檔　號：
保存年限：

內政部營建署　函

地址：54045南投市省府路38號（營建業務
）
聯絡人：何翊誠
聯絡電話：049-235-2911#323
電子郵件：af6649@cpami.gov.tw
傳真：049-235-2701

受文者：臺灣區綜合營造業同業公會

發文日期：中華民國106年5月12日
發文字號：營授辦建字第1061350239號
速別：最速件
密等及解密條件或保密期限：
附件：如說（請至http://edoc.cpami.gov.tw下載）明(工程會10600139430.pdf)

主旨：檢送駐泰國代表處經濟組函為該駐紮國相關商情資料1份，請查照並週知會員。

說明：依行政院公共工程委員會106年5月8日工程技字第10600139430號函副本辦理。（如附影本）

正本：臺灣區綜合營造業同業公會、台灣區環境保護工程專業營造業同業公會、台灣區基礎工程專業營造業同業公會、台灣防水工程專業營造業同業公會、臺灣區擋土支撐及土方工程專業營造業同業公會、台灣庭園景觀工程專業營造業同業公會、臺灣區地下管線工程專業營造業同業公會、臺灣區施工塔架吊裝及模版工程專業營造業同業公會、臺灣區預拌混凝土工程專業營造業同業公會、臺灣區鋼構工程專業營造業同業公會、臺灣區營建鑽探工程專業營造業同業公會、中華民國土木包工商業同業公會全國聯合會、中華民國全國建築師公會
副本：行政院公共工程委員會、內政部營建署（建築管理組）、本署中部辦公室 電子公文交換章

業務部

臺灣區綜合營造業同業公會
106. 5. 12
第 0327 號

副本 營建署

中部辦公室
(營建業務)

行政院公共工程委員會　函

地址：11010 台北市松仁路 3 號 9 樓
聯 絡 人：陳巧靜
聯絡電話：(02)87897612
傳　　真：(02)87897614

10055
臺北市中正區徐州路 5 號
受文者：內政部

發文日期：中華民國 106 年 5 月 8 日
發文字號：工程技字第 10600139430 號
速別：最速件
密等及解密條件或保密期限：
附件：如主旨

裝

主旨：函轉駐泰國代表處經濟組函，為關於泰國國家鐵路局（State Railway of Thailand, SRT）發送曼谷至華欣高鐵計畫案（High-Speed Rail Project：Bangkok-Hua Hin）之市場意向問卷調查（Market Sounding Exercise）一案，請轉知所屬會員參考填寫，請查照。

說明：

訂

一、檢送駐泰國代表處經濟組 106 年 5 月 4 日泰經組字第 10600006130 號函影本乙份。

二、副本抄送駐泰國代表處經濟組，有關來函主旨所稱投資公司非本會業管，請另洽該管主管機關。

正本：中華民國工程技術顧問商業同業公會、中華民國營造工程工業同業公會全國聯合會
副本：內政部、交通部、工程產業全球化專案辦公室（以上皆含附件）、駐泰國代表處經濟組

線

主任委員 吳宏謀

本案依分層負責規定授權業務主管決行

106. 5. 10　　106. 5. 9

內政部
1060036925　106/05/09

檔	/	保存年限	
號	/ /		

駐泰國代表處經濟組　函

機關地址：20th Fl. Empire Tower, 195 South Sathorn Rd., Bangkok 10120
承 辦 人：林秘書明秋
聯絡電話：+66-2-6700200
傳　　真：+66-2-6700226
電子郵件：mmlin@moea.gov.tw

受文者：行政院公共工程委員會
發文日期：中華民國 106 年 5 月 4 日
發文字號：泰經組字第 10600006130號
速別：最速件
密等及解密條件或保密期限：
附件：如文

主旨：關於泰國國家鐵路局（State Railway of Thailand, SRT）發送曼谷至華欣高鐵計畫案(High-Speed Rail Project：Bangkok-Hua Hin)之市場意向問卷調查(Market Sounding Exercise)一案，請轉知相關投資公司參考填寫。

說明：

一、依據泰國國家鐵路局局長 Mr. Tanongsak Pongprasert 本（106）年 4 月 27 日致本處 No. 1/696/2560 號信函辦理(詳如後附)。

二、上開來函略以，SRT 歡迎我對旨揭計畫案有興趣之相關民間投資公司填寫，並請於本年 5 月 12 日前將問卷以電子郵件方式回送(e-mail:thunthaporn.s@chotichinda.com；Chutima.b@chotichinda.com)或郵寄至下列地址：
Chotichinda Consultants Limited(Consultant)
1473/4 Chotichinda Building, Soi Phatthanakan 31/1
Phatthanakan Rd., Suan Luang, Bangkok 10250
"(Market Sounding)"　in Parenthesis on the envelope corner

正本：行政院公共工程委員會
副本：經濟部國際貿易局、泰國台灣商會聯合總會、曼谷台貿中心(以上均含附件)

駐泰國代表處經濟組

裝
訂
線

FROM : FAX NO. : 05 May 2017 09:43 P 002

No. 1/696/2560

State Railway of Thailand
Rong Mueang Rd., Patumwan
Bangkok 10330

27 April 2017 (B.E. 2560)

Subject: Invitation to Market Sounding Exercise for High-Speed Rail Project: Bangkok-Hua Hin

Excellency,

The State Railway of Thailand (SRT), a state enterprise under the Ministry of Transport, is responsible for rail infrastructure investment as well as freight and passenger.

SRT aims to provide the infrastructure development associated with high speed train, to increase the speed of passenger travel between cities, transparent and consistent with the policies of the State.

