

EXECUTIVE SUMMARY

1 Introduction

The title of this report is the **Environmental Impact Assessment for Proposed Development of Kuantan Maritime Hub at Mukim Sungai Karang, Kuantan, Pahang Darul Makmur**, hereinafter will be referred as the Kuantan Maritime Hub (KMh), or just the proposed Project.

2 Project Proponent and EIA Consultant

2.1 Details of the Project Proponent

The Project Proponent is Muhibbah Engineering (M) Bhd (MEB) and its correspondence details are:

Project Proponent	:	Muhibbah Engineering (M) Bhd
Address	:	Lot 579 & 586, 2nd Mile Jalan Batu Tiga Lama 41300, Klang Selangor
Contact Person	:	Mr. Jason Tan
Telephone	:	+603 3342 4323
Fax	:	+603 3342 4327 / 3342 9816
Email	:	jason@muhibbah.com.my

2.2 Details of the EIA Consultant

This EIA is prepared by Chemsain Konsultant Sdn Bhd (Chemsain), the EIA Consultant appointed by MEB. The correspondence details are:

EIA Consultant	:	Chemsain Konsultant Sdn Bhd
Address	:	41, 1st Floor, Jalan USJ 10/1D, 47620 UEP Subang Jaya Selangor
Contact person	:	Ms Lina Chan (Team Leader)
Telephone	:	+603 5637 0163
Fax	:	+603 5637 0385
Email	:	lina.chan@chemsain.com



3 Legal Requirement

The proposed Project will have multi-prescribed activities under the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015 as follows.

First Schedule:

Activity 6: Industry

(e) Shipyard: Dead weight tonnage of 5000 tonnes or more

Activity 15: Dredging

(a) Capital Dredging

Activity 17: Industrial Estate Development

Development of industrial estate covering an area of 20 hectares or more

Second Schedule:

Activity 7: Land Reclamation

(a) Coastal reclamation or land reclamation along river banks involving an area of 50 hectares or more

In compliance with Section 34A of the Environmental Quality Act, 1974, an EIA report on the potential impacts of the proposed Project on the environment is to be prepared and submitted to the Department of Environment (DOE) Putrajaya, for approval prior to commencement of the proposed Project.

Other prescribed activities which are not identified at this stage including disposal of unsuitable dredged materials, are subjected to separate EIA studies and reporting which shall be undertaken prior the commencement of such respective activities.

4 Statement of Need

Among Muhibbah Group's core businesses are in ship building and steel fabrication. Its current shipyard and fabrication yard are located at Telok Gong, next to South Port in Port Klang, Selangor. These facilities have been complementing Port Klang as a maritime hub in the western side of Peninsular Malaysia.

As the existing facilities have limited land areas for expansion and in view of potential demands from the east coast regions, MEB has taken this opportunity to propose another and bigger maritime hub in Kuantan, Pahang. MEB was given the authority by the *Perbadanan Setiausaha Kerajaan Pahang* on 4 June 2016 to develop 3 plots of land with total area of 500 acres into the proposed Kuantan



Maritime Hub (KMH). The proposed KMH is planned for a much bigger shipyard and fabrication yard with associated maritime industrial park as well as institution, business and residential parks to support and be self-sufficient where necessary.

The proposed KMH will also benefits vessels calling Kuantan Port and the deep-water port (currently under construction) in the near future for ship maintenance and repairs works and any other marine engineering requirement. A state of art steel fabrication yard to cater for offshore and onshore requirement especially fabrication of large steel structures, will attract many potential industries as well as the oil and gas groups in the east coast region. With its dedicated navigation channel, the launching of marine vessels and transportation barges will be much at ease and the proposed Project site is deemed strategic to serve these potential customers with shorter delivery time to projects in the east coast region.

Ship building and steel fabrication works require highly skilled workers. In ensuring that the required work force is available, a training institution is planned in the proposed Project site. The proposed Project is expected to provide for more than 13,000 PE which should largely makeup of the workers working within the Project area and their families. During the construction stage, about 2,800 workers are expected during the peak construction period.

Additionally, the proposed KMH will contribute and support the associated developments within the East Coast Economic Region (ECER). Importantly, the proposed Project is expected to contribute to new job and business opportunities to the locals, State and Country.

5 Project Concept

The development of the proposed KMH will include shipyard and fabrication yard with associated maritime industrial park, dedicated navigation channel as well as training institution, business and residential developments.

