

**Minutes of Discussions  
on the Preparatory Study  
on the Project for the Improvement of Vientiane No.1 Road  
and  
on the Project for the Establishment of the Road and Bridge Management Center  
in Lao People s Democratic Republic**

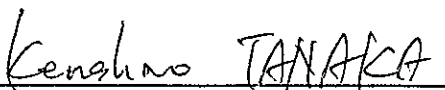
In response to a request from the Government of Lao People s Democratic Republic (hereinafter referred to as "Laos"), the Government of Japan decided to conduct a Preparatory Study on the Project for the Improvement of Vientiane No.1 Road and on the Project for the Road and Bridge Management Center in Lao People s Democratic Republic (hereinafter referred to as "the Projects") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").


JICA sent to Laos the Preparatory Study Team (hereinafter referred to as "the Team"), headed by Mr. Kenshiro Tanaka, the officer of the Third Project Management Division, the Grant Aid Management Department, JICA, and is scheduled to stay in the country from January 24 to February 15, 2003.

The Team held discussions with the officials concerned of the Government of Laos and conducted a field survey at the study area.

In the course of discussions and field survey, both sides confirmed the main items described in the attached sheets

Vientiane, January 31, 2003

  
Mr. Kenshiro TANAKA  
Leader  
Preparatory Study Team  
Japan International Cooperation Agency

  
Mr. Viengsavath SIPHANDONE  
Director General, Department of Road  
Ministry of Communication, Transport,  
Post and construction  
Lao People s Democratic Republic

## ATTACHMENT

### 1. Objective of the Projects

- (1) The Project for the Improvement of Vientiane No.1 Road
  - To improve the Vientiane No.1 Road from Wattay Airport to the Friendship Bridge
- (2) The Project for the Establishment of the Road and Bridge Management Center
  - To strengthen the road maintenance ability of Road No.8 Construction State Enterprise, shown in Annex-1.

### 2. Project Sites

- (1) The Project for the Improvement of Vientiane No.1 Road
    - Vientiane No.1 Road from Wattay Airport to the Friendship Bridge (The length of the Project road is approximately 27 km.)
  - (2) The Project for the Establishment of the Road and Bridge Management Center
    - The yard of Road No.8 Construction State Enterprise in Seno, Savannaket Province
- The project sites are shown in Annex-2.

### 3. Responsible Ministry and Implementing Agency

- (1) The Project for the Improvement of Vientiane No.1 Road

The responsible and implementing Ministry is the Department of Roads (hereinafter referred to as "DOR"), the Ministry of Communication, Transport, Post and Construction (hereinafter referred to as "MCTPC").

The organization chart of the ministry is shown in Annex-3.

- (2) The Project for the Establishment of the Road and Bridge Management Center

The responsible Ministry is DOR, MCTPC

The implementing Agency is Road No.8 Construction State Enterprise.

The organization outline and chart of the implementing agency is shown in Annex-4.

### 4. Items Requested by the Government of Laos

After discussions with the Team, the items as described below were requested by the Lao side.

- (1) The Project for the Improvement of Vientiane No.1 Road
  - Improvement of Pavement, Intersections, Traffic Signals, Street Lights, Sidewalk, Structures and Drainage of Vientiane No.1 Road
  - The prior section is from Wattay Airport to the downtown (approximately 10 km). The section has serious drainage problem.
  - Appropriate construction methods should be selected for cultural heritages when the construction work will be done near them.
- (2) The Project for the Establishment of the Road and Bridge Management Center
  - To procure equipment for road maintenance to Road No.8 Construction State Enterprise.

JICA will assess the appropriateness of the request and will report the findings to the Government of Japan.

#### 5. Japan's Grant Aid Scheme

The Lao side understands the Japan's Grant Aid scheme explained by the Team, as described in ANNEX-5

#### 6. Schedule of the Study

The Team continue the Study in Japan until March 2003. If the Project is deemed feasible, as the result of the Preparatory Study, JICA will send the Basic Design Study Team in 2003.

#### 7. Other Relevant Issues

##### (1) The Project for the Improvement of Vientiane No.1 Road

- The present situation of the pavement looks comparatively well maintained. Further study will be necessary to find the details.
- The present situation of the drainage doesn't look working appropriately. Further study will be necessary to fine the details.
- There are a lot of historical heritages and temples along the road. In order to conserve the environment, construction methods should be selected not to affect them.
- There are 1700 buildings facing the road. It is necessary to have sufficient communication with local people affected by the project for further implementation of the project.

##### (2) The Project for the Establishment of the Road and Bridge Management Center

- At the present time, only Road No.8 State Enterprise has the ability to maintain Asphalt Concrete Pavement in the southern region. But it doesn't look enough for future large-scale maintenance.

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**Ministry of Communication, Transport, Post and Construction**

**Plan for the Strengthening of an Existing State Enterprise**

**for**

**Maintenance of National Road No.9, "East-West Economic Corridor"**

31 January 2003



**Viensavath SIPHANDONE**

**Director General**

**Department of Roads**

**Ministry of Communication, Transport, Post and Construction**

**Lao People's Democratic Republic**



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1. Background

An important international road, the East-West Economic Corridor (EWEC) in the southern region of the Lao PDR consists of National Road No.9 (NR.9) and the Second Mekong Bridge. The maintenance of the EWEC, particularly NR.9, the first Asphalt Concrete (AC) trunk road in the Lao PDR, is an important duty of the Lao Government.

However, in the southern region of the Lao PDR, there is no company which has enough equipment and experience for AC Roads. In addition, we cannot expect that private companies in the southern region of the Lao PDR will be able to maintain NR.9. We also cannot expect that private companies in Vientiane or foreign countries will maintain NR.9. Because, in the Lao PDR where most roads are paved with Double Bituminous Surface Treatment (DBST) and there is a small demand for the maintenance of AC roads, private companies are interested in the maintenance and improvement of only DBST roads. They are not interested in maintaining AC roads which are unprofitable and need high investment risks of purchasing necessary equipment and so on. Therefore we need a public organization to maintain NR.9.

Before, we had a plan to establish a new Road Management Center. But this plan was not realistic and we have changed this to more realistic one.

The new plan is to give an existing road construction state enterprise an official duty to maintain NR.9 and to strengthen this enterprise so that it will be able to implement the given official duty.

2. Outline of the Plan

We choose one existing road construction state enterprise based in the southern region. JICA provides the services of a Senior Volunteer Team to this enterprise and the Japanese Government assists this enterprise in obtaining equipment, constructing facilities and so on through the Grant Aid so that this enterprise will be able to maintain NR.9, the EWEC, by itself.

In addition, this enterprise is responsible for human resource development of road engineers.

The detailed activities of the enterprise are as follow.

- ① To maintain NR.9, the EWEC, by itself.
- ② To receive trainees and students from Telecom and Communication Training Institute (TCTI), Lao National University, Savannakhet Technical School and so on and give them practical training for the maintenance of real asphalt concrete roads at actual sites.

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3. Advantage of this Plan compared with the Previous Plan for the Establishment of a New Road Management Center

(1) Organization

The use of an existing organization is smoother, easier and presents less risk than the establishment of a new center and its organization.

(2) Relation with the Present Road Maintenance Management System

At the present time, Departments of Communication, Transport, Post and Construction of Provinces (DCTPCs) are responsible for road maintenance management and implement road maintenance works by contracting them out to state enterprises and private companies.

If a new road management center is established, a dividing line must be drawn between the center's and DCTPCs' responsibilities. For example, the center could be responsible for National Roads and DCTPCs for rural roads.

In the case of the strengthening of an existing enterprise, this enterprise will maintain NR.9 under the responsibility of Savannakhet Provincial DCTPC. The present road maintenance management system will not change.

(3) Operating expenses

At the present time, the Lao Government funds DCTPCs for road maintenance management. In addition, the Road Maintenance Fund established by the World Bank is expected to be distributed to DCTPCs from the Ministry of Communication, Transport, Post and Construction (MCTPC).

If a new center is established, this center needs a lot of funding for its operation because this center is a new public organization and cannot expect much income. Therefore the Lao Government must fund the center a lot for its operation by reducing the distribution to DCTPCs. However, The Government's funding is not enough, therefore the center needs additional input from the Road Maintenance Fund. For that, negotiation with the World Bank is absolutely necessary.

On the other hand, in the case of strengthening of an existing enterprise, this enterprise does not need a lot of funding for its operation, because this enterprise exists and is being operated. This enterprise will receive necessary funding to maintain NR.9 from the national budget and the Road Maintenance Fund through Savannakhet Provincial DCTPC, not directly. This also means that the present way of the distribution will not change.

(4) Human Resource Development

The ways of human resource development are the same for the two plans. Both the plans receive trainees from TCTI, Lao National University, Savannakhet Technical School, etc. and



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provide the trainees practical training for the maintenance of real asphalt concrete roads at actual sites.

