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MINUTES OF DISCUSSIONS

ON

CAI MEP-THI VAI INTERNATIONAL PORT DEVELOPMENT PROJECT

BETWEEN

JAPAN BANK FOR INTERNATIONAL COOPERATION

AND

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM

Date: November 11, 2003

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Date: November 11, 2003

Place: Hanoi

Following the discussions regarding the proposed Cai Mep-Thi Vai International Port Development Project (hereinafter referred to as "the Project") between Government of Japan (hereinafter referred to as "GOJ") mission and the officials of Government of the Socialist Republic of Vietnam (hereinafter referred to as "GOVN") in October 2003, Japan Bank for International Cooperation (hereinafter referred to as "JBIC") mission had detailed discussions with officials of Ministry of Planning and Investment (hereinafter referred to as "MPI"), Ministry of Finance (hereinafter referred to as "MOF"), Ministry of Transport (hereinafter referred to as "MOT"), Project Management Unit No. 85 (hereinafter referred as "PMU 85") and Vietnam National Maritime Bureau (hereinafter referred to as "VINAMARINE") to study the feasibility of the Project.

The JBIC mission and the officials of MPI, MOF, MOT, PMU 85 and VINAMARINE hereby confirm the results of their discussions as follows subject to approval by the competent higher authorities on both sides. The JBIC mission has stated that the results of the field survey and discussions will be reported to GOJ and will be taken into account by GOJ in arriving at decision regarding the Loan relating to the Project. The officials of MPI, MOF, MOT, PMU 85 and VINAMARINE have stated that they had no objection to this.

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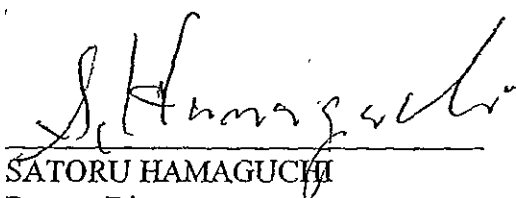
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JBIC mission and the officials of MPI, MOF, MOT, PMU 85 and VINAMARINE confirm the description of the Project and its estimated cost as detailed in Annex I attached hereto.

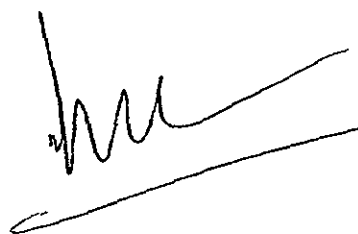
JBIC mission and the officials of MPI, MOF, MOT, PMU 85 and VINAMARINE confirm the implementation schedule and measures to be adopted for the implementation of the Project as shown in Annex II attached hereto.

JBIC mission and the officials of MPI, MOF, MOT, PMU 85 and VINAMARINE confirm the main points discussed as shown in Annex III attached hereto.

For JBIC


  
SATORU HAMAGUCHI  
Deputy Director  
Division 3  
Development Assistance Department II

For MPI

  
NGUYEN TRONG TIN  
Director  
Infrastructure and Urban Development  
Department

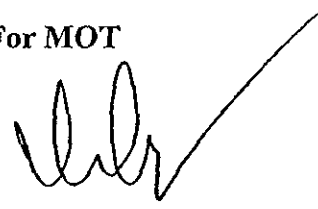
For MOF

水口幸司  
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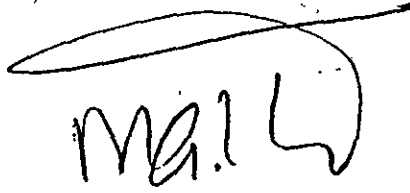
  
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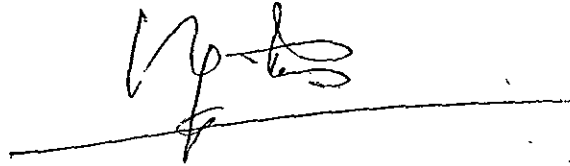
For VINAMARINE



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NGUYEN NGOC HUE  
Vice Chairman

For PMU 85



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NGUYEN NGOC TRAN  
General Director



## 1. Description of the Project

### (1) Objective

To support economic growth not only in southern part of Vietnam but also in whole country by constructing container and general cargo terminals at Cai Mep-Thi Vai area to accommodate increasing demand of cargo in southern part of Vietnam.

### (2) Location

Cai Mep and Thi Vai area in Baria-Vung Tau province, located along Thi Vai river in southern part of Vietnam.

The Project Location Map is shown in **Appendix I**.

### (3) Executing Agency

Project Management Unit No 85 (PMU 85) on behalf of the Ministry of Transport (MOT)

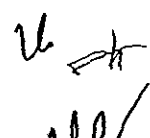
### (4) Scope of Works

The scope of the Project consists of the following components:

- a) Civil works for four (4) berths of terminal (container terminal: 2 berths, general cargo terminal: 2 berths), channel dredging and access road
- b) Procurement of cargo handling equipments
- c) Construction of buildings
- d) Consulting services

Detailed scope of works is shown in **Appendix II**.





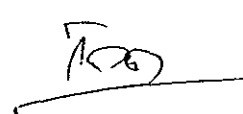
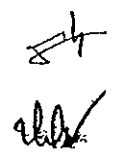
## 2. Cost Estimation

Category	Foreign Currency (Million Yen)	Local Currency (Million Yen)	Total (Million Yen)
Civil works for terminals	10,798	2,887	13,685
Procurement of cargo handling equipments	7,951	164	8,115
Construction of buildings	1,233	762	1,995
Price Escalation	1,778	0	1,778
Physical Contingency	1,743	373	2,116
Consulting service(D/D)	528	490	1,019
Cosulting service(supervision)	426	850	1,277
Consulting service(operator selection)	281	312	593
IDC	2,057	0	2,057
Tax & Duty	0	2,828	2,828
Land acquisition & compensation	0	1,785	1,785
Administration cost	1,340	522	1,862
<b>Total Project Cost</b>	<b>28,134</b>	<b>10,976</b>	<b>39,110</b>

Note:

- (1) Exchange Rate: US\$ 1 = ¥ 119 = VND 15,500, VND 1 = ¥ 0.00768
- (2) Base Year used in the cost estimation: October 2003
- (3) Assumed rate of price escalation (including consulting services)
  - Foreign currency portion: 1.4% per annum
  - Local currency portion: 0.0% per annum
- (4) Physical contingency: 10%(Civil and Building), 5%(Equipment)
- (5) There are some roundings.
- (6) Cost for the consulting services of the Selecting Port Operator needs further consideration.

Detailed cost estimate and annual fund requirement are shown in Appendix III-1.



### 1. Implementation Schedule

The implementation schedule for the project is detailed in Appendix IV. This Schedule is drawn up on the assumption that JICA will implement the Detail Design (hereinafter referred to as "D/D") from January 2005 and the Loan Agreement for the eligible portion of the Project cost excluding D/D (hereinafter referred to as "L/A") will be concluded in March 2006. (Alternative schedule attached as Appendix V is drawn up on the assumption that L/A will be concluded in March 2005.)

### 2. Estimated Annual Fund Requirement

Calendar Year	Foreign Currency (Million Yen)	Local Currency (Million VND)	Local (Million Yen)	Total (Million Yen)
2005	226	32,726	251	477
2006	1,795	377,785	2,900	4,695
2007	1,532	97,137	746	2,278
2008	4,945	208,288	1,599	6,545
2009	7,059	230,289	1,768	8,827
2010	7,546	255,641	1,963	9,509
2011	4,174	220,907	1,696	5,870
2012	432	5,456	42	474
2013	424	1,365	10	434
<b>Total Project Cost</b>	<b>28,134</b>	<b>1,429,593</b>	<b>10,976</b>	<b>39,110</b>

Detailed cost estimate and annual fund requirement are shown in Appendix III-1.

#### (Estimated Annual Fund Requirement under Alternative Schedule)

Calendar Year	Foreign Currency (Million Yen)	Local Currency (Million VND)	Local (Million Yen)	Total (Million Yen)
2004	223	32,674	251	474
2005	1,770	377,428	2,898	4,668
2006	1,511	96,850	744	2,255
2007	4,878	207,396	1,592	6,470
2008	6,963	229,051	1,759	8,721
2009	7,443	254,329	1,953	9,396
2010	4,118	220,182	1,690	5,808
2011	427	5,450	42	469
2012	419	1,363	10	429
<b>Total Project Cost</b>	<b>27,752</b>	<b>1,424,724</b>	<b>10,938</b>	<b>38,690</b>

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### 3. Measures to be adopted

#### (1) Procurement

All items to be financed by JBIC shall be procured in accordance with *Guidelines for Procurement under JBIC ODA Loans dated October 1999*.

Tendering for the project will be three (3) packages as follows. The schedule of each package is shown in Appendix VI.

- (i) Civil Works for terminals (ICB with PQ)
- (ii) Procurement of cargo handling equipments (ICB with PQ)
- (iii) Construction of buildings (ICB with PQ)

#### (2) Consulting services for the Project

The selection and employment of consultant shall be done in accordance with *Guidelines for Employment of Consultants under JBIC ODA Loans dated October 1999*.

Consulting services shall be divided into three (3) packages as follows on condition that the Detail Design is conducted by JICA and selecting Port Operator is in compliance with Vietnam regulations and laws. The draft TORs and draft Manning schedule of each package are shown in Appendix VII.

- (i) Detailed Design
- (ii) Construction Supervision
- (iii) Selecting Port Operator

#### (3) Budgetary appropriation for the Project

It has been confirmed that any portion of the Project cost not covered by JICA grant and by JBIC loan is to be financed by the budget of GOVN.

#### (4) Implementation of the Project

It has been confirmed that GOVN shall take all necessary measures to implement the Project smoothly and effectively. And during Project implementation, both sides may rearrange the implementation schedule to expedite the Project when it is appropriate to do so.

#### (5) Submission of reports

It has been confirmed that PMU 85/MOT shall submit without delay to JBIC, reports with regard to the progress of procurement procedure, physical and financial status, implementation of the Project, resettlement and other information on the Project in such form and details as JBIC may reasonably request.

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**Main Points Discussed**

**1. Implementation Schedule of the Project**

Vietnamese side expressed its strong wish that D/D should start in early 2004 and the conclusion on L/A should be done in March 2005 because of importance and urgency of the Project.

JBIC stated that the timing of L/A depends upon the progress and the quality of additional study of EIA and the smooth progress would make it possible to conclude L/A earlier.

**2. The approval of the Feasibility Study (F/S) for the Project**

Vietnamese side explained that they had submitted to the Prime Minister the Feasibility Study of the Project under submittal letter No. 4337/GTVT-KHDT dated September 30, 2003 and that it was expected that the F/S should be approved by Prime Minister by February 2004. They added that a copy of approval letter and its English translation should be submitted to JBIC right after the approval.

**3. Overall Scheme for the Project Implementation and the Port Operation**

Vietnamese side explained that Overall Scheme that would be applied to the Project was as follows;

- (1) PMU 85 is in charge of the Project implementation. (Organization chart of PMU 85 is attached hereto as **Appendix VIII**)
- (2) After the completion of the Project, VINAMARINE would be a representative of owner of the Cai Mep-Thi Vai International Port (hereinafter referred as "the Port") and a leaser of the Port infrastructure.
- (3) A Cai Mep-Thi Vai Port Management Body (CTPMB) under VINAMARINE would be established at the Port that would be supervising the Port Operator at the Port. (Expected organization chart of CTPMB is attached hereto as **Appendix IX**.)

Vietnamese side stated, however, that there was no decisive conclusion on a leasing policy that determines the principles on leasing the Port infrastructure, which was the sole authority of GOVN. Therefore, (2) and (3) stated above have not been finalized yet.

JBIC mission requested MOT to inform of the progress in the Port Sector Reform, especially, the progress of drafting any Decree or Decision on the leasing policy in the progress report. MOT agreed to it.

**4. Bidding Packages**

Vietnamese side strongly advised to JBIC mission that dividing the bidding package of the Project into 3 with too large scale of package describing in Annex II 3. (1) may result in few / no applicants who can meet P/Q requirements.

JBIC mission took note of it.

**5. Sample Bidding Documents**

JBIC mission requested the PMU 85 to apply JBIC's Sample Bidding Documents when preparing bidding documents for the Project. PMU 85 agreed to it.

## 6. VINAMARINE's Presence

All parties recognize that VINAMARINE, as an organization which is responsible for sea ports administration under MOT, expected to be a lessor of the Leasing Contract concerning the Port infrastructure and a supervisory body over CTPMB, should participate in the Project in order to facilitate the establishment of the administrative policy at the Port and the negotiation of the Leasing Contract with candidates of the Port operator.

All parties agreed to set up a steering committee where a representative of VINAMARINE participates to exchange its views and information concerning the Project with other relevant organizations.

JBIC mission requested Vietnamese side to submit a member list of the committee when it is decided, and Vietnamese side agreed to it.

## 7. Role of the Consultant

The JBIC mission requested the Vietnamese side to maintain sufficient communication with the consultant in accordance with *Guidelines for the Employment of Consultants under JBIC ODA Loans* dated October 1999 in order to secure smooth implementation of the Project and the transparency of the procurement.

## 8. Independent Audit

The JBIC mission explained that it is necessary for the Vietnamese side to take necessary measures to facilitate ex-post procurement audit to be carried out by independent auditors, who will be designated by JBIC, in order to ensure the fairness and competitiveness of procurement process, in case where JBIC considers such designation of auditors to be necessary. The Vietnamese side agreed to it.

## 9. Public Relations (PR)

The JBIC mission proposed the Vietnamese side to pay attention to public relations concerning this project (for example: making a brochure of the Project, attaching a plate to the site, performing an opening ceremony, etc.) especially, for a symbol of friendship between Vietnam and Japan. The Vietnamese side agreed to it.

## 10. Operation and Impact (Performance) Indicators

(1) The JBIC mission and Vietnamese side agreed to set performance indicators, which consist of operation and impact indicators and their target figures, as per attached Appendix X, to enable consistent evaluation after completion of construction of the Project. The JBIC mission and Vietnamese side agreed that the evaluation of the Project would be conducted by monitoring and analyzing the indicators.

(2) The JBIC mission explained the JBIC's policies on Operation and Impact Indicators to the Vietnamese side and stated that the Operation and Impact Indicators and their target figures might be disclosed by the JBIC. Vietnamese side stated that it had no objection to it.

## 11. Publication of Ex-Ante Project Evaluation Report

The JBIC mission informed the Vietnamese side that JBIC would publish the "Ex-Ante

Project Evaluation Report” soon after the signing of a Loan Agreement for the appraised Project. The report consists of eight major items: 1) project name, 2) necessity and justification of the JBIC loan, 3) objectives of the project, 4) project description, 5) operation and effect indicators (performance indicators), 6) risk due to external factors, 7) evaluation results of past similar projects and lessons learned, and 8) evaluation plan. The Vietnamese side agreed to it.

## 12. Mobile disease protection

JBIC mission stated that mobile disease protection such as IEC (Information, Education and Communications) activities of HIV/AIDs for stakeholder like construction workers has become more and more crucial in large-scale infrastructure project. From the viewpoint of alleviating social negative impact of the project, JBIC strongly suggested to adopt standard “Aids clause” in the tender documents of the project as a responsibility of contractors. Vietnamese side has no objection to this.