This project is in the process of Market Sounding Exercise to ascertain the level of interest of private sectors in High-Speed Rail Project: Bangkok-Hua Hin is investment. In addition, we would like to obtain suggestions and opinions from private sectors.

The Market Sounding Documents for investors with relevant forms are attached herewith for information. We would be highly appreciated for your reference on this matter to the attention of investors in your country.

Accept, Excellency, the assurances of our highest consideration.

Yours sincerely,

T. Pongprasert

(Mr. Tanongsak Pongprasert)
Deputy Governor of Traffic Business Cluster
Acting Governor of State Railway of Thailand

駐泰國台北經濟文化辦事處經濟組
第 000611 號
03 MAY 2017

□□□□□□□☑□□□□
警安移教科軍僑經新行領政
聯調民育技協務濟聞政務務
室室室室室組組組組組組組

Announcement of Market Sounding

High-Speed Rail Project: Bangkok-Hua Hin

The State Railway of Thailand (SRT) is implementing the High-Speed Rail Project: Bangkok-Hua Hin by allowing the private sector to participate in giving opinions to study the project investment forms according to the Act of Private Investment in State Undertaking B. E. 2556 (2013). SRT will carry out the market sounding and get feedback about the project from the interested persons. Please fill out this questionnaire. The obtained opinions and suggestions will be used for market sounding in this project only.

Further details and information about major project scope and questionnaire to fill out the opinions are as attached. Please send the questionnaire to SRT within May 12, 2017 by e-mail: thunthaporn.s@chotichinda.com, chutima.b@chotichinda.com or mail addressing to

Chotichinda Consultants Limited (Consultant)
1473/4 Chotichinda Building, Soi Phatthanakan 31/1
Phatthanakan Rd., Suan Luang, Bangkok 10250
"(Market Sounding)" in parenthesis on the envelope corner

Date 25 April, 2017

T. Pongprasert

(Mr. Tanongsak Pongprasert)
Deputy Governor of Traffic Business Cluster
Acting Governor of State Railway of Thailand

State Railway of Thailand

Ministry of Transport

Market Sounding Documentation

High-Speed Rail Project: Bangkok-Hua Hin

April 2017

1 Introduction

As the State Railway of Thailand (SRT) has implemented High-Speed Rail Project: Bangkok - Hua Hin in principle for private sector to participate in the investment. The high-speed rail project implementation is currently presented.

The SRT wishes to provide an opportunity for the private sector to participate in providing feedback on the study of investment forms as stipulated in Private investments in State Undertakings Act B.E. 2556 (2013) Therefore, the SRT is conducting a market sounding of the private sector in order to obtain information and comments together with suggestions from those interested in the project investment. The information contained in is this document is based on investors' opinions only.

2 Objective

To test the interest and readiness of the private sector in finding ways in which the private sector can invest in the High-Speed Rail Project: Bangkok-Hua Hin. To request for feedback and suggestions from potential private investors so that the project can be implemented effectively