4. Selection of an Existing Enterprise

(1) Criteria of the Enterprise to Receive Japanese Assistance

- ① The enterprise should be under the chief control of the state
  - ex) - The state ownership is more than 51%.
  - The main posts of the Management Committee are from the state and more than half of the members are also from the state.
- ② The enterprise will not be privatized within at least 10 years.
- ③ The enterprise will use the Japanese Assistance only for public purpose. The enterprise must not use the assistance to have its own benefit.

(2) Basic information on State Enterprises

The following is the list of state enterprises under the Department of Roads of MCTPC which can implement road maintenance work in the southern region.

① Road No.8 Construction Enterprise

(Organization) 100% state ownership

(Base) Seno city in Savannakhet province (received the base for NR.13 improvement works by WB funding)

(Number of the staff) 297

(Facilities) crushing plant, laboratory, workshop, office, etc.

(Equipment) dump trucks (29), grader (8), macadam roller (2), tire roller (4), vibration roller (5), etc.

(Past main works) improvement of DBST pavement roads (NR.8, 16, etc), improvement real asphalt pavement road (NR.9 improvement, as a subcontractor of Obayashi), etc

(Income) 1999-2000: 1,721,090US\$

2000-2001: 1,645,234US\$

2001-2002: 2,292,033US\$

(Others) provided with road construction equipment for about 7 million US\$ by the Japanese Government in 1993.

② NR.13 Construction State Enterprise

(Organization) 100% state ownership (a joint venture in the past, but the other company withdrew)



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(Base) Savannakhet city in Savannakhet province

(Number of the staff) 191

(Facilities) crushing plant, laboratory, workshop, office, etc.

(Equipment) dump trucks (40), grader (6), macadam roller (9), tire roller (15), etc.

(Past main works) improvement of DBST pavement road (NR.9), maintenance of DBST pavement road (NR.13), construction of Bailey bridges, etc

(Income) ?

(Others) provided with road construction equipment by the World Bank

③ NR.20 Construction State Enterprise

(Organization) 100% Champasak province's ownership

(Base) Pakse city, Champasak province

(Number of the staff) 290

(Facilities) crushing plant, mixing plant, laboratory, workshop, office, etc.

(Equipment) dump trucks (34), grader (5), tire roller (5), vibration roller (9), etc.

(Past main works) improvement of DBST pavement road (NR.13, 16), etc.

(Income) 1998: 3,332,543US\$

1999: 3,496,046US\$

2000: 2,785,418US\$

(Others) provided with road construction equipment by ADB

④ Bridge Construction No.1 State Enterprise

(Organization) 100% state ownership

(Base) Pakse city in Champasak province

(Number of the staff) 50

(Facilities) office, etc.

(Equipment) dump trucks (6), vibration roller (1), etc.

(Past main works) ?

(Income) 1998: 11,312US\$

1999: 77,645US\$

2000: 772,363US\$

(Others) provided with road construction equipment by the Soviet Union

⑤ Communication Construction State Enterprise

(Organization) 100% state ownership

(Base) head office is in Vientiane, the equipment is in Sekon province

(Number of the staff) ?





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(Facilities) office, etc.

(Equipment) ?

(Past main works) ?

(Income) ?

(Others) provided with road construction equipment by the Soviet Union

(3) Choice of a State Enterprise

Taking into consideration the size, the equipment, the facilities, the experiences, the bases, etc, it is the most appropriate to strengthen Road No.8 Construction Enterprise (R.8.C.E) through Japanese assistance so that this enterprise will be able to maintain NR.9 by itself.

R.8.C.E is the biggest road construction state enterprises in the Lao PDR. Its base is in an ideal place, at the center of the southern region, near the junction of NR.13S and NR.9. It is implementing the improvement of NR.9 as a subcontractor of a Japanese construction company, OBAYASHI, and is the only enterprise in the southern region that has had experience of real asphalt concrete pavement. It has laboratories, a workshop, crushing plants, road construction equipment, etc, though they are not enough for the maintenance of NR.9.

R.8.C.E was provided with road construction equipment for the construction of NR.8 through Japanese Grant Aid in 1993. This equipment is still being used effectively because of proper repair and maintenance. Therefore, if R.8.C.E is provided with road maintenance equipment, this enterprise will use the provided equipment properly for a long time.

The staff of R.8.C.E shows uncommon enthusiasm for its strengthening and human resource development. Most executives of R.8.C.E have enough English ability. There are enough office facilities for a senior volunteer team. MCTPC has an idea to continue R.8.C.E as a state enterprise, because this enterprise received assistance in obtaining road construction equipment through Japanese Grant Aid.

Although NR.13 Construction Enterprise is a big enterprise and is based in an ideal place, the center of the southern region, this enterprise was provided with equipment by the World Bank. It seems that the World Bank has its own policy for this enterprise. Therefore it seems to be difficult for the Japanese Government to assist this enterprise. In addition, staff members who have enough English abilities are rare.

NR.20 Construction Enterprise is also one of the biggest road construction enterprises in the Lao PDR, but its base is far from the center of the southern region, in Pakse City. In addition, this enterprise is a provincial owned enterprise, not a state owned enterprise. Moreover, this enterprise was provided with equipment by ADB and it seems that ADB has its own policy for this enterprise. Therefore it seems to be difficult for the Japanese Government to assist this enterprise.

Bridge Construction No.1 State Enterprise and Communication Construction State



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Enterprise are not appropriate, because they are small enterprises with bases far from the center of the southern region.

**5. Present Situation of R.8.C.E**

**(1) Outline of R.8.C.E**

R.8.C.E was established in 1989. The purposes of the establishment of R.8.C.E is to implement big projects which have important significance on politics, economy, national defense, etc. 60% of the benefit of R.8.C.E is appropriated for the national budget, because R.8.C.E is an public organization.

**(2) Organization**

See attached Figure-1.

**(3) Facilities**

① Office (See attached Figure-2.3)

The office is about 2-3 km from the center of Seno City to the East along NR.9. If a senior volunteer team is provided to R.8.C.E, they will work in the meeting room for the time being. This meeting room is air-conditioned and is big enough to serve as an office for the senior volunteer team and also has a clean toilet.

② Workshop and equipment storage space (See attached Figure-4)

This is several km from the office to the East along NR.9.

There is a workshop, but there is not a warehouse for equipment.

R.8.C.E plans to buy additional land in order to have sufficient ground.

③ Laboratories

There is no laboratory in the above-mentioned facilities. There are laboratories at construction sites.

**(4) Equipment**

① Existing equipment

The list is shown on attached Table-1.

R.8.C.E has equipment for DBST, but does not have necessary equipment for the maintenance of real asphalt concrete pavement.

② Plan to buy new equipment

The attached Table-2 shows equipment which R.8.C.E is planning to buy. This equipment costs 2.5 million US\$.

Of the equipment shown on Table-2, R.8.C.E has already bought one Excavator, one Concrete Batching Plant and two Concrete Mixers. These are all old used ones.

R.8.C.E is negotiating with the Ministry of Defense to buy an old used Asphalt Plant from this ministry on installment plan. R.8.C.E is also making effort to buy a used Asphalt Concrete Paver. These machineries are necessary for road improvement works which



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R.8.C.E has undertaken and, after the projects, those machineries will not last because they are very old.

To maintain NR.9 properly, new equipment which can work for at least ten years are necessary. But it is difficult, in fact almost impossible for R.8.C.E and the Lao Government to buy new equipment necessary for the maintenance of NR.9 because of lack of funds.

Materials testing is important for proper maintenance of NR.9. Although R.8.C.E recognizes the shortage of Laboratory equipment, R.8.C.E does not have any plan to buy laboratory equipment.

6. Plan for Strengthening of R.8.C.E

(1) Plan of Japanese Assistance

① Senior Volunteer Team Provision Plan

(Members)

A coordinator (also taking care of trainees from TCTI, Lao National University, Savannakhet Technical School and so on)

An advisor in road maintenance techniques

An advisor in road maintenance equipment

The application forms has already been submitted by R.8.C.E to JICA.

② Equipment Provision Plan (Grant Aid)

—Road Maintenance Equipment

Type and number of road maintenance equipment should be considered as follow.

Step1) Calculate the volume of NR.9 maintenance, taking into consideration the length of the roads, the traffic volume, etc. Then, calculate type and number of road maintenance equipment necessary for the maintenance.

Step2) Study type, number and condition of equipment owned by R.8.C.E. Also study new equipment purchasing plan of this enterprise. Taking into consideration the results of these studies, calculate type and number of equipment which can be used for NR.9 maintenance.

Step3) Compare the numbers of equipment calculated at Step1 and 2. The shortage should be provided to R.8.C.E.