## 13. Environmental and Social Issues

- (1) Both sides confirmed the importance of the EIA report as the document where the project owner clearly states the impacts of the project on the environment and mitigation measures for them, which should be accountable for Vietnamese people and Japanese people.
- (2) The PMU85 submitted the EIA report to the JBIC mission and informed that the EIA report was approved by Ministry of Natural Resources and Environment (MONRE) on November 4, 2003. The approval letter from MONRE is as shown in Appendix XI.
- (3) The JBIC mission pointed out that there are still some unclear points that need additional study and examination in order to supplement the current version of the EIA and there need some adjustment and correction. The JBIC mission also stated that the current version of EIA does not include sufficient information. The JBIC mission explained that the points which are listed as Appendix XII should be supplemented and revised. The main points are as follows.
  - 1) There is not sufficient ecological data that should be the basis for the impact evaluation of clearance of mangrove forest of 66 ha. The EIA should include a biological inventory covering mammals, birds, amphibians, reptiles, fish, and plants, based on the sufficient literature/interview/field surveys in/around the project area, and prediction of impact to them and necessary mitigation measures where feasible.
  - 2) Alternative study is not included in the EIA study.
  - 3) Impact of dumping activities and proposed dumping methods needs further examination.
  - 4) There is no impact analysis on adjacent mangrove area.
  - 5) There needs further impact study on fishery activities based on the detailed information of the fishery in Ganh Rai Bay and the port construction site.
  - 6) Present condition (Chapter 3), Impact assessment (Chapter 4)” and Mitigation measures(Chapter 5) should be discribed being linked with each other. Impact

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assessment should be examined quantitatively where possible, based on the present baseline data described in Chapter 3. Regarding Chapter 5, there is still some unclear points such as how to mitigate impact on mangrove ecology within the port area, adjacent mangrove and impact on fishery activities in construction and operation phases.

- (4) Both sides agreed that the additional environmental study will be conducted during 6 month in order to supplement the current version of the EIA and that PMU85 should make "revised EIA" report with full support of EIA experts from Institute of Meteorology and Hydrology (IMH) and submit it to JBIC by June 2004. Both sides agreed the TORs of the additional environmental study, which are as shown in **Appendix XIII**. Both sides agreed that, the additional public consultation should be conducted to gather opinions from stakeholders such as local authorities, people who live within/around project sites and fishermen in Ghan Ray Bay. Both sides also agreed with the schedule to complete "revised EIA" as shown in **Appendix XIV**.
- (5) PMU 85 stated that Mr. Pham Van Xuan, Vice Director of Project Planning Department 2, has responsibility to follow-up of the EIA.
- (6) MOT/PMU85 stated that the additional environmental study and revision of EIA report could be carried out in parallel with Detailed Design or combine it in the Scope of Work of Consulting Services in Detailed Design. The JBIC mission took note of it.
- (7) JBIC mission stated that JBIC will conduct the Environmental Appraisal again based on the revised EIA.

#### EIA disclosure

- (8) Vietnamese side stated that there is no problem to disclose the EIA report(current version and revised version) of the project in both of Vietnam and Japan.
- (9) Both sides agreed to put the EIA report written in Vietnamese and English in Vietnam Development Information Center in Hanoi and Vietnamese version in a room of relevant PCs or the branch offices of PMU85 to which people who has their interests can easily make access.

#### Inventory of Biological Species

- (10) PMU85 explained that, because of lack of the time, the field survey and literature survey regarding mammals, amphibians, reptiles, birds, fish and plants have not been conducted sufficiently.
- (11) JBIC mission stated that PMU85 should conduct the survey and confirm what species actually were/are observed in the project site and that impact analysis on these species and mitigation measures where feasible should be clearly described in the EIA report. Both sides agreed the study for biological species should be conducted within the additional environmental study.

#### Construction soil management

- (12) PMU85 explained that total volume from dredging activities during construction is around 10.6 million m<sup>3</sup>. The volume to be used for construction will be decided during Detailed Design.

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- (13) Both sides confirmed that, according to the EIA, the concentration level of harmful substances in the sedimentation in the project area is within the permissible level generally used internationally.
- (14) PMU85 explained that dumping location will require the permissions from Ba Ria-Vung Tau Provincial People's Committee (BRVT PPC).
- (15) PMU85 explained that, though the final location of the dumping site has not been decided yet, the followings are the candidates.
- Dumping site proposed in the JICA study (5km offshore)
  - Dumping site proposed in the EIA report (15-20km offshore)
- (16) Both sides agreed that the PMU should conduct the impact study on the above-mentioned candidates both in JICA's option and EIA's option in the additional environmental study mentioned above, especially impact on the benthic animals, fishing activities, through sampling survey and water quality simulation.
- (17) PMU85 stated that the final location of dumping site will be decided during Detailed Design stage based on the study.

#### Mangrove

- (18) PMU85 explain that a total of 772,200 trees are expected to be cut down in the area of 66ha which corresponds to 5.5 % of the total mangrove area in Phuoc Hoa commune.
- (19) PMU85 also explained that PMU85 will pay the compensation for Mangrove trees to Ba Ria- Vung Tau Provincial People's Committee in accordance with Decree 3619/1999/QD-UB of July 31 1999 and a part of which will be paid to the project-affected people as compensation, and other part will be used for mangrove reforestation. According to the past experience, the average cost of mangrove reforestation per hectare is \$600 and total area that could be reforested by the compensation will be equal to cut down area.
- (20) PMU85 explained that Ba Ria- Vung Tau Provincial People's Committee will prepare a reforestation program taking consideration of the ecological feature of the reforestation site.
- (21) Both sides agreed that PMU85 will confirm the reforestation program and will describe it as "compensatory reforestation for a off-site mitigation of the project" in the revised EIA.

#### Environmental Management Program

- (22) PMU85 presented the future framework of environmental management in PMU85 and a proposed organizational chart as shown in Appendix XV.
- (23) The PMU85 stated that it will realize mitigation measures described in the EIA and will reflect them to concrete project plan such as the Detailed Design and Tender Documents. Both sides agreed that, with assistance of the consultants, PMU85 will adopt an Environmental Management Program including a Environmental Monitoring

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Program in accordance with mitigation measures described in the EIA and will implement it throughout the construction phase. The outline of the Environmental Management Program is as shown in **Appendix XVI**.

- (24) Both sides agreed that cost of implementation of mitigation measures described in the EIA should be estimated in the Detailed Design and included in the total project cost.
- (25) MOT stated that the implementation of the Environmental Management Program in the operational phase of the project will be taken over by Port Management Body and Port Operator under responsibility of MOT.

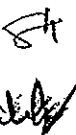
#### **Environmental Checklist**

- (26) Both sides confirmed that environmental impact of the project could be currently summarized as the environmental checklist as shown in **Appendix XVII**. Both sides agreed that it will be revised based on the revised EIA at the time of the future environmental appraisal to be conducted by JBIC.

#### **Land acquisition and Resettlement**

- (27) PMU85 stated that the number of the people within the project site (PAPs) is estimated around 20 households and 60 people. This number was counted during field survey conducted in July 2003.
- (28) PMU85 presented the schedule of the resettlement as shown in **Appendix XVIII**.
- (29) PMU85 presented the main result of the interview survey conducted by IMH in July 2003 as shown in **Appendix XIX**.
- (30) PMU85 and Ba Ria- Vung Tau Provincial People's Committee stated that the PAPs including illegal occupants will be resettled in such a manner that the living standards of them can be maintained in accordance compensation and resettlement plans which will be prepared by Ba Ria- Vung Tau People's Committee.
- (31) PMU85 and Ba Ria- Vung Tau Provincial People's Committee explained that, though the details of the plan is not decided at this moment, PAPs will have options such as resettlement in to 8 candidate resettlement areas as shown in **Appendix XX** or resettlement by themselves buying the land suitable for them by compensation money.
- (32) Regarding illegal occupants, Ba Ria- Vung Tau Provincial People's Committee stated that they can receive compensation for the investment that they have already done for building their houses, huts, ponds, and mangrove forestation, etc with support and allowances that will help them to restore the living standard after resettlement.
- (33) Both sides agreed that the public hearing meetings for PAPs will be held at the earliest timing in order to gather opinions from PAPs and the followings will be explained to them:
- Project plan
  - Facts that they have to be resettled,
  - Resettlement policy that Ba Ria- Vung Tau People's Committee has







- (34) Both sides agreed that the records of the public hearing meetings will be prepared by Ba Ria- Vung Tau Provincial People's Committee, confirmed by PMU85 and PMU85 will submit it to JBIC by the end of December 2003.
- (35) Both sides also agreed that the minutes should be included the all opinions from PAPs including negative opinions.

#### **Consideration for fishing activities**

- (36) According to the EIA, the construction activities of quay system and dredging activities will reduce fishing areas and affect fishing activities. The total surface area prohibited for fishing activities is 43 ha at terminal port and approximately 140 ha at access channel from project site to the buoy "0". When the project enters operation, at Ganh Rai bay, the high density of deep-sea ships entering the quay will cause interference with fishing boats in the region and an increased probability of ship collision between commercial shipping and fishing boats.
- (37) PMU85 explained that fishermen are conducting their activities in the areas in an inappropriate manner without superintendence of Fishery Department and that Government of Vietnam has a program to facilitate the modal shift from coastal fisheries to the offshore fisheries, such as giving financial support to fishermen to have bigger boats capable for the offshore fisheries, so fishery activities in the areas will shift to offshore fishing.
- (38) Ba Ria- Vung Tau PPC explained that it is supporting the fishermen to shift to offshore fishing by providing loan with interest rate of 0.6% per month and 5-10 years in accordance with Decision No.428/ Ba Ria- Vung Tau People's Committee.
- (39) JBIC mission stated that, though it understands explanation made by related parties, PMU85 should compensate or take other mitigation measures for the disturbance of fishing activities and removal of fishing facilities such as set nets. PMU85 stated that it will discuss with Ba Ria- Vung Tau PPC and find out solution to deal this matter reasonably.
- (40) Both sides agreed that detailed study regarding current situation of fishery activities in Ganh Rai Bay/the port construction site and impact analysis will be conducted within the additional environmental study.

#### **14. Key Concept of the Project**

JBIC mission stated that a key concept of the Project would be "Access to New Era" which implies that the Project would be a milestone for Vietnam to increase accessibility to global market and would be a pioneer for Transport sector in Vietnam to reform itself. Vietnamese side agreed to it.

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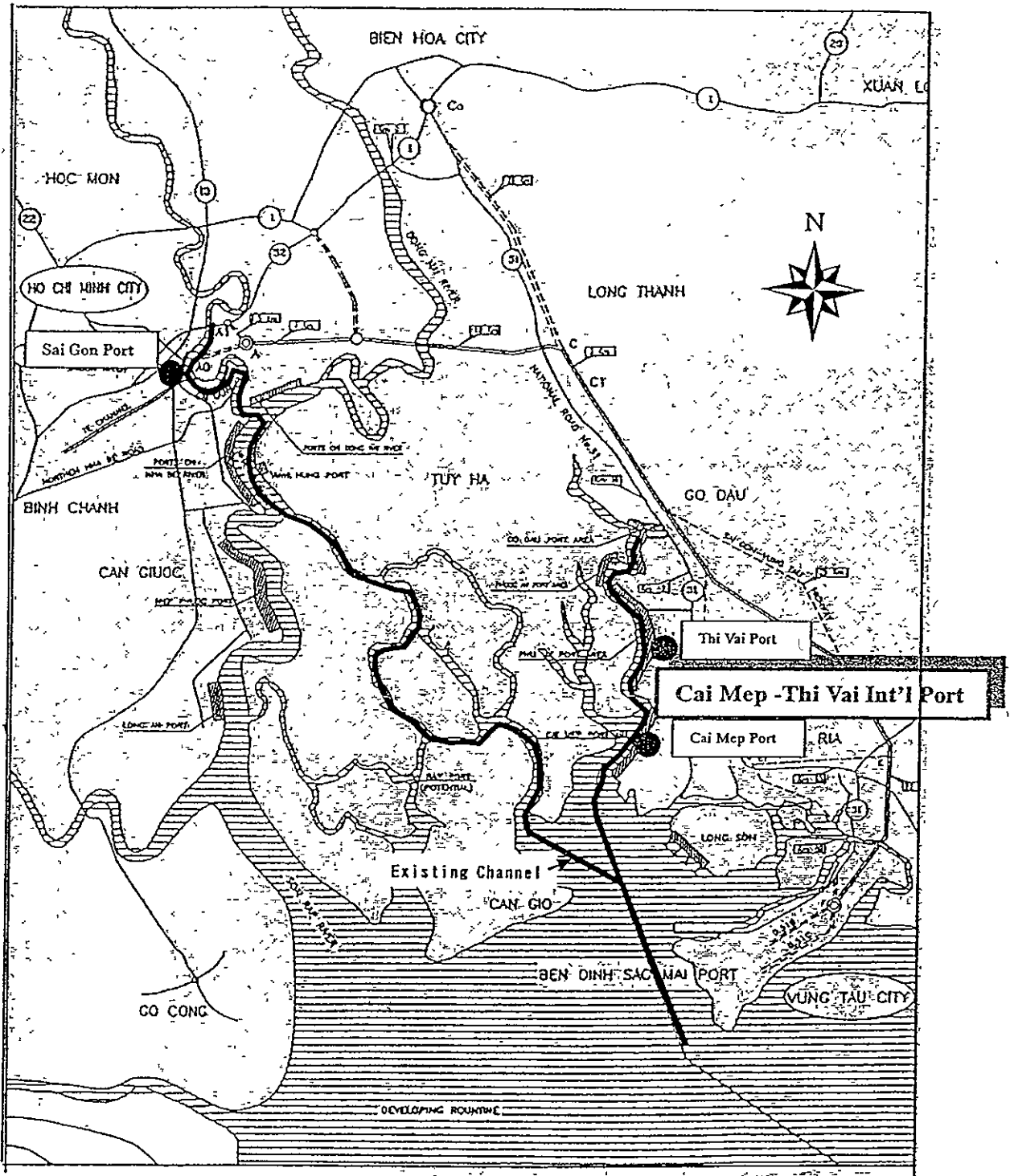
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## Appendix List

Appendix I:	Project Location Map
Appendix II:	Detailed Scope of Works
Appendix III-1:	Detailed Cost Estimate and Annual Fund Requirement
Appendix III-2	Bidding Package
Appendix IV:	Implementation Schedule
Appendix V:	Alternative Implementation Schedule
Appendix VI:	The Schedule of each package
Appendix VII	Draft TORs and Draft Manning Schedules
Appendix VIII:	Organizational Chart of PMU 85
Appendix IX:	Organizational Chart of CTPMB
Appendix X:	Operation/Impact Indicators
Appendix XI:	EIA Approval Letter
Appendix XII:	Comments to the EIA report
Appendix XIII:	TORs for Additional Environmental Study
Appendix XIV:	Schedule to complete EIA revision
Appendix XV:	Organizational Chart of Resettlement and Environmental Department
Appendix XVI:	Outline of Environmental Management Plan
Appendix XVII:	Environmental Checklist
Appendix XVIII:	Schedule of Resettlement
Appendix XIX:	Result of Interview Survey
Appendix XX:	List of Candidates of Resettlement Area

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General Location Map of Cai Mep - Thi Vai International Port