3 Target Group

3.1 The company that currently manages MRT rail operation both locally and abroad

3.2 Financial institutions interested in funding the project

3.3 Manufacturers and suppliers of MRT system

3.4 Civil construction companies

3.5 Investors of general private sector, both domestic and foreign

4 Project Information

4.1 Reason and Necessity

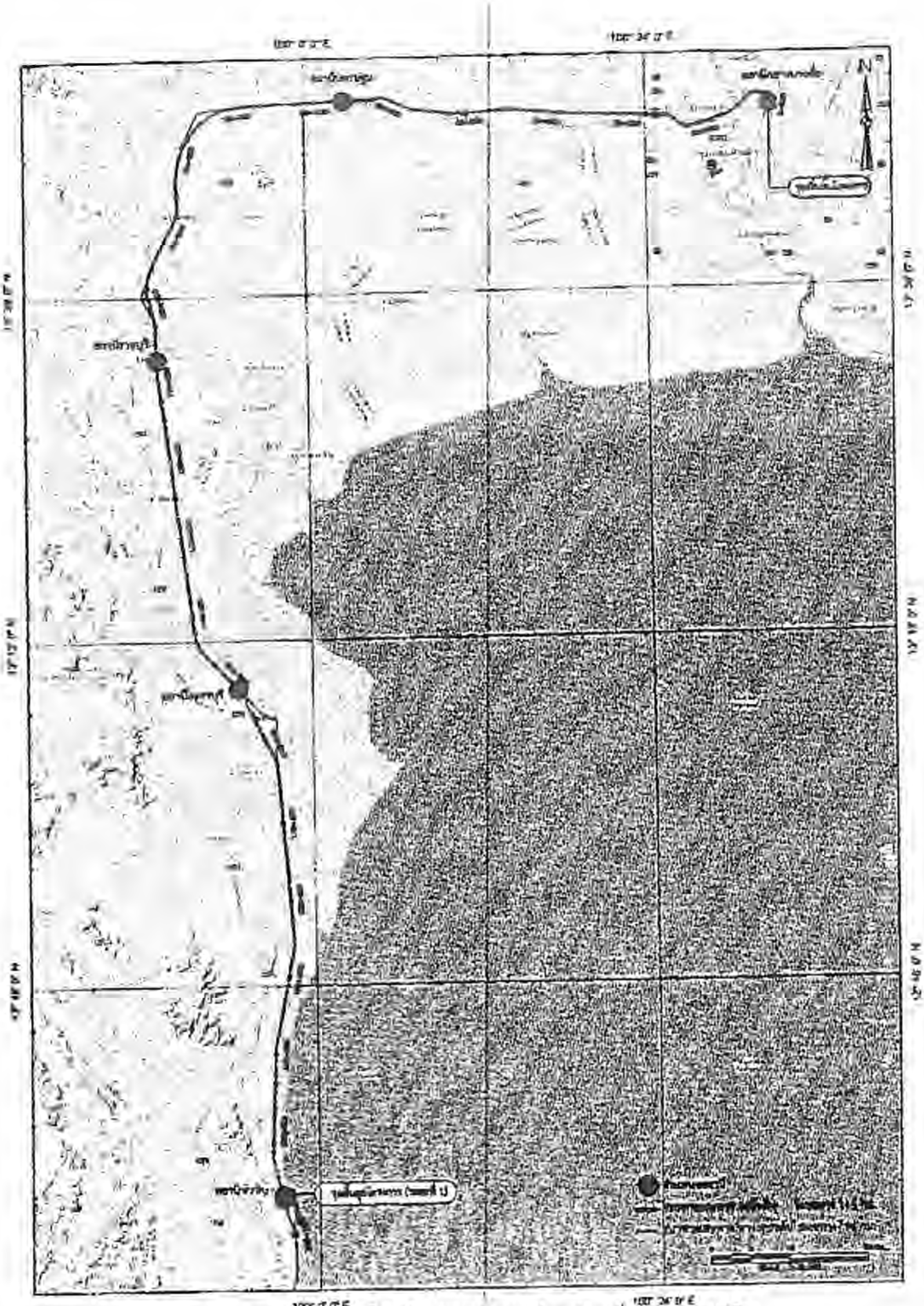
According to the Cabinet Resolution on May 3, 2011, the acknowledgment and agreement are made as per the meeting result of the National Transport and Logistics Management System Board on April 11, 2011. The resolution is agreed to allow international participation in tender of high-speed rail projects of 3 routes, which are Bangkok-Chiang Mai, Bangkok-Rayong and Bangkok-UbonRatchathani. The Ministry of Transport is also assigned to carry out feasibility study in route development for goods transportation. This includes the feasibility study for routing, particularly the route expansion of Bangkok-Rayong up to Trat Province to accommodate passengers and border goods transportation. The feasibility study is also carried out for management structure of the national high-speed rail system and determination of appropriate and responsible sectors prior to submitting to the Cabinet.

The policy was announced to the parliament by the government on August 23, 2011 about Article 3.4 Infrastructure Policy, Development of Mass Transit Rail System and Management of Transport and Logistics System. Article 3.4.4 Rail Transport System Development was also mentioned by connecting the network and transportation management of passengers, goods and service with convenience and safety in rural areas, urban areas and internationally. This includes the support of production base expansion along railway route. The announcement was also made on Sub-article 2, the Study and Development of High-Speed Rail: Bangkok-Chiang Mai, Bangkok- Nakhon Ratchasima, Bangkok- Hua Hin and other routes to prepare a connection with neighboring countries.

4.2 Alignment of Project

The High-Speed Rail Project: Bangkok-Hua Hin is the 1st phase of the Southern Line High-Speed Rail Project (Bangkok-Padangbezar). It has 211 km distance, starting from Bang Sue Station, Bangkok with its alignment running along the southern railway line. Its railway structure is elevated track alternate with at grade structure. It passes Nakhon Pathom Province, Ratchaburi Province, and Phetchaburi Province. At the section of Amphoe Mueang Phetchaburi, the alignment will divert from the current track alignment to be at the median area between main road and frontage road of Phet Kasem Road and enter into doubling track alignment again at Khao Thamon Station. Then, it heads to the south, passing Amphoe Cha-am and terminates at Hua Hin Station, Prachuap Khiri Khan Province.

In structural construction of the alignment, it must pass various Rights of Way (RoW) consisting of RoW at 171.4 km, highway area at 4.4 km, the Royal Irrigation Department area at 2.6 km and land expropriation area at 32.6 km. The High-Speed Rail Project: Bangkok-Hua Hin has 4 stations, which are Nakhon Pathom Station, which is constructed at the existing station. The other 3 stations are, Ratchaburi Station, Phetchaburi Station and Hua Hin Station, which are new construction and designed to serve both high-speed rail and connected with doubling track service.



แผนที่แสดงแนวเส้นทางโครงการรถไฟความเร็วสูง (ระยะที่ 1) กรุงเทพฯ-หัวหิน

Figure 1 Location Map Showing Alignment of High-Speed Rail Project
Phase 1: Bangkok (Bang Sue Station) to Hua Hin Station