—Laboratory Equipment

—Equipment for the Workshop (including spare parts)

③ Facility Construction Plan (Grant Aid)

—Necessary Facilities for the provided equipment

ex) warehouses, for road maintenance equipment, laboratories, improvement of the workshop, etc



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- Facilities to receive trainees
  - ex) dormitory, lecture room, etc
- Others
  - ex) improvement of office, etc. if necessary

(2) Plan for R.8.C.E's activities

① Road Maintenance works

At the present time, DCTPCs are responsible for road maintenance management and implement road maintenance works by contracting them out to state enterprises and private companies.

Without changing this system, R.8.C.E will implement NR.9 maintenance works under the responsibility of Savannakhet Provincial DCTPC.

② Human Resources Development

R.8.C.E has been periodically receiving trainees from Savannakhet Technical School. To contribute to further human resource development of road engineers, R.8.C.E will receive more trainees not only from Savannakhet Technical School but also from TCTI, Lao National University, etc. The senior volunteer team being provided to R.8.C.E will coordinate with other senior volunteers and experts working at MCTPC, Lao National University and Savannakhet Technical School to achieve this.

(3) Relationship with RMP

MCTPC, IDA, ADB, SIDA and NDF are implementing the Road Maintenance Program (RMP) since 2001. RMP consists of two phases: RMP1 from April 2001 to December 2004 and RMP2 from July 2004 to December 2009.

The purposes of RMP are as follow.

A) Preservation of the Road Network through Civil Works

- A.1) Periodic Maintenance and Rehabilitation Works through Loan Assistance
- A.2) Routine Maintenance Works through Loan Assistance
- A.3) Heavy Transport Management Program (the construction of axle load weight stations, etc.)

B) Building Institutional Capacity

- B.1) Complete Establishment of Road Management System (consultancy services to MCTPC, DCTPCs and so on)
- B.2) Assist Implementation of Road Maintenance Fund
- B.3) Improve Project Preparation, Execution and Monitoring (consultancy services to MCTPC, DCTPCs and so on)



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B.4) Develop Strategy to Improve Performance of Local Contracting and Consulting Industry

B.5) Involve Road Users-Beneficiaries in Road Maintenance Activities

Firstly, there will be no duplication with RMP.

Secondly, this project will contribute to the establishment of a more effective RMP by fulfilling the needs for road maintenance equipment and trained engineers which are not covered by RMP.

We are expecting that this project will be a part of RMP. Therefore we must consider the relationship between this project and RMP.

**(4) Consideration of private companies' activities**

We have to consider this project carefully so that this project will not suppress private companies activities. If there are private companies which are interested in the maintenance of NR.9, this project will exclude such companies, because R.8.C.E will monopolize the maintenance work of NR.9.

In the Lao PDR, most roads are paved with Double Bituminous Surface Treatment (DBST). DBST roads are easy to be damaged. Therefore there is and will be a big demand for the maintenance. In addition, many big road improvement projects using DBST are being and will be implemented. Domestic and foreign companies are very interested in the maintenance and improvement of DBST roads, because they have many chances to undertake works. They already have necessary equipment. Therefore they can implement the works without investment risks of purchasing new equipment.

On the other hand, Asphalt Concrete (AC) Roads are very rare in the Lao PDR. Within several years, big road improvement projects using AC will finish and new projects using AC cannot be expected. Only maintenance works of AC roads are expected. If private companies in the southern region of the Lao PDR wants to undertake the maintenance work of AC roads, they must purchase very expensive equipment such as Asphalt Finisher, Laboratory Equipment, Asphalt Plant and so on, because there is no company which has such equipment in the southern region of the Lao PDR. In the case of private companies in Vientiane or foreign countries which already has enough equipment for the maintenance of AC roads, they have to make a big investment to implement maintenance work of AC roads in the southern region of the Lao PDR, for examples, the establishment of a base camp, transportation of various equipment and so on. Even if private companies in the southern region, Vientiane or foreign countries make such a big investment, they can get only a little profit from the maintenance work of AC roads, about 10-20 thousands US\$/year. In the Lao PDR, the maintenance of AC roads are unprofitable and needs a high investment risk.



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Private companies act to get much profit with low risk. Based on this principle, private companies will be interested in the maintenance and improvement of only DBST roads. There will be no private companies in the southern region which will purchase necessary equipment to implement the maintenance of AC roads such as NR.9.

Therefore, MCTPC is planning to give R.8.C.E an official duty of maintaining NR.9 and even if R.8.C.E monopolizes the maintenance work of NR.9, it will not exclude any private companies, because there will be no private companies which will be interested in this work.

However, we should continue to consider possibility that this project will suppress private companies' activities and if there is such possibility, we have to take measures.



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ORGANIZATION CHART-OF R.8. C.E