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## Detailed Scope of Works

## 1. Construction of Port Facilities and Channel Dredging

## (1) Lower Cai Mep International Container Terminal

## 1) Wharf

Berth  $300\text{m} \times 14\text{m} \times 2$ 

Basin Dredging Volume 31,200 Cu.m

## 2) Terminal

Reclamation Area 2,077,000 Cu.m

Yard Pavement Area 428,690 Sq.m

## 3) Access Road

Bank Road and Culvert 3,000m

Bridge 1set

## (2) Thi Vai International General Cargo Terminal

## 1) Wharf

Berth  $300\text{m} \times 14\text{m} \times 2$ 

Basin Dredging Volume 23,200 Cu.m

## 2) Terminal

Reclamation Area 1,200,000 Cu.m

Yard Pavement Area 223,250 Sq.m

## 3) Access Road

Bank Road and Culvert 2,000m

## (3) Navigation Channel Dredging

## 1) River section

Dredging Volume 663,000 Cu.m

## 2) Sea Section

Dredging Volume 9,918,000 Cu.m

## 2. Construction of Buildings

## (1) Lower Cai Mep International Container Terminal

Administration Building. 1set

Yard Pavement 428,690 Sq.m

## (2) Thi Vai International General Cargo Terminal

Administration Building. 1set

Yard Pavement 223,250 Sq.m

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### 3. Equipment

#### (1) Lower Cai Mep International Container Terminal

Quayside Container Crane	6	unit
RTGs	15	unit
Yard Tractors and Chasses	30	unit
Forklifts	15	unit
Side Lifters	2	unit
Reachstakers	2	unit

#### (2) Thi Vai International General Cargo Terminal

Multi-purpose Quayside Cranes	2	unit
Quayside Jib Cranes	2	unit
Quayside Jib Cranes	2	unit
Forklifts	50	unit
Yard Tractors and Chasses	10	unit
Side Lifters	2	unit
Reachstakers	2	unit
Mobile Cranes	2	unit
Movable Hoppers and Beltconveyers	5	unit

#### (3) Vessel Traffic Service (VTS) System

Rader System etc	1	set
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### 4. Consulting Services

(1) Detailed Design

(2) Construction Supervision

(3) Selecting Port Operator

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Annual Fund Requirement

Year	Function	2004		2005		2006		2007		2008		2009		2010		2011		2012		2013	
		Total	Local	Total	Local	Total	Local	Total	Local	Total	Local	Total	Local	Total	Local	Total	Local	Total	Local	Total	Local
(1) construction (rent facilities and building)	80,736	24,256	11,574	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-1 prior assessment	10,794	15,600	11,574	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 physical contingency	376,692	13,484	2,426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(2) construction (utility and pavements)	9,852	2,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-1 prior assessment	10,362	6,406	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2-2 physical contingency	1,223	742	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(3) equipment	1,139	1,139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-1 prior assessment	1,139	641	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-2 physical contingency	3,642	697	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(4) consulting services (short-term)	3,100	6,810	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-1 prior assessment	243	243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4-2 physical contingency	1,711	3,277	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(5) consulting services (Ongoing selection)	2,108	3,906	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-1 prior assessment	139	6,608	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5-2 physical contingency	112	123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(6) Consulting services (Fixed Fee)	4,974	3,025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-1 prior assessment	150	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6-2 physical contingency	196	409	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Project Base Cost (incl. Consulting Services)	167,910	32,044	11,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prior Assessment (incl. Consulting Services)	14,024	23,744	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physical Contingency (incl. Consulting Services)	14,643	3,136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	197,491	35,184	11,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IFX (Construction & Equipment)	15,856	15,856	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consulting Services (incl. P.E.&E.C.)	10,380	13,807	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IFX (Utility Services)	1,226	1,844	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IFX (Water)	2,223	217,464	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total of Eligible Purposes	223,101	49,041	21,159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Land Acquisition and Compensation Cost	24,784	6,841	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Administration Cost	11,500	4,390	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAT	1,240	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PAY and Dues	0	1,881	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	236,221	92,232	39,456	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exchange Rate: JPY 1 USD = 154.50	24,784	10,918	24,784	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

IFX (Construction & Equipment)  
 IFX (Utility Services)  
 IFX (Water)  
 Total of Eligible Purposes  
 Land Acquisition and Compensation Cost  
 Administration Cost  
 VAT  
 PAY and Dues  
 Grand Total

0.934443

154.50  
 0.014  
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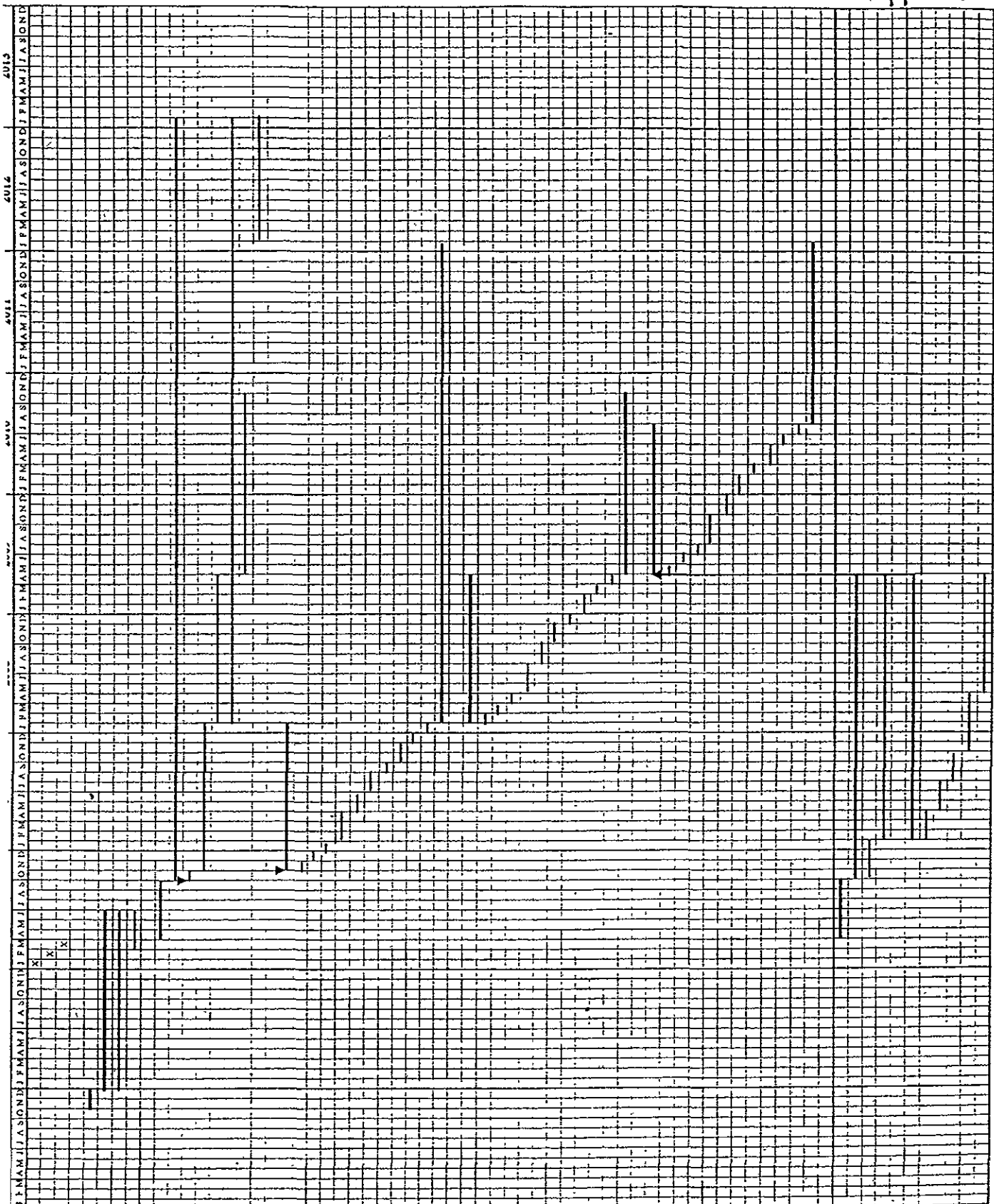
## Detailed Cost Estimation and Bidding Packages

Item	Description	Unit	Quantity	Rate US\$ / unit	Amount Th. US\$	Foreign		Local Th. US\$	
						Th. US\$	Th. Yen		
<b>Category 1. Civil and Building Works</b>						131,768	101,098	12,030,662	30,670
<b>Pac.1 Construction of Port Facilities and Channel Dredging</b>						115,000	90,736	10,797,584	24,264
<b>(1) Cai Mep International Container Terminal</b>						50,885	39,893	4,747,267	10,992
<b>1) Wharf</b>						22,534	18,026	2,145,094	4,508
a. Pier	Steel pile	m	600	34,438	20,663	16,530	1,967,070	4,133	
b. Trestle	Steel pile	m	360	4,942	1,779	1,423	169,337	356	
c. Basin Dredging	Basin	m <sup>3</sup>	31,200	3	92	73	8,687	19	
<b>2) Terminal</b>						22,554	17,810	2,119,390	4,744
a. Reclamation and Soil Improvement		m <sup>3</sup>	2,077,000	10	20,646	16,516	1,965,404	4,130	
b. Revetment	Rubble mound	m	1,300	315	410	246	29,274	164	
c. Utilities	Water, Electric, Drain. & Sew. etc.	L.S			1,498	1,048	124,712	450	
<b>3) Access Road</b>						5,797	4,057	482,783	1,740
a. Bank Road and Culvert	Incl. Soil improvement	m	3,000	1,432	4,297	3,007	357,833	1,290	
b. Bridge	L=100m, W=30m	set	1	1,500,000	1,500	1,050	124,950	450	
<b>(2) Thi Vai International General Cargo Terminal</b>						38,440	30,303	3,606,057	8,137
<b>1) Wharf</b>						24,719	19,774	2,353,106	4,945
a. Pier	Steel pile	m	600	41,062	24,637	19,709	2,345,371	4,928	
b. Basin Dredging	Basin	m <sup>3</sup>	23,200	4	82	65	7,735	17	
<b>2) Terminal</b>						10,898	8,553	1,017,807	2,345
a. Reclamation and Soil Improvement		m <sup>3</sup>	1,200,000	8	9,536	7,628	907,732	1,908	
b. Revetment	Rubble mound	m	340	323	271	162	19,278	109	
c. Utilities	Water, Electric, Drain. & Sew. etc.	L.S			1,091	763	90,797	328	
<b>3) Access Road</b>						2,823	1,976	235,144	847
a. Bank Road and Culvert	Incl. Soil improvement	m	2,000	1,412	2,823	1,976	235,144	847	
<b>(3) Navigation Channel Dredging</b>						25,675	20,540	2,444,260	5,135
1) River section	B=310m, Depth=14m	m <sup>3</sup>	663,000	3	2,255	1,804	214,676	451	
2) Sea Section	B=310m, Depth=14m	m <sup>3</sup>	9,918,000	2	23,420	18,736	2,229,584	4,684	
<b>Pac.2 Construction of Buildings and Pavement</b>						16,768	10,362	1,233,078	6,406
<b>(1) Cai Mep International Container Terminal</b>						9,874	6,126	728,594	3,748
Adm. and Amenity Block		m <sup>2</sup>	9,400	120	1,128	789	93,891	339	
CFS		m <sup>2</sup>	6,000	100	600	420	49,980	180	
Maintenance Shop		m <sup>2</sup>	1,750	93	163	97	11,543	66	
Main/Sub Gates		m <sup>2</sup>	2,550	100	255	178	21,182	77	
Power/Fuel Stations		m <sup>2</sup>	600	93	56	39	4,641	17	
Yard Pavement		m <sup>2</sup>	428,690	18	7,672	4,603	547,757	3,069	
<b>(2) Thi Vai International General Cargo Terminal</b>						6,894	4,236	504,084	2,658
Adm. and Amenity Block		m <sup>2</sup>	6,000	120	720	504	59,976	216	
Warehouse and Transit Shed		m <sup>2</sup>	16,000	93	1,494	896	106,624	598	
Maintenance Shop		m <sup>2</sup>	800	94	75	45	5,355	30	
Main/Sub Gates		m <sup>2</sup>	2,550	38	225	157	18,683	68	
Power/Fuel Stations		m <sup>2</sup>	700	93	65	45	5,355	20	
Yard Pavement		m <sup>2</sup>	223,250	19	4,315	2,589	308,091	1,726	
<b>Category 2. Procurement of Equipment</b>						68,190	66,812	7,950,628	1,378
<b>Pac.3 Equipment Procurement</b>						68,190	66,812	7,950,628	1,378
<b>(1) Cai Mep International Container Terminal</b>						48,030	47,068	5,601,092	962
Quayside Container Crane		unit	6	4,300,000	25,800	25,284	3,008,796	516	
RTGs		unit	15	1,125,000	16,875	16,537	1,967,903	338	
Yard Tractors and Chasses		unit	30	90,000	2,700	2,646	314,874	54	
Forklifts	3-5 ton	unit	15	27,000	405	396	47,124	9	
Side Lifters	30-5 ton	unit	2	225,000	450	441	52,479	9	
Reachstackers	30-5 ton	unit	2	300,000	600	588	69,972	12	
Computer System		set	1	1,200,000	1,200	1,176	139,944	24	
<b>(2) Thi Vai International General Cargo Terminal</b>						19,351	18,962	2,256,478	389
Multi-purpose Quayside Cranes	40 ton	unit	2	3,000,000	6,000	5,880	699,720	120	
Quayside Jib Cranes	20 ton	unit	2	2,250,000	4,500	4,410	524,790	90	
Quayside Jib Cranes	10 ton	unit	2	1,500,000	3,000	2,940	349,860	60	
Forklifts	2-10 ton	unit	50	27,000	1,350	1,323	157,437	27	
Yard Tractors and Chasses		unit	10	117,000	1,170	1,146	136,374	24	
Side Lifters	30-5 ton	unit	2	225,000	450	441	52,479	9	
Reachstackers	35-40 ton	unit	2	300,000	600	588	69,972	12	
Mobile Cranes	40-100 ton	unit	2	877,500	1,755	1,719	204,561	36	
Movable Hoppers and Belconveyers		unit	5	105,200	526	515	61,285	11	
<b>(3) Vessel Traffic Service (VTS) System</b>						809	782	93,058	27
Radar System		L.S			652	638	75,922	14	
VHF Communication System		L.S			37	36	4,284	1	
Installation and Training		L.S			120	108	12,852	12	
<b>Total Construction Cost (Cat.1+ Cat.2)</b>						199,960	167,910	19,981,290	32,050
<b>Consulting Services</b>						22,587	9,351	1,112,806	13,235
Pac.1 Detailed Design Study	Surveys, Detailed Design, Environmental Study, and Management Study				8,003	4,078	485,249	3,925	
Pac.2 Construction Supervision	Construction Supervision and Environmental Monitoring				9,976	3,166	376,728	6,810	
Pac.3 Selecting Port Operator	Assistance for Selection of Port Operator				4,608	2,108	250,829	2,500	
<b>Price Escalation</b>						15,473	15,473	1,841,229	0
<b>Physical Contingency</b>						18,932	15,138	1,801,371	3,794
<b>IDC</b>						17,290	17,290	2,057,492	0
<b>Total Direct Project Cost</b>						274,241	225,161	26,794,188	49,080
<b>VAT</b>						13,367	0	0	13,367
<b>TAX and Duties</b>						10,394	0	0	10,394
<b>Land Acquisition and Compensation Cost</b>						15,000	0	0	15,000
<b>Administration Cost</b>						15,650	11,260	1,339,940	4,390
<b>Total Project Cost</b>						328,652	236,421	28,134,128	92,230