Figure ES1 and **Table ES1** show the proposed development breakdown within the project area. The development planning on the area designated for Phases 2 and 3 will only be determined by future market requirement and tentatively it is earmarked for industrial parks.



Table ES1: Breakdown of Project Development

Development Phase	Development	Approximate Acreage (acre)
Phase 1	Shipyard	120
	Fabrication Yard	200
	Training Institution	30
	Maritime Industrial Park	100
	Business and Residential Park	50
	Total	500
Phase 2	Future Development (Industrial Park)	365
Phase 3	Future Development (Industrial Park)	115

Key Project activities will include reclamation, dredging and land work development during construction stage, and operation and maintenance of the shipyard and fabrication yard. This EIA study will cover the reclamation and dredging for Phases 1, 2 and 3 and only proposed development components for Phase 1 only.

6 Project Location

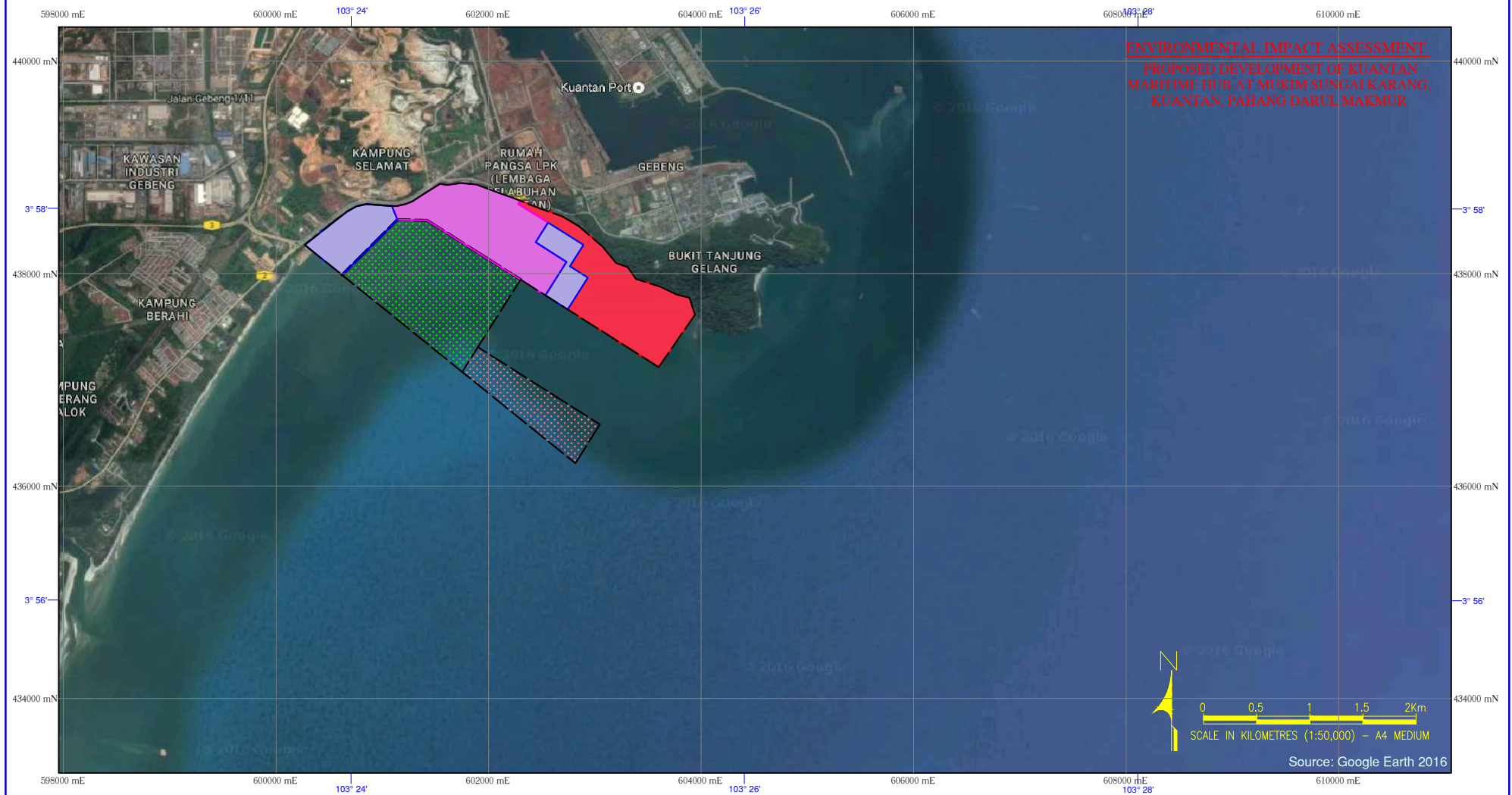
The proposed KMH is to be located fronting the South China Sea and in proximity to Kuantan Port (**Figure ES2**). The proposed Project site is situated immediately south of Kuantan Port, approximately 0.9km from Gebeng Industrial Estate and 100m southeast of Kampung Selamat.