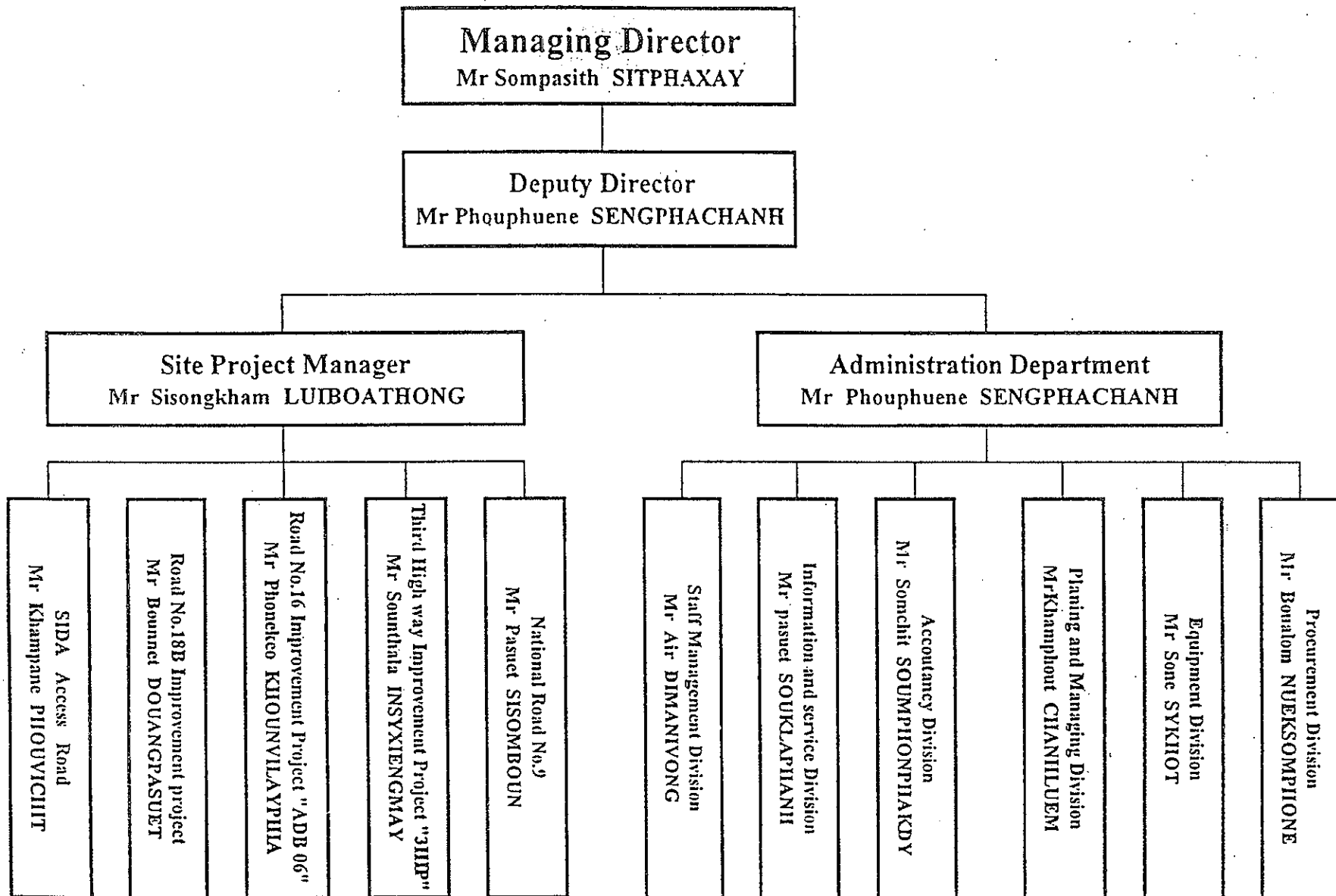


Figure-1

PHONE NO. : 851 41 214850

Aug. 16 2002 05:13AM

FROM : ROAD No 8

SAVANNAKHET

B3-HOUSE FOR STAFF  
AREA = 8x32m

PAKING AREA

B1- OFFICE

R.N07  
6x4m

R.N01  
3x4m

R.N02  
8x6m

R.N06  
3x3m

R.N03  
6x4m

R.N04 and R.N05  
4x12m

HOUSE FOR STAFF  
AREA = 12x14m

# LEGEND

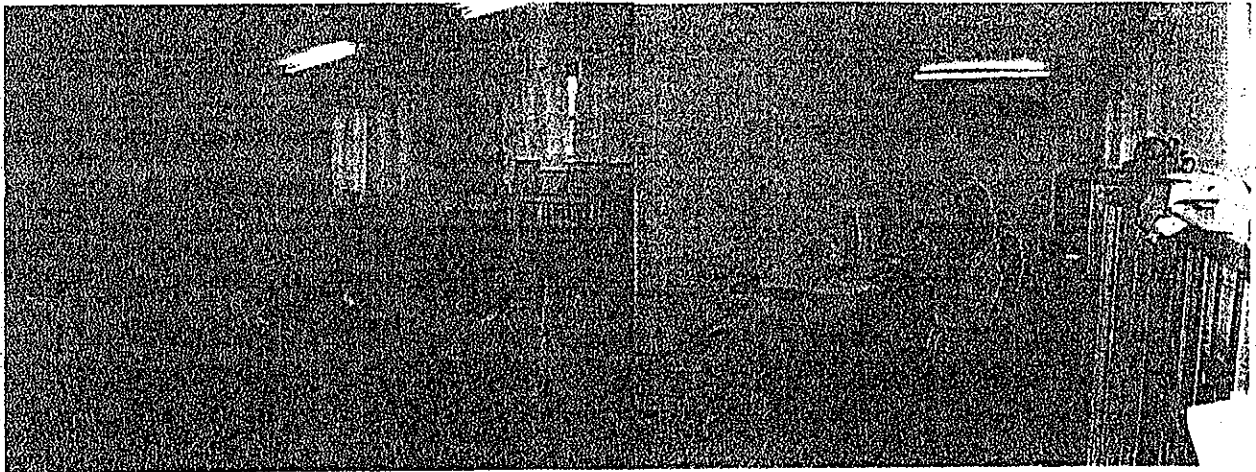
- RN01-ACCOUNTANCY ROOM
- RN02-ADMINISTRATION ROOM
- RN03-MEETING ROOM
- RN04-COMPUTER ROOM
- RN05-MANAGING DIRECTOR AND DEPUTY ROOM
- RN06-TOILET
- RN07-STAFF MANAGER ROOM



SEND

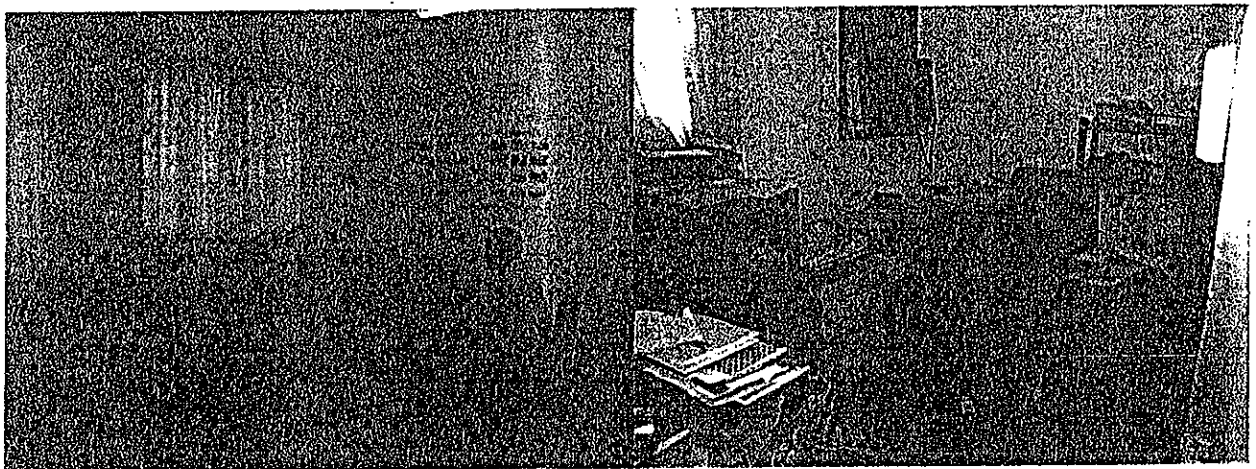
Figure-2





Administration Room

Computer Room



Meeting Room (Room for a Senior Volunteer Team?)

Audit Room



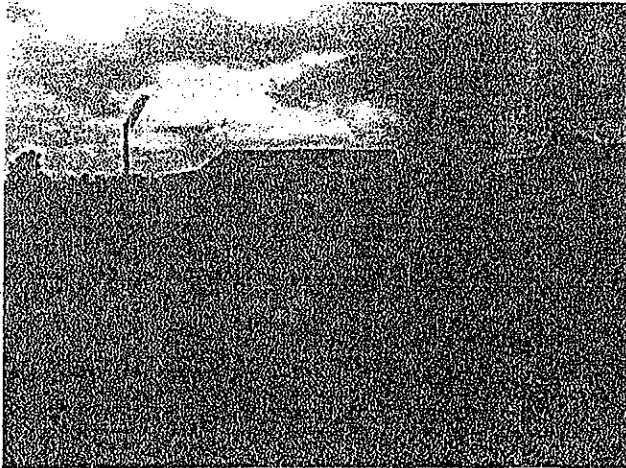
Room for Director and Deputy Director

Overview of Office

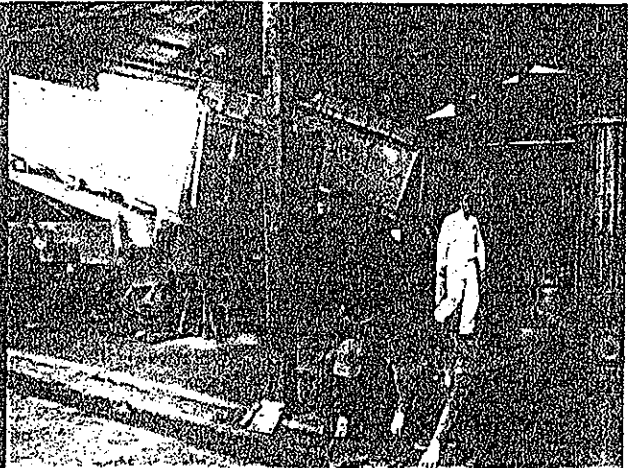
Figure— 3 Office

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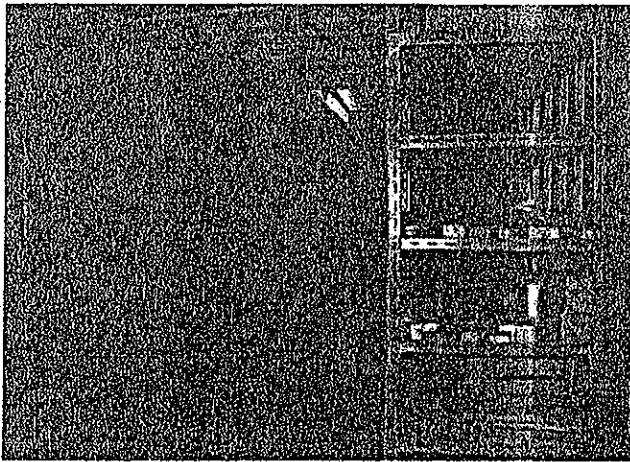
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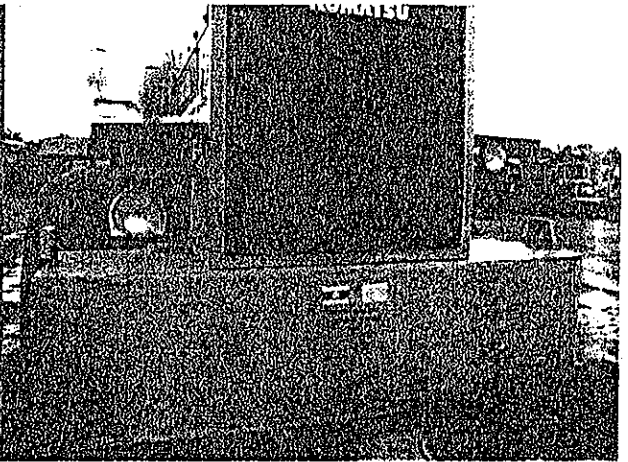
Overview