Exchange rate: US\$1=Yen 119

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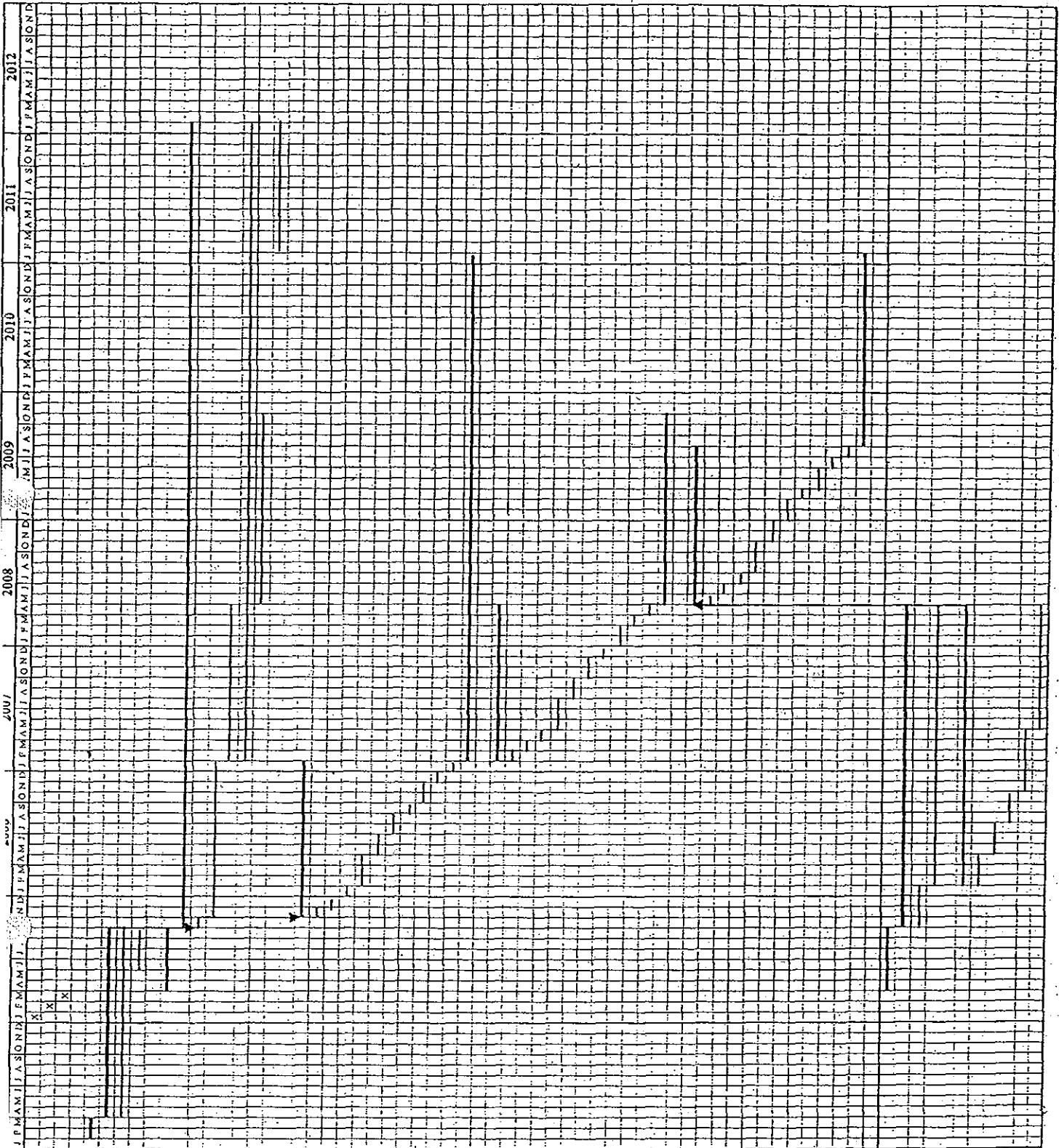
Task Name

- for Notification
- change of Note
- an Agreement
- Employment of Consultant for Detail Design
- Detail Design
- preparation of Draft Tender Document
- Employment of Consultant for Supervision
- Finalizing Services for Supervision
- Review of Tender Document
- Tender Assistance for Construction Port Facilities and Dredging
- Tender Assistance for Equipment
- Supervision on Construction Works
- Supervision on Installation of Equipment
- Maintenance Inspection
- Tender for Construction of Port Facilities and Dredging (with P/Q)
- Finalization and Closing of P/Q
- Finalization of P/Q
- Finalization of P/Q result by JIBC
- Finalization of Tender Document
- Tender Period
- Tender Evaluation
- Finalization of Tender Evaluation by JIBC
- Contract Negotiation
- Finalization of Contract by JIBC
- Opening of L/C and L/COM
- Construction of Port Facilities and Dredging
- Tender for Equipment (with P/Q)
- Finalization and Closing of P/Q
- Finalization of P/Q
- Finalization of P/Q result by JIBC
- Finalization of Tender Document
- Tender Period
- Tender Evaluation
- Finalization of Tender Evaluation by JIBC
- Contract Negotiation
- Finalization of Contract by JIBC
- Opening of L/C and L/COM
- Installation of Equipment
- Tender for Construction of Building and Pavement (with P/Q)
- Finalization and Closing of P/Q
- Finalization of P/Q
- Finalization of P/Q result by JIBC
- Finalization of Tender Document
- Tender Period
- Tender Evaluation
- Finalization of Tender Evaluation by JIBC
- Contract Negotiation
- Finalization of Contract by JIBC
- Opening of L/C and L/COM
- Construction of Building
- Employment of Consultant for Selection of Operator
- Finalizing Services for Selection of Operator
- Finalization of Tender Document
- Tender Assistance
- Tender for Operator by PMB
- Finalization and Closing of P/Q
- Finalization of P/Q
- Tender Period
- Tender Evaluation
- Finalization of Tender Evaluation

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AA





Task Name	2007	2008	2009	2010	2011	2012
for Notification	X					
exchange of Note	X					
and Agreement	X					
Employment of Consultant for Detail Design						
Consulting Services for Detail Design						
Detail Design						
Preparation of Draft Tender Document						
Employment of Consultant for Supervision						
Consulting Services for Supervision						
Review of Tender Document						
Tender Assistance for Construction Port Facilities and Dredging						
Tender Assistance for Equipment						
Supervision on Construction Works						
Supervision on Installation of Equipment						
Maintenance Inspection						
Tender for Construction of Port Facilities and Dredging (with P/Q)						
Invitation and Closing of P/Q						
Evaluation of P/Q						
Concurrence of P/Q result by JBIC						
BIC Concurrence of Tender Document						
ender Period						
ender Evaluation						
Concurrence of Tender Evaluation by JBIC						
Contract Negotiation						
Concurrence of Contract by JBIC						
Signing of L/C and L/COM						
Instruction of Port Facilities and Dredging						
Tender for Equipment (with P/Q)						
Invitation and Closing of P/Q						
Evaluation of P/Q						
Concurrence of P/Q result by JBIC						
BIC Concurrence of Tender Document						
ender Period						
ender Evaluation						
Concurrence of Tender Evaluation by JBIC						
Contract Negotiation						
Concurrence of Contract by JBIC						
Signing of L/C and L/COM						
Installation of Equipment						
Tender for Construction of Building and Pavement (with P/Q)						
Invitation and Closing of P/Q						
Evaluation of P/Q						
Concurrence of P/Q result by JBIC						
BIC Concurrence of Tender Document						
ender Period						
ender Evaluation						
Concurrence of Tender Evaluation by JBIC						
Contract Negotiation						
Concurrence of Contract by JBIC						
Signing of L/C and L/COM						
Construction of Building						
Employment of Consultant for Selection of Operator						
Consulting Services for Selection of Operator						
Preparation of Tender Document						
Tender Assistance						
Tender for Operator by PMB						
Invitation and Closing of P/Q						
Evaluation of P/Q						
ender Period						
ender Evaluation						
Contract Negotiation						

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## Detailed Procurement Lot and Key Dates

## LIST FOR BIDDING PACKAGES(PROCUREMENT LOTS)

Country Socialist Republic of Viet Nam

Loan Agreement No. ( )

Name of the Project: CAI MEP--THI VAI INTERNATIONAL PORT DEVELOPMENT PROJECT

Package (Lot) Name/No.	Estimated Cost			Procurement Procedure	Estimated Schedule for requesting the Fund's concurrence (YY/MM/DD)			Contract		
	Local Cost (mil.VND) (*)	Local Cost (mil.JPY) (*)	Foreign Cost (mil.JPY) (*)		P/Q Criteria	P/Q Evaluation	Tender Criteria		Tender Evaluation	
Construction (Port Facilities and Dredging)	376,092	2,887	10,798	ICB(**)	2006/11/1	2007/3/1	-	2007/8/1	-	2007/12/1
Construction (Building and Pavement)	99,293	762	1,233	ICB	2009/5/1	2009/9/1	-	2010/2/1	-	2010/6/1
Equipment	21,359	164	7,951	ICB	2008/2/1	2008/6/1	-	2008/11/1	-	2009/3/1

(\*)Exchange Rate: 1JPY/USD = 119

1VND/USD = 15,500

(\*\*)International Competitive Bidding

(\*\*\*)In principle, for a package(lot) whose amount is not less than 1 billion Japanese Yen, prequalification(P/Q) is required.

**TERMS OF REFERENCE**  
**FOR**  
**CONSULTANT SERVICES (DETAILED DESIGN STUDY)**  
**FOR**  
**CAI MEP – THI VAI INTERNATIONAL PORT DEVELOPMENT PROJECT**  
**(Draft)**

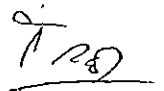
1. Background

The Government's Policy "Doi Moi" has strongly encouraged the development of Vietnam's economy. As a result, sea-born trade through the ports in Ho Chi Minh City (HCMC) area has experienced a significant increase both in quantities and kinds of commodities. It was estimated that by year 2010, the amount of cargo throughputs in Southern Focal Economic Area (SFEA) will be 50 million tons per year, while the maximum throughput capacity of the existing ports in HCMC area in 2010 will be around 33 million tons per year, therefore, the remaining amount of almost 17 million tons needs to be shipped in and out through other ports to be newly constructed nearby such as Thi Vai and Vung Tau areas.

Almost the ports such as Sai Gon, Nha Be ports were constructed long ago in curved river sections, therefore, water depth of shipping channel and its turning radius are limited to cater large sized vessel. More critical, the port back-up area inshore is so limited, handle equipment are backward, and not meet the growing cargo throughput demands, especially demand of container traffic. Though in the past years, some ports were constructed and are now in full operation such as Ben Nghe, Tan Thuan, VICT, Ba Ria Serece, Go Dau, etc. However, their capacities still do not meet the demand forecast. Therefore, it is an urgent requirement to develop sufficient ports in this area.

In addition to the port development mentioned above, equally important is to formulate an appropriate port operation strategy, which is fully controlled by the government body. To this end, improvement of the institutional framework of port operation and management should be thoroughly studied. On this bases, the most functional and economical operation of the new port complex in the Thi Vai – Vung Tau area should be established.

From above situation, Ministry of Transport (MOT) of the Government of the



Socialist Republic of Vietnam (GOVN) requested the Government of Japan (GOJ) to make a development study on the ports in the South of Vietnam to be performed by Japan International Cooperation Agency (JICA) in 1999. JICA Study Team commenced the master plan study in March 2001 and selected the Lower Cai Mep International Container Terminal and Thi Vai International General Cargo Terminal as a priority project (hereinafter referred to "Cai Mep – Thi Vai International Port Development Project") based on the results of the master plan study. The feasibility study on the Cai Mep – Thi Vai International Port Project has been conducted and the final report was submitted to MOT in December 2002.

Responding to the recommendation of JICA Study, the GOVN requested GOJ to provide ODA loan for the Cai Mep – Thi Vai International Port Development Project in 2002.

## 2. Project Profile

### 2.1 Name of the Project

This project will be hereinafter referred as "Cai Mep – Thi Vai International Port Development Project" or simply "the Project".

### 2.2 Objective of the Project

- (1) To increase the capacity of ports with regard not only to cargo throughput but also to acceptable ship size in South Vietnam in order to absorb sharply increasing demands.
- (2) To support economic growth not only of South Vietnam but also of whole country.
- (3) To mitigate urban traffic congestion in the center of HCMC.
- (4) To contribute shifting country's traditional export structure of raw products to new export structure of industrial products.

### 2.3 Location of the Project

As shown in Figure 1,2 and 3, the project is located in Lower Cai Mep and Thi Vai areas on left bank of the Thi Vai River and Ganh Rai Bay in Ba Ria - Vung Tau province.

### 2.4 Scope of the Project



The Project consists of the following components.

(1) Construction of Port Facilities

1) Lower Cai Mep International Container Terminal

- a. Construction of Quay Structure (2 berths for 50,000DWT vessels)
- b. Construction of Terminal Yard (39 ha)
- c. Construction of Related Port Buildings
- d. Construction of Utilities
- e. Construction of Access Road
- f. Any other facilities coming out of overall planning

2) Thi Vai International General Cargo Terminal

- a. Construction of Quay Structure (2 berths for 50,000DWT vessels)
- b. Construction of Terminal Yard (27 ha)
- c. Construction of Related Port Buildings
- d. Construction of Utilities
- e. Construction of Access Road
- f. Any other facilities coming out of overall planning

(2) Construction of Channel

- 1) Dredging of Navigation Channel
- 2) Installation of Navigation Buoys

(3) Procurement Equipment

- 1) Procurement of Cargo Handling Equipment
- 2) Procurement of VTS system

(4) Consulting Services for:

- 1) Detailed Design Study
- 2) Selection of Port Operator
- 3) Construction Supervision

## 2.5 Schedule of the Project

Implementation schedule of the Project is shown in Figure 4.

## 3. Scope of the Detailed Design Study

This Detailed Design Study (hereinafter referred as "the Study") are composed of three stages: 1<sup>st</sup> stage of the Study for review of the feasibility study and related studies, execution of additional field investigations and preparation of definitive plan, 2<sup>nd</sup> stage of the Study for more detailed studies such as detailed design and preparation of tender documents, and 3<sup>rd</sup> stage of the Study for management

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capability building by formulating strategies and development modernized management systems best suited for the smooth and efficient management of the Cai Mep – Thi Vai International Port.

The outline of the scope of the Study is as follow:

- (1) First Stage of the Study
  - 1) Review of the previous studies related for the Project
  - 2) Additional field investigation and analysis for planning and design of the Project
  - 3) Numerical simulations for channel and dredging plan of the Project
  - 4) Preparation of the Definitive Plan for the Project
  - 5) Assistance to prepare of Environment Management Plan(EMP)
- (2) Second Stage of the Study
  - 1) Detailed Design
  - 2) Construction Planning and Cost Estimation
  - 3) Preparation of Tender Documents and Tender Assistance
  - 4) Technology Transfer
- (3) Third Stage of the Study
  - 1) Management Capability Building
  - 2) Preparation of Leasing Policy for Terminal Operation and Maintenance

The detailed scope of the Study is the followings:

### 3.1 First Stage of the Study

#### 3.1.1 Review of the previous related studies

Review the related studies conducted in the past including the JICA's master plan and feasibility study of the Project ("The Port Development Study in the South of The Socialist Republic of Vietnam"), the sedimentation study report of Belgian Technical Cooperation ("Site Survey and Hydraulic Sedimentological Impact Study for the Cai Mep Multipurpose Terminal in the Thi Vai River, Vung Tau"), and EIA report prepared by GOVN, in term of the necessity of the Cai Mep – Thi Vai International Port Development Project, scope, location, layout, specifications, cost estimates, schedule, organizational structure for the implementation, operation and maintenance of the Project.