FROM : FAX NO. : 05 May 2017 09:45 P 008

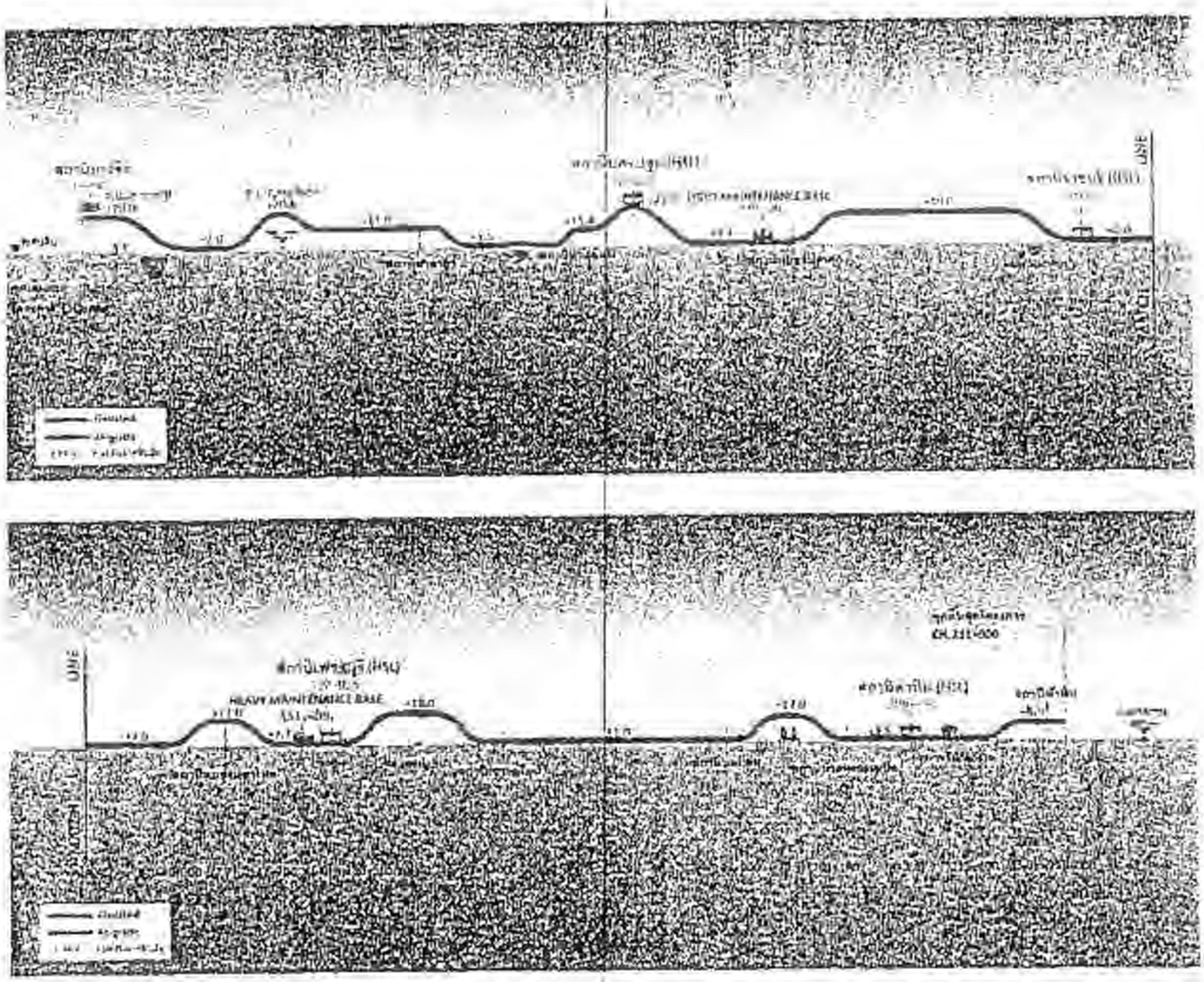


Figure 2 Layout Plan Showing Elevation of Area along the Alignment
Phase 1: Bangkok (Bang Sue Station) to Hua Hin Station