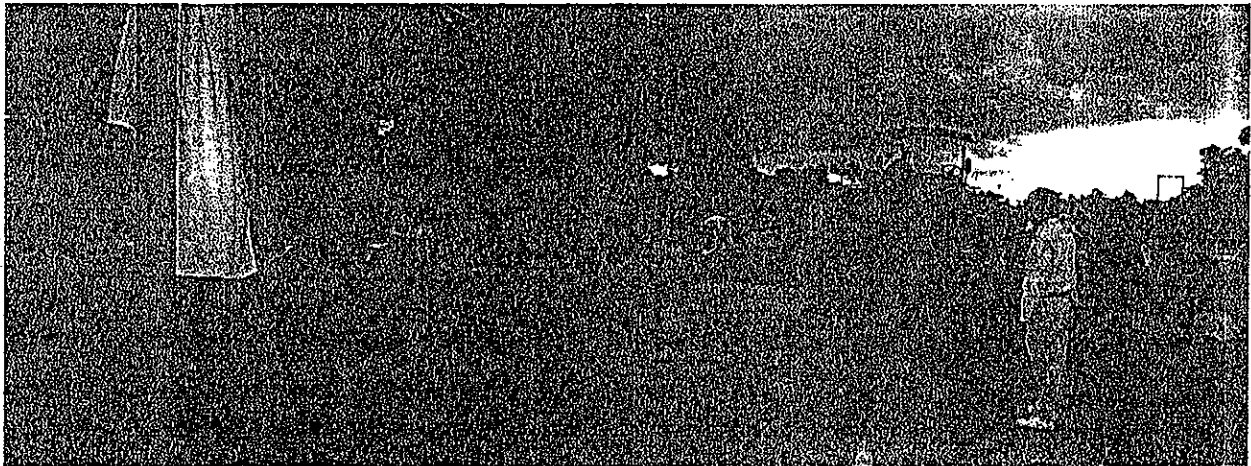
Workshop



Warehouse for spare parts



Equipment



House for Workers

Use of Equipment

Figure — 4 Workshop • Space to Keep Equipment

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**Table-1** LIST OF EQUIPMENT OF ROAD No. 8 CONSTRUCTION ENTERPRISE

N	DESCRIPTION	MODEL	MADE IN	MACHINE NUMBER	SERIAL NUMBER	YEAR OF MANUFACTURE	QUANTITY
1	BULLDOZER	Komatsu D85A-21	JAP	6D125.59215	36435	1994	5
2	BULLDOZER	Komatsu D85A-21	JAP	6D125.59216	36436	1994	
3	BULLDOZER	Komatsu D85A-21	JAP	6D125.59217	36437	1994	
4	BULLDOZER	Catterpillar D7G	JAP	10Z.17996	65V.07288	1991	
5	BULLDOZER	Catterpillar D7G	JAP	10Z.17998	65V.07289	1991	
6	EXCAVATOR	Komatsu PC200-5	JAP	S6D95L.130331	70627	1994	8
7	EXCAVATOR	Komatsu PC200-5	JAP	S6D95L.130332	70628	1994	
8	EXCAVATOR	Komatsu PC200-5	JAP	S6D95L.130333	70629	1994	
9	EXCAVATOR	Komatsu PC100	JAP	4D1052.154692	13874	1985	
10	EXCAVATOR	Yutani US450L	JAP	151485	81L00286	1988	
11	EXCAVATOR	Komatsu PC200-3	JAP	6D105-104405	37758	1990	1
12	EXCAVATOR	Komatsu PC200-5	JAP	S6D95L-1.66049	15591	1994	
13	EXCAVATOR	CAT E200B	USA			1990	
14	PAVER	Demag DF110	GER	8022211	31189	1991	
15	VIBRATORY ROLLER	Komatsu JV100WP	JAP	6D105.118088	30087	1994	
16	VIBRATORY ROLLER	Komatsu JV100A	JAP	6D105.118011	10455	1994	8
17	VIBRATORY ROLLER	Komatsu JV100A	JAP	6D105.118012	10456	1994	
18	VIBRATORY ROLLER	Komatsu JV100A	JAP			1994	
19	VIBRATORY ROLLER	Sakai SV500TF	JAP	6BD1.709485	VSV.4T.10187	1994	
20	VIBRATORY ROLLER	Ingersollrand SD100D	USA	45298094	144765	1996	
21	VIBRATORY ROLLER	Ingersollrand SD100D	USA	25424062	147551	1996	4
22	VIBRATORY ROLLER	Ingersollrand SD100D	USA	45266934	144086	1996	
23	TIRE ROLLER	Sakai TS200	JAP	6BD1.745007	TTS-3-12426	1994	
24	TIRE ROLLER	Sakai TS200	JAP	6BD1.744791	TTS-3-12427	1994	
25	TIRE ROLLER	Sakai TS9	JAP	0A220576337	TS9-33534	1994	
26	TIRE ROLLER	WATANABE WP902	JAP		WP902-9974	1980	2
27	MACADAM ROLLER	Sakai	JAP			1995	
28	MACADAM ROLLER	Sakai	JAP		R2-31637	1995	2
29	VIBRATORY ROLLER	Komatsu JV06H	JAP	16500	3281	1994	
30	VIBRATORY ROLLER	Komatsu JV06H	JAP	16501	3282	1994	5
31	WHEEL LOADER	Catterpillar 926E	JAP	7YJ02910	8NB02936	1994	
32	WHEEL LOADER	Catterpillar 926E	JAP	7YJ03252	8NB02937	1994	
33	WHEEL LOADER	Catterpillar 926E	JAP	7YJ03240	8NB02938	1994	
34	WHEEL LOADER	Catterpillar 926E	JAP	7YJ03241	8NB02939	1994	
35	WHEEL LOADER	Catterpillar 926	BEL	3204DIT	4NB01861	1992	8
36	MOTOR GRADER	Mitsubishi MG430	JAP	6D22.224152	4GA.00432	1994	
37	MOTOR GRADER	Mitsubishi MG430	JAP	6D22.224111	4GA.00433	1994	
38	MOTOR GRADER	Mitsubishi MG430	JAP	6D22.224149	4GA.00434	1994	
39	MOTOR GRADER	Mitsubishi MG430	JAP	6D22.224146	4GA.00435	1994	
40	MOTOR GRADER	Catterpillar 14G	JAP	3L.24466	961U.2087	1985	3
41	MOTOR GRADER	KOMATSU GD611	JAP			1994	
42	MOTOR GRADER	KOMATSU GD623				1995	
43	MOTOR GRADER	KOMATSU GD625				1995	1
44	HYDRAULIC CRANE	Nissan TADANO	JAP	G182003	KW31M01197	1994	
45	ASPHALT DISTRIBUTOR	Nissan NIGITA	JAP	PF6.116162T	CWB450H 00412	1994	
46	ASPHALT DISTRIBUTOR	HINO FF1JJK	JAP	JOBCF-14316	FF1JJK-10231	1994	2
47	MOBILE WORKSHOP	Nissan TFA430GHL	JAP	PEG 181940	TFA430G.00019	1994	