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When the above aspects are reviewed, the particular attention should be paid for the following points:


- (1) Scope, Location, Layout, etc.
  - 1) Quay construction component: Object vessels, Alignment of face line, Type and arrangement of foundation piles, needs and length of trestle, Type of revetment
  - 2) Terminal Yard component: Subsoil Improvement method, Construction schedule, Type of Pavement, Drainage system
  - 3) Related buildings component: Required area of each buildings, Arrangement of buildings, Type of structure
  - 4) Access Road component: Subsoil improvement method, Drainage system, Span and elevation of Bridge
  - 5) Related Utilities to all the above facilities including drainage, water supply, electricity, communication system in port area.
  - 6) Cargo Handling Equipment component: Type, capacity, dimensions and number of equipment, Procurement schedule, Fund source
  - 7) Navigation Channel component: Alignment of channel, Depth and width of channel, Phasing plan of dredging, Consideration of over dredging, Location of Dumping site, Instillation of Navigation aids
  - 8) Consistency with related development plan of port facilities in the region
  - 9) Vessel Traffic service. Introduction related system to the project.
- (2) Effect of the Project
  - 1) Beneficiary of the Project
  - 2) Environmental effect to the natural and social aspects
  - 3) Economic and financial evaluation of the Project
- (3) Operation and Maintenance System
  - 1) Organization of the Project construction management body
  - 2) Organization of new port management body
  - 3) Consideration of Private Sector Participation

### 3.1.2 Additional Field Investigations and Analyses for Planning and Design of the Project

Additional soil investigation, hydraulic survey, topographic and hydrographic surveys and environmental survey will be conducted for the preparation of the

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Definitive Plan and Detailed Design, mainly regarding the land reclamation, subsoil improvement and stability analyses of structures and embedded utilities, and baseline data for environmental management/monitoring.

### 3.1.3 Numerical Simulations for Channel and Dredging Plan of the Project

Field surveys, numerical simulations and analyses will be carried out on sedimentation of navigation channel, ship maneuverability, dispersion of dredged and dumped soils, and optimal planning of navigation channel alignment and sections.

### 3.1.4 Preparation of Definitive Plan for the Project

Based on the above review and additional information, the Definitive Plan for the Cai Mep – Thi Vai International Port Development Project will be prepared as follows;

#### (1) Design Works

- 1) Confirmation of design criteria and standards
- 2) Detailed alignment, elevation and dimensions of quay structures
- 3) Detailed formation level, dimensions and layout of terminal yard
- 4) Detailed capacities, dimensions and layout of related facilities and utilities
- 5) Detailed alignment and dimensions of access road
- 6) Detailed capacity, type, number of cargo handling equipment
- 7) Detailed alignment and section of navigation channel and dumping site of dredged material
- 8) Detailed alignment and specifications of navigation aids

#### (2) Implementation Schedule of the Project

- 1) Final adjustment of scope of project components to be implemented in each year

#### (3) Preparation of the Definitive Plan Report

The Definitive Plan for the Project should be prepared by reviewing and updating the JICA Study Report and contain at least:

- 1) Background,
- 2) Current situation of ports in the region including the situation in hinterland,
- 3) Volume and type of cargoes to be handled at the Project ports,
- 4) Existing natural conditions in detail based on the field survey,
- 5) Detailed scope of the Cai Mep and Thi Vai International Port Project,

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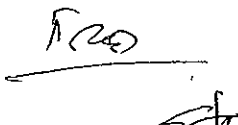
- 6) Explanation of the necessity of each component of the scope with relevant data and calculation,
- 7) Consistency with the higher and related development plan,
- 8) Implementation schedule,
- 9) Construction method,
- 10) Organization structures for implementation, operation and maintenance,
- 11) Effect of the Project,
- 12) Review of financial and economic evaluation,
- 13) Review of environmental impacts
- 14) Vessel Traffic Service

### 3.1.5 Assistance to prepare of Environment Management Plan(EMP)

EMP in construction and operation periods will be prepared by Project Executing Agency. The consultants shall assist the preparation of the EMP with careful review of the EIA report, available environmental baseline data, and other related documents. This work will be started in the 1st stage of the study and will be continued through the 2nd stage of the study. The result of the study should be incorporated to Detailed Design and tender documents of the project.

Following contents shall be included in the EMP.

- a. Summary of the current condition of the environment (baseline data)
- b. Summary of all adverse environmental impact of the project in construction phase and in the operational phase
- c. Environmental Mitigation measures for each impact described in b)
- d. Environmental Monitoring programs in construction phase and in the operational phase include monitoring items, target parameters, frequency and duration, equipment procurement, manpower, and funding, etc.
- e. Environmental awareness promotion, education and training programs
- f. Description of the Responsibilities and Authorities for Implementation of Mitigation Measures and Monitoring Requirements
- g. Work Plan including staffing chart, proposed schedules of participation by various members of the project team, and activities and inputs of various government agencies
- h. Cost Estimates
- i. Mechanisms for feedback and adjustment
- j. Consideration for preparing the Detailed Design and Tender Documents



## 3.2 Second Stage of the Study

### 3.2.1 Detailed Design

Detailed Design for the proposed works and facilities of the Project will be carried out including preparation of detailed drawings, design calculation, detailed cost estimates, preparation of detailed construction plans which include construction methods and detailed implementation schedule which is consistent with the actual progress.

### 3.2.2 Construction Planning and Estimate

Appropriate contract packaging will be considered first in conformity with the Guidelines for Procurement under JBIC ODA Loans. Following packaging is considered tentatively.

#### Category 1: Civil and Building Works

Package 1: Construction of Port Facilities and Channel Dredging

Package 2: Construction of Buildings

#### Category 2: Procurement of Equipment

Package 3: Equipment Procurement

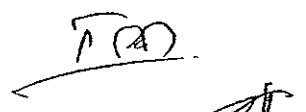
Then, construction methods and time schedule will be discussed and formulated. Finally the cost of the Project will be estimated by Packages.

### 3.2.3 Preparation of Tender Documents

Tender documents including pre-qualification documents, technical specifications, bill of quantities and tender drawings will be prepared by Package based on the detailed design. These documents should be prepared in conformity with the Guidelines for Procurement under JBIC ODA Loans based on FIDIC Conditions of Contracts.

### 3.2.4 Technology Transfer

Technology transfer to Vietnamese counterpart officers on designing dedicated international container terminal, project planning, project implementation, and



environmental management will be done through the on-the-job training in the Ho Chi Minh City and Ba Ria Vung Tau province. In addition, the overseas training will be also carried out.

### 3.3 Third Stage of the Study

#### 3.3.1 Management Capability Building

##### (1) Strategic Planning and Management

The external environment affecting the management of Cai Mep International Container Terminal and Thi Vai International General Cargo Terminal (hereinafter referred to "the Terminal") shall be assessed broadly. These include government policies, laws and regulations, taxation, shipping companies' and shipper's strategies, competitiveness development, trade development trends and their future prospects, technological developments in marine transport system, marketing strategy, and other conditions affecting the Terminal. The Consultants shall also undertake the following:

- 1) Assist Cai Mep-Thi Vai Port Management Body (CTPMB)<sup>1</sup> in defining their principal mission, goals, and objectives.
- 2) Analyze the situation likely to be encountered by CTPMB such as external risks and opportunities as well as CTPMB's internal strengths and weaknesses in view of achieving the mission, goal and objectives for the operation.
- 3) Identify critical issues in the implementation of the terminal management.
- 4) Define possible strategic alternative measures to address these issues.

##### (2) Management Information System (MIS)

Establish MIS (general accounting and management accounting system and other related systems as required) for CTPMB including a study to tie up with the MOT/PMU85's existing accounting system and possibly with a terminal operator's information system.

##### (3) Terminal Operations Management

Develop basic policies and guidelines for the operation of the Terminal which shall

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<sup>1</sup> In order to administrate and manage the Cai Mep – Thi Vai International Port, a new port management body is supposed to be established before the new port commence operation.

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include supervision/control of marine and container/general cargo terminal operations (pilotage, berth allocation, stowage, dredging/surveying, etc.), cargo handling operations, and prevention of possible disaster and pollution pursuant to the policies, goals and objectives stated in 3.3.1(1).

(4) Maintenance Management of Terminal

1) Formulate basic policies and Guidelines for the maintenance of the container terminal facilities and equipment considering the policies, goals and objectives stated in 3.3.1(1).

2) Develop the Long-term Maintenance Plan and Replacement Plan

(5) Organization and Personnel Management

Assist the CTPMB in establishing organizational structure, administration and personnel management best suited for the terminal, including manpower/allocation, motivation, qualification of staff, training needs among others considering the requirement of 3.3.1(1).

The Consultant shall prepare the implementation manual in cooperation with CTPMB that provide policies, guidelines and procedures which are necessary for smooth and successful management of the Terminal. The contents of the Implementation Manual may include, but not limited to the following:

- a. Statement of the Terminal's mission, visions, goals and strategies
- b. CTPMB's management policy
- c. Institutional policy
- d. Personnel policy
- e. Marketing strategy
- f. Auditing procedure
- g. Procedures and workflow for
  - MIS (general accounting system and management accounting system, etc.)-
  - Marine and terminal operations management
  - Maintenance management for terminal facilities and equipment
  - Environmental management- JBIC's procedure (disbursement request, reporting requirements, etc.)
  - Demarkation and coordination with Terminal Operator or other related agencies

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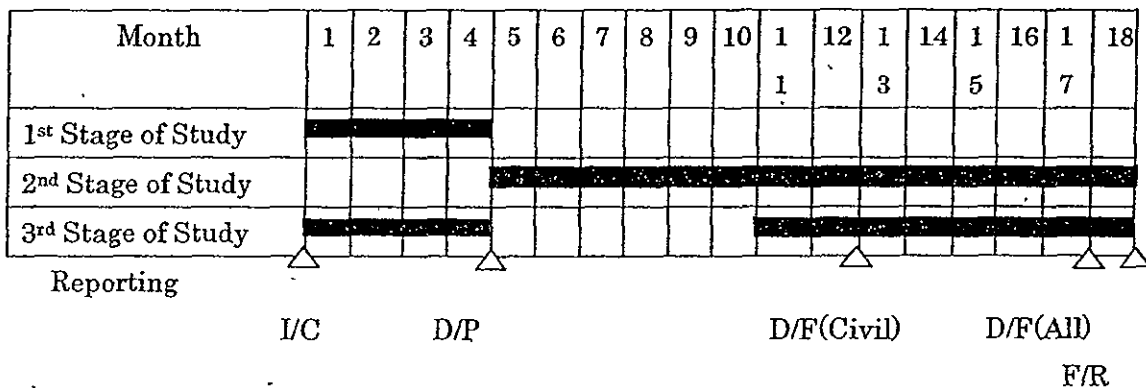
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### 3.3.2 Preparation of Leasing Policy for Terminal Operation and Maintenance

- (1) Prepare the legal and regulatory issue.
- (2) Study the cost/profit sharing scheme between CTPMB and terminal operator(s) which contributes to the preparation of the most adequate contract terms and conditions in consideration of the CTPMB's mission, goals and objectives and financial aspects.
- (3) Assist CTPMB in preparation of bidding timetable.

### 4. Schedule of the Study


The Study for 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> stages will be accomplished within 18 months.




### 5. Reporting

The following five (5) reports in English shall be prepared and submit to MOT/PMU85.

- (1) Inception Report  
20 copies within three (3) weeks after commencement of the Study
- (2) Monthly Progress Report  
10 copies within 12 days in next month
- (3) Definitive Plan Report  
20 copies within four (4) months after commencement of the Study
- (4) Environmental Management Plan Report
- (5) Draft Final Report including draft tender documents, prequalification documents and issues on management capacity building.  
20 copies within 17 months after commencement of the Study
- (6) Final Report and Revised Tender Documents  
30 copies and one(1) electronic information within one (1) month after the receipt of written comments on the Draft Final Report


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## 6. Required Experties

### 6.1 Expatriate

The expatriate experts for the following Study will be, but not limited to, necessary. The required assignment man/month of Expatriate are estimated at 186 m/m.

Service in Charge
(1 <sup>st</sup> and 2 <sup>nd</sup> Stage)
(1) Team Leader
(2) Deputy T.L./Port Facility Design (I)
(3) Port Facility Design (II)
(4) Physical Port Planning
(5) Navigation
(6) Demand Forecast/ Financial Analysis
(7) Port Civil Design
(8) Bridge/ Road Design
(9) Channel Dredging/ Siltation Measure Planning
(10) Architect (I) (Design)
(11) Architect (II) (Structure)
(12) Architect (III) (Utility)
(13) Facility Design (I) (Electricity)
(14) Facility Design (II) (Utility)
(15) Facility Design (III) (Operation System)
(16) Cargo Handling Equipment Design
(17) Construction Method Planning
(18) Cost Estimation (I) (Civil Work)
(19) Cost Estimation (II) (Building Work)
(20) Tender Document Preparation
(21) Geographic Investigation / Analysis
(22) Topographic/ Hydrographic Survey / Analysis
(23) Hydraulic Survey / Analysis
(24) Environmental Survey / Analysis
(3 <sup>rd</sup> Stage)
(25) Management / Institutional Planning

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(26) Terminal Operation
(27) Terminal Finance & Business
(28) Terminal Information System
(Common)
(29) Team Coordinate

## 6.2 Local Experts

The required local experts for the following Study will be, but not limited to, the following personnel and the total assignment man/months is estimated to be around 247 m/m.

(1) Co-Deputy Team Leader
(2) Port Engineer
(3) Structural Engineers
(4) Civil Engineers
(5) Road Engineers
(6) Dredging/Hydraulic Engineers
(7) Geotechnical Engineers
(8) Port Operation/Management Specialist
(9) Cargo Handling Equipment Specialist
(11) Architects
(12) Electric Engineers
(13) Mechanical Engineers
(14) Cost Estimator
(15) Economic/Financial Expert
(16) Environment Specialist
(17) Document Specialist

In addition to the above Engineers/Specialists, the Consultant will employ local supporting staff such as CAD operators, inspectors, translators, secretaries, and others.

## 7.Undertakings of the Government of Vietnam

- (1) The GOV shall accord privileges, exemptions and other benefits to the Japanese Study Team (hereinafter referred to as "the Team") in accordance with the Agreement on technical cooperation between the Government of Japan and the GOV

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signed on October 20, 1998.