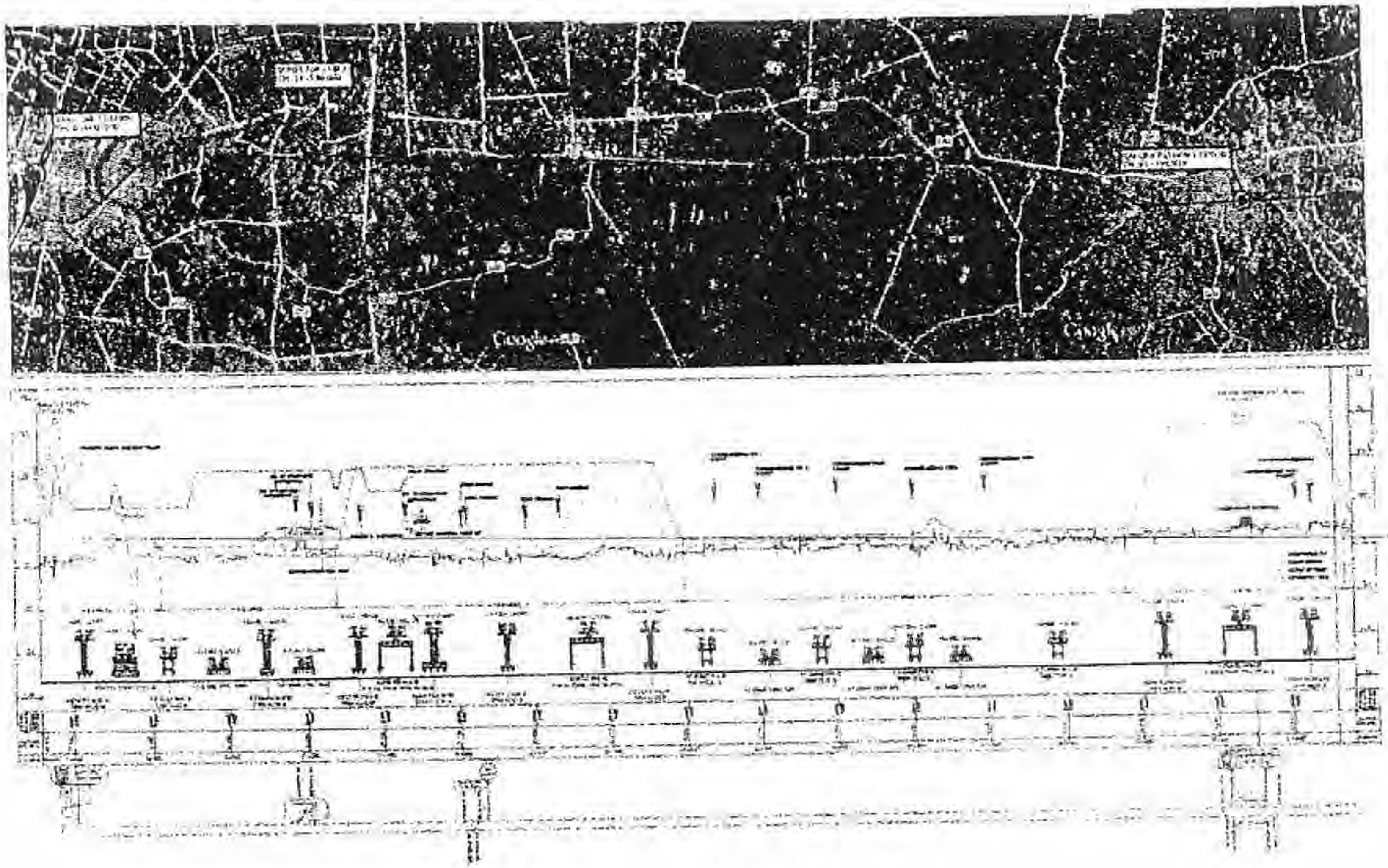


Figure 3 Structures Layout Plan, Elevation and Intersections

Along Bangkok-Hua Hin Alignment, Bang Sue Station to Nakhon Pathom Station

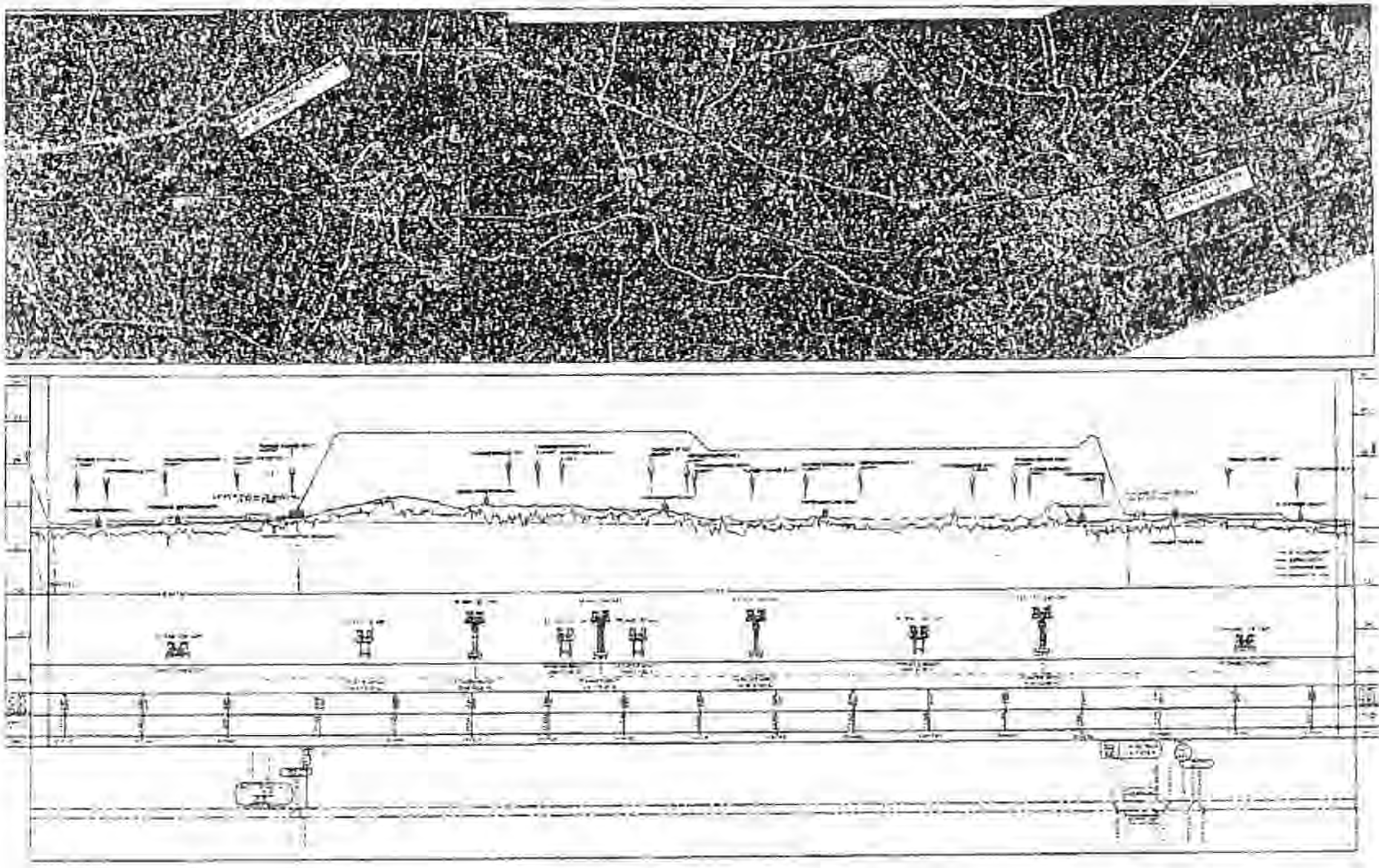


Figure 4 Structures Layout Plan, Elevation and Intersections
Along Bangkok-Hua Hin Alignment, Nakhon Pathom Station to Ratchaburi Station

