 2,479,669 kip/year</p> <p>③Water Charges Water usage at normal times: 1 m³/day×261 days + 1.5 m³/day×365 days = 808.5 m³/year Water charges: 808.5 m³/year×706 kip/m³ = 570,801 kip/year</p>
<p>[Budo-related Activities and Other Sports Events] The total of utility cost will be 56,514,604 Kip (US\$ 5,561).</p> <p>①Electric Charges Watt-hours:</p>

Normal times: $\{160\text{kW (assumed contract demand)} \times 0.1 \text{ (daytime demand factor)} \times 8\text{Hr (use time)}\} \times 261 \text{ days} + \{160\text{kW (assumed contract demand)} \times 0.2 \text{ (nighttime demand factor)} \times 3\text{Hr (use time)}\} \times 335 \text{ days} = 65,568\text{kW/year}$

During Budo competition events and exhibitions: $160\text{kW (assumed contract demand)} \times 0.6 \text{ (demand factor)} \times 8\text{Hr (use time)} \times 30 \text{ days} = 23,040\text{kW/year}$

Electricity charges: $(65,568\text{kW/year} + 23,040\text{kW/year}) \times 598 \text{ kip/kW} = 52,987,584 \text{ kip/year}$

② Telephone Charges

Use time (domestic calls): $4 \text{ calls} \times 5 \text{ min} \times 261 \text{ days} = 5,220 \text{ min/year}$

Use time (international calls): $0.1 \text{ calls} \times 5 \text{ min} \times 261 \text{ days} = 130.5 \text{ min/year}$

Telephone charges: Base rates: $1 \text{ circuit} \times 12 \text{ months} \times 10,900 \text{ kip/month} = 130,800 \text{ kip/year}$

(The charges for telephones used by Judo Association, Karatedo Association, and Aikido Association will be paid by respective associations.)

Call charges (domestic calls): $5,220 \text{ min/year} \times 400 \text{ kip/min} = 2,088,000 \text{ kip/year}$

Call charges (international calls): $130.5 \text{ min/year} \times 1,999 \text{ kip/min} = 260,869 \text{ kip/year}$

Total telephone charges 2,479,669 kip/year

③ Water Charges

Normal times: $1 \text{ m}^3/\text{day} \times 261 \text{ days} + 1.5 \text{ m}^3/\text{day} \times 335 \text{ days} = 763.5 \text{ m}^3/\text{year}$

During Budo events: $24.0 \text{ m}^3/\text{day} \times 30 \text{ days} = 720.0 \text{ m}^3/\text{year}$

Total water usage 1,483.5 m³/year

Water charges: $1,483.5 \text{ m}^3/\text{year} \times 706 \text{ kip/m}^3 = 1,047,351 \text{ kip/year}$

[Budo-related Activities and Events Including Sports and Concerts]

The total of utility cost will be 76,566,172 Kip (US\$ 7,656).

① Electric Charges

Watt-hours:

Normal times: $\{160\text{kW (assumed contract demand)} \times 0.1 \text{ (daytime demand factor)} \times 8\text{Hr (use time)}\} \times 261 \text{ days} + \{160\text{kW (assumed contract demand)} \times 0.2 \text{ (nighttime demand factor)} \times 3\text{Hr (use time)}\} \times 287 \text{ days} = 60,960\text{kW/year}$

During events: $160\text{kW (assumed contract demand)} \times 0.6 \text{ (demand factor)} \times 8\text{Hr (use time)} \times 78 \text{ days} = 59,904\text{kW/year}$

Electric charges: $(60,960\text{kW/year} + 59,904\text{kW/year}) \times 598 \text{ kip/kW} = 72,276,672 \text{ kip/year}$

② Telephone Charges

Use time (domestic calls): $4 \text{ calls} \times 5 \text{ min} \times 261 \text{ days} = 5,220 \text{ min/year}$

Use time (international calls): $0.1 \text{ calls} \times 5 \text{ min} \times 261 \text{ days} = 130.5 \text{ min/year}$

Telephone charges: Base rates: $1 \text{ circuit} \times 12 \text{ months} \times 10,900 \text{ kip/month} = 130,800 \text{ kip/year}$

(The charges for telephones used by Judo Association, Karatedo Association, and Aikido Association will be paid by respective associations.)

Call charges (domestic calls): $5,220 \text{ min/year} \times 400 \text{ kip/min} = 2,088,000 \text{ kip/year}$

Call charges (international calls): $130.5 \text{ min/year} \times 1,999 \text{ kip/min} = 260,869 \text{ kip/year}$

Total telephone charges 2,479,669 kip/year

③ Water Charges

Normal times: $1 \text{ m}^3/\text{day} \times 261 \text{ days} + 1.5 \text{ m}^3/\text{day} \times 287 \text{ days} = 691.5 \text{ m}^3/\text{year}$

During events: $24.0 \text{ m}^3/\text{day} \times 78 \text{ days} = 1,872.0 \text{ m}^3/\text{year}$

Total water usage 2,563.5 m³/year

Water charges: $2,563.5 \text{ m}^3/\text{year} \times 706 \text{ kip/m}^3 = 1,809,831 \text{ kip/year}$

Equipment Running Cost

The equipment procured in this cooperation Project will not cause yearly generation of maintenance cost. However, tatami for Judo and mats for Karatedo will require renewal because of aging deterioration resulting from daily use. The following shows the maintenance cost regarding tatami and mats. The total of this cost amounts to about 193 million Kip (US\$ 19,314.12). If earmarked in the previous year, the expenditure of this amount is acceptable within the budget of NSC. In addition, the income from events can be used. Therefore, the Lao side is considered to have sufficient ability to bear this cost.

① Tatami for Judo

Depending on the frequency of use, the service life of tatami is considered to be in the range from 5 years to over 8 years.

Tatami is damaged mainly when it is raised during setting and removal. When raised, the weight of tatami itself causes bending, which produces excessive strain of stitches and breaking of stitches, resulting in bending and damage of tatami.

Because the Budo center is operated for multi-purpose use including various events, tatami will not be placed

permanently on the floor. Therefore, repeated movement of tatami is expected to result in damage of tatami. However, a cart for transportation of tatami is included in the equipment specification plan to minimize the damage of tatami. Because the practice in Judo and Aikido is planned to begin in the evening, the frequency of use is expected to be lower than that in typical practice halls in Japan.

Considering the above conditions, the service life of tatami is expected to be 8 years or more. Because it is unlikely that all tatami mats will need replacement after 8 years in this use condition, it is assumed that those covering a half of the competition area (64 tatami mats) will be replaced.

Number of tatami mats replaced after 8 years, 64 mats x 28,000 yen = 1,792,000 yen (US\$ 15,363.51).

② Mats for Karatedo

Similarly to Judo, the mats for Karatedo are considered to have the service life of about 8 years to 10 years. Because the use condition is similar to that of tatami for Judo, the service life of the mats for Karatedo is estimated to be 8 years or more.

Because a karate competition event comprises "kumite" and "kata" programs, the Project is planned to provide mats to cover 2 competition areas (144 mats for an area). However, although the practice in "kumite" and that in "kata" are usually performed simultaneously in 1 area, it is unlikely that all mats will need replacement after 8 years in this use condition. Therefore, it is assumed that those covering a half of the competition area will be replaced.

Number of mats replaced after 8 years, 72 mats x 6,400 yen/mat = 460,800 yen (US\$ 3,950.61).

(2) Income Forecast

Although the large income through Budo practice is not expected, the income of the Budo center will consist of the facility usage fees for Budo competitions, Budo performance demonstrations, events such as concerts, and competitions including sepak takraw and table tennis. The estimated amount is about 54,000 thousand Kip (US\$5,400). It is recommended that the income brought by the facility use should be kept for the maintenance cost for facility and equipment.

The table below estimates the yearly income of the Budo center. NSC sets the facility usage fees for Budo completions and demonstrations, completions of sepak takraw and table tennis. For details of usage fee for events see "Appendices "6 Complementary Reference on Execution of Events.

Table 2-22 Income Forecast

(US\$1=10,000Kip)

Income source	Number of scheduled day a year	Usage fee	Total
a. Budo competitions and demonstrations	20 days	150 thousand to 200 thousand Kip (US\$15to 20)	3,000 thousand to 4,000 thousand Kip (US\$300to 400)
b. Competitions of sepak takraw and table tennis	10 days	200 thousand Kip (US\$20)	2,000 thousand Kip (US\$200)
c. Events including concerts	48 days	1,000 thousand Kip (US\$100)	48,000 thousand Kip (US\$4,800)
a.+c. Total	30 days		5,000 thousand to 6,000 thousand Kip (US\$500to 600)
a.+b.+c. Total	78 days		53,000 thousand to 54,000 thousand Kip (US\$5,300to 5,400)

Currently the associations and club collect the membership fee from the members. This fee is used for communication, clerical work, and paid to the facilities as utility cost (assumed 50% of the membership fee). After the handover to the Budo center, the fee should be paid to the Budo center and this income is supposed to be the income of Budo center.

Utility cost paid by associations < (15,000Kip/person, month (membership fee) x 50%) x (145 persons (Judo members) + 190 persons (Karatedo members) + 74 persons (Aikido persons) > x 12 months = 36,810,000 Kip/year

The utility cost from the Judo association, Karatedo association, and Aikido clubs is 36,810,000Kip (US\$3,681) a year.

(3) Income and Expense Simulation

This section explains a simulation of yearly income and expense of the Budo center based on the estimate of the previous sections.

Three simulations in relation to the usage cases of the Budo center were made: ① Only Budo practice and no event, ② Budo-related activities and other sports events, and ③ Budo-related activities and events including sports and concert. In this estimate, salary for employees and management cost is fixed but the utility cost changes depending on the case.

① Only Budo Practice and No Event

This simulation is based on the assumption that Budo practice is made on both weekdays and weekends. Events are not held and the income is only the utility cost from federations and clubs.

As a result of the simulation, the balance will have a deficit of 49.19 million Kip (US\$4,919), thus requiring compensation for deficit from NSC for operation and maintenance of the Budo center.

Table 2-23 Balance Simulation-1 (US\$1=10,000Kip)

Balance	Item	Amount	Total
Expense	Salary: Increase of labor cost due to three employee increase	19.73 million Kip	86.00 million Kip (US\$8,600)
	Administration cost: Budo center area increase to the largest management cost 484.63 million Kipx4.6%	22.29 million Kip	
	Technical activities cost: NA	---	
	Infrastructure cost: Utility cost, see 2-5-2 Operation and Maintenance Cost (1) Facility Running Cost.	43.98 million Kip	
Income	Utility cost from associations	36.81 million Kip	36.81 million Kip (US\$3,681)
Balance	Expense - Income		49.19 million Kip (US\$4,919)

② Budo-related Activities and Other Sports Events

This simulation is based on the assumption that Budo practice, Budo competition and performance demonstrations, and competitions including sepak takraw and table tennis. The income of the Budo center will be born from usage fees of Budo competitions and performance demonstrations and competitions of sepak takraw and table tennis, and utility cost from associations and clubs.

As a result of the simulation, as in the case of ①, the balance will have a deficit of 55.72 million Kip (US\$5,572), thus requiring compensation for deficit from NSC for operation and maintenance of the Budo center.

Table 2-24 Balance Simulation-2

(US\$1=10,000Kip)

Balance	Item	Amount	Total
Expense	Salary: Increase of labor cost due to three employee increase	19.73 million Kip	98.53 million Kip (US\$9,853)
	Administration cost: Budo center area increase to the largest management cost 484.63 million Kipx4.6%	22.29 million Kip	
	Technical activities cost: NA	---	
	Infrastructure cost: Utility cost, see 2-5-2 Operation and Maintenance Cost (1) Facility Running Cost.	5 6.51 million Kip	
Income	Income of Budo competitions and demonstrations and competitions of sepak takraw and table tennis (see previous section)	6.00 million Kip	42.81 million Kip (US\$4,281)
	Utility cost from associations	36.81 million Kip	
Balance	Expense—Income		55.72 million Kip (US\$5,572)

③ Budo-related Activities and Events Including Sports and Concerts

This simulation is based on the assumption that Budo competitions and performance demonstrations, competitions of sepak takraw and table tennis, events including concerts are held other than weekday Budo practice. The income of the Budo center will be born from usage fees of Budo competitions and performance demonstrations, competitions of sepak takraw and table tennis, and events, and utility cost from associations and clubs.

As a result of the simulation, as in the previous cases, the balance will have a deficit of 27.77 million Kip (US\$27.77), thus requiring compensation for deficit from NSC for operation and maintenance of the Budo center. In these three simulation, however, the deficit level is minimal.

Table 2-25 Balance Simulation-3

(US\$1=10,000Kip)

Balance	Item	Amount	Total
Expense	Salary: Increase of labor cost due to three employee increase	19.73 million Kip	118.58 million Kip (US\$11,858)
	Administration cost: Budo center area increase to the largest management cost 484.63 million Kipx4.6%	22.29 million Kip	
	Technical activities cost: NA	---	
	Infrastructure cost: Utility cost, see 2-5-2 Operation and Maintenance Cost (1) Facility Running Cost.	76.56 million Kip	
Income	Income of Budo competitions and demonstrations, competitions of sepak takraw and table tennis, and events (see previous section)	54.00 million Kip	90.81 million Kip (US\$9,081)
	Utility cost from associations	36.81 million Kip	
Balance	Expense —Income		27.77 million Kip (US\$2,777)

As a result of three simulations, holding events decreases the compensation from NSC. The compensation amount can be a half compared with the case where events are not held. This simulation

sets the entrance fee of events to 20,000Kip (US\$2.00). In order to balance the income and expenditure, the entrance fee should be set to 21,000Kip (US\$2.10). In either case, inviting events is necessary for self-sustained operations of the Budo center.

To increase the income, revision of the usage fee of the Budo center and increase in the number of events may be needed. However, it is difficult to realize the case where the income exceeds the expense. Thus, NSC should prepare the enough budget to operate and maintain the Budo center every year.

Moreover, the costs for the replacement of tatami and mats due to their aging will be born. Budget must be prepared when necessary.

2-6. Other Relevant Issues

In order to ensure the full utilization of the facility construction and equipment procurement in this Project and the realization and persistence of the beneficial effects, the NSC should consider the following issues.