- (2) In order to facilitate smooth conduct of the Study, the GOV shall take the following necessary measures:
- 1) to secure the safety of the Team;
  - 2) to permit the members of the Team to enter, leave and stay in Vietnam for the duration of their assignment therein and exempt them from alien registration requirements and consular fees;
  - 3) to exempt the members of the Team from taxes, duties and any other charges on equipment, machinery and other material brought into Vietnam for the conduct of the Study;
  - 4) to exempt the members of the Team from income taxes and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Team for their services in connection with the implementation of the Study;
  - 5) to provide necessary facilities to the Team for remittance as well as utilization of the funds introduced into Vietnam from Japan in connection with the implementation of the Study;
  - 6) to secure permission for entry into private properties or special areas for the implementation of the Study;
  - 7) to secure permission for the Team to take all data and documents, including maps and photographs related to the Study out of Vietnam to Japan; and
  - 8) to provide medical services as needed. Its expenses will be chargeable on the members of the Team.
- (3) The GOV shall bear claims, if any arise against members of the Team resulting from, occurring in the course of, or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the members of the Team.
- (4) MOT/PMU85 shall act as counterpart agency to the Team and also as coordinating body in relation with other governmental and non-governmental organizations concerned for the smooth implementation of the Study
- (5) MOT/PMU85 shall, at its own expenses, provide the Team with the following in cooperation with other agencies concerned:

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- ① available data (including maps and photographs) and information related to the Study;
- ② counterpart personnel; and
- ③ credentials or identification cards.

The Government of Vietnam assures that the matters referred to in this form will be ensured for the smooth conduct of the Development Study by the Japanese Study Team.

#### 8. Obligation of Consultant Team

The Consultant Team, with their full responsibilities, commits to successfully carry out all works as mentioned in this TOR and other works relevant to achievement of the Project, and all members of the Consultant Team shall comply with legislation, law and regulations in Vietnam, except for any stipulations agreed between Government of Vietnam and Japan/or home country of such Consultant when carrying out their consulting services in Vietnam.

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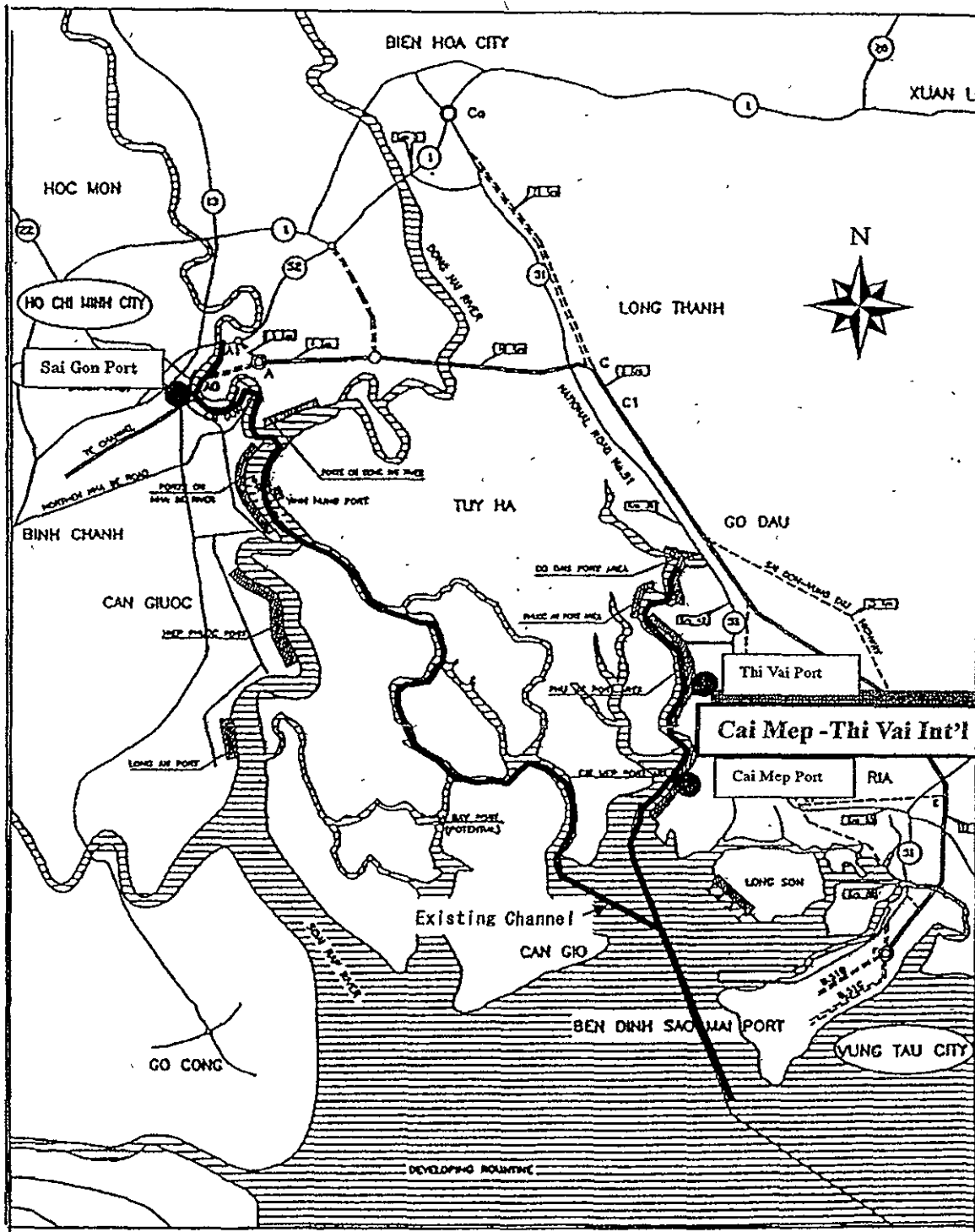


Figure 1 General Location Map of Cai Mep – Thi Vai International Port

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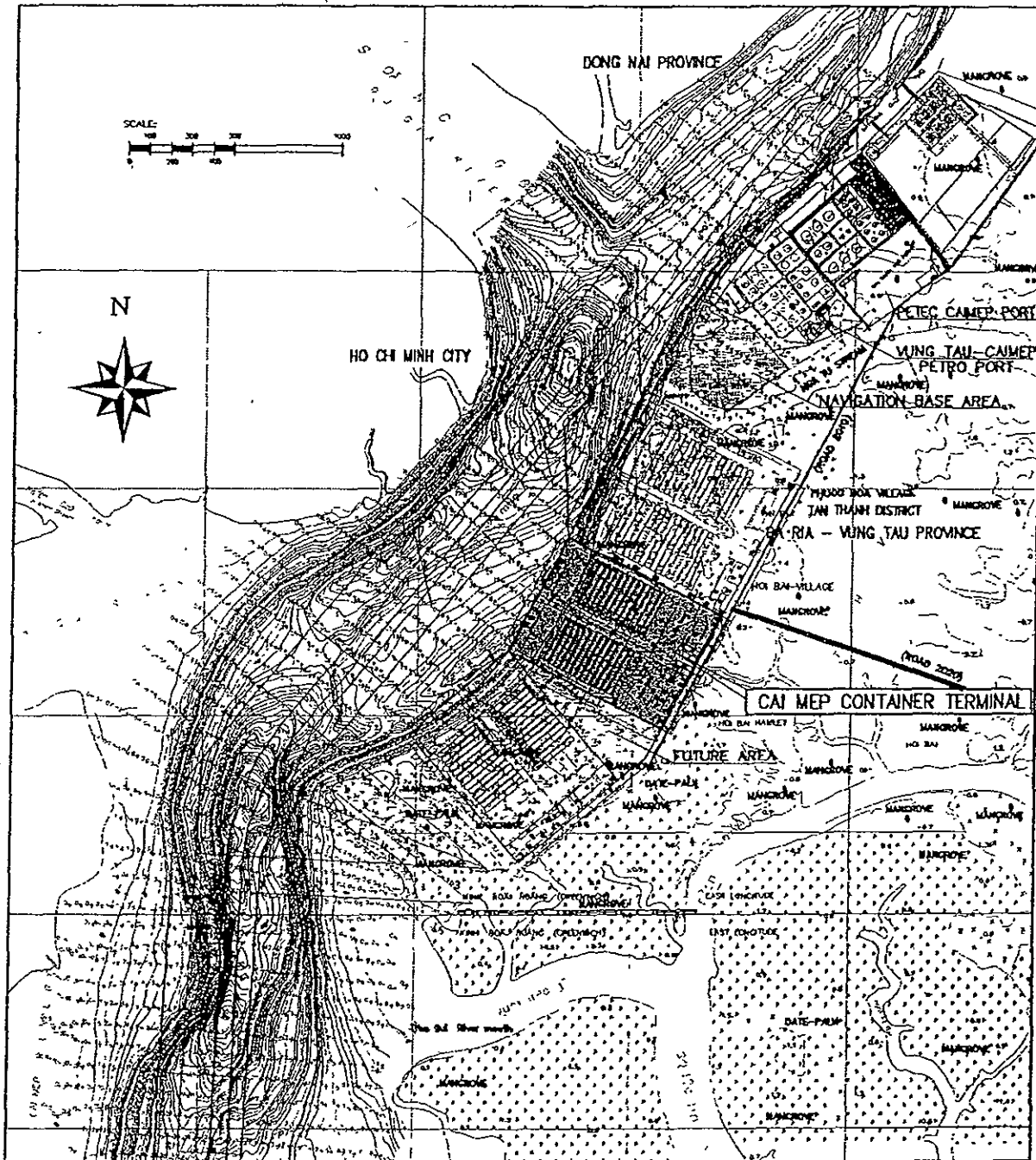


Figure 2. Detailed Location Map of Cai Mep Container Terminal

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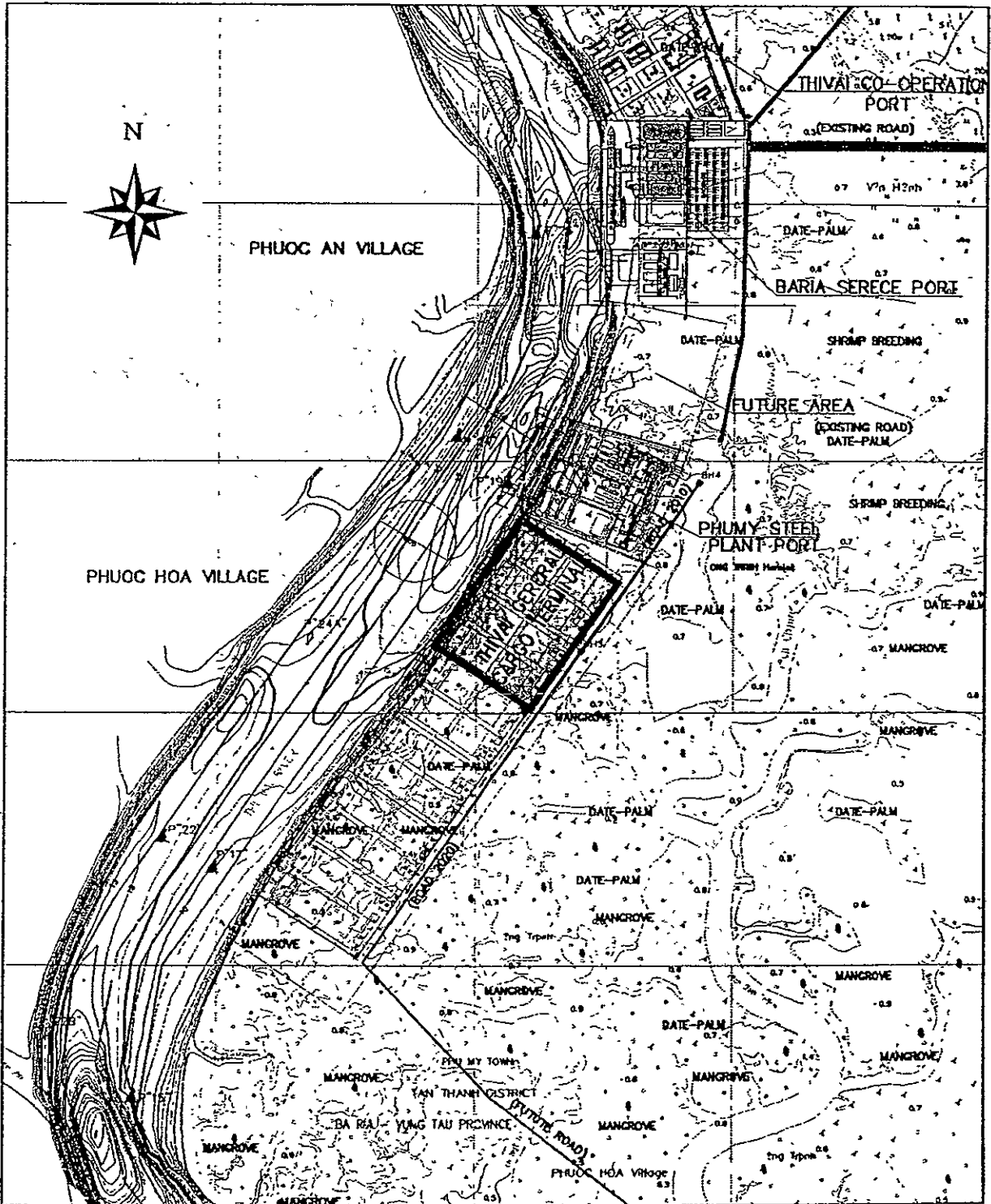


Figure 3. Detailed Location Map of Thi Vai General Cargo Terminal

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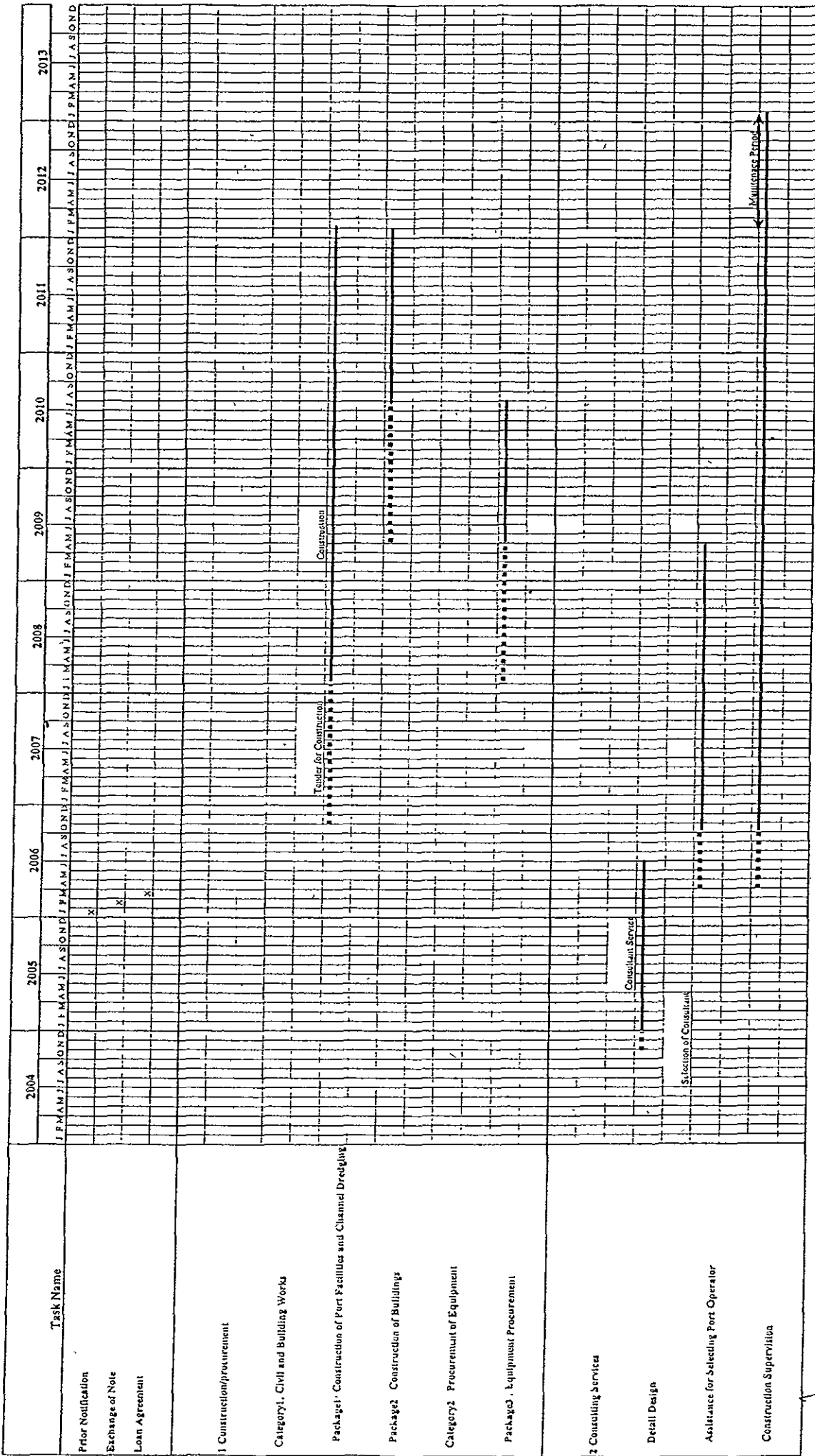


Figure 4 Implementation Schedule of the Project

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**TERMS OF REFERENCE**  
**FOR**  
**CONSULTING SERVICES (CONSTRUCTION SUPERVISION)**  
**FOR**  
**CAI MEP – THI VAI INTERNATIONAL PORT DEVELOPMENT PROJECT**  
**(Draft)**

**1. General**

This Terms of Reference (TOR) is prepared to provide the general scope of work for the international consultant who will provide construction supervision services for the new container terminal and general cargo terminal that are required by the GOVN for the Cai Mep – Thi Vai International Port Development Project (the Project). In carrying out the services, the Consultant shall cooperate fully with the Project executing agency, the Ministry of Transport (MOT) / Project Management Unit85 (PMU85) of MOT.