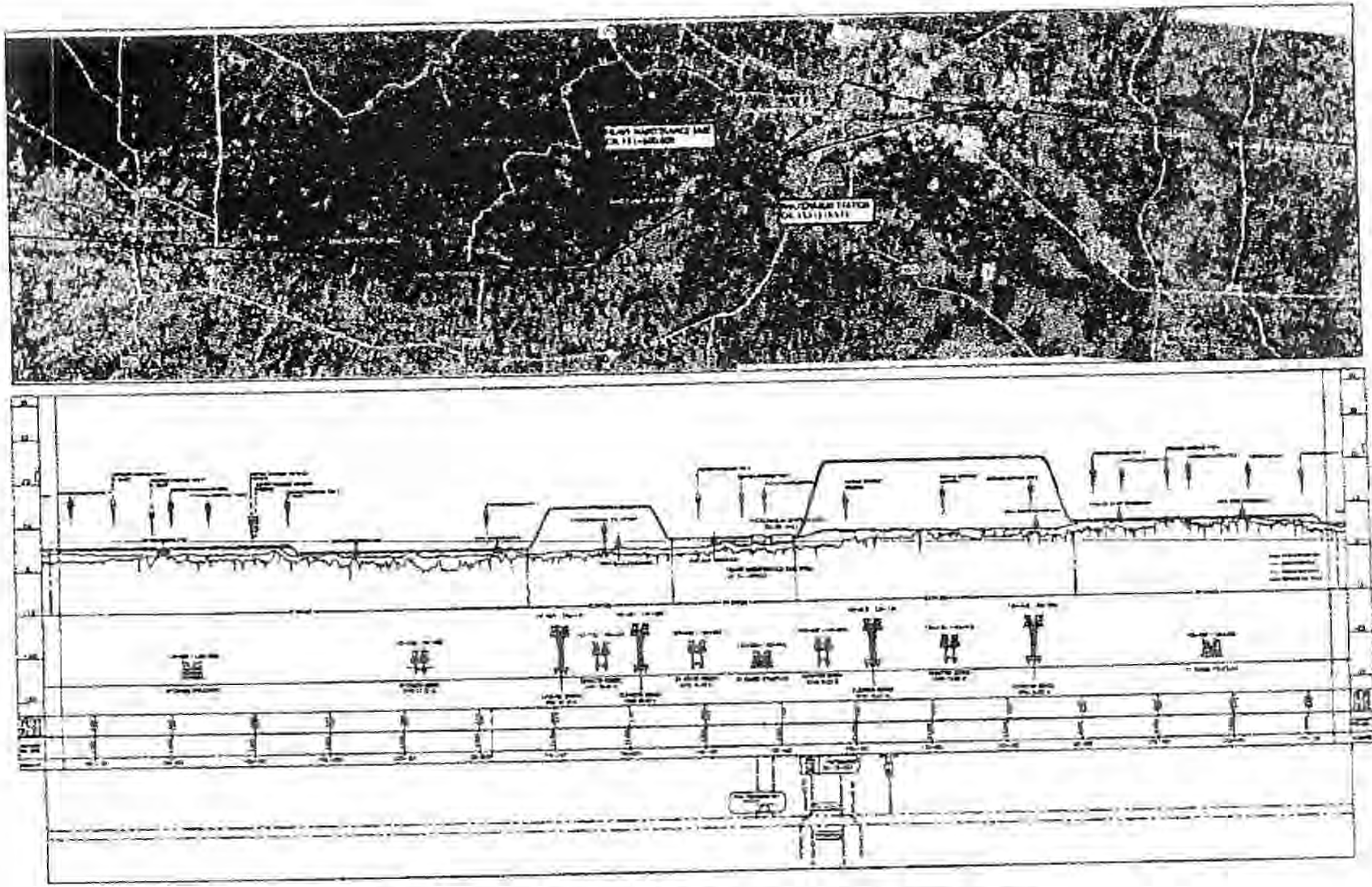


Figure 5 Structures Layout Plan, Elevation and Intersections
Along Bangkok-Hua Hin Alignment, Ratchaburi Station to Phetchaburi Station