① Establishment of the Preparation Committee and the Coordinating Committee (Names are Tentative)

The handover of the Budo Center to the Lao side is planned to occur in March 2009. This will be the first Budo facility that can host international events in Laos. While the Lao side will take charge of the operation of the facility, establishment of the coordinating committee will be necessary for the smooth operation and maintenance of the Budo Center. (A preparation committee should be established during the construction of the Budo Center and this will act as the coordinating committee after completion.) To ensure appropriate operation and maintenance of the Budo Center, the preparation committee for the Budo Center should be established at an early stage.

② Income and Expenditure of the Budo Center

When the operation of the Budo Center is assumed to include multipurpose use other than Budo, the income of the Budo Center will be divided broadly into the income from Budo demonstrations, sepak takraw and table tennis competitions, and other events on one hand, and the membership charges from federations and clubs on the other hand. While the operation and maintenance costs of the Budo Center will be expended from the NSC budget, it is desirable from the standpoint of sustainability that appropriate use fees are collected from the users of the Budo Center, and operation, maintenance, and management are covered by this fund. For this reason, a steady increase in the income from sepak takraw and table tennis competitions and other events is desired for the smooth maintenance and management of the Budo Center.

Chapter 3 PROJECT EVALUATION AND RECOMMENDATIONS

Chapter 3 Verification of the Project Relevance

3-1 Project Effect

Currently in Laos, there is no Budo center that satisfies the international standards. Athletes are practicing by making use of meeting rooms and lecture halls, which are not only old, but are not providing ideal training environment since they are not designed specifically for sports. For some athletes, the room available for practice is a space with pillars at intervals of several meters, instead of a large room, and the practice hours are on shifts for some Budo disciplines where one room is being shared. It is not a sufficient environment for practice.

The implementation of this project will enable the athletes to train in more appropriate conditions, the Budo education to be promoted, and the level of Lao Budo athletes to be improved. The project will also enhance the popularity of Budo among Lao people and the recognition of Budo as a part of youth education.

The effect of this project is summarized in the table below.

Table 3-1 The effectiveness of the project and the level of improvement

Current situation and challenges	Measures to be taken in the project (the cooperation project)	Direct effect/ level of improvement	Indirect effect/ level of improvement
There are about 400 Budo athletes, but due to the assignment of JOCV and SV, their technical skills have greatly improved and the number of people wanting to participate is increasing, But there is no Budo center that satisfies the international standards, and the athletes are practicing in meeting rooms, lecture halls etc., which are not only old, but are not providing ideal practicing space because they are not designed for sports.	To construct a Budo center equipped with 2 competition areas, which is needed for international events, and to provide the necessary Budo equipment as well as other multi-purpose equipment.	1) The training environment and the quality of the training will be improved, and the number of Budo athletes (about 400 people) will increase. 2) International games, which could not be held in Laos until now, can be hosted.	1) The technical skills of Budo athletes in Laos will improve. 2) The traditional Japanese culture, such as Judo, Karatedo and Aikido, will be popularized, and the understanding toward Japanese culture among Lao people will be deepened.

The construction of a center equipped with two Budo competition areas, which is needed for international games, accompanied by the provision of equipments will result in positive effects such as an increase in the number of athletes and trainees, a possibility of holding international events in Laos, and an increase in the number of athletes who can participate in international events. The indicators which define the objective of the project are listed below. The indicators are the results of discussions with NSC and the hearing with each Budo Associations.

The appropriate time for evaluation would be one year after the handover of the facilities and the equipment, i.e. in 2010.

Table 3-2 Success indicators

Indicators	2007 (current situation)	After 2010
Number of Budo athletes and trainee	400	Increased
Number of international Budo events hosted in Laos.	0	Increased
Number of participants in international Budo event	23	Increased

① Number of athletes and trainees

By constructing a new and well-equipped Budo center, the number of athletes and trainees is expected to rise.

② Number of international events hosted in Laos

Currently, there are two Budo competition areas in Laos, but there is no Budo center with the necessary facilities and spectator's seats. Through this project, it will be possible to host international competitions for Judo and Karatedo.

③ Number of participants in international Budo events

In 2006, a total of 23 athletes participated in Judo and Karatedo competitions at the 15th Asian Games in Doha, Qatar, and in the Asian Judo Championship held in Phnom Penh, Cambodia. The implementation of this project is expected to increase the number of athletes, and hopefully the number of participants in those international Budo events.

3-2 Recommendations

3-2-1 Challenges to be Overcome by Laos / Recommendations

Listed below, are the challenges to be overcome by NSC, in order to maximize the use of the facilities constructed and the equipments provided by the project.

① Establishment of a Preparation Committee and a Coordinating Committee (tentative names)

The Budo center is planned to be handed over to the Government of Laos in March 2009. It will be the first Budo center in Laos that has a capacity to hold international events. The operation of the facility will be under the responsibility of the Lao side, and the establishment of a committee will be essential for the smooth operation and maintenance of the Budo center. In concrete terms, a Preparation Committee will be established by NSC, together with the representatives from the Judo Association, Karatedo Association and Aikido Club, which will formulate the terms of use (general rules, purpose, projects, membership, meetings, accounting etc). By jointly organizing the Preparation Committee between the NSC and the Budo organizations, operational know-how of each organization can be shared and promote a strengthened cooperation. After the completion of construction, the Preparation Committee will become the Coordinating Committee, which will regularly hold meetings to manage the operation and maintenance of the Budo center. In order to ensure stable management of operation and maintenance, an establishment of the Preparation Committee at an early stage will be recommended.

② Securing of Budo center's income

With a multi-purpose use of the Budo center, the income can be separated into two kinds: the facility usage fee from Budo performance demonstrations, competitions of sepak takraw and table-tennis, and other events, and the membership fee from the Associations/Club. In view of sustainability, although the cost of operation and management will be covered by the budget of NSC, it is recommended that appropriate user fees are collected to fund the operation and management. From such point of view, it is encouraged to achieve consistent increase of income from Budo performance demonstrations, sepak takraw and table-tennis competitions, and other events.

③ Maintenance of facility and equipment

While maintenance management of the Budo center will be handled by the maintenance technician assigned by NSC, Tatami and mats will be installed by each Association, and the management of public address and acoustic systems as well as the lighting facilities during multi-purpose use of the center will be under the responsibility of the event organizers. Therefore, main duties of the maintenance technician will be routine maintenance of the facility, such as exchanging lighting fixtures and the daily checkup of the air-conditioners. These duties do not require special skills so a training session prior to handover at the time of completion of construction will be sufficient. Therefore, NSC must ensure the assignment of technicians who will conduct the maintenance tasks. Moreover, since the facility and equipment maintenance costs are not expected to vary greatly from year to year unless particular problems arise, a fixed budget amount should be secured every year.

3-2-2 Technical Cooperation / Working in Partnership with Other Donors

Since this project is for the construction of the first full-scale Budo center in Laos, the management of operation and maintenance after the completion of construction must be ensured by establishing a Preparation Committee prior to handover. For a smooth operation of the Preparation Committee, it will be recommended to dispatch volunteers to take part in the planning/management of the facility. This Budo center plans multi-purpose usage, and events other than Budo. As NSC lacks in experience of such events, the dispatch of experienced organizers will be effective. Additionally, if the members of the Preparation Committee are decided at an early stage, it may be possible to invite the members who will be directly involved in the operation and maintenance management to Japan for training.

Apart from the dispatch of volunteers who are specialized in Budo, equipments such as makiwara, Karatedo mats and protectors had been supplied as a Grass-roots Grant Aid project in 2003, for the promotion of Karatedo. They are currently being managed by the Karatedo Association, but will be installed in the Budo center after the completion of construction.

Since this project is for the construction of a facility related to the Japanese traditional culture, Budo, there will be no collaboration with other countries and agencies. However, various activities which are not related to Budo are being supported by other donors, in preparation for the SEA Games which is scheduled to be held in Laos in 2009. These include the construction of a sports complex consisting of the

main stadium, swimming pools, indoor stadium, tennis courts, and rifle range supported by the China Development Bank, the construction of a training center with the support of the Government of Vietnam, and the training of athletes of indoor sports by the International Olympics Committee (IOC).

3-3 Relevance of the Project

The relevance of this project as a Japanese Grant Aid project has been confirmed based on the following five reasons:

- (1) It is the first Budo center to be constructed in Laos, that has the capacity to hold international competitions. Therefore, the direct beneficiaries of the project are the Budo athletes and trainees, approximately 400 people. Their technical levels have improved in the recent years, owing to the instructions of JOCVs and SVs, and the increasing number of medalists is resulting in the increase of trainees. Since 2003, Budo performance demonstrations have been given every year as part of the cultural exchange project of overseas establishments, which has also contributed in increasing the public interest in Budo. Additionally, by hosting international events of Budo, newspaper and television coverage will increase and the general public who are interested in Budo will indirectly benefit from the project.
- (2) After the handover of the Budo center, the management of facilities and equipment will not require excessively high skills and will be possible by only a few number of staff assigned from NSC. The operation of the Budo center will be jointly managed by NSC and the Budo Associations, and events other than Budo, such as concerts and seminars, will be held to realize the multi-purpose usage of the facility.
- (3) The Lao Government has been addressing the problem of poverty through the National Growth and Poverty Eradication Strategy (NGPES). This strategy, which is positioned as the action plan of poverty eradication of the National Development Plan, has been formulated focusing on the four areas which are closely linked to poverty eradication: education, agriculture, healthcare and transportation infrastructure. The importance of sports for a healthy development of youth is widely acknowledged. This project, which plans to construct a Budo center and supply the necessary equipment, will therefore comply with the promotion of sports under the umbrella of education, and will contribute to the implementation of the overall plan of the Lao Government.
- (4) The construction site is located in an area where many national stadiums and sports facilities are found. Therefore, the negative impact caused by noise and traffic congestion will be minimal to the neighboring residents. With regard to waste disposal, no wastes of special nature are to be expected and the waste water will be discharged from septic tanks to the public sewage facilities. Therefore, this project is expected to have no negative impact on the surrounding environment.
- (5) The construction site occupies approximately 6,600 m² of land acquired in the premises of Anou Primary and Secondary School, located adjacent to the National Stadium in the center of Vientiane city. The land is almost flat, and neither the demolition cost of the existing building nor the land

renovation cost is expected to be of excessive burden to the Lao side. The surrounding area is served with infrastructure including water, sewage system, electricity, and telephone line; therefore, no additional installations will be required. Furthermore, as the Lao Government already has the experience of implementing Japanese Grant Aid projects, hence no problems are to be anticipated in implementing this project under the framework of Grant Aid.

3-4 Conclusion

As described above, the project is expected to have substantial positive impact and to contribute in improving the BHN of a wider community. Based on such considerations, the relevance of implementing this project under Grant Aid scheme has been confirmed. Furthermore, the Lao Government is considered to have sufficient capacity of securing the necessary work force and funding for the operation and maintenance management of the project. If securing of personnel, maintenance of the facility/equipment, securing of budget can be ensured, the operation of the Budo center can be further stabilized.

APPENDICES

- 1. Member List of the Study Team**
- 2. Study Schedule**
- 3. List of Parties Concerned in the Recipient Country**
- 4. Minutes of Discussions**
- 5. Equipment**
- 6. Complementary Reference on Execution of Events**

1. Member List of the Study Team

1-1 Basic Design Study-1

From 14 October, 2006 to 9 November, 2006 (27days)

Position	Name	Period (2006)	Organization
1. Leader	Mr. Senya MORI	—	Resident Representative, Laos Office, JICA
2. Coordinator	Mr. Nobutaka KONDO	14/Oct.- 23/Oct.	Senior Project Administration Officer ICT and Governance Team, Grant Aid Management Dept., JICA
3. Chief Consultant/ Architect I/ O&M Planning	Mr. Hozumi OGAWA	14/Oct.- 9/Nov.	Azusa Sekkei Co., Ltd.
4. Architect II	Mr. Yoshihumi HOSHIAI	14/Oct.- 9/Nov.	Azusa Sekkei Co., Ltd.
5. Const. Supervision Planning/ Cost Estimation	Mr. Ysasuto TOYOKI	17/Oct.- 9/Nov.	Azusa Sekkei Co., Ltd.
6. Equipment Planning/ Procurement Planning/ Cost Estimation	Mr. Koichi OBAYASHI	14/Oct.- 9/Nov.	International Total Engineering Corporation
7. Sports Facility	Mr. Toyoaki AMAGAI	14/Oct.- 23/Oct.	Azusa Sekkei Co., Ltd.
8. Facility Operation	Mr. Koji KATANO	26/Oct.- 3/Nov.	Event Produce Group NYX Proximity

1-2 Basic Design Study -2

From 21 January, 2007 to 1 February, 2007 (12 days)

Position	Name	Period (2007)	Organization
1. Leader	Mr. Senya MORI	—	Resident Representative, Laos Office, JICA
2. Chief Consultant/ Architect I/ O&M Planning	Mr. Hozumi OGAWA	20/Jan.- 1/Feb.	Azusa Sekkei Co., Ltd.
3. Architect II	Mr. Yoshihumi HOSHIAI	21/Jan.- 1/Feb.	Azusa Sekkei Co., Ltd.

1-3 Draft Report Explanation

From 23 May, 2007 to 2 June, 2007 (11 days)

Position	Name	Period (2007)	Organization
1. Leader	Mr. Senya MORI	—	Resident Representative, Laos Office, JICA
2. Coordinator	Mr. Masafumi YATABE	23/May- 2/June.	Senior Project Administration Officer ICT and Governance Team, Grant Aid Management Dept., JICA
3. Chief Consultant/ Architect I/ O&M Planning	Mr. Hozumi OGAWA	26/May- 2/June.	Azusa Sekkei Co., Ltd.
4. Architect II	Mr. Yoshihumi HOSHIAI	23/May- 2/June.	Azusa Sekkei Co., Ltd.