**2. Project Profile**

The Project consists of the construction of two (2) berths of international container terminal and two (2) berths of international general cargo terminal (including dredging, reclamation and other port related facilities), the navigation channel of –12 to –14 m deep and the installation of quay side gantry cranes as main components of the Project.

The location and implementation schedule of the Project are shown in Figure 1,2,3 and 4, respectively.

The components of the Project are divided as follows:

**Category 1: Civil and Building Works**

**Package 1: Construction of Port Facilities and Channel Dredging**

- (1) Lower Cai Mep International Container Terminal
  - 1) Wharf
  - 2) Terminal
  - 3) Access Road
- (2) Thi Vai International General Cargo Terminal
  - 1) Wharf
  - 2) Terminal
  - 3) Access Road
- (3) Navigation Channel
  - 1) Dredging of Navigation Channel
  - 2) Installation of Navigation Buoys



## **Package 2: Construction of Buildings**

### **(1) Lower Cai Mep International Container Terminal**

- 1) Administration Building and Amenity Block
- 2) Container Freight Station (CFS)
- 3) Maintenance Shop
- 4) Main Gate and Sub-Gate
- 5) Power Station and Fuel Station

### **(2) Thi Vai International General Cargo Terminal**

- 1) Administration Building and Amenity Block
- 2) Warehouse and Transit Shed
- 3) Maintenance Shop
- 4) Main Gate and Sub-Gate
- 5) Power Station and Fuel Station

## **Category 2: Procurement of Equipment**

### **Package 3: Equipment Procurement**

- (1) Cargo Handling Equipment for Lower Cai Mep International Container Terminal
- (2) Cargo Handling Equipment for Thi Vai International General Cargo Terminal
- (3) Vessel Traffic Service (VTS) system

## **Category 3: Consulting Services**

- (1) Detailed Design Study
- (2) Selection of Port Operator
- (3) Construction Supervision

### **3. Objectives of the Consulting Services for Construction Supervision**

The services to be provided by the Consultant are to undertake the construction supervision for Cai Mep container terminal and Thi Vai general cargo terminal, access roads and navigation channels. It also includes the installation supervision of the cargo handling equipment for both containerized and non-containerized cargo, and VTS system for ship navigation safety.

The Environmental management is one of the important services to assist MOT/PMU85 in implementation of environmental monitoring and other environmental management practices during the construction period.

The Consultant shall provide the necessary assistance to MOT/PMU85 in the invitation for bids for construction of civil works, building works and navigation channel, and procurement of cargo handling equipment and VTS system. Such Construction Supervision Services are deemed imperative in consonance with the urgency of this vital Project as well as the enhancement of its implementation.

## 4. Scope of Services

### 4.1 General

In executing the services, the Consultant shall follow the relevant Guidelines and procedures of the GOVN and JBIC based on the FIDIC Conditions of Contracts. The Consultant shall assist MOT/PMU85 in all aspects of the work including the bidding, construction supervision, procurement of goods and project management support required for the completion of the Project. The scope of the consulting services broadly consists of the following works:

- i Review of Detailed Design Study
- ii Bidding and Contracting Assistance
- iii Construction Supervision
- iv Monitoring of Defects during Defect Liability
- v Environmental Management

The Consultant shall keep MOT/PMU85 and JBIC fully informed on all-important matters by means of Monthly Reports and meetings as may be considered necessary for the satisfactory implementation of the Project.

The tasks, which the Consultant shall undertake on behalf of and in collaboration with MOT/PMU85, are described in the following sections

### 4.2 Scope of Construction Supervision Services

- a) Review of Detailed Design Study  
To check the detailed design study of the project, and review it if necessary, for transferring the responsibility based on it to the consultant of construction supervision.
- b) Bidding and Contracting Assistance  
To assist in the prequalification, bidding and contracting of the Project, which include but shall not be limited to the following.
  - i To provide the necessary assistance for invitations to prequalification, evaluation of applications, and preparation of prequalification evaluation report submitted to MOT/PMU85 for the approval of MOT/PMU85 and JBIC.
  - ii To provide the necessary assistance for invitations to bid, evaluation of bids and preparation of detailed tender evaluation report submitted to MOT/PMU85 together with the recommendations for the award of the contract to the highest evaluated and most responsive bidders for the approval of MOT/PMU85 and JBIC. In addition, the Consultants shall also assist MOT/PMU85 in the preparation and finalization of contract agreements.
- c) Construction Supervision  
To undertake construction supervision of the project, which include but shall not be limited to the following.



- i To check and recommend approval and/or modification, if necessary, of the proposals, documents including Construction Method Statement, Quality Control Plan, Environmental Management Plan, and Drawings prepared by the Contractor and/or the Manufacturer relative to the construction of the Project.
- ii To prepare additional designs, and supply of all necessary working drawings for the Contractor for approval by MOT/PMU85 for satisfactory execution of works including those required as a result of any modification and /or alterations in the original bid documents.
- iii To check the location, alignment and workmanship of all works as laid out by the Contractor and recommend to MOT/PMU85 the acceptance or rejection of the works as constructed as well as equipment procured, if needed.
- iv To recommend acceptance or rejection of materials to be used or incorporated in the works, and verification, if necessary.
- v To continuously inspect the works on the Project and issue necessary instructions to the contractor including as well, compliance to applicable regulations of the Government.
- vi To check monthly Contract Payment Certificate and regularly progress payments on the construction works and certifying progress payments for the approval of MOT/PMU85.
- vii To assist MOT/PMU85 in negotiating and execution of any Change Order which may be deemed necessary.
- viii To check, evaluate and recommend for approval by MOT/PMU85 the Contractor's and Supplier's Work Schedule (CPM) and Progress Schedule for the most effective, expeditious, and safe methods of carrying out the works as well as the manufacture and installation of equipment.
- ix To conduct periodic coordination meetings as may be required.
- x To maintain permanent records of all measurements made for the works, quantities to be paid and results of all tests made on materials used in the works.
- xi To evaluate and make recommendations for MOT/PMU85's approval of all claims, disputes and requests for time or changes that Contractor may request, and assist MOT/PMU85 in negotiating with Contractor on prompt solutions for all such problems.
- xii To supervise the fabrication/installation of all equipment and facilities at the site and performance of final performance test.
- xiii To issue interim payment certificates, certificates of completion, final payment certificates and maintenance certificates in accordance with conditions of Contract.
- xiv To submit to MOT/PMU85, upon the issuance of the Final Certificate of Acceptance of the Project, all job records, as-built drawings as well as the required written instruction for the satisfactory operation and maintenance of the Project.
- xv Management of site safety.

Within three (3) months after the issuance of Final Certificate of Acceptance of the Project, the Consultant shall submit to MOT/PMU85 a Contract Completion Report describing progress of work, construction record, variation, final cost and other matters as may be required by MOT/PMU85.

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d) Monitoring of Defects during Defect Liability Period

- i During the first year after project completion, the Contractor shall execute maintenance work in accordance with the Contract. The Consultant will inspect periodically the performance work to be executed by the Contractor.
- ii During the period of maintenance, the Consultant will instruct the Contractor in writing to execute all such works of repair, amendment, recognition, rectification and making good effects, imperfections, shrinkage or other fault as may be required of the Contractor. After any substantial part of the maintenance work has been completed to the satisfaction of the Consultant, the latter will issue Defects Liability Certificate to the Contractor.
- iii Upon issuance of the Defects Liability Certificate, the Consultant will submit a Defects Liability Completion Report summarizing the conditions of the facilities and any remedial actions that were taken.

e) Environmental Management

- i To carry out Environmental Monitoring Program
- ii To supervise the environmental management and monitoring activities implemented by contractors
- iii To propose specific actions and countermeasures to specific issues related to the environment.
- iv To recommend additional monitoring and mitigation measures when necessary
- v To prepare and submit the Environmental Monitoring Reports periodically.

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## 5 Schedule of the Services

The services for construction supervision will be accomplished within 76 months, including one year for maintenance period.

Year	1		2		3		4		5		6		7	
Month	6	12	18	24	30	36	42	48	54	60	66	72	78	84
Construction Supervision	←—————→													
Package 1	..... △ PQER    △ BE R													
Package 2	..... △ PQER    △ BE R													
Package 3	..... △ PQER    △ BE R													

△ PCR, EMR    △ DLCR

Note:

Package 1: Construction of Port Facilities and Channel Dredging

Package 2: Construction of Buildings

Package 3: Equipment Procurement

..... Tender for Construction

———— Construction

△ Report Preparation

## 6 Reports and Documents

### 6.1 Reports and Documents submitted to MOT/PMU85

The Consultant shall write and submit the following reports and documents in English to MOT/PMU85:

- (1) Prequalification Evaluation Report  
5 copies within 2 weeks after closing date
- (2) Bid Evaluation Report  
5 copies within 1 month after closing date
- (3) Monthly Progress Report  
10 copies within 1 week in next month
- (4) Project Completion Report  
5 copies within 3 months after the Project completion
- (5) Environmental Monitoring Report  
10 copies within 1 month after the Project completion
- (6) Defects Liability Completion Report  
5 copies within 1 month after issuance of Defects Liability Certificate

## 6.2 Reports and Documents submitted to JBIC

The Consultant shall assist MOT/PMU85 in preparing reports to be submitted to JBIC by MOT/PMU85, such as the Progress Report and Project Completion Report, which are defined in the Loan Agreement of the Project.

## 7. Required Experties

### 7.1 Expatriate


The required expatriate experts for the Construction Supervision Services will be, but not limited to, the following personnel and the total assignment man/months is estimated to be around 182 m/m.

(1) Team Leader/ Port Engineer
(2) Deputy T.L./Civil Engineer
(3) Dredging Engineer
(4) Soil/Geotechnical Engineer
(5) Cargo Handling Equipment Specialist
(6) Architect
(7) Electric Engineer
(8) Utility Engineer
(9) System Engineer
(10) Environment Expert
(11) Document Specialist
(12) Coordinator

### 7.2 Local Experts

The required local experts for the Construction Supervision Services will be, but not limited to, the following personnel and the total assignment man/months is estimated to be around 488 m/m.

(1) Co-Team Leader/Office Administrator
(2) Port Engineer
(3) Structural Engineers
(4) Civil Engineers
(5) Road Engineers
(6) Dredging/Hydraulic Engineers
(7) Geotechnical Engineers
(8) Cargo Handling Equipment Specialist
(9) Architects
(10) Electric Engineers
(11) Mechanical Engineers
(12) Environment Specialist
(13) Document Specialist

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In addition to the above Engineers/Specialists, the Consultant will employ local supporting staff such as CAD operators, inspectors, translators, secretaries, and others.

#### **8. Obligation between MOT/PMU85 and the Consultant**

- (1) In the case of a difference of opinion between MOT/PMU85 and the Consultant or any important matters involving professional judgment that might affect the proper evaluation or execution of the Project, MOT/PMU85 shall allow the Consultant to submit promptly to MOT/PMU85 a written report and, simultaneously, to submit a copy to JBIC. MOT/PMU85 shall forward the report to JBIC with its comments in time to allow JBIC to study it and communicate with MOT/PMU85 before any irreversible steps are taken in the matter. In cases of urgency, the Consultant shall have the right to request to MOT/PMU85 and/or JBIC that the matter be discussed immediately between MOT/PMU85 and JBIC.
- (2) MOT/PMU85 is responsible for supervising the Consultant's performance and ensuring that the Consultant carries out the assignment in accordance with the contract. Without assuming the responsibilities of MOT/PMU85 or the Consultant, JBIC may monitor the work as necessary in order to satisfy itself that it is being carried out in accordance with appropriate standards and is based on acceptable data. As appropriate, JBIC may take part in discussions between MOT/PMU85 and the Consultant. However, JBIC shall not be liable in any way for the implementation of the Project by reason of such monitoring or participation in implementation of the Project nor shall the Consultant be released from any responsibility for the Project by reason of JBIC's monitoring or participation in discussion.

#### **9. Undertakings of MOT/PMU85**

- (1) To assist with procedures for issuance of entry permits necessary for the Consultant's members to conduct the services.
- (2) To assign counterpart staff to obtain accommodation and facilities to assist the Consultants in conducting the services.
- (3) To ensure the safety of Consultants' staff at place of works.
- (4) To assist the Consultants' staff as the need arises for any medical services which may be required.
- (5) To arrange for duties and custom clearance exemption for equipment, instruments, tools and other articles to be brought into Vietnam in connection with the implementation of the services.
- (6) To assist in obtaining privileges and benefits including customs clearance for personal effects which may be brought into the Vietnam by the staff of the Consultant for the execution of the services
- (7) To assist in securing adequate office space to the Consultant.

#### **10. Obligation of Consultant Team**

The Consultant Team, with their full responsibilities, commits to successfully carry out all works.

as mentioned in this TOR and other works relevant to achievement of the Project, and all members of the Consultant Team shall comply with legislation, law and regulations in Vietnam, except for any stipulations agreed between Government of Vietnam and Japan/or home country of such Consultant when carrying out their consulting services in Vietnam.

Handwritten signature and initials in black ink, located in the bottom right corner of the page. The signature appears to be 'T. C. H.' followed by a stylized mark.