Table-1

48	MOBILE SERVICE TRUCK	Nissan CPB14H	JAP	NE6.020915	CPB14H.11375	1994	1
49	CHIPPING SPREADER	SAVALCO HS 460	SWE		64	1990	1
50	ROTARY BROOM	PRO-LAMPAC	THAI			1997	2
51	ROTARY BROOM	PRO-LAMPAC	THAI			1997	
52	SCREENING PLANT	KYC SS.38	JAP		383039	1994	1
53	CRUSHING PLANT	CMD 739	USSR			1980	
54	CRUSHING PLANT	PDCY 25	USSR			1980	
55	CRUSHING PLANT	PDCY 200	USSR			1985	1
56	CRUSHING PLANT	TESAB	SWE			1990	
57	CRUSHING PLANT	WILLIAM WS405	SWE			1990	
58	CRUSHING PLANT	WILLIAM	THAI			2001	
59	MIXING PLANT	WBC200B	SING			1995	
60	MIXING PLANT		SWE			1990	2
61	CONCRETE MIXER	KYC KNSO.18 OU	JAP	13627	8463	1994	2
62	CONCRETE MIXER	KYC KNSO.18 OU	JAP	13629	8464	1994	
63	CONCRETE MIXER	KYC KND.11 OU	JAP	4627	8465	1994	
64	CONCRETE MIXER	KYC KND.11 OU	JAP	4629	8466	1994	4
65	CONCRETE MIXER	KYC KND.11 OU	JAP	4628	8467	1994	
66	CONCRETE MIXER	KYC KND.11 OU	JAP	4840	8468	1994	
67	DRILLING MACHINE	Furukawa PCR200	JAP		5589	1994	1
68	AIR COMPRESSOR	Komatsu EC170Z	JAP	6D105.118085	1556	1994	
69	AIR COMPRESSOR	Komatsu EC75Z	JAP	4D95L.167776	3286	1994	4
70	AIR COMPRESSOR	Komatsu EC75Z	JAP	4D95L.167777	3287	1994	
71	AIR COMPRESSOR	Air MAN PDS-265	JAP	4BD1-947560	3110661	1992	
72	GENERATOR 100KW	Komatsu EG125B	JAP	S6D105-118116	4073	1994	
73	GENERATOR 40KW	Denyo DCA45P1	JAP	4BD1.223674	1334748	1994	1
74	GENERATOR 60KW	SDMO	ENG	U706965A	SJK73929J/3	1996	
75	GENERATOR 350KW	Denyo DCA400 SPK	JAP	SA6D140A15184	1329782	1990	
76	WATER PUMP	Yanmar TF70L	THAI	044774		1995	
77	WATER PUMP	Honda G200	THAI			1998	1
78	WATER PUMP	Honda G200	THAI	G200-9457798	WZBL-9228108	2001	
79	THEODOLITE	SOKKIA TM20E - D10141	JAP		75388	1994	
80	THEODOLITE	SOKKIA TM20E - D10141	JAP		75389	1994	
81	THEODOLITE	PENTAX PTS III GS	JAP		211215	1999	
82	THEODOLITE	SOKKIA DTS	JAP		113115	1998	1
83	THEODOLITE	LEICA TC600			408163	1995	
84	THEODOLITE	LEICA TC1100			416400	1997	
85	LEVEL	NIKON	JAP			1996	
86	LEVEL	TOPCON AT-F7			X70431	1997	1
87	LEVEL	SOKKIA B21-D10324	JAP		202667	1994	
88	LEVEL	SOKKIA B21-D10324	JAP		202719	1994	
89	FIELD TESTING APPARATUS		JAP			1994	
90	FIELD TESTING APPARATUS		JAP			1994	2
91	TESTING APPARATUS		JAP			1994	
92	TESTING APPARATUS	76/6029/A	JAP			1994	2
93	WATER TUNKER	Mitsubishi FK455F	JAP	6D14.773937	FB30017	1994	
94	WATER TUNKER	Mitsubishi FK455F	JAP	6D14.774822	FB30018	1994	
95	WATER TUNKER	Mitsubishi FP418H	JAP	6D22.163603	HB20006	1994	5
96	WATER TUNKER	ISUZU TDJ	JAP			1994	
97	WATER TUNKER	Mitsubishi FP418H	JAP	6D22.125685	HA50220	1994	
98	FUEL TUNKER	Mitsubishi FK415F	JAP	6D14.774209	FB30180	1994	1

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Table-1

99	FLAT BED TRUCK	Mitsubishi FK455k	JAP	6D114.774629	KB30038	1994	1
100	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226059	FA40012	1994	
101	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226328	FA40013	1994	
102	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226335	FA40014	1994	
103	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.2263378	FA40015	1994	
104	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226392	FA40016	1994	
105	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226420	FA40017	1994	
106	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226429	FA40018	1994	
107	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226445	FA40019	1994	
108	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226480	FA40020	1994	
109	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226495	FA40021	1994	
110	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226522	FA40022	1994	
111	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226529	FA40023	1994	
112	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226553	FA40024	1994	
113	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226618	FA40025	1994	
114	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226612	FA40026	1994	
115	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226590	FA40027	1994	
116	DUMP TRUCK	Mitsubishi FP418F	JAP	6D22.226634	FA40028	1994	
117	DUMP TRUCK	Mitsubishi FUSO	JAP	6D16TD-4907	FN257NTD-4907	1997	
118	DUMP TRUCK	Mitsubishi FUSO	JAP	6D16TD-5562	FN257NTD-5562	1997	
119	DUMP TRUCK	Mitsubishi FUSO	JAP	6D16TD-5682	FN257NTD-5682	1997	
120	DUMP TRUCK	Mitsubishi FUSO	JAP	6D16TD-3811	FN257NTD-3811	1997	
121	DUMP TRUCK	Mitsubishi FUSO	JAP	6D16TD-5574	FN257NTD-5574	1997	
122	DUMP TRUCK	Mitsubishi FUSO	JAP			2000	
123	DUMP TRUCK	Mitsubishi FUSO	JAP			2000	
124	DUMP TRUCK	Mitsubishi FUSO	JAP			2000	
125	DUMP TRUCK	Mitsubishi FUSO	JAP			2000	
126	DUMP TRUCK	Mitsubishi FUSO	JAP			2000	
127	DUMP TRUCK	HYUNDAI	JAP			1992	
128	DUMP TRUCK	HYUNDAI	JAP			1992	
129	TRACTOR / TRAILER	Mitsubishi FV415H	JAP	8DC9.418507	HA40006	1994	2
130	TRACTOR / TRAILER	Inter. 503278.C2.K	USA	11365133	615010102	1990	
131	WAGON	Toyota Landcruiser	JAP	3F.0249619	0118080	1994	
132	WAGON	Nissan PATROL	JAP	SD33068711B	JN1WRG160U0887416	1992	
133	WAGON	Toyota Landcruiser	JAP	1HZ0050890	HZJ800009214	1994	
134	WAGON	TOYOTA Land Cruiser	JAP	FZJ80-0070348	1FZ012226	1994	
135	WAGON	Isuzu TROOPER	JAP	4FG189420	18LG5444743	1990	
136	PICK UP	Mitsubishi K34T		4D56.GG0852	340PR02853	1994	
137	PICK UP	Mitsubishi K34T	JAP	4D56.GG0853	340PR02854	1994	
138	PICK UP	Toyota 2L	JAP	2L.1688801	LN56.0133710	1988	
139	PICK UP	Nissan BIGM	JAP	TD25.S00234	RG021A.50953	1990	
140	PICK UP	Isuzu PUP	JAP	721038	JAACL1450H-0721038	1990	
141	PICK UP	Toyota	JAP	1023800	RN60.SU15395	1991	

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**Table-2**

*Lao people's Democratic Republic*  
*Peace Independence Democracy Unity Prosperity*

Ministry of CTPC

RN6/SCE

Tel: 041 431024

Fax: 041 431317

PLAN FOR EQUIPMENT PURCHASES

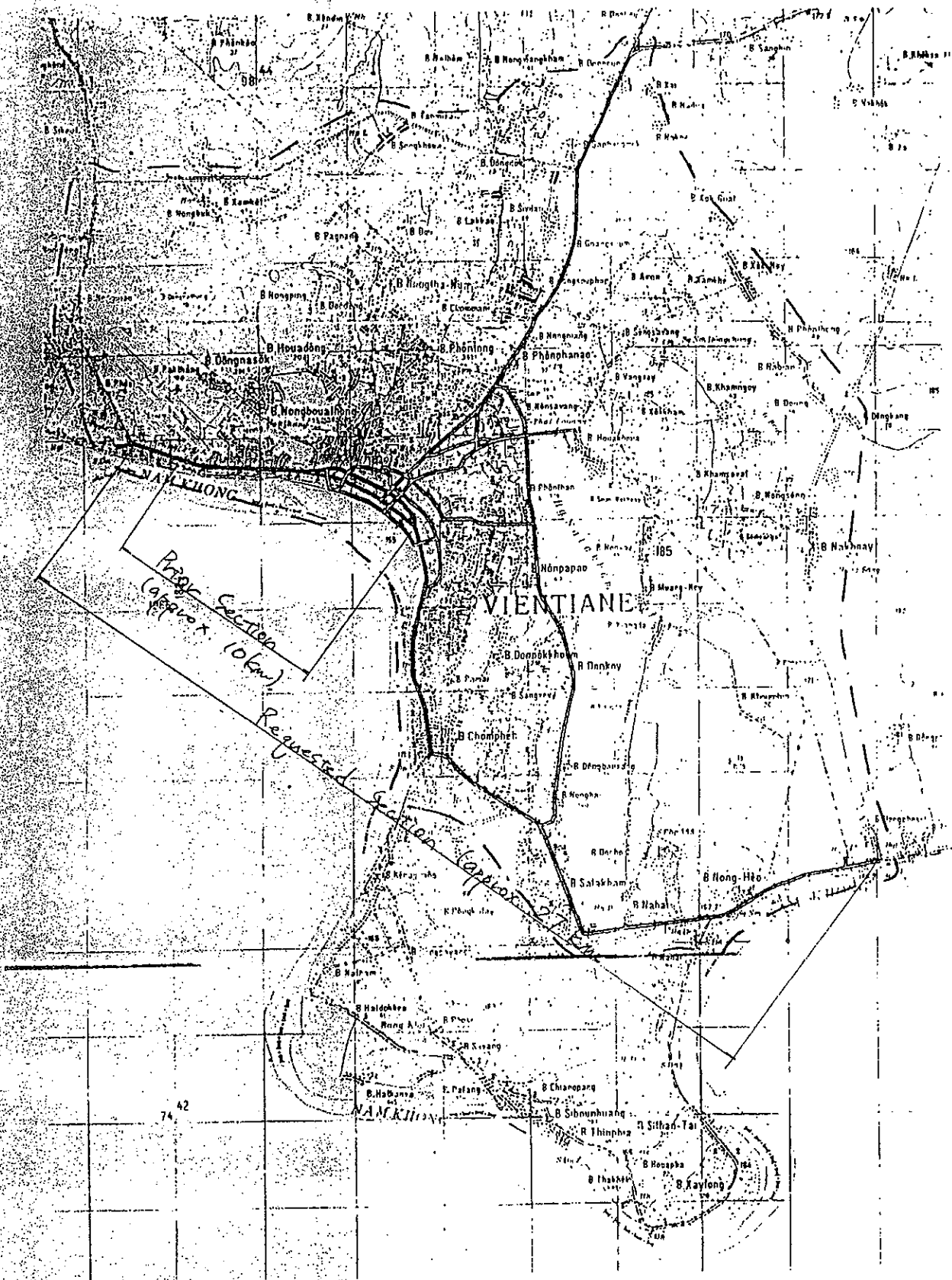
ITEM	DESCRIPTION	MODEL	CAPACITY	QUAN TITY	REMARK
01	Paver for Asphalt Concrete Paving		60 - 80 t/h	1	
02	Excavator	KOMATSU PC-200-6		2	
03	Wheel Excavator	KOMATSU PC-120		2	
04	Motor Grader	KOMATSU GD 625A		1	
05	Comboid Roller	SAKAI TG 350		2	
06	Bitument Distributor	NISSAN NIIGATA		1	
07	Mobile work Shop	NISSAN TFA 130 GDL		1	
08	Trailer	MITSUBISHI FV415H		1	
09	Chipping Spreader Machine	FURUKAWA PCR200		2	
10	Track Drilling Machine	KOMATSU TC 170 Z		1	
11	Aircompressor			1	
12	Asphalt Plant		60 - 80 t/h	1	
13	Crushing Plant		60 - 80 t/h	1	
14	Concrete Batching Plant		5 - 10 m³/h	1	
15	Concrete Mixer		0.5 m³	2	
16	Mixing Plant		130 - 150 t/h	1	