Muhibbah Engineering (M) Bhd (MEB) was given the authority by *Perbadanan Setiausaha Kerajaan Pahang* on 4 June 2016 (**Appendix 1.1**) to develop 3 plots of land with a total area of 500 acres into the proposed KMH. These plots of land namely HSD 47544 PT 22734, HSD 47543 PT 22733 and HSD 47542 PT 22732 will form Phase 1 development of the proposed KMH. MEB wishes to expand the proposed KMH in future with Phase 2 and Phase 3 development with another total land area of approximately 480 acres, and the reclamation for Phases 2 and 3 are included in this EIA study.

Table ES2: Approximate Coordinates of the Project Boundaries







Point	Latitude	Longitude	Associated Land Lot Number
1	3° 57' 48.84" N	103° 23' 45.83" E	HSD 47542 PT 22732
2	3° 57' 39.66" N	103° 23' 57.20" E	HSD 47542 PT 22732
3	3° 57' 06.23" N	103° 24' 38.60" E	Future development
4	3° 56' 41.99" N	103° 25' 08.40" E	Future development
5	3° 56' 53.89" N	103° 25' 15.89" E	Future development
6	3° 57' 17.56" N	103° 24' 38.63" E	Future development





ENVIRONMENTAL IMPACT ASSESSMENT
PROPOSED DEVELOPMENT OF KUANTAN
MARITIME HUB AT MUKIM SUNGAI KARANG,
KUANTAN, PAHANG DARUL MAKMUR

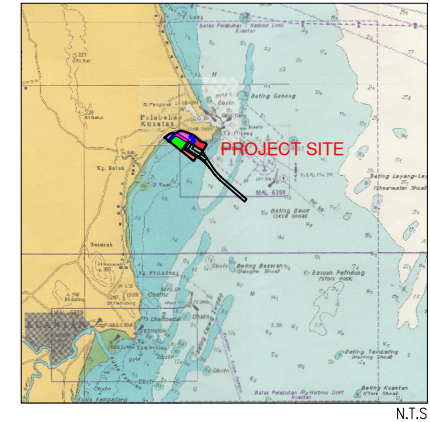
LEGEND:

- | | | | |
|---|--------------|---|------------------------------|
|  | PROJECT SITE |  | PHASE 2 (FUTURE DEVELOPMENT) |
|  | PHASE 1a |  | PHASE 3 (FUTURE DEVELOPMENT) |
|  | PHASE 1b | | |
|  | PHASE 1c | | |







PROJECT PHASE

FIGURE: ES-1

ENVIRONMENTAL IMPACT ASSESSMENT
PROPOSED DEVELOPMENT OF KUANTAN
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LEGEND:

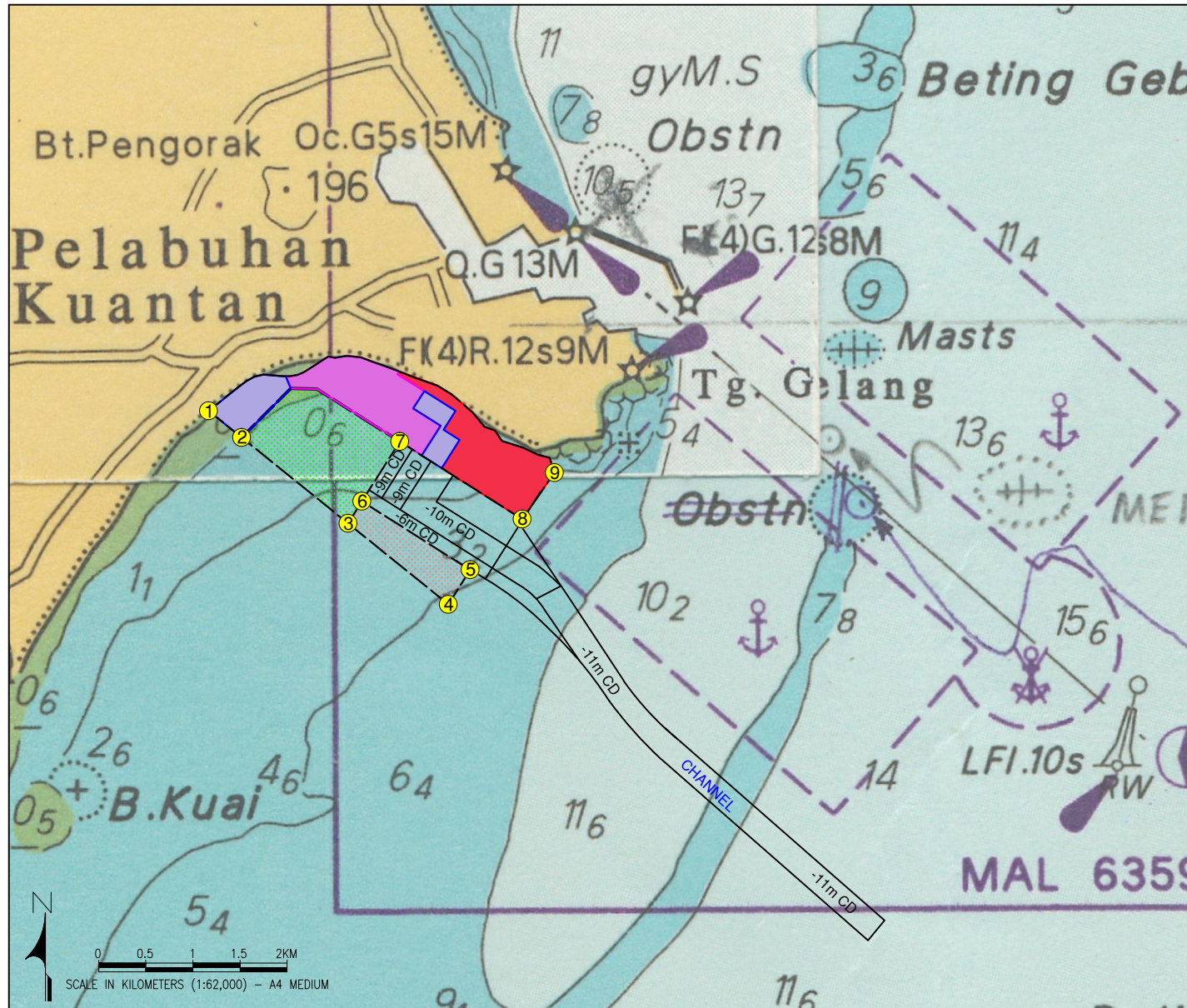
-  PROJECT SITE
-  PHASE 1a
-  PHASE 1b
-  PHASE 1c
-  PHASE 2 (FUTURE DEVELOPMENT)
-  PHASE 3 (FUTURE DEVELOPMENT)

COORDINATES:

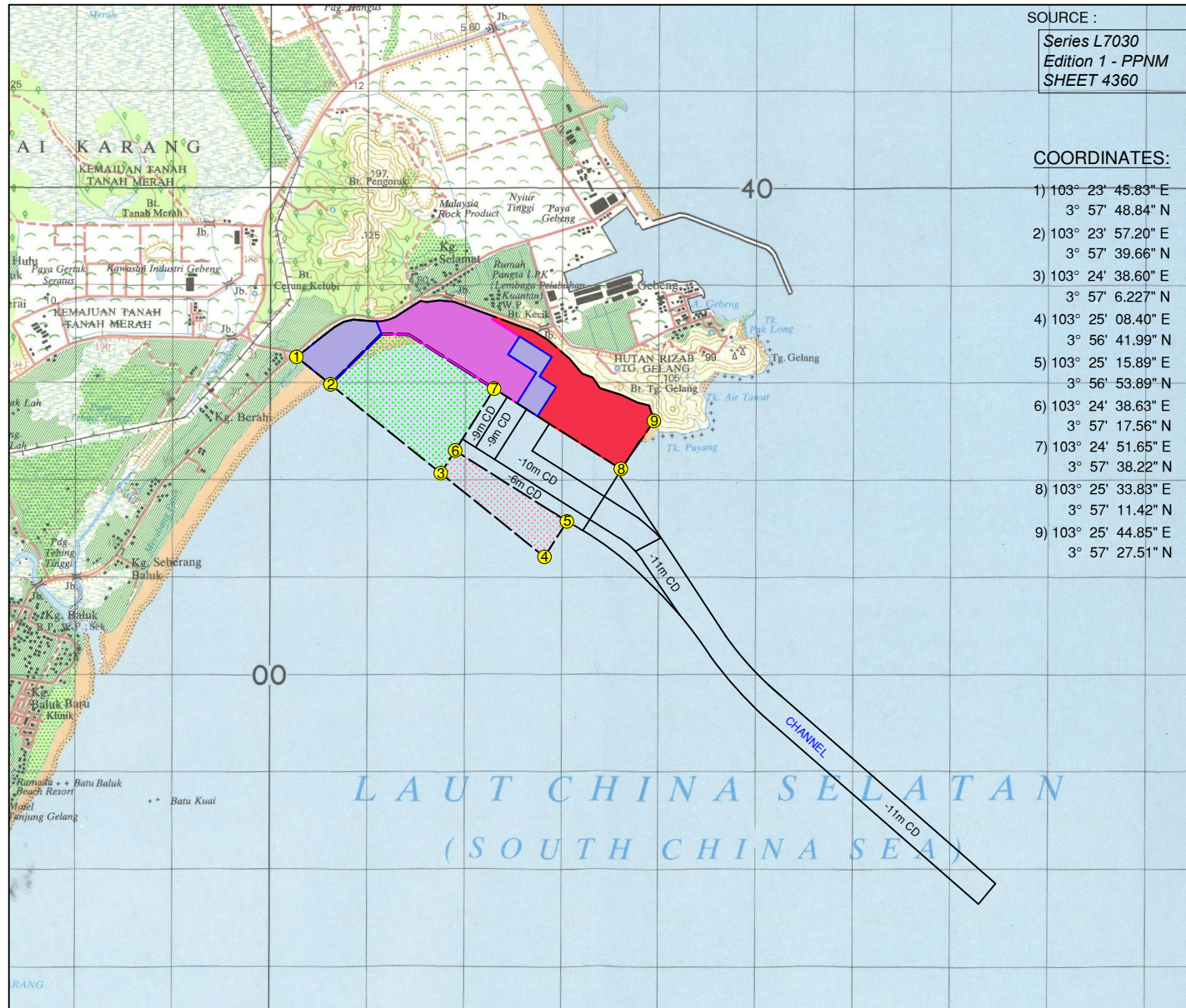
- | | |
|----------------------|----------------------|
| 1) 103° 23' 45.83" E | 6) 103° 24' 38.63" E |
| 3° 57' 48.84" N | 3° 57' 17.56" N |
| 2) 103° 23' 57.20" E | 7) 103° 24' 51.65" E |
| 3° 57' 39.66" N | 3° 57' 38.22" N |
| 3) 103° 24' 38.60" E | 8) 103° 25' 33.83" E |
| 3° 57' 6.227" N | 3° 57' 11.42" N |
| 4) 103° 25' 08.40" E | 9) 103° 25' 44.85" E |
| 3° 56' 41.99" N | 3° 57' 27.51" N |
| 5) 103° 25' 15.89" E | |
| 3° 56' 53.89" N | |

PROJECT LOCATION

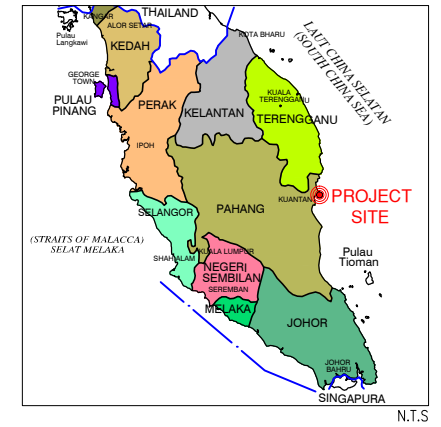
FIGURE: ES-2a









SOURCE: MAL 645

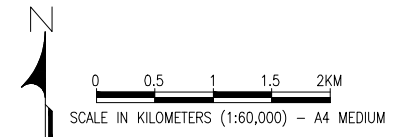


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LEGEND:

-  PROJECT SITE
-  PHASE 1a
-  PHASE 1b
-  PHASE 1c
-  PHASE 2 (FUTURE DEVELOPMENT)
-  PHASE 3 (FUTURE DEVELOPMENT)



PROJECT LOCATION

FIGURE: ES-2b

Point	Latitude	Longitude	Associated Land Lot Number
7	3° 57' 38.22" N	103° 24' 51.65" E	HSD 47543 PT 22733
8	3° 57' 11.42" N	103° 25' 33.83" E	HSD 47544 PT 22734
9	3° 57' 27.51" N	103° 25' 44.85" E	HSD 47544 PT 22734

7 Project Components and Layout

The details on proposed Project layout for Phase 1 development which covers an area of 500 acres with the list of components are presented as **Figure ES3**, **Figure ES4**, **Figure ES5** and **Figure ES6**. The proposed dedicated navigation channel is shown on **Figure ES7**.

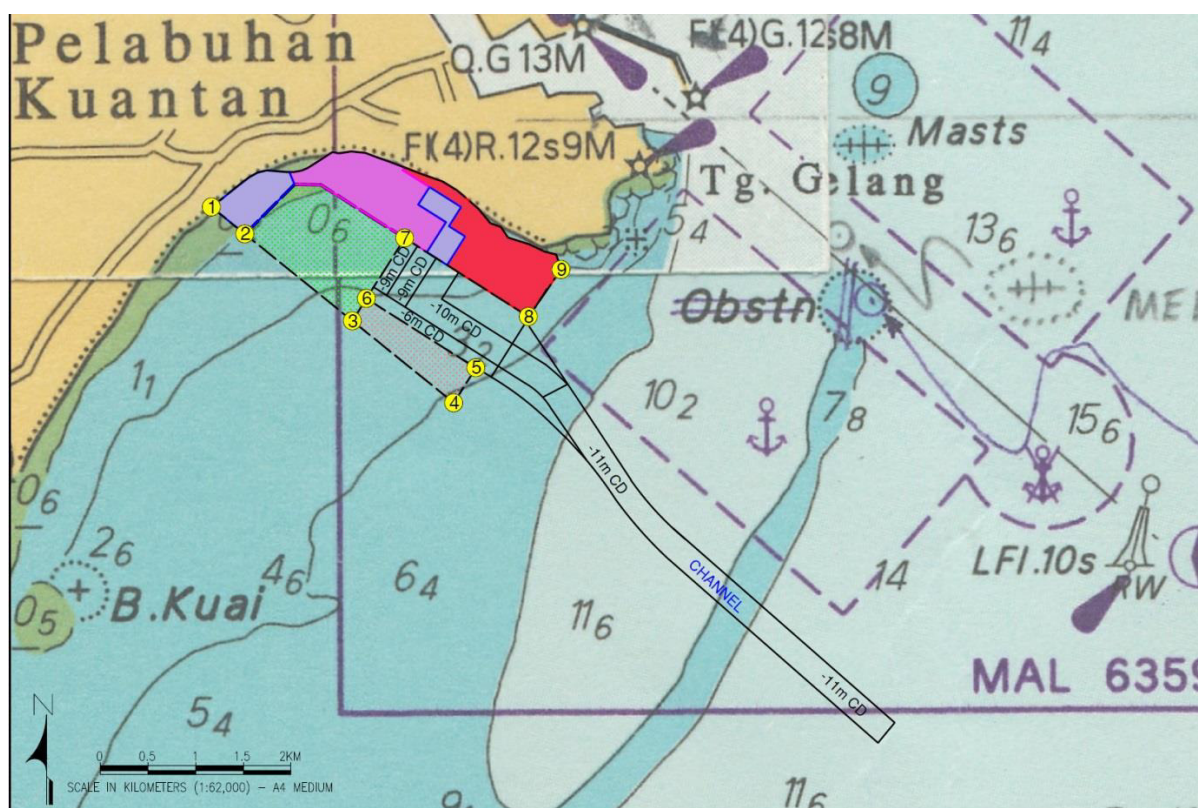


Figure ES7: Proposed Navigation Channel

The main Project components that are associated with activities of potential environmental concerns are listed in **Table ES3**.