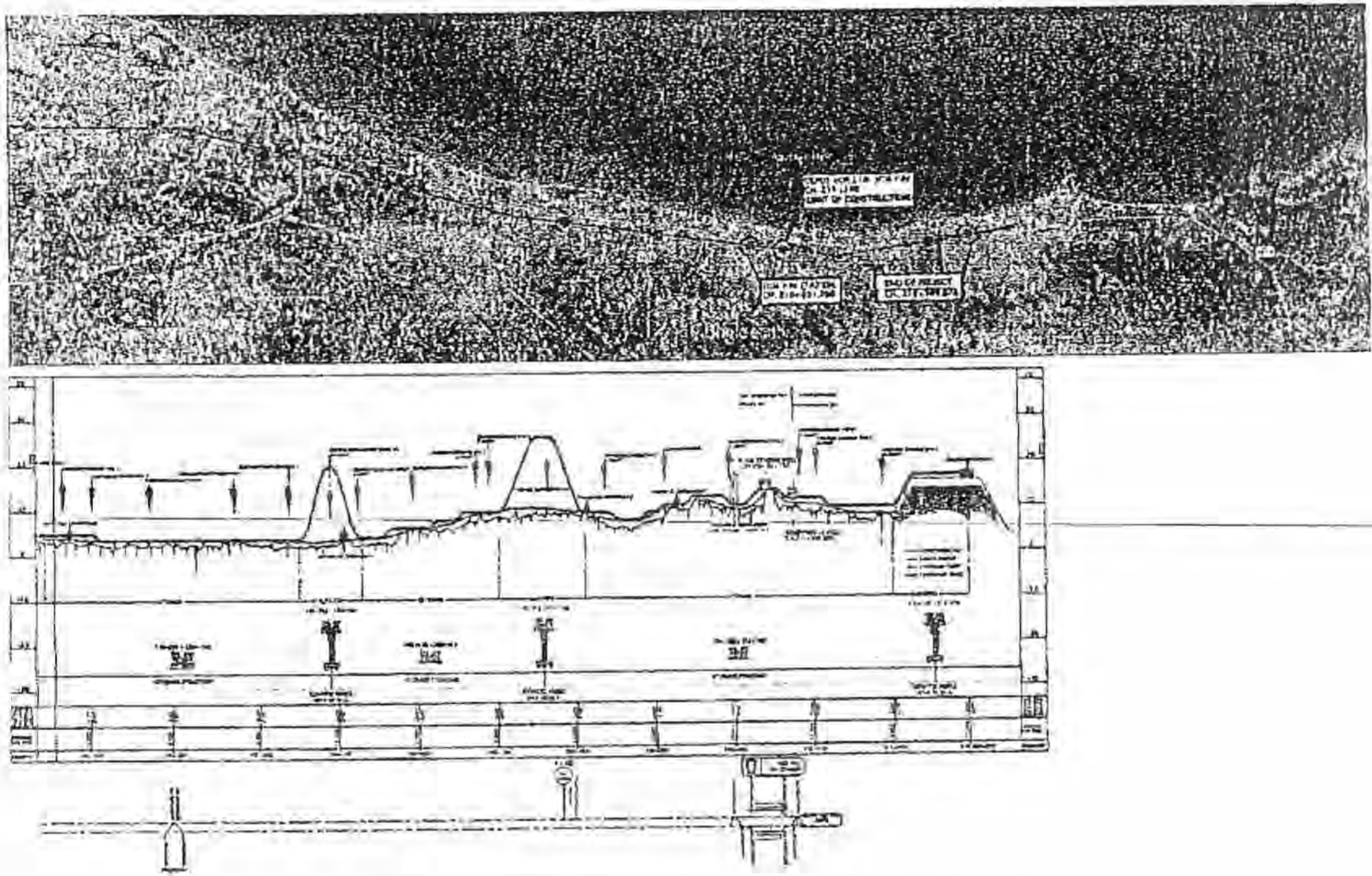


Figure 6 Structures Layout Plan, Elevation and Intersections
Along Bangkok-Hua Hin Alignment, Phetchaburi Station to Hua Hin Station

4.3 System with Suitability

The technology type and specifications of high-speed rail is open and acceptable in accordance with international standards in order not to limit the technology and to allow the interested private sector to invest widely.

4.4 Rights of Way and Land Acquisition Management

For the High-Speed Rail Project: Bangkok-Hua Hin, there are totally 895 plots of land, where land acquisition management must be carried out along the alignment, station, depot and Park & Ride. Areas for expropriation are approximately 1,002 Rais. There are 4,310 numbers of buildings and construction in SRT land and 282 numbers of buildings and construction outside SRT land.

4.5 Ridership Forecast

According to the ridership forecast in the year of service opening, the fare is calculated as per distance and the forecast result is as follows

Bangkok-Hua Hin	Ridership (Person/Day)
2023	10,094
2033	12,650
2043	15,288
2053	17,807

4.6 Estimation of Project Investment Budget

An investment budget (including annual adjustment cost) of the High-Speed Rail Project: Bangkok-Hua Hin is 100,125.07 Million Baht, consisting of land acquisition cost, civil work construction cost, MRT work system cost and train cost as follows:

Unit: Million Baht

Item	Budget Amount	Investor
1. Land Acquisition Management Cost	4,761.97	Public Sector
2. Cost of Civil Work, Track Work, Infrastructure	68,033.22	Private Sector
3. Cost of MRT System Work and Train	25,002.70	Private Sector
4. Project Consultant Cost	2,327.18	Private Sector
Total	100,125.07	

The Consultant has estimated annual construction cost according to the construction plan as follows:

- Hua Hin–Surat Thani Section: Construction period 5 years and service opening in 2026
- Surat Thani–Padangbezar Section: Construction period 5 years and service opening in 2043

Unit: Million Baht

	Phase 2	Phase 3
	Hua Hin–Surat Thani	Surat Thani–Padangbezar
Land Expropriation Cost, Building Compensation Cost	3,042.40	2,531.00
Civil Work, Track Work, Infrastructure	116,586.70	80,713.50
Train Operation System	27,200.00	21,118.40
Train	36,556.40	54,085.60
Construction Supervision	3,030.00	2,152.00
Total Construction Cost	186,415.50	160,600.50

Remark: Estimated cost of 2013 study report

4.7 Fare Revenue and Non-Fare Revenue

The project has a form of distance-based fare collection. This means that the fare will increase according to the distance travelled by the passengers. The fare is determined by the boarding passengers with minimum charge or fixed fare of 80 Baht per trip. The fare is charged as per distance at the rate of 1.8 Baht/km. Fare adjustment will be increased as per average inflation rate of 2.50% per year in the service year of 2023. Furthermore, the concessionaire will have other income from the project, such as commercial development in station and MRT area, etc. All fare revenue and non-fare revenue will be belong to private investors.