2. Study Schedule

2-1 Basic Design Study-1

From 14 October, 2006 to 9 November, 2006 (27days)

No.	Date	Time	Activity
01	14 Oct. (Sat.)	10:35 15:05	Lv. Tokyo by JL-717 (Mr.Kondo, Mr.Ogawa, Mr.Hoshiai & Mr.Obayashi) Ar. Bangkok
02	15 Oct. (Sun.)	08:20 09:30 13:00	Lv. Bangkok by TG-690 Ar. Vientiane Visit project proposed sites (Kaysone Museum, Lao-ITEC, Beung Kha Ngong, Youth Union, That Luang) Visit FEM of Lao University and Budo Hall of Youth Union
03	16 Oct. (Mon.)	09:00 11:20 14:00	Courtesy call to JICA and submission and explanation of the inception report and questionnaire (Mr.Mori, Mr.Kondo, Mr.Ogawa, Mr.Hoshiai & Mr.Obayashi) Courtesy call to the Embassy of Japan and submission and explanation of the inception report and questionnaire Courtesy call to NSC and submission and explanation of the inception report and questionnaire, confirmation of schedule and project proposed sites
04	17 Oct. (Tue.)	09:00 14:00 15:15 15:45 16:00 16:15 17:30 10:55 15:45	Meeting with NSC for the system of grant aids and project proposed sites based on the inception report (Mr.Mori, Mr.Kondo, Mr.Ogawa, Mr.Hoshiai & Mr.Obayashi) Visit project proposed site of the front of Kaysone Museum Visit project proposed site of the front of That Luang Visit project proposed site of Beung Kha Ngong Visit project proposed site of Youth Union Courtesy call to Youth Union Observation of Judo Hall of Youth Union Lv. Tokyo by JL-717 (Mr.Amagai and Mr.Toyoki) Ar. Bangkok
05	18 Oct. (Wed.)	08:30 09:00 11:00 14:00 16:00 08:20 09:30 13:00	Report to Mr.Mori about project proposed sites (Mr.Kondo, Mr.Ogawa, Mr.Hoshiai & Mr.Obayashi) Meeting with NSC for the inception report Courtesy call to Youth Union (Mr.Khamphanh SITIDAMPHA) Meeting with NSC Report to Ms.Onoda, the Embassy of Japan Lv. Bangkok by TG-690 (Mr.Amagai and Mr.Toyoki) Ar. Vientiane Visit project proposed sites (Kaysone Museum, Lao-ITEC, Beung Kha Ngong, Youth Union, That Luang)
06	19 Oct. (Thu.)	09:00 10:30 11:30 14:00 15:00 17:00	Meeting with NSC for the project site Observation of LJC & FEM, the National University of Laos Observation of ICT Center Visit project proposed site of Report to Ms.Onoda, the Embassy of Japan Observation of Budo Hall in the National Stadium area
07	20 Oct. (Fri.)	09:00 12:00 15:30 14:00	Mr.Mori requested NSC to arrange that the Ambassador's intention might be the front of That Luang Ask Ms.Isida, JOCV, about Judo circumstances in Lao Mr.Katsura, Ambassador, requested Mr.Phongsavath BOUPHA, Vice Minister of Foreign Affairs, to arrange for the project site in the front of That Luang (Mr.Mori, Mr.Kondo, Mr.Ogawa and Mr.Hoshiai) Observation of construction and equipment circumstances (Mr.Amagai, Mr.Toyoki & Mr.Obayashi)
08	21 Oct. (Sat.)	09:00 10:30 16:30	Visit the project proposed site in front of the Diet Building Observation of the New National Stadium donated by China in Km 16 Visit Mr.Sonesak, Vice President of Karatedo Federation in Communication School

No.	Date	Time	Activity
	22 Oct. (Sun.)	All day	Observation of the Vientiane City Filing documents
10	23 Oct. (Mon.)	09:00	Internal Meeting in NSC and meeting with Dr. Soulasith for the project policy Receive questionnaire from Mr. Sonesak, Vice President of Karatedo Federation Meeting with NSC
		16:30	Lv. Vientiane by QV-414 to Tokyo via Bangkok (Mr.Amagai)
11	24 Oct. (Tue.)	10:30	Lv. Vientiane by TG-691 to Manila (Mr.Kondo)
		09:00	Confirmation of the schedule at NSC
		10:00	Visit Meteorological Agency (Mr.Toyoki & Mr.Obayashi)
		14:00	Visit Mr.Sonesak's office, Vice President of Karatedo Federation, check of karetedo equipment donated by Japan and question (Mr.Ogawa, Mr.Hoshiai Mr.Toyoki & Mr.Obayashi)
		15:30	Visit Lao ITECC (Mr.Ogawa & Mr.Hoshiai) Visit Mr.Ogawa's office, the expert of EDL (Mr.Toyoki & Mr.Obayashi)
12	25 Oct. (Wed.)	09:00	Meeting with NSC
		12:00	Ask Mr.Miura, Judo expert, about Judo circumstances in Asia
		14:00	Observation of the Lao Culture Hall
		15:30	Meeting with NSC (Mr.Ogawa & Mr.Hoshiai) Meeting with the telephone office (Mr.Toyoki & Mr.Obayashi)
13	26 Oct. (Thu)	09:00	Meeting with NSC (Mr.Ogawa & Mr.Hoshiai) Meeting with CPTC (Mr.Toyoki & Mr.Obayashi)
		13:30	Observation of the City Gymnasium in Beung Kha Ngong
		14:30	Observation of the Gymnasium, Ministry of Public Security in Km 2
		15:30	Observation of the Gymnasium, Ministry of Defence in Km 5
		10:55	Lv. Narita by TG-641 (Mr.Katano)
		15:45	Ar. Bangkok
14	27Oct. (Fri.)	09:00	Meeting with NSC (Mr.Ogawa, Mr.Toyoki & Mr.Obayashi)
		13:30	Meeting with Fire Office in Vientiane
		15:00	Observation of the Police School
		16:10	Observation of the Police Academy
		18:00	Confirmation of the answer of questionnaire at NSC
		08:20	Lv. Bangkok by TG-690 (Mr.Katano)
		09:30	Ar. Vientiane
		11:00	Investigation of events (Mr.Hoshiai & Mr.Katano)
15	28 Oct. (Sat.)	06:00	Visit Vientiane Half Marathon hosted by NSC (Mr.Mori, Mr.Ogawa, Mr.Hoshiai Mr.Toyoki, Mr.Obayashi & Mr.Katano)
		10:00	Filing documents
16	29 Oct. (Sun.)	09:30	Observation of the Vientiane City
		13:30	Internal Meeting
17	30 Oct. (Mon.)	09:00	Meeting with NSC (Mr.Ogawa, Mr.Toyoki & Mr.Obayashi)
		11:00	Meeting with JICA (Mr.Ogawa & Mr.Hoshiai)
		13:30	Investigation of mechanical and equipment (Mr.Toyoki & Mr.Obayashi)
		09:30	Investigation of events (Mr.Hoshiai & Mr.Katano)
18	31 Oct. (Tue)	09:00	Meeting with NSC (Mr.Ogawa, Mr.Hoshiai Mr.Toyoki, Mr.Obayashi & Mr.Katano)
		14:00	Observation of bonded warehouse in Tanalane
		17:00	Internal Meeting
		11:00	Investigation of events (Mr.Hoshiai & Mr.Katano)
19	1 Nov. (Wed.)	08:45	Internal Meeting (Mr.Ogawa, Mr.Hoshiai, Mr.Toyoki, Mr.Obayashi & Mr.Katano)
		10:00	Observation of Lao National Circus (Mr.Ogawa, Mr.Hoshiai & Mr.Katano)
		16:00	Meeting with NSC (Mr.Ogawa, Mr.Hoshiai Mr.Toyoki & Mr.Obayashi)
		10:00	Survey of construction material cost (Mr.Toyoki)
		10:00	Survey of sports equipment (Mr.Obayashi)

No.	Date	Time	Activity
20	2 Nov. (Thu)	09:00	Meeting with NSC (Mr.Ogawa, Mr.Toyoki & Mr.Obayashi) Information of new project site from Mr.Mori through the Embassy of Japan Confirmation of the questionnaire Discussion on the Memorandum at NSC
		10:15	Lv. Vientiane by TG-691 to Tokyo via Bangkok (Mr.Katano)
21	3 Nov. (Fri.)	09:00	Meeting with NSC (Mr.Ogawa, Mr.Toyoki & Mr.Obayashi) Discussion on the draft Minutes at NSC Confirmation of the questionnaire
		09:00	Visit project proposed site of Aonu School
22	4 Nov. (Sat.)	11:00	Internal Meeting
		13:00	Observation of the Vientiane City
		All day	Internal Meeting Filing documents
23	5 Nov. (Sun.)	10:15	Lv. Vientiane by TG-691 to Bangkok (Mr.Toyoki & Mr.Obayashi)
		08:30	Meeting with NSC (Mr.Ogawa, & Mr.Hoshiai)
24	6 Nov. (Mon)	10:00	Visit project proposed site of Aonu School with Mr.Katsura, Ambassador, Mr.Shinohara, Couunseller, Ms.Onoda, Mr.Mori & Dr.Soulasith,
		12:00	Meeting with Mr.Khemsath, president of Judo association and Mr.Ousavanh, Vice president
		15:00	Signing of the Minutes & the Memorandum at NSC Meeting with Mr.Mori
		17:00	Report to Ms.Onoda, the Embassy of Japan
		All day	Survey of construction material and sports equipment (Mr.Toyoki & Mr.Obayashi)
		08:45	Report to Dr.Soulasith, NSC
25	7 Nov. (Tue)	09:15	Submit the project site plan in Anou School to Mr.Mori
		10:30	Lv. Vientiane by TG-691 to Bangkok (Mr.Ogawa, & Mr.Hoshiai)
		All day	Survey of construction material and sports equipment (Mr.Toyoki & Mr.Obayashi)
26	8 Nov. (Wed.)	07:30	Visit Chantanaburi Province (Mr.Ogawa, Mr. Hoshiai, Mr.Toyoki & Mr.Obayashi)
		13:00	Observation of Budo Hall of Sianuson School
		15:00	Return to Bangkok
27	9 Nov. (Thu)	08:10	Lv. Bangkok by JL-708 (Mr.Ogawa, Mr. Hoshiai, Mr.Toyoki & Mr.Obayashi)
		16:15	Ar. Tokyo

2-2 Basic Design Study -2

From 21 January, 2007 to 1 February, (12 days)

No.	Date	Time	Activity
01	21 Jan. (Sun)	10:35	Lv. Tokyo by JL-717 (Mr.Ogawa & Mr.Hoshiai)
		15:55	Ar. Bangkok
		19:20	Lv. Bangkok by TG-692
		20:30	Ar. Vientiane
02	22 Jan. (Mon.)	09:00	Courtesy call to Mr. Mori, JICA, confirmation of schedule and the Anou project site
		10:00	Courtesy call to Mr.Katsura, Ambassador, Mr.Shinohara, Couunseller, Ms.Onoda, the Embassy of Japan confirmation of schedule and the Anou project site
		14:00	Meeting with the local relegated company
03	23 Jan. (Tue.)	09:00	Courtesy call to NSC(Mr. Mori, Mr.Ogawa & Mr.Hoshiai) and meeting with Dr. Soulasith, confirmation of schedule and the Anou project site
		14:00	Signing the local relegated company
		15:15	Introducing the local relegated company at NSC Confirmation of the Anou project site and survey dates
		18:30	Visit Budo Hall of Youth Union, Ms.Ishida & Mr.Ito, JOCV
04	24 Jan. (Wed.)	09:00	Meeting with NSC for confirmation of Infrastructures & Questionnaire
		14:00	Filing documents at NSC Receive additional equipment request letter

No.	Date	Time	Activity
05	25 Jan. (Thu.)	08:45	Meeting with NSC
		09:00	Additional survey at ETL
		10:15	Additional survey at Urban Environment, Vientiane Municipality
		14:00	Additional survey at Water Supply, Nampapa Nakhone Luang
		15:00	Additional survey at ECI
		16:15	Courtesy Call to Mr.Khemsath , president of Judo association
		17:00	Courtesy Call to Mr.Chanthiva Prasasouk , president of Aikido club
06	26 Jan. (Fri.)	09:00	Meeting with NSC
		14:00	Discussion on the draft Minutes at NSC
		16:00	Survey of infrastructures at the project site
07	27 Jan. (Sat.)	09:00	Filing documents at NSC
08	28 Jan. (Sun)	All day	Internal meeting
			Filing documents
09	29 Jan. (Mon.)	09:00	Meeting with NSC
		10:00	Report to Mr.Katsura, Ambassador, Mr.Shinohara, Counsellor, Ms.Onoda, the Embassy of Japan
		14:00	Meeting with NSC for the draft Minutes
10	30 Jan. (Tue.)	09:00	Final confirmation of the Minutes at NSC
		14:30	Signing of the Minutes
			Report to the Embassy of Japan
11	31 Jan. (Wed.)	10:30	Lv. Vientiane by TG-691 (Mr.Ogawa & Mr.Hoshiai)
		11:30	Ar. Bangkok
12	1 Feb. (Thu.)	08:10	Lv. Bangkok by JL-708 (Mr.Ogawa & Mr.Hoshiai)
		16:15	Ar. Tokyo

2-3 Draft Report Explanation

From 23 May, 2007 to 2 June, 2007 (11 days)

No.	Date	Time	Activity
01	23 May (Wed.)	10:50	Lv. Tokyo by TG-641 (Mr.Yatabe) , NH-953 (Mr.Hoshiai)
		15:25	Ar. Bangkok
		19:20	Lv. Bangkok by TG-692
		20:30	Ar. Vientiane
02	24 May (Thu.)	09:00	Courtesy call to Mr. Mori, JICA, confirmation of schedule and the Anou project site
		10:00	Courtesy call to Mr.Katsura, Ambassador, Mr.Shinohara, Counsellor, Ms.Onoda, the Embassy of Japan confirmation of schedule and the Anou project site
		14:00	Courtesy call to NSC(Mr. Mori, Mr.Yatabe, Mr.Ogawa & Mr.Hoshiai) and meeting with Dr. Soulasith, confirmation of schedule and the Anou project site, explanation of Draft BD Report
03	25 May (Fri.)	08:30	Explanation of Draft BD Report at NSC
04	26 May (Sat.)	08:30	Confirmation of size for the Anou project site
		10:50	Lv. Tokyo by NH-953 (Mr.Ogawa)
		15:25	Ar. Bangkok
		19:20	Lv. Bangkok by TG-692
		20:30	Ar. Vientiane
05	27 May (Sun.)	All day	Internal Meeting
06	28 May (Mon.)	09:00	Meeting with NSC about operation & maintenance of Budo Center
			Hearing from the Football Federation
		12:00	Meeting with Mr.Kikuchi, SV
		15:00	Meeting with NSC about operation & maintenance of Budo Center