1 million US \$

within 5 years

100

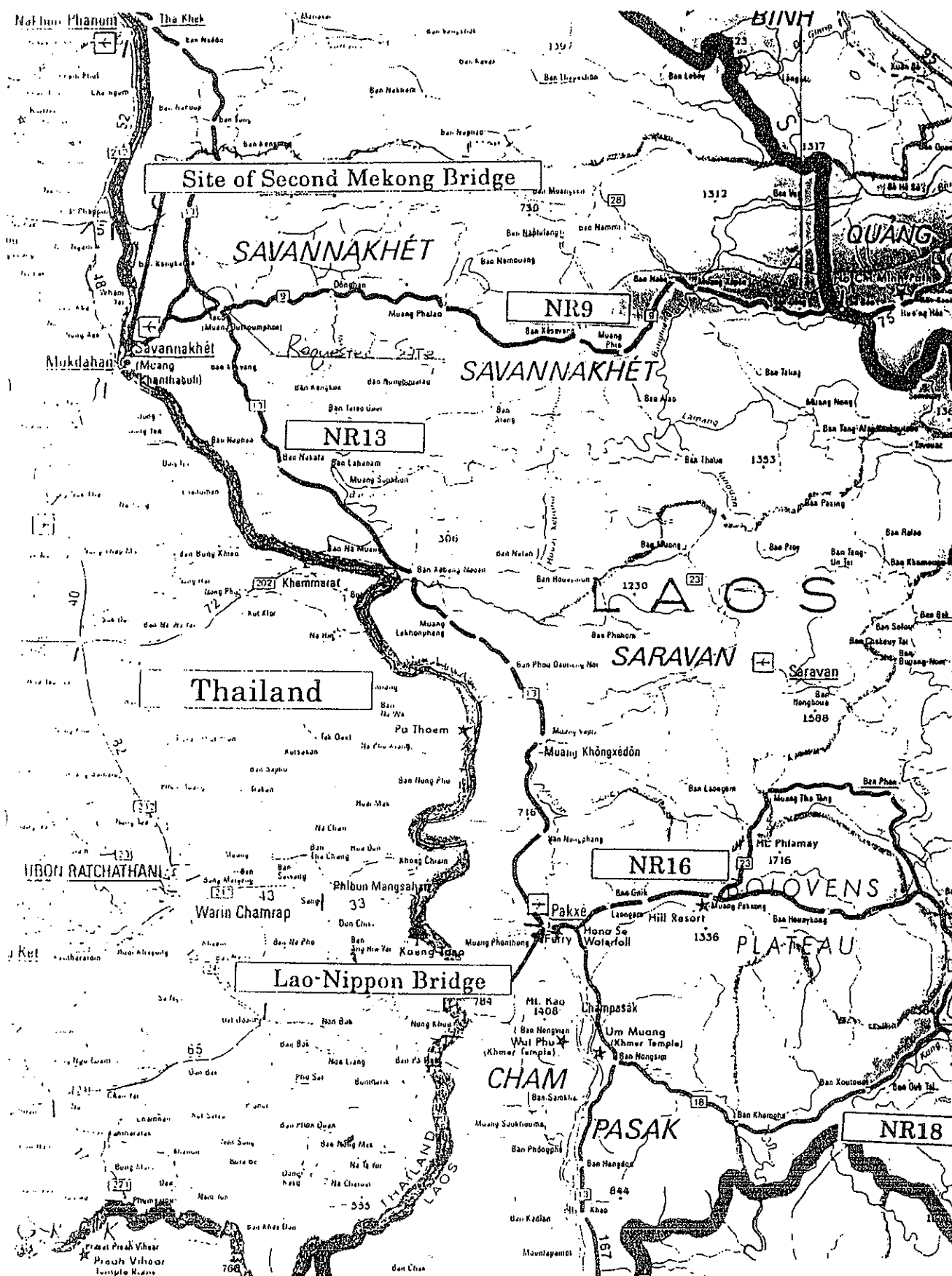




The Project Site of the Improvement of Vientiane No.1 Road

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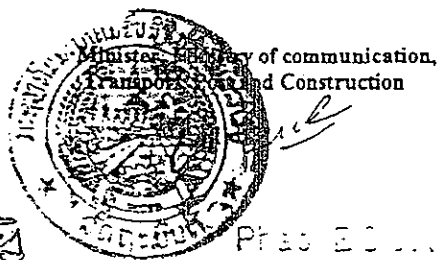
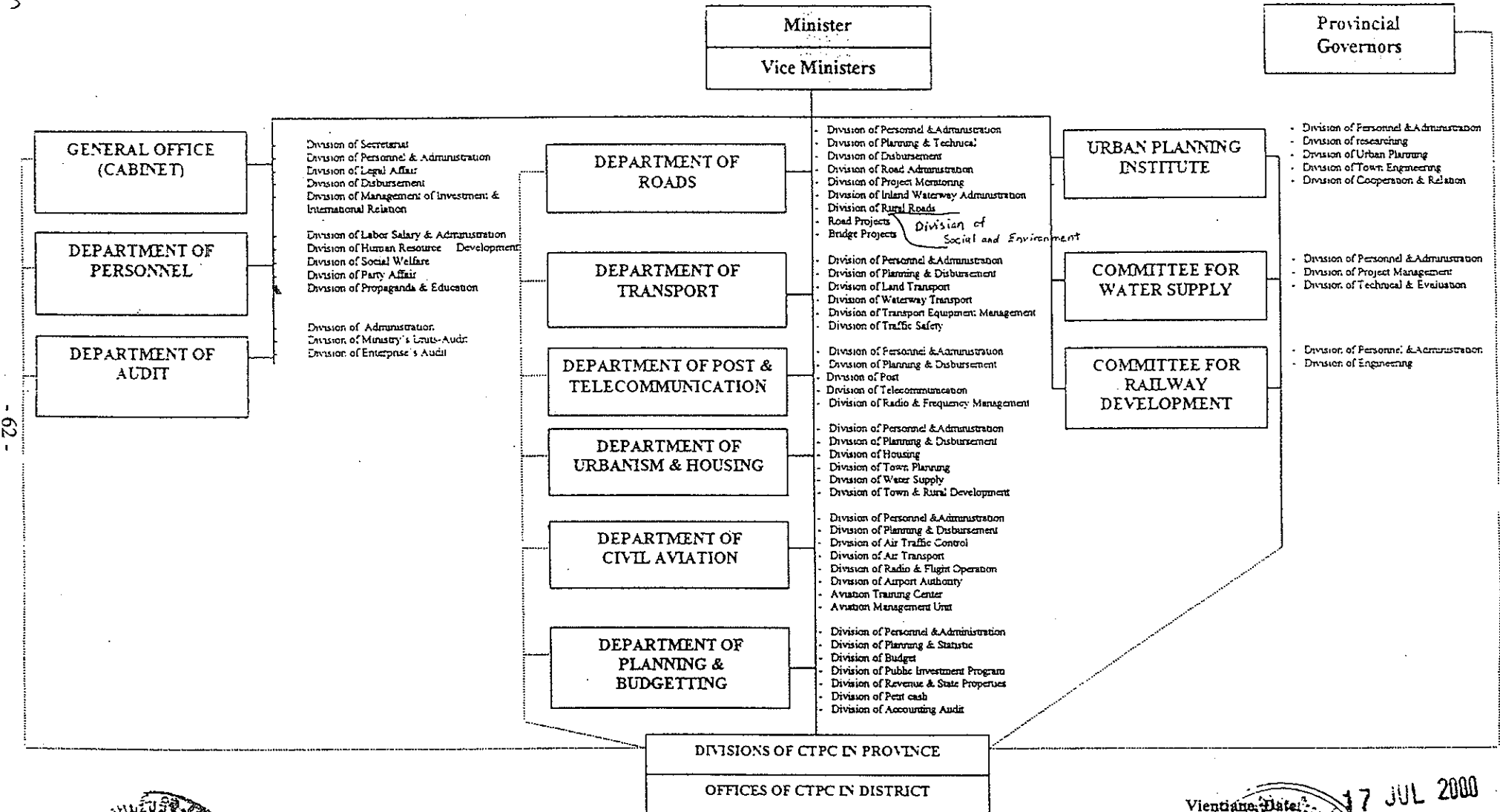
The Project Site for the Establishment of the Road and Bridge Maintenance Center