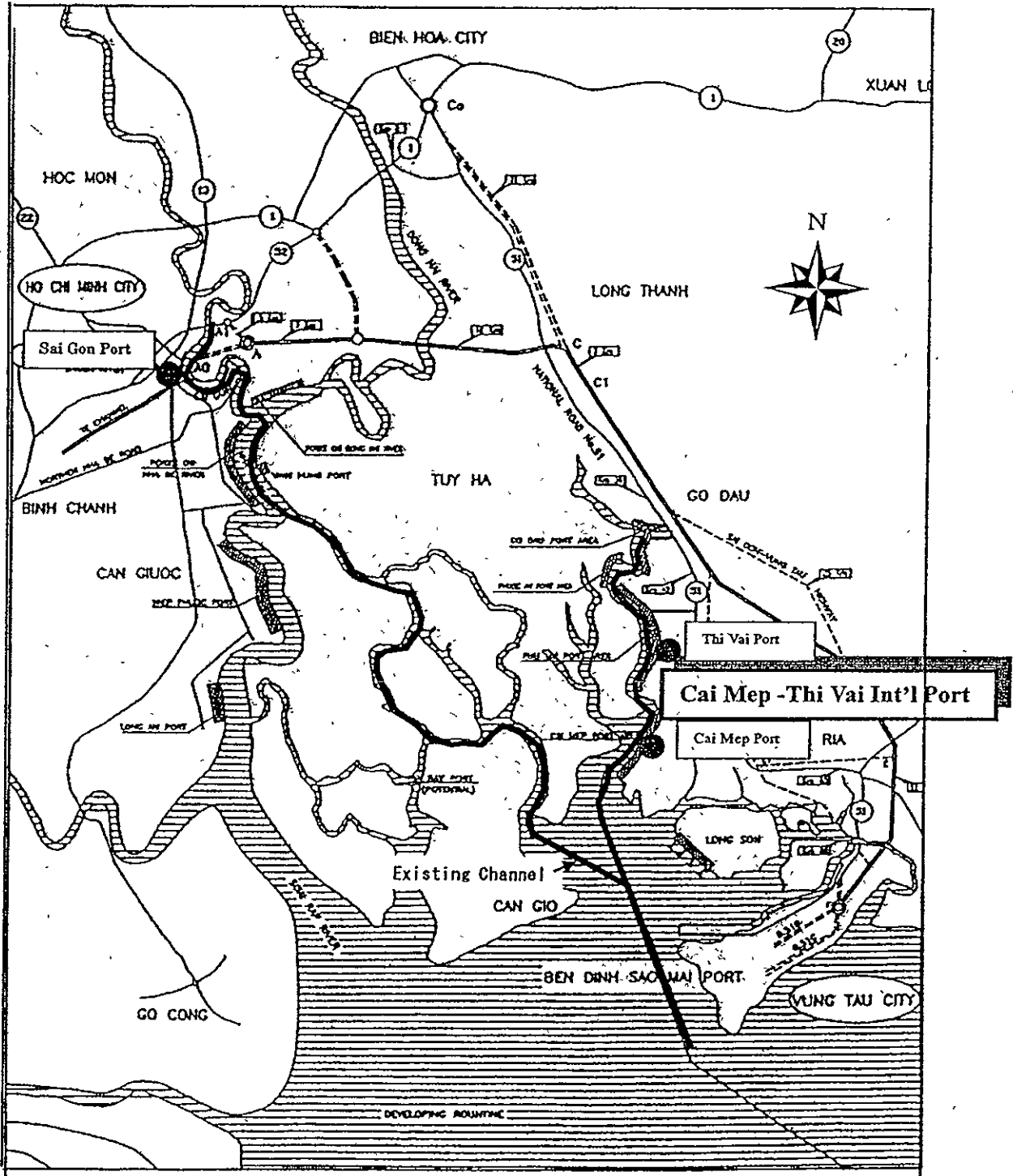


Figure 1 General Location Map of Cai Mep – Thi Vai International Port

*Tao*  
*eff*

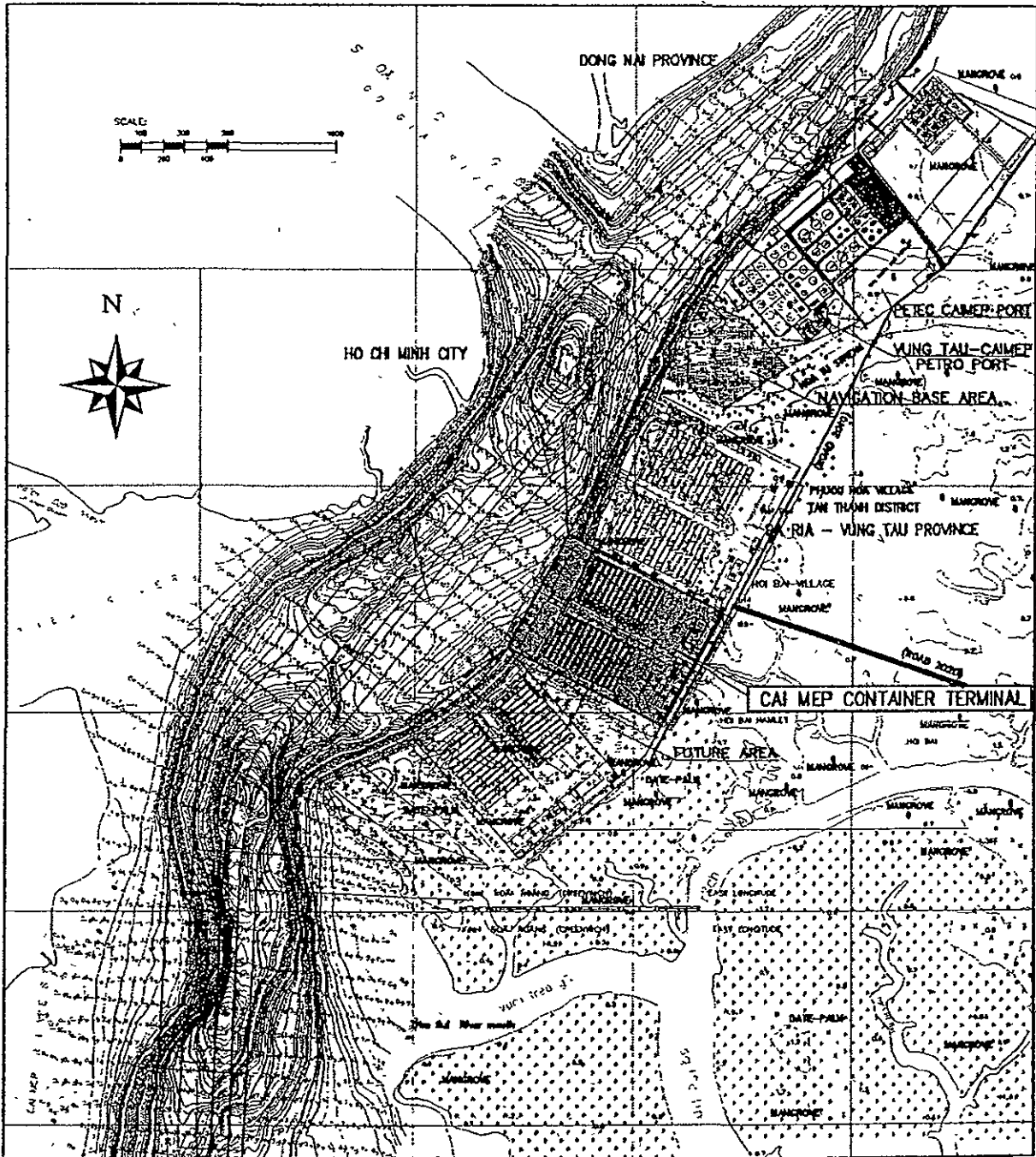


Figure 2. Detailed Location Map of Cai Mep Container Terminal

*TC*  
*AK*



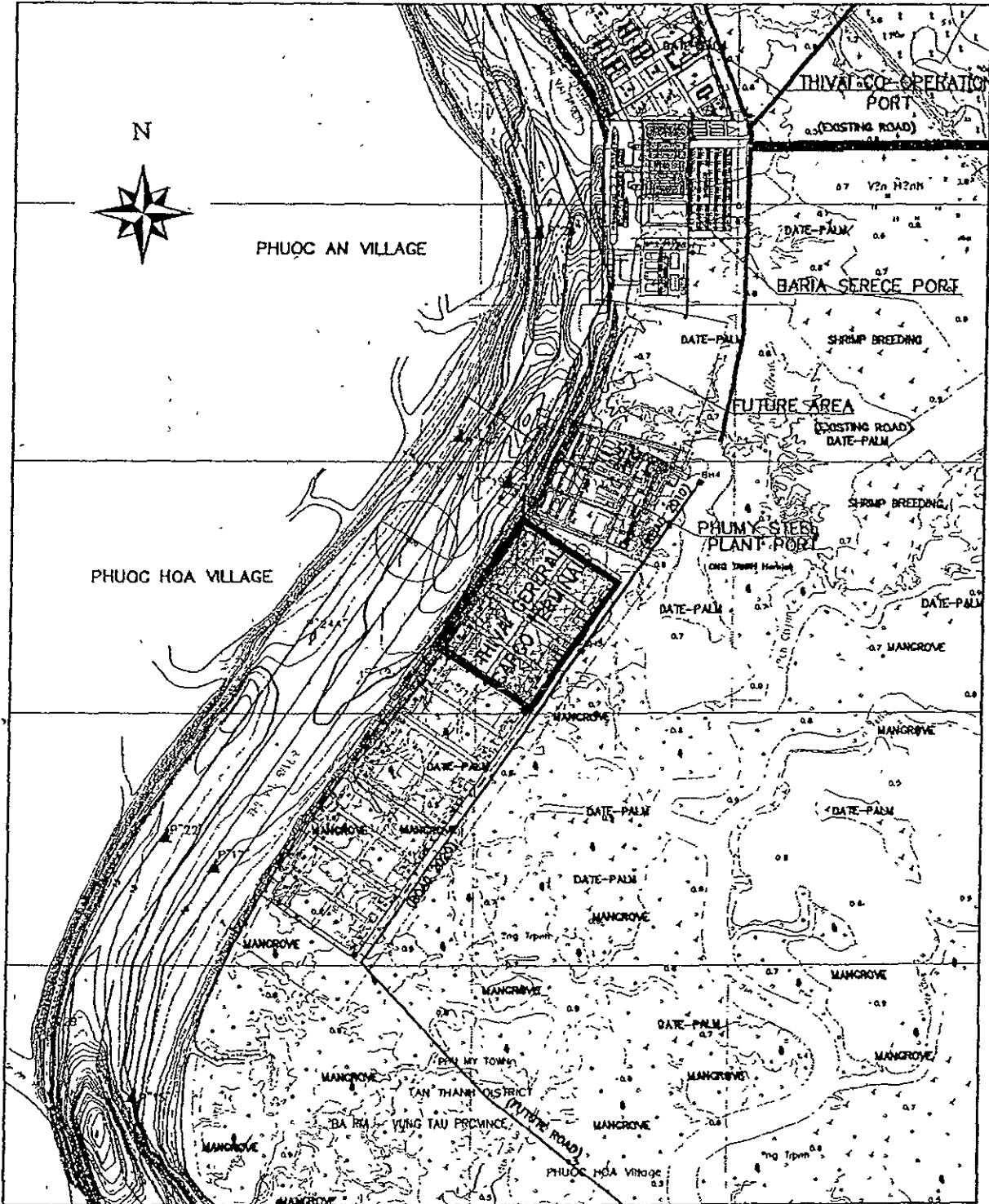


Figure 3. Detailed Location Map of Thi Vai General Cargo Terminal

*To*  
*At*

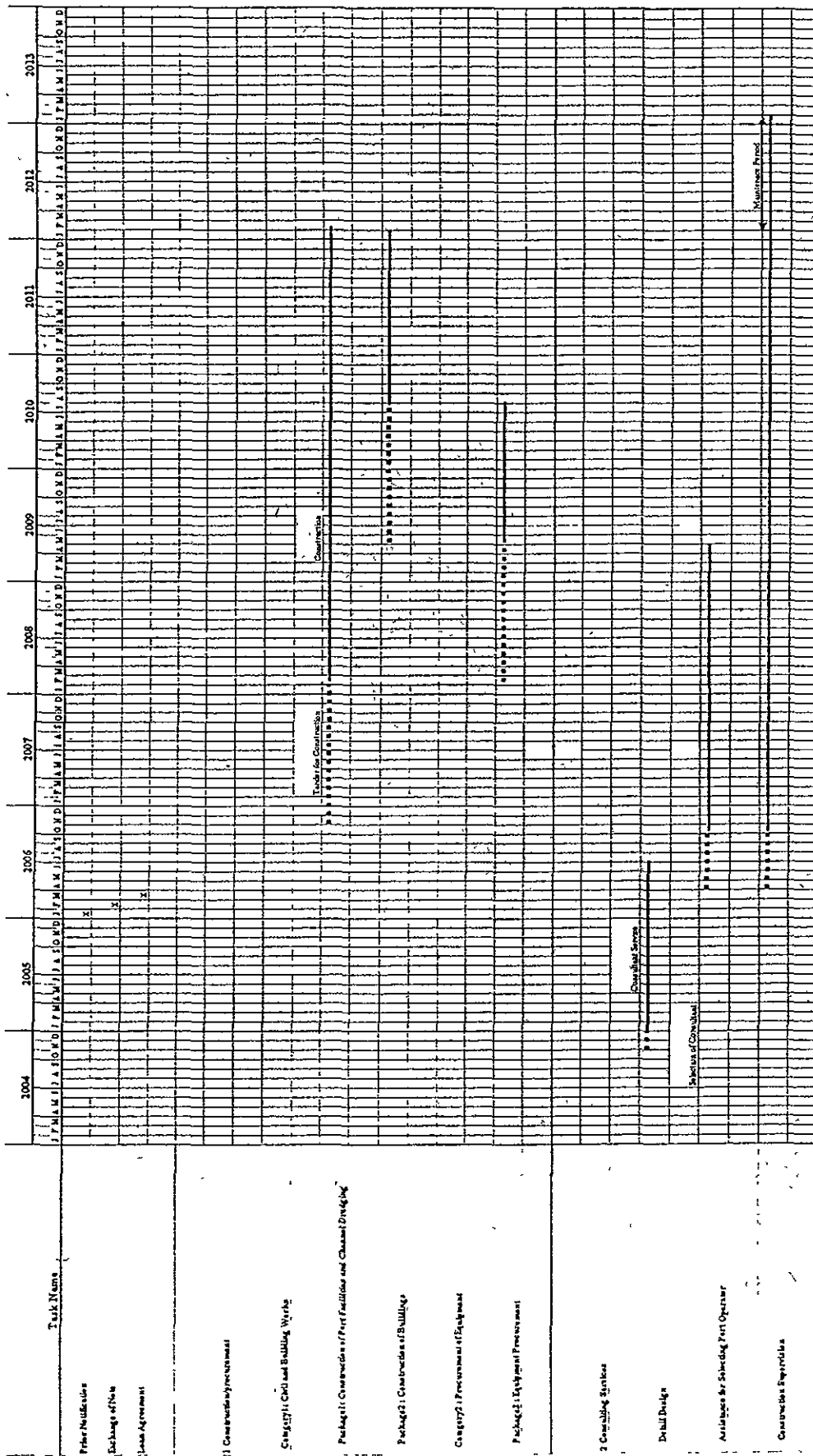


Figure 4. Implementation Schedule of the Project

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