No.	Date	Time	Activity
07	29 May (Tue.)	08:30	Meeting with member at JICA Office for the Minutes
		10:00	Meeting with the president of Karatedo Federation at Youth Union
		11:00	Meeting with the president of Judo Federation
		14:00	Meeting with NSC (Mr.Yatabe & Mr.Ogawa)
		17:00	Meeting with the sub-director of Aikido Club
		18:00	Meeting with member at JICA Office
		14:00	Survey of construction material (Mr.Hoshiai)
08	30 May (Wed.)	09:00	Meeting with the director of Aikido Club
			Meeting with NSC about the Minutes
09	31 May (Thu)	09:00	Signing of the Minutes at NSC
		10:00	Observation of ICT Center
		11:00	Observation of LJC & FEM, the National University of Laos
		14:00	Observation of Beung Kha Ngong Gymnasium
		15:00	Receiving documents at NSC
		16:00	Report to the Embassy of Japan
10	1 Jun. (Fri.)	09:00	Additional survey
		21:25	Lv. Vientiane by TG-693 (Mr.Yatabe, Mr.Ogawa & Mr.Hoshiai)
		22:30	Ar. Bangkok
		23:55	Lv. Bangkok by TG-642 (Mr.Yatabe), NH-916 (Mr.Ogawa & Mr.Hoshiai)
11	2 Jun. (Sat.)	08:05	Ar. Tokyo

3. List of Parties Concerned on the Recipient Country

Organization	Position	Name
Ministry of Foreign Affairs	Vice Minister	Mr.Phongsavath BOUPHA
National Sport Committee (NSC)	Vice President	Mr.Somphou PHONGSA
	Director General, International Sports Relations Department	Dr.Soulasith OUPRAVANH
	Deputy Director General, International Sports Relations Department	Mr.Sinakhone PATHOUMMARATH
	Deputy Director, International Sports Relations Department	Mr.Souksavath THEPHANAVA
	Deputy Chief, International Sports Relations Department	Miss Chanthaly PHONGPACHITH
	Director of Statistic & Planning Division	Mr.Amphavanh KUANGMANIVANH
	Deputy Director, Administration Depart.	M.Phayboon CHANTHAMALY
Lao Football Federation Vientiane Municipality	Director General First Sport Depart.	Mr.Sengphone PHONH AMATH
	Staff	Mr.Saysana PHANTHONG
	Deputy Director, Sports Department	Mr.Khammanh KOUMPHOM
	Deputy Director, Construction Depart.	Mr.Soubin PHOUTTHAVONG
	Director, Urban Planning Depart.	Mr.Phoutthaphone KHOTpanya
Nampapa Nakhone Luang	National Project Manager, Urban Environment	Mr.Bounchanh KEOSITHAMMA
	Director, City Water Department	Mr.Vienthouay VANNARATH
Electrical Construction and Installation Sated Enterprise (ECI)	Deputy of Technical & N.R.W. Division	Mr.Veune SENGDALA
	Deputy Director, Technical Department	Mr.Phoumaly SYHABOUTH
Enterprise of Telecommunications Lao (ETL)	Director, Marketing Depart.	Ms.Leelavan KHAMMANIVONG
	Deputy Director, Technical Department	Mr.Vathana VONGTHEVANH
	Deputy Director General	Mr.Khamhoong SOSAMPHANH
Weather Bureau, Ministry of Agriculture and Forestry	Deputy Director, Water Resources Depart.	Mr.Manoloth SOUKHANOUVONG
	Deputy Director, Weather Bureau	Mr.Nikhom KEOSAVANG
Custom Office	Chief, Bond Warehouse, Tanalane	Mr.Thao CHANTHAKHATH
Ministry of Public Security	Deputy Sport Office of Public Security	Mr.Phothone THANAVADY
	Chief, Fire Prevention & Protection Depart.	Mr.Chanpheng
	Deputy Chief,	Mr.Soulisack SIMMANOTAY

Organization	Position	Name	
Lao Judo Federation	President	Mr.Khemsath PHILAPHANDETH	
	Vice President, Member of National Assembly	Mr.Ousavanh THIENGTHEPVONGSA	
Lao Karate Federation	Vice President	Mr.Sonesak N. NHANSANA	
Lao Aikido Club	Director	Mr.Chanthiva PRASASOUK	
	Sub-Director	Mr.Thavongdeth PHONPRASITH	
Central Committee of Lao People's Revolutionary Youth Union	Secretary General	Mr.Khamphanh SITIDAMPHA	
	Deputy Secretary General	Mr.Vilayvong BOUDDAKHAM	
	President of Karate Fede.	Dr.Sonethanou THAMAVONG	
	Chief of Cabinet	Dr.Sonethanou THAMAVONG	
Police School	Deputy Chief of Cabinet	Mr.Alounxai SOUNNALATH	
	Vice Director	Mr.Thongchan SIVILAY	
International Cooperation & Training Center (ICTC)	English Techer	Mr.Khamdeng DUANGCHANTHA	
	Acting Director	Mr.Thonglung SAYAVONG	
Lao National Culture Hall	Deputy Director	Mr.Bounsanong SYHALATH	
Lao ITECC	Marketing Manager	Ms.Shootima TENGRUNSUN	
	Liaison Division	Ms.Vieng SAVANH	
Circus	Director	Ms.Bounsanong SYHALATH	
Lao National Circus	Master	Mr.Somchit PHOMSAVANH	
Lao Plaza Hotel	Sales Manager	Mr.Junichiro MATSUYAMA	
Don Chan Palace Hotel	Sales Coordinator	Mr.Pingkeo PHOUTHAVONG	
Novotel Vientiane Hotel	Sales Executive	Mr.Southavy APHAYARATH	
Mekong Orchard	Managing Director	Mr. Hironori MOROTOMI	
Lao Chorusing	President	Mr.Charoen Dapha	
Indee Records	President	Mr.Pet	
Mittapa Construction Co.	Director, Technical Department	Mr.Sitha BOOYAVONG	
Loumkham Construction	President	Mr.Loumkham VONGXAY	
Keovengkham Sawmill	Director	Mr.Bansak KEOMISY	
Luangpaseuth Construction Co.,Ltd	Director	Mr.Bounleuth LUANGPASEUTH	
Lao freight Forwarder	Vice President	Mr.Somphone PHASAVATH	
VV survey design	President	Mr.Vath PHOTHIMAT	
Embassy of Japan	Ambassador	Mr. Makoto KATURA	
	Minister-Counselor	Mr. Mamoru SHINOHARA	
	Counselor	Mr. Akihiko FUJII	
	First Secretary	Mr. Ken NAKAMURA	
	Third Secretary	Ms. Akiko ONODERA	
JICA Laos Office	Resident Representative	Mr. Senya MORI	
	Assistant Resident Rep.	Mr. Hiroyuki TOMITA	
EDL Project	Expert	Mr. Masahiro OGAWA	
	Expert	Mr. Yuichi WATANABA	
LJC Project	Chief Adviser	Mr. Shinichi SUZUK (until Apr., 2007) Mr. Mikiharu SATO (from Apr., 2007)	
SV & JOCV	Judo	Mr. Masatoshi KIKUCHI Ms. Ryoko ISHI Mr. Shingo ITOH	
	JICE	Project Coordinator	Ms. Yuko SAKAUE
	JOCA	Representative	Mr. Takahiro TODA
Project Management Depatment		Ms. Anami MURATA	
Judo Expert		Mr. Mamoru MIURA	

4.Minutes of Discussions

4-1 Basic Design Study – 1

**Minutes of Discussions
on the Basic Design Study
on the Project for Construction of Lao-Japan Budo Center
in Lao People's Democratic Republic**

In response to the request from the Government of Lao P.D.R. (hereinafter referred to as "the GOL"), the Government of Japan decided to conduct a Basic Design Study on "The Project for Construction of Lao-Japan Budo Center" (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

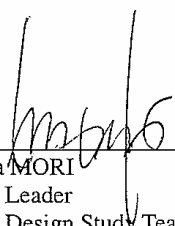
JICA sent to Lao P.D.R. the Basic Design Study Team (hereinafter referred to as "the Team"), headed by Mr. Senya MORI, Resident Representative, JICA Laos Office, and is scheduled to stay in the country from 15 October to 7 November, 2006.

The Team held discussions with the officials concerned of the GOL and conducted a field survey at the study areas.

In the course of discussions and field survey, both parties tried to confirm the necessary items for the basic design of the Project. However, both parties were not able to confirm a location of the Project site, because the site requested originally by the GOL to be inappropriate from technical point of view, and because the Lao side has not confirmed other candidates of the Project site yet.

Therefore, both parties confirmed the other items than the Project site which described on the attached sheets.

Vientiane, 6 November, 2006



Senya MORI
Team Leader
Basic Design Study Team
Japan International Cooperation Agency



Somphou PHONGSA
Vice President
National Sports Committee
Lao People's Democratic Republic



ATTACHMENT

1. Objective

The objective of the Project is to build a Budo Center to be utilized for SEA GAMES 2009 held in Lao P.D.R. and to promote cultural exchange between Lao P.D.R. and Japan through dissemination of Budo.

2. Project Site

The Lao side shall confirm a candidate of the Project site immediately after the Team left from Lao P.D.R. and shall inform JICA Laos Office of the result.

3. Responsible and Implementing Organizations

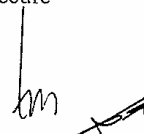
The responsible and implementing agency is National Sports Committee (NSC). The organization chart of NSC is shown in Annex-1.

4. Japan's Grant Aid Scheme

- (1) The Lao side understood the Japan's Grant Aid scheme and the necessary measures to be taken by the GOL explained by the Team as described in Annex-2.
- (2) The Lao side will take necessary measures, as described in Annex-3, for smooth implementation of the Project, as a condition for the Japan's Grant Aid to be implemented.

5. Other Relevant Issues

- (1) The Lao side shall start the procedure to get the license to use the Project site immediately, and submit a photocopy of the license to JICA Laos Office by 15 January, 2007. And the Lao side also understood it is a requisite condition to implement the Project.
- (2) The Lao side shall complete land preparation (land clearance) of the Project site by the end of May, 2007.
- (3) The Lao side understood that the Japan's Grant Aid Project cannot cover the requests in its original description submitted by the Lao side in July, 2005 because of budgetary limitation and also understood the need to optimize the request from the viewpoint of cost-effectiveness.
- (4) Both sides agreed that the size of the Budo Center cannot exceed 1,300 m² substantially.
- (5) The Lao side shall secure and allocate enough budget and qualified staff to operate and maintain the buildings to be built and the equipment to be supplied by the Japan's Grant Aid properly and effectively.
- (6) Both sides agreed that the Budo Center would be a multi-purpose facility to secure

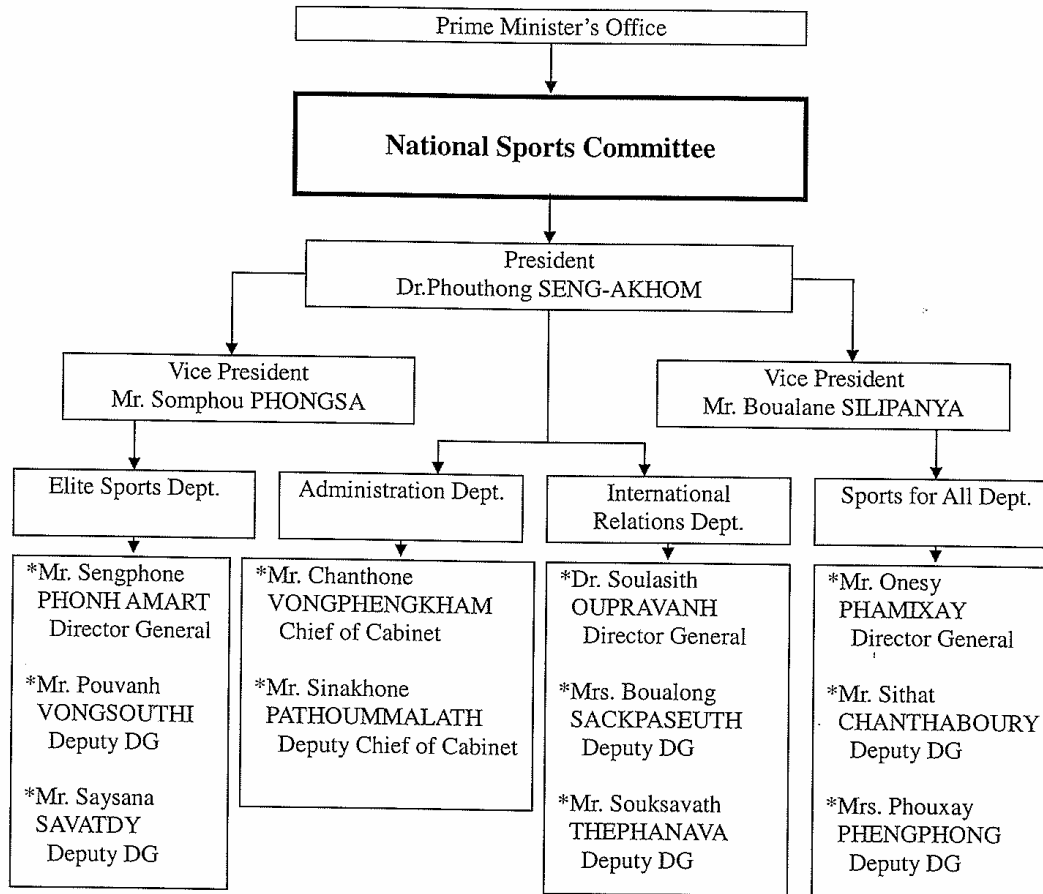


financial resources for operating/maintaining the facility.

- (7) The Lao side complete Initial Environmental Examination (IEE) and submitted the result to JICA Laos office by the end of January, 2007.
- (8) The Lao side requested that the technical cooperation be carried out by JICA, regarding the coaching of Budo (Judo, Karatedo, Aikido) and management of the facility to be constructed. The Lao side understood that another official request will be necessary to be submitted by the Lao side to the Japanese side through the official channel such as Embassy of Japan and JICA Laos Office.

bm
~~---~~

Organization Chart of the Implementing Agency



hm

JAPAN'S GRANT AID

The Grant Aid scheme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1. Grant Aid Procedures

Japan's Grant Aid scheme is executed through the following procedures:

- Application (Request made by the recipient country)
- Study (Basic Design Study conducted by JICA)
- Appraisal & Approval (Appraisal by the Government of Japan and Approval by the Cabinet)
- Determination of Implementation (The Note exchanged between the Governments of Japan and recipient country)

Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study) using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Scheme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes (E/N) signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.