Ken

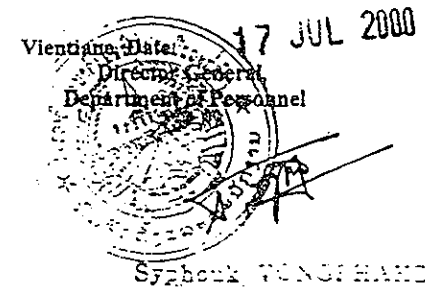
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# ORGANISATION CHART OF MINISTRY OF COMMUNICATION TRANSPORT POST AND CONSTRUCTION



Phat E. NAPHOL



(Annex-3)

## BACKGROUND

In the end of 1988, after construction national road No9 completed The Road No 9 company was divided into three companies, Among of these was **THE ROAD No 8 CONSTRUCTION ENTERPRISE.**

The Road No8 construction enterprise was established in the early of 1989, by **Mr. Somad PHONSANA** was the first Managing Director. R.8.C.E has been participating in the execution of most of the big projects with the important significance on politics, economy, national defense of the country since the early 1989 up to now.

In the end of 1993 Mr Sompasith SITPHANAY was elected to be the Managing Director replacement Mr Sommad, while Mr Sommad. Was elected. To be the General Director of Road Department "DOR"

R.8.C.E is specialized in making the construction of the civil work such as Road Bridge Design and Consultation and finished the whole Project with the high quantity and technique.

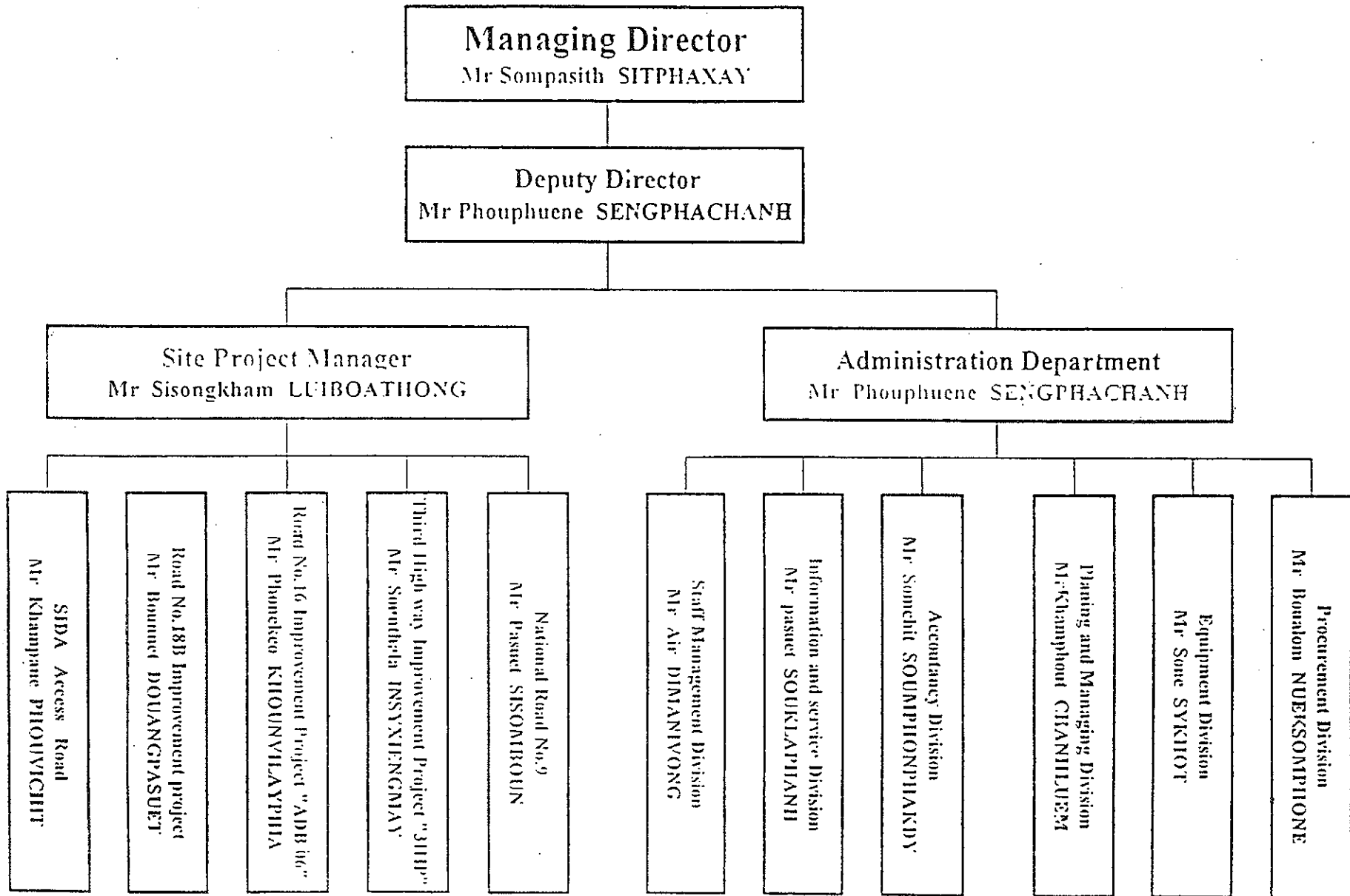
In the middle of 1994, R.8.C.E had received the new Equipment Grand aid from Japan Government in the amount of 7.300.000 USD we have been using this Equipment to execute the many Projects such as:

- Road No 8 Construction Project.
- Some approach road of Japan Government grand aid phase I and II
- Road No 16 Improvement Project.
- Second High way Improvement Project
- Third High way Improvement Project
- the Project for Improvement of National Road Route 9
- Road No18 B Improvement Project
- Opening New Land for Immigrants
- And etc.....

R.8.C.E has a lot of 15 year experiences in construction with nearly 64 high technical qualified staff and more than 141 modern equipment machines having capacities to per form all Projects as per the International Quality and Standard requirements, many past years, it has been winning the trust from its Customers and is one of the most confident contractor in the construction field.

We would like to co-operate with International, External Companies and International Organization to carry out the construction contracts of the projects with all scale in the country

ORGANIZATION CHART OF R.E. C.E



## JAPAN'S GRANT AID SCHEME

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 a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the 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 Japanese consulting firms.

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 smooth 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 (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter 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 upon by both parties concerning the basic concept of the Project.
- Preparation of a basic design of the Project.
- Estimation of cost 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 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 registered consulting firms. JICA selects firms based on proposals submitted by interested firms. The firms selected carry out a Basic Design Study and write a report, based upon terms of reference set by JICA.

The consulting firms used for the Study 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.

## 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 procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors

such as natural 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, 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, contracting 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 the 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 of Japanese taxpayers.

- 5) Undertakings required to 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 expense and prompt execution 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 supply of the products and services under the Verification 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 operate and maintain the facilities constructed and 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 Arrangement (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 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.

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