4.8 Economic Return

Economic return of the project consists of direct benefits and indirect benefits. Direct benefits include cost saving of vehicle use, saving of travel time, pollution reduction and value saving from accidental loss. Indirect benefits include employment, development of areas surrounding the high-speed train station for the period of 50 years.

Economic Internal Rate of Return (EIRR)	Net Present Value ($NPV_{12\%}$)	Benefit Cost Ratio (B/C ratio)
12.07%	502.45	1.01

The economic analysis result of Bangkok-Surat Thani Section (Hua Hin- Surat Thani Section is opened for service in 2026) for the period of 30 years.

Economic Internal Rate of Return (EIRR)	Net Present Value ($NPV_{12\%}$)	Benefit Cost Ratio (B/C ratio)
15.61%	60,905.08	1.37

The economic analysis result of Bangkok-Surat Thani Section is opened for service in 2043 for the period of 30 years.

Economic Internal Rate of Return (EIRR)	Net Present Value ($NPV_{12\%}$)	Benefit Cost Ratio (B/C ratio)
16.07%	75,776.53	1.42

4.9 Project Implementation Plan

According to the implementation plan of the High-Speed Rail Project: Bangkok-Hua Hin, main activities area as follows:

Item No	Implementation Procedure	Implementation Period
1	Selection of Private Sector	January 2018-June 2018
2	Land Acquisition Management (Relocation & Expropriation)	July 2018 – June 2020
3	Construction and Testing & Commissioning	January 2019 – December 2022
2	Service Opening	January 2023

4.10 Scope of Investment

According to the implementation plan of the High-Speed Rail Project: Bangkok-Hua Hin, main activities area as follows:

4.10.1 Scope of Investment ดังนี้

Construction The project operator will be responsible for construction cost of civil work and MRT system, including provision, production and installation of MRT train together with M&E installation, fare collection system and all other relevant systems. In order for the project opening for service, the project consultants must be employed in accordance with the project contract

Train Operation Management and Maintenance The project operator will collect the fare in the High-Speed Train Project: Bangkok-Hua Hin Route. The project operator will be responsible for the cost in train operation management. This is to provide train service with efficiency and safety according to international standards, including project maintenance to be in good condition throughout the contract period of the project.

4.10.2 Public Sector Support

The government will be investor in the cost in relation to land acquisition management. SRT will assist in coordination with government sectors and will allow the private sector to request for financial support (In case of evaluation that the project is not worth in terms of finance) but not exceeding civil work value of the project. The private sector can also submit the proposal for revenue sharing to the government (in case of evaluation that the project has financial worth). This is the condition in proposal competition, which the selection will be made on the proposal with the lowest request for support or offering the highest revenue sharing to the government.

5 Regulations relevant for project implementation

Private sector participation in the investment of the High-Speed Rail Project. Bangkok-Hua Hin of the SRT will be carried out according to the Private Investments in State Undertakings Act B.E. 2556 (2013), the State Railway of Thailand Act B.E. 2494 (1951) including relevant regulations and contracts.

6 Market Sounding of Private Sector

Interested private investors are kindly requested to fill in market sounding questionnaire by returning to the SRT within May 12, 2017 at e-mail: thunthaporn.s@chotichinda.com and chutima.b@chotichinda.com or by mail addressing to

Chotichinda Consultants Limited

1473/4 Chotichinda Building, Soi Phatthanakan 31/1

Phatthanakan Rd., Suan Luang, Bangkok 10250

"(Market Sounding)" in parenthesis on the envelope corner

Or Fax (662) 318-7236

For more information, please contact Tel. (662) 318-7236 Ext. 382

The SRT will neither be responsible for the expenses incurred from questionnaire responses nor committed to taking actions according to the suggestions or information provided by the responders. The SRT will keep responders' comments confidential.

7 Questions

7.1 Information of responder

Contact Name	
Position	
Company Name	
Company Address	
Telephone Number	
Fax Number	
E-mail	

7.2 Business type of responder

☐ The Company that manages MRT rail operation

☐ Financial institution

☐ Manufacturers and suppliers of MRT system

☐ Construction Company

☐ Private sector investor

☐ Others ; please specify ____________________

7.3 Are you interested in the investment of High-Speed Rail Project: Bangkok-Hua Hin or not

☐ Interested (For this reply, please reply to questions 5-9)

☐ Uninterested (For this reply, please reply to question 4 only)

7.4 If you feel that the specified model of private investment in the project may not be appealing, what suggestions do you have on how to invest in the project?

____

____

____

____

7.5 Business type of responder

☐ The company that manages MRT rail operation

☐ Financial institution

☐ Manufacturers and suppliers of MRT system

☐ Construction company

☐ Private sector investor

☐ Others; please specify ____________________

7.6 For private investment in the High-Speed Rail Project in PPP Net Cost model, how do you comment on these considerations in investment?

1. What is an appropriate scope of investment do you think?

2. Do you think how much an appropriate return on investment should be?

3. Do you think how the service quality control of PPP Net Cost should be?

4. Do you think how the public sector should set the conditions on fare rate to minimize the risk in investment?

5. What measures do you take on risk management in terms of ridership?

6. Do you have any ideas about the form of request for financial support from the government (if any)?

7. How do you have ways for sources of funding?

8. Do you have any opinions or suggestions or would you like more support from the government in other forms or not?

9. Other suggestions, such as privileges, which the investors will continuously receive in case of the other two phase construction, which are Hua Hin-Surat Thani and Surat Thani- Padangbezar