2. Basic Design Study

(1) Contents of the study

The aim of the Basic Design Study (hereafter referred to as “the Study”) conducted by JICA on a requested project (hereafter referred to as “the Project”) is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project’s implementation.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- Preparation of a basic design of the Project.
- Estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of the Japan’s Grant Aid scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA. The consultant firm(s) used for the Study is (are) recommended by JICA to the recipient country to also work on the Project’s implementation after the Exchange of Notes, in order to maintain technical consistency.

Handwritten signature and initials, possibly 'bm' and a crossed-out mark.

3. Japan's Grant Aid Scheme

(1) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

(2) "The period of the Grant Aid" means the one fiscal year, which the Cabinet approves, the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed. However, in case of delays in delivery, installation or construction due to unforeseen factors such as national disaster, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

(3) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country. However, the prime contractors, namely, consulting, constructing and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

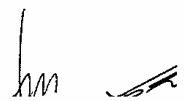
(4) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

(5) Undertakings required of the Government of the Recipient Country

In the implementation of the Grant Aid Project, the recipient country is required to undertake such necessary measures as the following:

- a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction,
- b) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) To secure buildings prior to the procurement in case the installation of the equipment,
- d) To ensure all the expenses and prompt excursion for unloading, customs clearance at the



port of disembarkation and internal transportation of the products purchased under the Grant Aid,

- e) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- f) To accord Japanese nationals, whose services may be required in connection with the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(6) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and the equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

(7) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

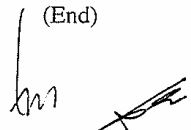
(8) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

(9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

(End)



Major undertakings to be taken by each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1.	To secure land		●
2.	To clear, level and reclaim the site when needed *1)		●
3.	To construct gates and fences in and around the site *2)		●
4.	To construct the parking lot	●	
5.	To construct roads		
	1) Within the site	●	
	2) Outside the site *3)		●
6.	To construct the buildings	●	
7.	To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities		
	1) Electricity		
	a. The distributing line to the site		●
	b. The drop wiring and internal wiring within the site	●	
	c. The main circuit breaker and transformer	●	
	2) Water Supply		
	a. The city water distribution main to the site		●
	b. The supply system within the site (receiving and elevated tanks)	●	
	3) Drainage		
	a. The city drainage main (for storm, sewer and others) to the site		●
	b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site	●	
	4) Gas Supply		
	a. The city gas main to the site		●
	b. The gas supply system within the site	●	
	5) Telephone System		
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building		●
	b. The MDF and the extension after the frame/panel	●	
	6) Furniture and Equipment		
	a. General furniture		●
	b. Project equipment	●	
8.	To bear the following commissions to the Japanese foreign exchange bank for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
9.	To ensure unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient country	●	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	●	
10.	To accord Japanese nationals, whose services may be required in connection with the supply of the products and the services under the verified contract, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.		●
11.	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts.		●
12.	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant.		●
13.	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 installation of the equipment.		●

(B/A: Banking Arrangement, A/P: Authorization to Pay)

4-2 Basic Design Study – 2

**Minutes of Discussions
on the Second Basic Design Study
on the Project for Construction of Lao-Japan Budo Center
in Lao People's Democratic Republic**

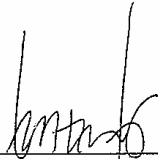
In response to the request from the Government of Lao P.D.R., the Government of Japan decided to conduct the Basic Design Study on "The Project for Construction of Lao-Japan Budo Center" (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Lao P.D.R. the Second Basic Design Study Team (hereinafter referred to as "the Team"), headed by Mr. Senya MORI, Resident Representative, JICA Laos Office, and is scheduled to stay in the country from 21 January to 30 January, 2007.

The Team held discussions with the officials concerned of the Government of Lao P.D.R. and conducted a field survey at the study areas.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

Vientiane, 30 January, 2007



Senya MORI
Team Leader
Basic Design Study Team
Japan International Cooperation Agency



Somphou PHONGSA
Vice President
National Sports Committee
Lao People's Democratic Republic

ATTACHMENT

1. General

Both sides agree that the items confirmed in the previous Minutes of Discussion signed on 6 November 2006 are valid except for the items set forth as follows.

2. Project Site

The new site of the Project is shown in Annex-1. Both sides agree that this is the final decision.

3. Responsible and Implementing Organizations

The responsible and implementing agency is National Sports Committee (NSC). NSC will manage the facility under force account.

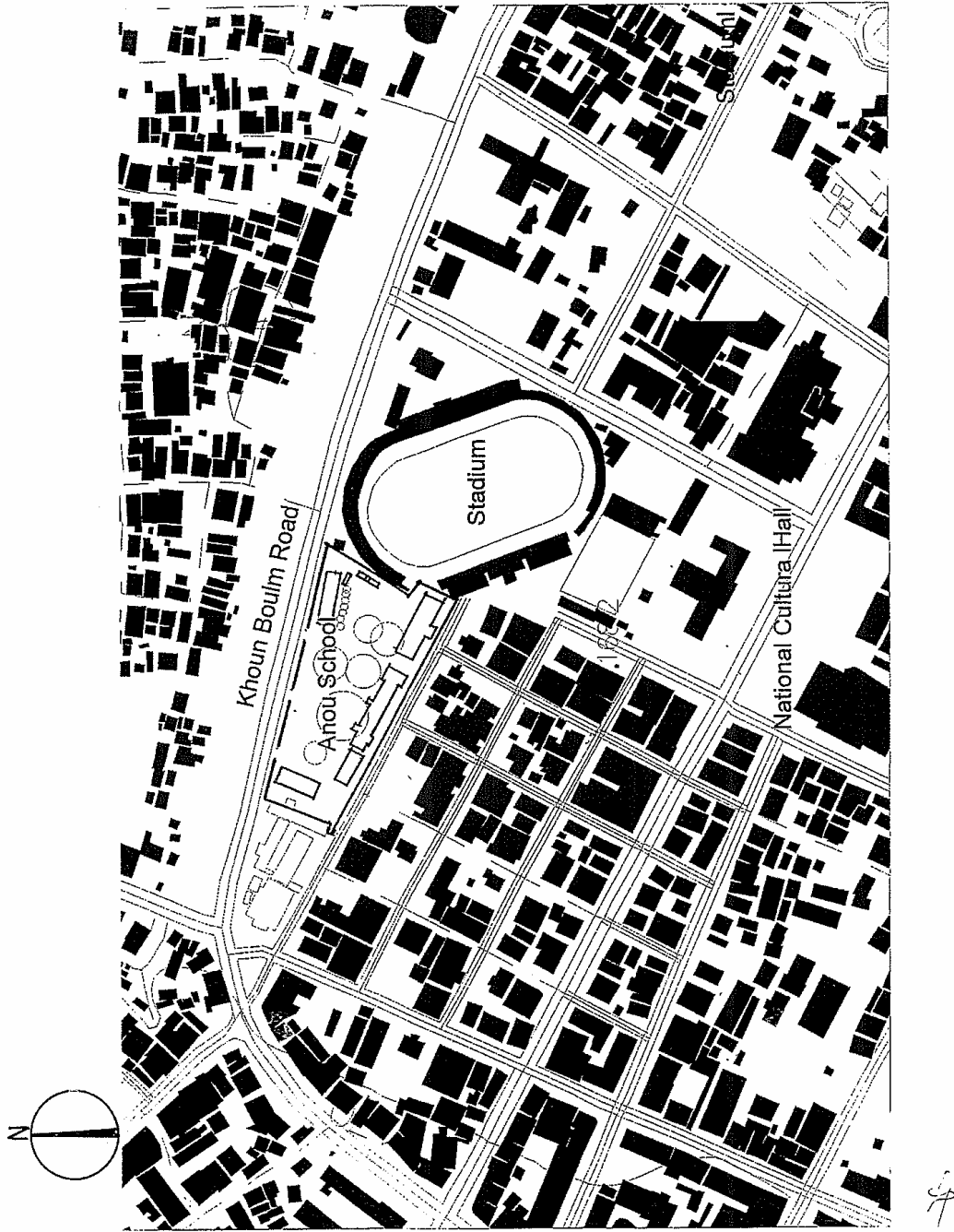
4. Schedule of the Study

- (1) JICA will prepare the draft report in English and dispatch a mission to Lao P.D.R. in order to explain its contents in mid/end of April, 2007.
- (2) In case that the contents of the report is accepted in principle by the Government of Lao P.D.R., JICA will complete the final report and send it to the Government of Lao P.D.R. by the end of July, 2007.

5. Other Relevant Issues

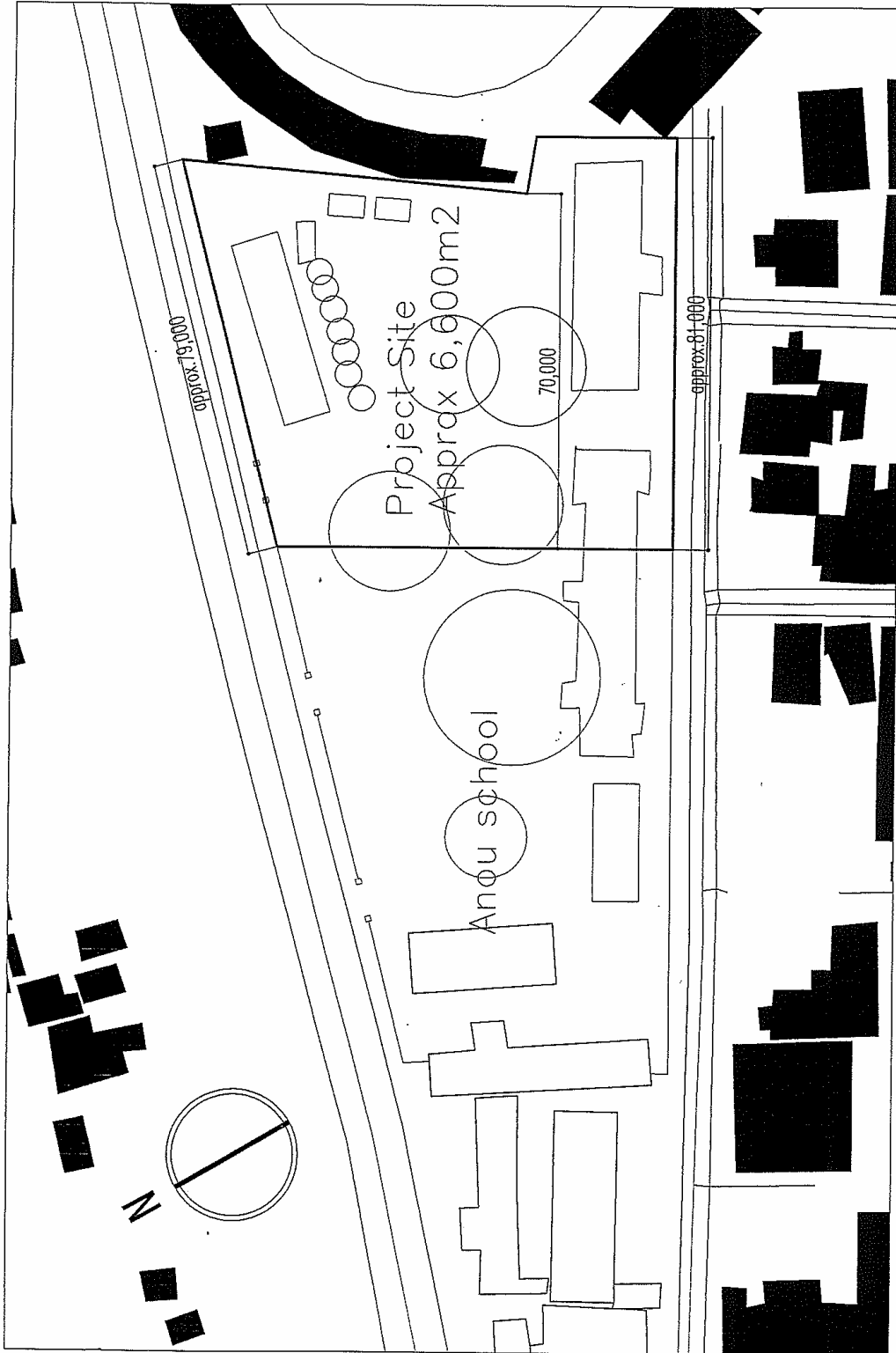
- (1) The Lao side shall start the procedure to get the license to use the new Project site immediately, and submit a photocopy of the license to JICA Laos Office by 15 March, 2007. And the Lao side also understood it is a requisite condition to implement the Project.
- (2) The Lao side shall complete land preparation (land clearance) of the Project site by the end of July 2007 on its own responsibility and cost. As a matter of fact, those measures which are necessary for the above land preparation (land clearance) include, but are not limited to, the relocation of those students who study in the existing buildings in the Project site, the demolition of the existing buildings, and the construction of a new school building.
- (3) The Lao side complete Initial Environmental Examination (IEE) and submitted the result to JICA Laos office by 15 March, 2007.

Annex-1-1 Location Map



Location Map

Handwritten signature



Site location plan S=1/1000

4-3 Draft Report Explanation

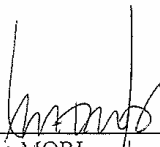
**Minutes of Discussions
on the Basic Design Study
on the Project for Construction of Lao-Japan Budo Center
in Lao People's Democratic Republic
(Explanation of Draft Report)**

In October/November 2006, and January 2007, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team on "The Project for Construction of Lao-Japan Budo Center" (hereinafter referred to as "the Project") to Lao P.D.R., and through discussions, field survey, and technical examination of the results in Japan, JICA prepared a draft report of the study.

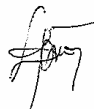
In order to explain and to consult with the officials concerned of the Government of Lao P.D.R., on the components of the draft report, JICA sent the Draft Report Explanation Team (hereinafter referred to as "the Team") from 23rd to 31st of May, 2007.

As a result of the discussions, both sides confirmed the main items described on the attached sheet.

Vientiane, 31 May, 2007



Senya MORI
Resident Representative
Lao Office
Japan International Cooperation Agency



Somphou PHONGSA
Vice President
National Sports Committee
Lao People's Democratic Republic

ATTACHMENT

1. Components of the Draft Report

The Lao side agreed and accepted in principle the components of the draft report explained by the Team.

2. Japan's Grant Aid Scheme

The Lao side understands the Japan's Grant Aid scheme and the necessary undertakings to be taken by National Sports Committee (hereinafter referred to as "NSC") as explained by the Team and described in Annex-2 and Annex-3 of the Minutes of Discussions signed by both sides on November 6, 2006.

3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to Lao P.D.R. by the end of August, 2007.

4. Other Relevant Issues

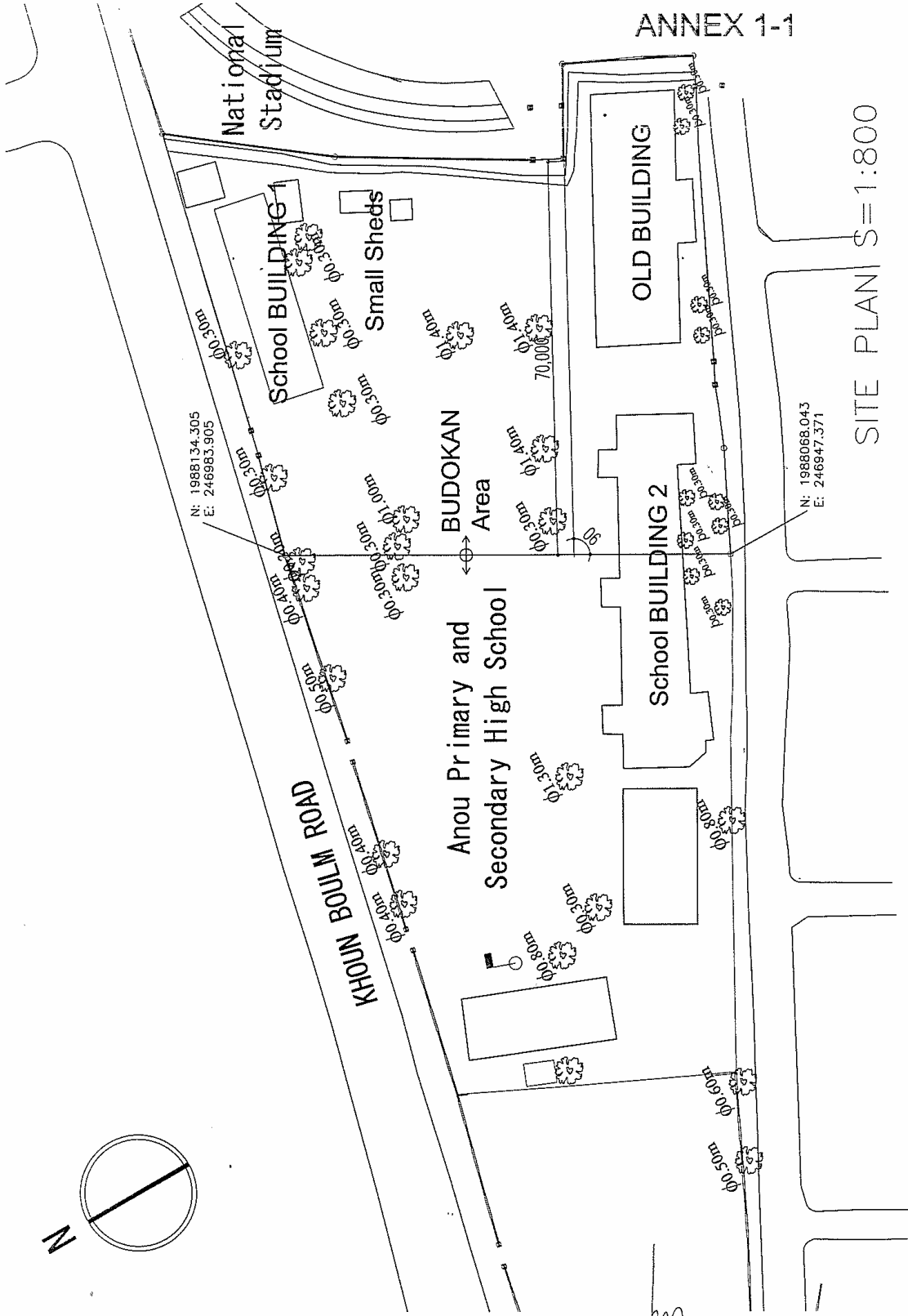
- (1) Both sides agreed that the Project will be implemented based on the Site Plan as described in Annex-1-1, Annex-1-2.
- (2) The Lao side agreed that the following undertakings should be taken by the Lao side,
 - Removal of the existing buildings and trees: by the end of January, 2008.
 - Secure an electrical, telephone, water intake: by the end of December, 2008.
 - Construction of two (2) gates and fence: Shortly after completion of the works by the Japanese side (February, 2009).
- (3) The Lao side shall secure and allocate sufficient budget as described in Annex-2, and shall assign at least three (3) qualified staff by September, 2008, in order to operate and maintain the Budo center to be built and the equipment to be supplied by the Project properly and effectively.
- (4) The Lao side requested that the volunteers would be dispatched by JICA, regarding the coaching of Budo (Judo, Karate-do and Aiki-do) and management of the facility to be constructed. The Lao side understood that another official request would be necessary to be submitted by the Lao side to the Japanese side through the official channel.
- (5) The Lao side agreed that the cost for the Project as attached in Annex-3 should be borne by the Lao side.
- (6) The Lao side understood that NSC needs to charge the usage fees as described in Annex-4 on the users of Lao-Japan Budo Center in order to maintain the facility by obtaining supplementary income.



- (7) The Lao side shall manage the Lao-Japan Budo Center by implementing the Plan as described in Annex-5.
- (8) The Lao side agreed that NSC shall establish a coordinating committee involving major users/beneficiaries of the Budo Center by December, 2008, and also expects to receive a full support from these organizations in respect to the operation.

↓
m

8

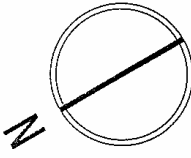


ANNEX 1-1

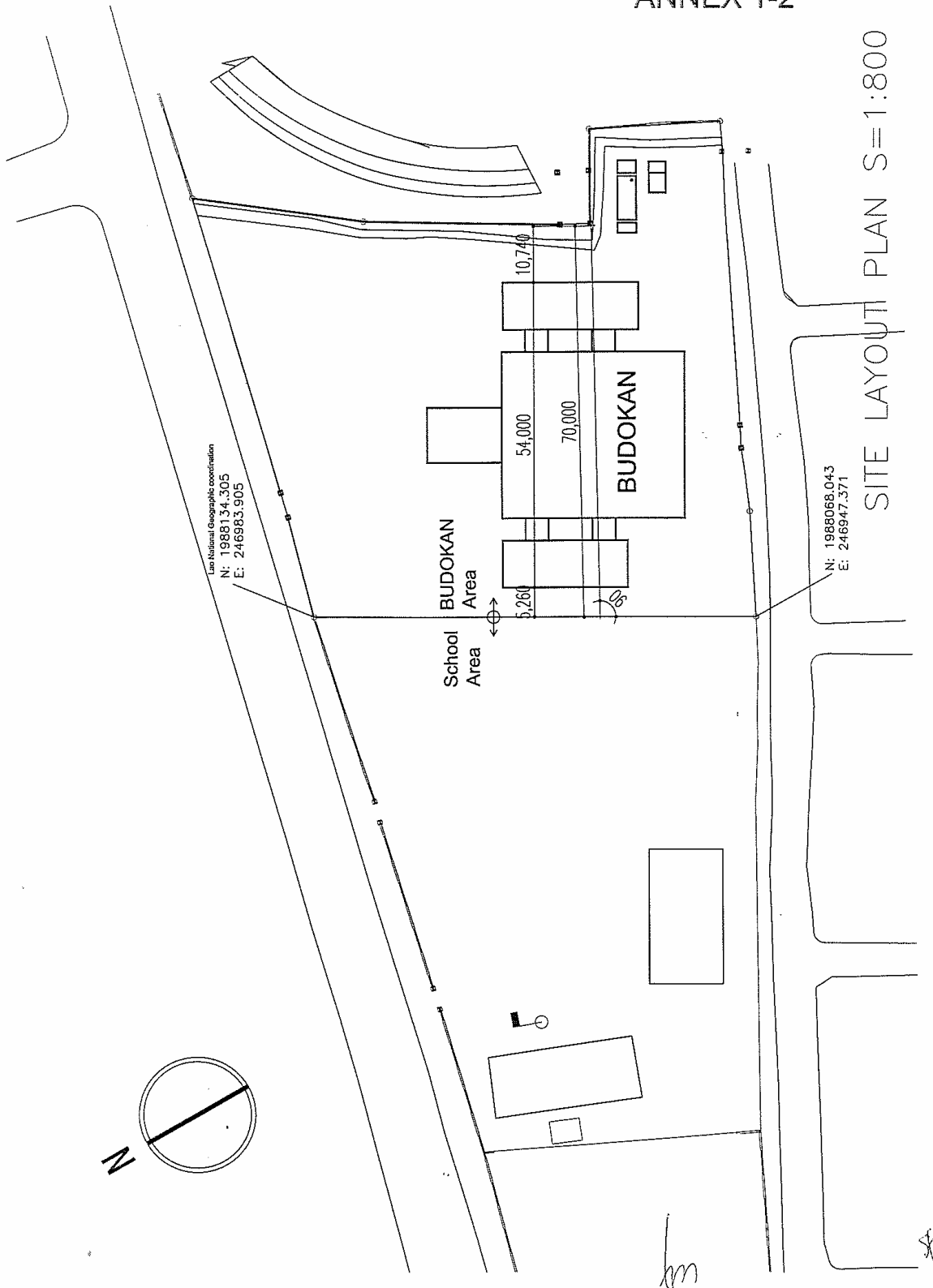
SITE PLAN S=1:800

N: 1988134.305
E: 246983.905

N: 1988068.043
E: 246947.371



ANNEX 1-2



SITE LAYOUT PLAN S=1:800

The simulations of running cost of Lao-Japan Budo center

Three types of simulations in relation to the usage cases of the Lao-Japan Budo center were made:

- ① Only Budo practice and no event
- ② Budo-related activities and other sports events
- ③ Budo-related activities and events including sports and concert

In these 3 simulations, salary for employees and management cost is fixed but the utility cost changes depending on the case.

① Only Budo Practice and No Event

This simulation is based on the assumption that Budo practice is made on both weekdays and weekends. Events are not held and the income is only the utility cost from federations and clubs.

As a result of the simulation, the balance will have a deficit of 49.19 million Kip (US\$4,919), thus requiring the budget from NSC for operation and maintenance of the Budo center.

Table 1 Balance Simulation (US\$1=10,000Kip)

Balance	Item	Amount	Total
Expense	Salary: Increase of labor cost due to three employee increase	19.73 million Kip	86.00 million Kip (US\$8,600)
	Administration cost: Budo center area increase to the largest management cost 484.63 million Kipx4.6%	22.29 million Kip	
	Technical activities cost: NA	---	
	Infrastructure cost: Utility cost, see 5-2 Operation and Maintenance Expense (1) Facility Running Cost.	43.98 million Kip	
Income	Utility cost from associations	36.81 million Kip	36.81 million Kip (US\$3,681)
Balance	Expense - Income		49.19 million Kip (US\$4,919)

② Budo-related Activities and Other Sports Events

This simulation is based on the assumption that Budo practice, Budo competitions and performance demonstrations, and competitions including sepak takraw and table tennis. The income of the Budo center will be born from usage fees of Budo competitions and performance demonstrations and competitions of sepak takraw and table tennis, and utility cost from associations and clubs.

As a result of the simulation, the balance will have a deficit of 55.72 million Kip (US\$5,572), thus requiring the budget from NSC for operation and maintenance of the Budo

center.

Table 2 Balance Simulation (US\$1=10,000Kip)

Balance	Item	Amount	Total
Expense	Salary: Increase of labor cost due to three employee increase	19.73 million Kip	98.53 million Kip (US\$9,853)
	Administration cost: Budo center area increase to the largest management cost 484.63 million Kip x 4.6%	22.29 million Kip	
	Technical activities cost: NA	---	
	Infrastructure cost: Utility cost, see 5-2 Operation and Maintenance Expense (1) Facility Running Cost.	56.51 million Kip	
Income	Income of Budo competitions and demonstrations and competitions of sepak takraw and table tennis (see previous section)	6.00 million Kip	42.81 million Kip (US\$4,281)
	Utility cost from associations	36.81 million Kip	
Balance	Expense—Income		55.72 million Kip (US\$5,572)

③ Budo-related Activities and Events Including Sports and Concerts

This simulation is based on the assumption that Budo competitions and performance demonstrations, competitions of sepak takraw and table tennis, events including concerts are held other than weekday Budo practice. The income of the Budo center will be born from usage fees of Budo competitions and performance demonstrations, competitions of sepak takraw and table tennis, and events, and utility cost from associations and clubs.

As a result of the simulation, as in the previous cases, the balance will have a deficit of 27.77 million Kip (US\$27.77), thus requiring the budget from NSC for operation and maintenance of the Budo center. In these three simulations, however, the deficit level is minimal.

Table 3 Balance Simulation (US\$1=10,000Kip)

Balance	Item	Amount	Total
Expense	Salary: Increase of labor cost due to three employee increase	19.73 million Kip	118.58 million Kip (US\$11,858)
	Administration cost: Budo center area increase to the largest management cost 484.63 million Kip x 4.6%	22.29 million Kip	
	Technical activities cost: NA	---	
	Infrastructure cost: Utility cost, see 5-2 Operation and Maintenance Expense (1) Facility Running Cost.	76.56 million Kip	
Income	Income of Budo competitions and demonstrations, competitions of sepak takraw and table tennis, and events (see previous section)	54.00 million Kip	90.81 million Kip (US\$9,081)
	Utility cost from associations	36.81 million Kip	
Balance	Expense—Income		27.77 million Kip (US\$2,777)

As a result of three simulations, holding events decreases the budget from NSC. The budget can be a half compared with the case where events are not held.

To increase the income, revision of the usage fee of the Budo center and increase in the number of events may be needed. However, it is difficult to realize the case that the income exceeds the expense. Thus, NSC should prepare the enough budget to operate and maintain the Budo center every year.

Moreover, the costs for the replacement of tatami and mats due to their aging will be born in the future. Budget must be prepared when necessary.

lm

4

Project Cost Estimation

The Project cost to be borne by the Lao side, if this project were to be implemented through grant aid cooperation from Japan, is estimated to be 11.7 million yen.

(1) Cost Estimation to be borne by the Lao side,

1) Clearance of existing facilities	US\$ 28,576 (App. 3.3 million JPY)
2) Clearance of existing trees	US\$ 920 (App. 0.1 million JPY)
3) New construction of two gates & fence	US\$ 48,175 (App. 5.6 million JPY)
4) Table-tennis table	US\$ 5,470 (App. 0.6 million JPY)
5) Incoming charge for Infrastructure	US\$ 14,281 (App. 1.6 million JPY)
6) Bank Charge	US\$ 3,522 (App. 0.4 million JPY)
Total	US\$ 100,944 (App. 11.7 million JPY)

(2) Condition of Cost Estimation

- 1) Time of Cost Estimation From May 2006 to October 2006 (half year average rate)
- 2) Exchange rate US\$1 = 116.64 Japanese yen
- 3) Construction term It is estimated that the project would be implemented in a single fiscal year, and a period of detailed design, construction and procurement of equipment is identified in the implementation schedule.
- 4) Other This project will be implemented through the system of the grant aid cooperation by the Government of Japan.

Plan for the Usage Fees of Budo Center

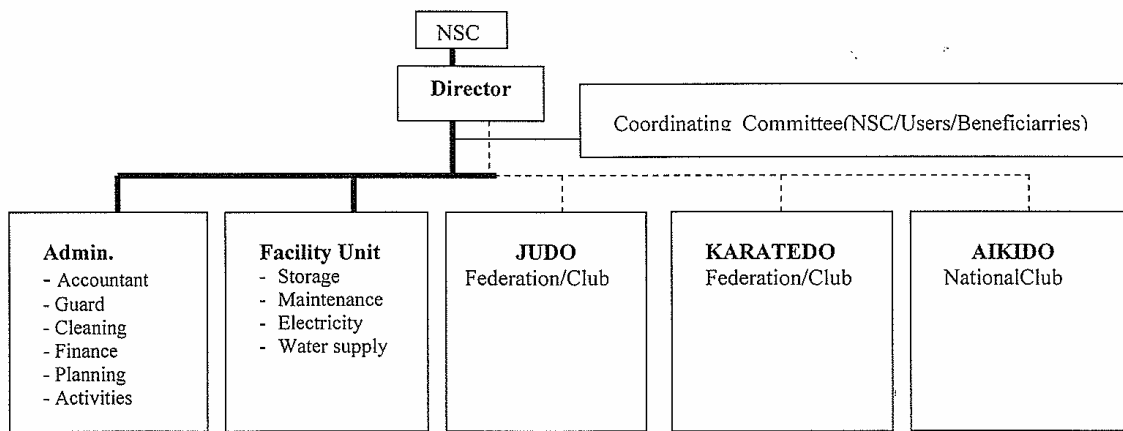
(Annual)

Ivent	Usage Fee * (per 1 day)	Number of Expected Dates	Income
Budo Tournament & Budo Demonstration	150,000Kip-200,000Kip (US\$15-US\$20)	20 days	3,000,000Kip-4,000,000Kip (US\$300-US\$400)
Table Tennis Tournament & Sepak Trakraw Tournament	200,000Kip (US\$20)	10 days	2,000,000Kip (US\$200)
Concert	1,000,000Kip (US\$100)	48 days	48,000,000Kip (US\$4,800)
Total		78 days	53,000,000Kip-54,000,000Kip (US\$5,300-US\$5,400)

*The Usage Fee is the minimum amount that NSC need to charge on the users of Budo center. NSC shall decide appropriate Usage Fees considering the Plan above.

MANAGEMENT
(Operation and Maintenance)
of LAO – JAPAN BUDO CENTER

1. Organization Chart



Remarks: — subordinate - - - - - functional

2. Operation and Maintenance

Lao – Japan BUDO Center operates under the Lao National Sports Committee in coordination with National Sports Federations, namely: Judo, Karatedo and Aikido.

3. Expenditures

- electricity
- water
- cleaning
- guard
- management staffs
- office equipment etc.

bm *A*

4. Financial sources

- 4.1 Annual State budget
- 4.2 Karatedo/Judo/Aikido Federations/Club contribution
- 4.3 Venue renting for events, competition, workshop, concert, etc. service fees
- 4.4 Vendors' leasing
- 4.5 Parking fees
- 4.6 Fund Raising (sponsor, donor)
- 4.7 Other

5. Guaranty of budget by NSC

- 5.1 NSC will provide required annual budget for the operation and maintenance of BUDO center for the first two years. After the BUDO center will be able to manage its own required annual expenditures.
- 5.2 NSC will be responsible for administrative expenditures of the BUDO center, namely: salary of staffs and administrative expenses.



5. Equipment

5-1 Examination of Requested Equipment

Minuses No.	(Request) Descriptions	Item No.	(Project) Descriptions	Priority	①	②	③	④	⑤	⑥	⑦	Q'ty	Remarks
1	Tatami	1	Tatami	A	O	O	O	O	O	O	O	1set	for one court, international size.
2	Karatedo Electric Score Board (Large)	Deleted		C	O	x	O	O	O	O	x	-	This is provided from The Grassroots Grant Programme in 2002.
3	Karatedo Electric Score Board (Small)	Deleted		C	O	x	O	O	O	O	x	-	The above-mentioned existing equipments are used. Deleted
4	Judo Timer (Large)	Deleted		C	O	x	O	O	O	O	x	-	Judo Timer (Small) is used. Deleted
5	Judo Timer (Small)	2	Judo Timer (Small)	A	O	O	O	O	O	O	O	1set	It is used for training and the game.
6	Flag for Judge	3	Flag for Judge	A	O	O	O	O	O	O	O	1set	It is used for the game.
7	Mat for Karatedo	4	Mat for Karatedo	A	O	O	O	O	O	O	O	1set	for two courts.
8	Portable Folding Chair	5	Portable Folding Chair	A	O	O	O	O	O	O	O	1set	It is used for multiple-purpose use of a seminar or others.
9	Dumbbell sets	Deleted		C	O	x	O	O	O	O	x	-	Gymnasium is not planned to facilities planning. Deleted
10	Barbell sets	Deleted		C	O	x	O	O	O	O	x	-	Gymnasium is not planned to facilities planning. Deleted
11	Training Bench	Deleted		C	O	x	O	O	O	O	x	-	Gymnasium is not planned to facilities planning. Deleted
12	Sand Bag	Deleted		C	O	x	O	O	O	O	x	-	Gymnasium is not planned to facilities planning. Deleted
13	Bar Sets	Deleted		C	O	x	O	O	O	O	x	-	Gymnasium is not planned to facilities planning. Deleted
14	Bicycle Machine	Deleted		B	O	x	O	O	O	O	x	-	Gymnasium is not planned to facilities planning. Deleted
15	Honor Platform	Deleted		C	O	x	O	O	O	O	x	-	It prepares in each federations. Deleted
16	Flag Pole	Deleted		C	O	x	x	O	O	O	x	-	It prepares in each federations. Deleted
17	Weight Measure Machine	6	Weight Measure Machine	A	O	O	O	O	O	O	O	2pcs	It is used for maintenance of a player's weight, and the inspection before a game.
18	Treadmill Machine	Deleted		B	O	O	O	O	O	O	x	-	Gymnasium is not planned to facilities planning. Deleted
19	Sepak Takraw Poles with Net	Deleted		A	O	O	O	O	O	O	x	-	Includes in facilities planning. Deleted
20	Floor Protection Sheet	7	Floor Protection Sheet	A	O	O	O	O	O	O	O	1set	Necessary for multiple-purpose use.
21	Desk	Deleted		C	O	O	O	O	O	O	x	-	It prepares in the NSC and each federations. Deleted
22	Desk Chair	Deleted		C	O	O	O	O	O	O	x	-	It prepares in the NSC and each federations. Deleted
23	Air Conditioner	Deleted		C	O	O	O	O	O	O	x	-	includes in facilities planning. Deleted
24	Folding Bed	Deleted		C	x	x	O	O	O	O	x	-	Accommodations are not planned to facilities planning. Deleted
25	Blanket	Deleted		C	x	x	O	O	O	O	x	-	Accommodations are not planned to facilities planning. Deleted
26	Pillow	Deleted		C	x	x	O	O	O	O	x	-	Accommodations are not planned to facilities planning. Deleted
27	Mattress	Deleted		C	x	x	O	O	O	O	x	-	Accommodations are not planned to facilities planning. Deleted
28	Personal Computer	Deleted		C	O	x	O	O	O	O	x	-	It prepares in the NSC and each federations. Deleted
29	Printer	Deleted		C	O	x	O	O	O	O	x	-	It prepares in the NSC and each federations. Deleted
30	O/S	Deleted		C	O	x	O	O	O	O	x	-	It prepares in the NSC and each federations. Deleted
31	DVD Movie Camera	Deleted		C	O	x	O	O	O	O	x	-	It prepares in each federations. Deleted
32	DVD Player	Deleted		C	O	x	O	O	O	O	x	-	It prepares in each federations. Deleted
33	DVD Disc	Deleted		C	O	x	O	O	O	O	x	-	It prepares in each federations. Deleted
34	TV	Deleted		C	O	x	O	O	O	O	x	-	It prepares in each federations. Deleted

①=Purpose ②=Necessity ③=Technique ④=Organization of operation ⑤=Organization of maintenance
⑥=Operation and Maintenance fee ⑦=Judgment

5-2 Equipment Delivery List

Item No.	Descriptions	Q'ty	Court	Equipment Storage1	Men's Change Room	Women's Change Room
1	Tatami	1set	1set			
2	Judo Timer (Small)	1set	1set			
3	Flag for Judge	1set	1set			
4	Mat for Karatedo	1set	1set			
5	Portable Folding Chair	1set		1set		
6	Weight Measure Machine	2pcs			1pc	1pc
7	Floor Protection Sheet	1set		1set		

5-3 Outline of Main Equipment

Item No.	Descriptions	Main specifications or components	Grade	Q'ty	Appropriateness of equipment grade
1	Tatami	1. Tatamis, (Green) : 110pcs 2. Tatamis, (Red) : 18pcs International Judo Federation approved Dimensions : 1x2M 3. Tatami stoppers (Straight line) : 30pcs 4. Tatami stoppers (Corner) : 4pcs 5. Mobile Storage Carts : 2pcs	Popular	1set	It is mainly used for everyday practice. The dimension of the Tatami plans international size which the International Judo Federation approved. At Aikido, practice and "Enbu" are used by the Laos Judo federation and common use in order to use the Tatami for judo.
4	Mat for Karatedo	1. Karatedo mats (Blue) : 232pcs 2. Karatedo mats (Red) : 56pcs World Karate Federation approved Size:1,025(L)x1,025(W)mm	Popular	1set	It is mainly used for everyday practice. During the Karatedo game, the mat for the Karatedo is effective in order to make an injury of a player and an accident into the minimum.
5	Portable Folding Chair	1. Portable Folding Chairs : 750pcs Standard : JIS Frame Material : Steel Seat Surface Material : Synthetic Cloth 2. Mobile Storage Carts Loading Capacity : 36chairs or more	Popular	1set	To use the Budo center for multipurpose use. It is used for participants as for lecture, seminar, concert, and others.
7	Floor Protection Sheet	1. Floor Protection Sheets : 29rolls Japan Fire Retardant Association approved Dimensions : 1.5(T)x1100mm(W)x20M(L) Material : Rubber and vinyl chloride 2. Shaft Roll Adapters : 29pairs 3. Sheet Lifters : 4pairs 4. Mobile Storage Carts : 2pcs	Popular	1set	To use the Budo center for multipurpose use. It is used for protection of the floor of the court.

5-4 Equipment List

Item No.	Descriptions	Q'ty	Country of Origin	Procured from
1	Tatami	1set	Japan	Japan
2	Judo Timer (Small)	1set	Japan	Japan
3	Flag for Judge	1set	Japan	Japan
4	Mat for Karatedo	1set	Japan	Japan
5	Portable Folding Chair	1set	Japan	Japan
6	Weight Measure Machine	2pcs	Japan	Japan
7	Floor Protection Sheet	1set	Japan	Japan

6. Complementary Reference on Execution of Events

【A】Events Plan

The possibility for the multi-purpose use of the Budo center will be examined in order to promote the utilization of the Budo center for purposes other than Budo and reflect such uses in the Project.

1. Event Facilities

The following shows the facilities, advertising agents, and event companies holding international conferences, seminars, exhibitions, concerts, sport events, etc. in Vientiane.

Table-1 Event Facilities in Vientiane

Event Facilities	Outline of Facility and Typical Events Hosted
National Culture Hall	National Culture Hall (completed in 2000 with the aid from China) is managed by the Ministry of Information and Culture. It is a top-class hall in Laos with 1,500 fixed seats and a stage. Mainly used for music concerts, acts, movie shows, international conferences, seminars, etc.
LAO-ITECC	LAO-ITECC is a private commercial facility (completed in 2004). With the exhibition area having the floor area of about 8,200 m ² , it is the largest exhibition facility in Laos. It is used mainly for large exhibitions and trade fairs (in main exhibition space). In addition to exhibitions, music concerts are held using a temporary stage. The facility can hold up to 6,000 seats or about 30,000 persons in the case of a standing audience. Outdoor concerts and trade fairs are also held, as well as wedding parties in banquet rooms.
International Cooperation and Training Center (ICTC)	International Cooperation and Training Center (ICTC; completed in 2004 with the aid from Japan) is managed by the Ministry of Foreign Affairs. It is mainly used for international conferences, as well as seminars and workshops. Music concerts and shows are not held. The multi-purpose hall used for large conferences has simultaneous interpretation equipment and holds 700 persons. It can be divided into 2 parts holding 500 and 200 persons.
Circus	Circus is an amphitheater (completed in 1990) constructed with the aid from the former Soviet Union for the purpose of performing circus. It is managed and operated by the Ministry of Information and Culture, including the employment of circus personnel. The capacity is about 850 persons. Fixed seats are arranged on concentric terraces. In addition to circus, this facility is used for music concerts and sports events such as Judo, Karatedo, and boxing (muay lao).
Hotels	Typical Events Hosted
Lao Plaza Hotel	Product presentation shows + parties, fashion shows, international conferences.
Don Chan Palace Hotel	International conferences (capable to host large conferences), product presentation shows + parties, wedding parties.
Novotel Vientiane	Middle and small-sized conferences, concerts in outdoor tennis courts, small wedding parties.
Lan Xang Hotel	International conferences, banquets, wedding parties.
Advertising Agents and Event Companies	Main Event-related Business
Mekong Orchard	Comprehensive planning and operation of events, coordination of corporate sponsors, arrangement of stage decoration and equipment.
Indee Records	Employment of artists under exclusive contract, planning and operation of concerts, planning and operation of events, stage decoration, self-owned equipment.
Lao Charoensin	Stage decoration, stage setting, production of large signs and signboards, self-owned equipment, planning and operation of events.

2. Current Trend of Events in Laos

As a trend in recent years, various events are held in Laos. In addition to international conferences held based on financial aid from other countries and events for international exchange held by the Government, there is a tendency toward the increase in commercial events sponsored by private enterprises. The following summarizes the trend in each event genre.

Table-2 Event Genres

Music Concerts	
Music productions as represented by Indee Records are comprehensively planning and operating the arrangement of artists, concert production (using self-owned lighting and acoustic equipment), advertising, etc. The only large indoor concert venue in Laos is National Culture Hall. Musical concerts in various forms are held in the outdoor parking lot of LAO ITECC. Participation of private enterprises has been increasing for several years. Events linked to product promotion campaigns are getting popular.	
Exhibitions and Trade Fairs	
LAO ITECC is the only large exhibition venue in Laos. Despite the attempts to host exhibition events focusing on specific themes (such as a motor show), exhibitors have been difficult to find. Most events are actually held in the form of local product exhibitions (with food/drink and sales booths).	
Meetings and Product Presentation Shows	
These events are held frequently in International Cooperation and Training Center (ICTC) and the conference rooms and banquet halls of hotels. Facilities for these events do not seem to be in short supply in Vientiane.	
Festivals, Wedding Parties, etc.	
Festival-type events are held at the times of traditional festivities in outdoor plazas and other places in a form like fairs. In addition to stalls, mini stage shows and traveling amusing parks for children are features of these events. Some booths are sponsored by companies. Wedding parties are usually held with the attendance of 1,000 or more persons in large banquet halls of some hotels and LAO ITECC.	

3. Event Needs in Laos and the Direction of the Multi-purpose Use of the Budo Center

Considering the result of field study and the fact that the Budo center will have a capacity of about 800 persons at the maximum, the direction of the multi-purpose use of the Budo center is expected to be as follows.

Table-3 Event Needs and Direction of Multi-purpose Use

Music Concerts	
○ (Good)	There are no large indoor concert venues in Vientiane other than National Culture Hall (capacity 1,500 persons). Because of this oligopoly, the multi-purpose use of the Budo center as a small and medium-sized concert venue holding 300 to 800 persons is considered high.
Exhibitions and Trade Fairs	
× (Very Poor)	Exhibitions are primitive, and are regarded as a form of markets. Even LAO ITECC is showing a low utilization rate. The possibility for the multi-purpose use of the Budo center as an exhibition venue is considered almost nil.
Conferences and Product Presentation Shows	
(Poor)	The demand for a large international conference venue is already met by International Cooperation and Training Center. As a future possibility, the Budo center may be used for product presentation shows and small sales meetings, which are held by companies in increasing numbers. However, such needs are small at the present, and are served by meeting rooms and banquet halls of hotels.
Festivals, Wedding Parties, etc.	
× (Very Poor)	The Budo center is not suitable to festival-type events, which are held outdoors in a large scale. The facility is also unsuitable for wedding parties, which are usually held with 1,000 or more attendants.

4. Direction of the Plan Considering Multi-purpose Use

From the above consideration, it follows that the event planning of this Project may include architectural arrangements in the following direction to support multi-purpose use according to the actual needs in Laos.

The budo center should support multi-purpose use including music concerts and theater style shows (combinations of presentations and other events).

◆ Architectural arrangements

- A stage space should be provided.
- The combination of a fixed stage and a movable stage (provided by the event organizer) allowing flexible layout is desirable.
- Battens to support lighting equipment should be provided.
- Doorways for movement of items and persons should have sufficient size.
- Backyard flow lines for artists and staff should be provided.
- Rooms for artists and staff should be provided.

* Lighting, sound, stage decoration, and other equipment for events will no be included in this Project, because such equipment is owned by music productions and companies supplying signs and decorations.

【B】 Prospects for Hosting Events

1. Discussion on the Type of Events Held in This Facility

The result of the field research has shown that the following events are held in major halls and hotel banquet rooms in Vientiane.

Table 4 Events Held in Major Halls and Hotel Banquet Rooms in Vientiane

Facility	Typical Events Hosted	Other Events
National Culture Hall	Music concerts (1500 seats)	Movie shows, seminars, etc.
LAO ITECC	Large exhibitions (local product fairs)	Wedding parties, etc.
ICTC (International Cooperation and Training Center)	International conferences	Seminars, workshops, etc.
Circus	Circus (850 seats)	Muay lao, budo, etc.
Lao Plaza Hotel	Conferences + parties	Fashion shows, etc.
Don Chan Palace	International conferences + parties	Wedding parties, exhibitions, etc.
Novotel Hotel	Conferences + parties	Fashion shows, etc.
Lan Xang Hotel	Conferences + parties	Seminars, workshops, etc.

The demand for the venues of product presentation shows and academic conferences is served by existing facilities such as LAO ITECC and International Cooperation and Training Center. On the other hand, the facilities for music concerts are not sufficient. In particular, there seems to be a high demand for the venues (with the capacity of 300 to 500 persons) of live concerts featuring domestic pop artists gaining increasing popularity.

In addition, there are demands for venues of stage events (lectures, shows, concerts, etc.) and small exhibitions (product promotion) sponsored by companies.

Therefore, it is assumed that the event use of this facility will mainly consists of medium and small-sized "music concerts."

2. Assumed Frequency of Events and Total Number of Audience (Monthly and Yearly)

According to the hearing research, major halls and hotel banquet rooms in Vientiane are hosting events at the following frequency.

Considering this situation, it is assumed that the demand for the hosting of concerts and other events in this budo center will be 48 times/year (about 4 times/month).

The capacity of the budo center is 800 persons at the maximum (375 on the 1st floor and 425 on the 2nd floor) when the stage attached to the building is used. However, because a special stage is likely to be set up for a music concert, the capacity is assumed to be 753 persons (328 on the 1st floor and 425 on the 2nd floor).

Therefore, the yearly total number of audience is assumed to be 36,144 persons (753 persons x 48 times) at the maximum.

Table 5 Frequency of Events in Major Halls and Hotel Banquet Rooms in Vientiane

Event Facility	Typical Events	Frequency of Events
National Culture Hall	Music concerts (1500 seats)	25-30 times/year (2-3 times/month)
LAO ITECC	Large exhibitions (local product fairs)	100-180 days/year (10-15 days/month)
ITCT	International conferences and seminars	120-280 days/year (10-20 days/year)
Circus	Circus (850 seats)	25-30 days/year (2-3 days/year)
Lao Plaza Hotel	Conferences + parties	90% or more in the high season (October to March) About 50% in off season (April to September)
Don Chan Palace	International conferences + parties	
Novotel Hotel	Conferences + parties	
Lan Xang Hotel	Conferences + parties	

3. Expected Balance Sheets for Events, Assumed Ticket Price, and Cost of Hosting Events

According to the hearing research, major halls and hotel banquet rooms in Vientiane are setting event entrance fees and facility rental charges as follows.

Table 6 Event Entrance Fees and Facility Rental Charges of Existing Facilities

Event Facility	Typical Events	Event Entrance Fee	Facility Rental Charge
National Culture Hall	Music concerts (1500 seats)	\$1.5 - \$2 (with support from companies)	\$350 (1 day)
LAO ITECC	Large exhibitions (local product fairs)	Free of charge	\$300 - \$400 (1 booth)
ITCT	International conferences, seminars	Mostly free of charge	\$400 (schooling of 500 persons, 1 day)
Circus	Circus (850 seats)	\$0.5 - \$0.6	\$300 (2 days)

Based on the above research result, the balance sheet of an event will be estimated as shown below when a promoter uses this facility as the venue of a concert.

Table 7 Expected Balance Sheet for 1 Performance and the Setting of Facility Rental Charge

* Assuming an event for 2 days with 1 performance a day.

Item	Description		Assumed Cost
1. Entrance fee income	A. Assumed entrance fee \$2 x assumed audience 753 persons x 2 days		\$3,012
	* Entrance fee has been assumed considering the fees at other facilities in Laos.		
2. Cost of event	B. Event production cost	Artist performance fee	\$500
		Cost for stage decoration and other work	\$750
		Cost for sound and lighting equipment	\$500
		Management and staff personnel cost	\$750
		Miscellaneous cost	\$200
			\$2,700
		A-B	\$312
	C. Facility rental charge	* Assumed considering the charges at other facilities in Laos.	\$200
3. Profit of promoter			\$112

* Costs have been calculated in US\$ based on local prices.

To increase the utilization rate of the facility, the facility rental charge must be set at a level within the profit of the event promoter (user), i.e., within the difference between entrance fee income and event production cost.

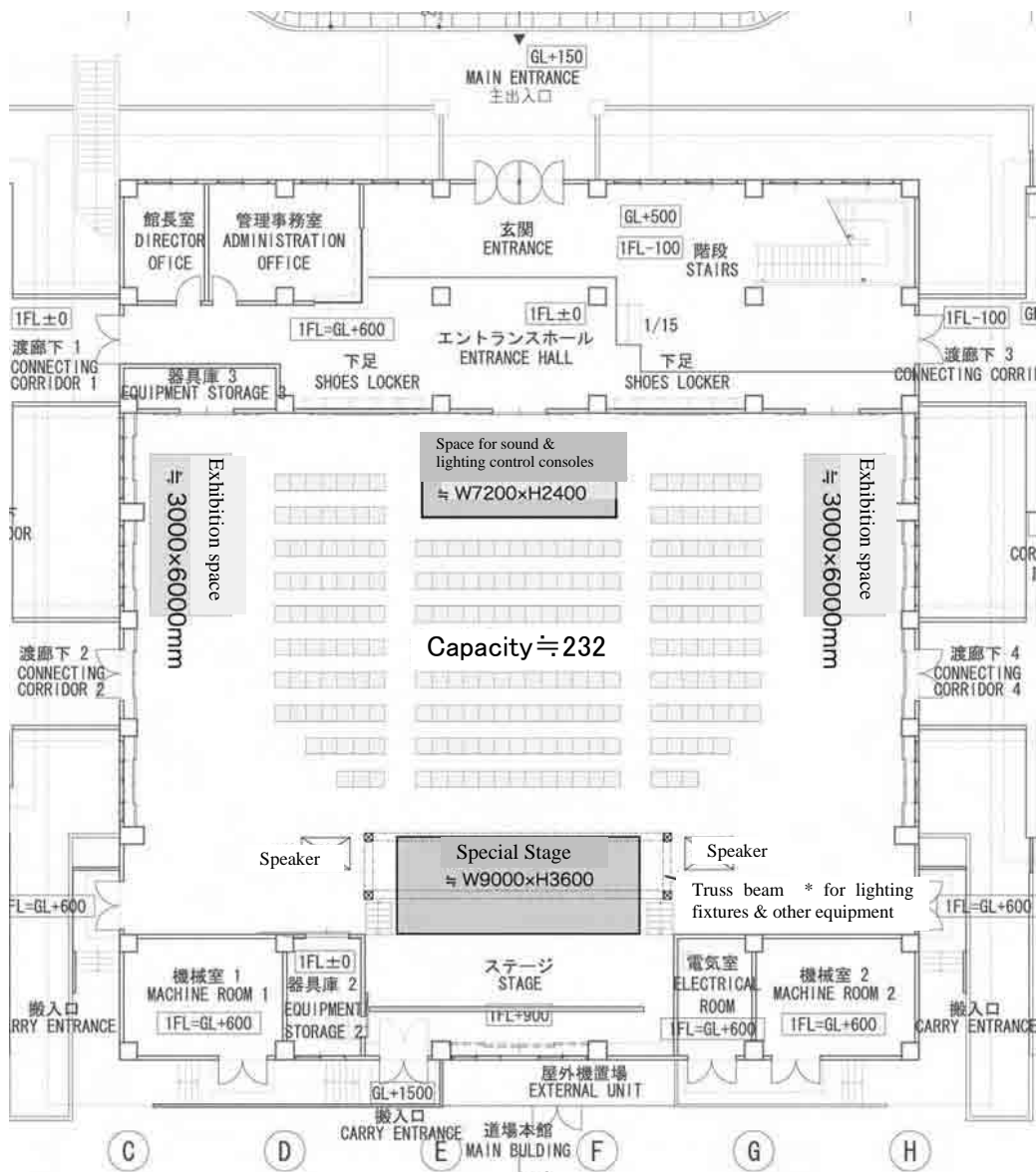
As shown in the above estimation, the event promoter can expect profit from an ordinary music concert with the entrance fee of about US\$2 if the facility rental charge is set at US\$200 for 2 days (US\$100 for a day).

In reality, charges will have to be set depending on the size of events and the amount of entrance fee. However, it is considered appropriate to expect the facility rental charge of \$100 a day in average. Therefore, assuming the use for 4 times a month, the income from the facility rental business of the budo center is expected to be US\$ 4800 (\$100 x 48 days).

【C】 Facility Requirements for Holding Events

1. An Example of Hall Layout for a Music Concert

While the fixed stage in the budo hall will be sufficient as the space for a ceremony and similar events, music concerts are generally held using a temporary special stage. Plans presupposing a temporary stage are advantageous for the sake of flexibility in stage effects.



* If exhibition spaces are converted to seats, the 1st floor can hold 328 persons.

2. Sound and Lighting Equipment Brought by the Event Promoter

It is desirable that a batten for lighting fixtures is provided above the place where a special stage may be set up. However, in the case of music events, it is usual that a truss structure is set up above the temporary stage and lighting fixtures and other equipment are supported on this structure.

The building should have a supply of power source for the sound and lighting equipment installed on this truss structure. Because sound and lighting equipment is usually owned by local music productions and event promoters, such equipment is expected to be brought by the event promoter, and is not considered as the items attached to the budo center.

3. Safety Considerations Regarding Entry and Exit of People During Large Events

Consideration of measures to ensure safe and smooth guiding of people entering the venue is essential.

When a music concert is held, measures such as locating the entrance reception (ticket checking) in the outdoor parking lot (in a tent) should be considered. Other methods of event operation ensuring safety should also be considered, such as the use of outdoor space as the waiting space for visitors, and managing the entry and exit based on seat numbers to prevent confusion in the hall (e.g., guiding audience in groups, starting from the front/stage-side seats on the 1st floor).

4. Need for Temporary Facilities

Because this budo center is not specifically designed for concerts, shortage of rooms may occur at the time of a concert event. On such occasions, the facility should be able to accommodate temporary tents and other facilities in such places as the outdoor space behind the stage of the budo hall. If possible, electric power should be supplied to these temporary tents.

