

Introduction

Halcrow

Halcrow Group

A world map with a blue background and a topographic color scheme (green for lowlands, brown for highlands). Numerous white dots are scattered across the map, representing office locations. The dots are concentrated in North America, Europe, Africa, and Asia, with a few in South America and Australia.

- 3,400 engineers
- 74 countries
- 60 international offices
- US\$ 220 million turnover

The Halcrow Team

- Richard Clarke – Director of Ports and Dockyards
- Stephen McDonagh – Technical Director for Economics
- Valerie Cooper – Technical Director Environment
- Tim Catchpole – Market Sector Manager Development Planning

Workshop Format

- Introduction
- What is the Trade?
- Why Brunei? Why Muara?
- Planning Implications
- Environmental Issues
- How do we make it happen?
- Summary

What is the Trade?

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Existing Trades

- Containers - 72,014 TEU in 2002
- General Cargo – 1 million Tonnes in 2002
- Cruise Liners – Occasional
- Regional Growth – 10%
- Existing Port Capacity – 350,000 TEU

The Target

- Container Transshipment
- Industrial Activity
- Calls by Large Container Ships
- Low Shipping Costs

Container Transshipment

- Requires a Network of Feeder Ships
- Trade is Mobile
- Charges are Very Low
- There are no Profits
- With a foreign operator, Brunei will only see benefits from employment and lower domestic prices.

Industrial Activity

- Import – Add Value - Export
- Competitive with other locations
 - Location
 - Political Stability
 - Ease of doing business
 - Costs
 - Labour Force
 - Infrastructure

Calls by Large Ships

- Large exchanges are needed
 - Transhipped containers
 - High volume local industries
 - Direct Distribution
- Large exchanges – large ships – low costs – transshipment/industry – large volumes – large exchanges

**Why Brunei?
Why Muara?**

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What Makes the Big Ships Call?

- Minimum Diversion from Trade Route
- Large Container Exchange
- Fits Shipping Schedules
- Has Adequate Facilities
- Can Handle Containers Quickly
- Safe for Shipping and Cargo
- Has a Trusted Operator
- Low Charges

Location



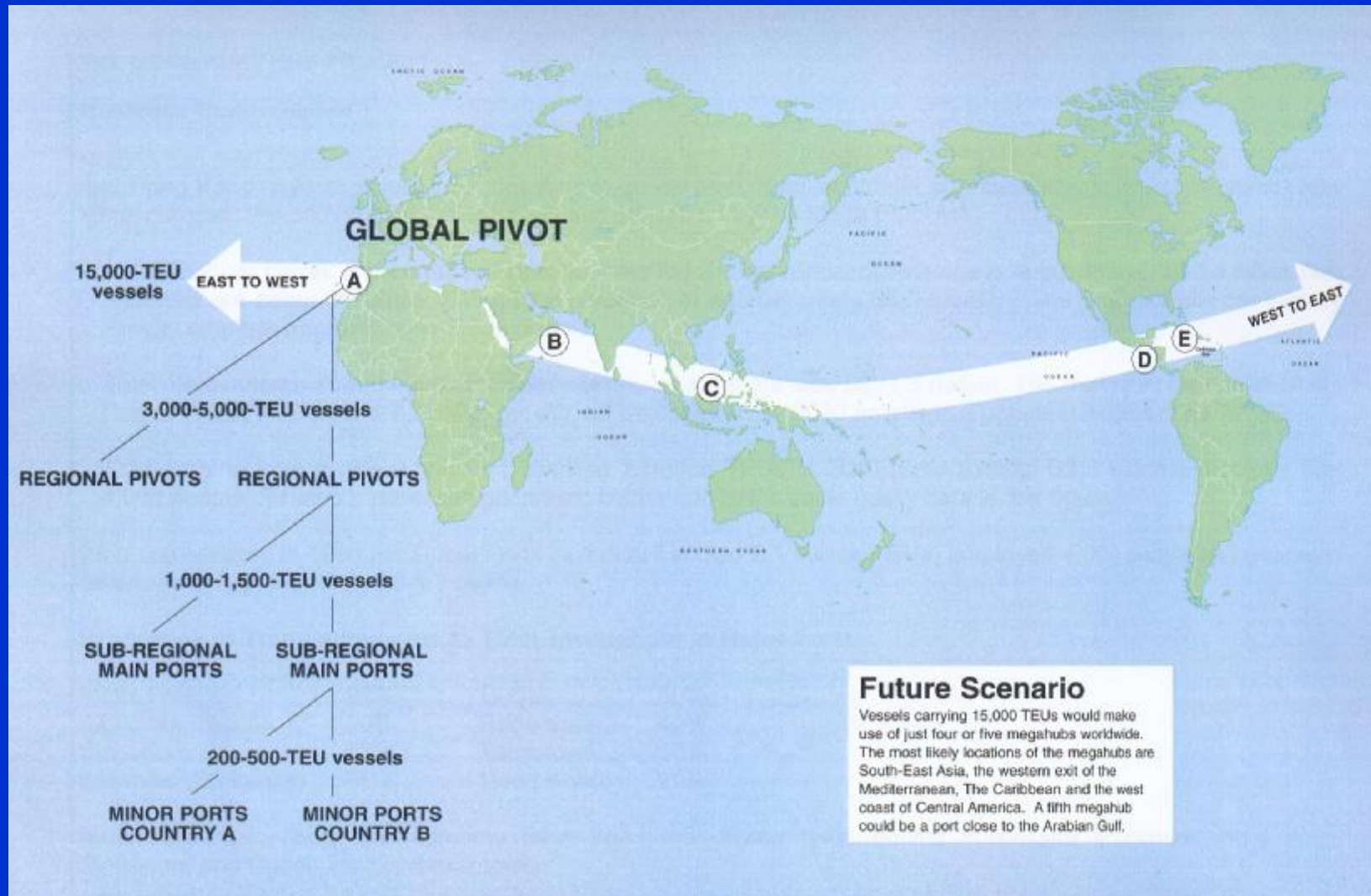
Facilities (1)

- The Biggest Container Ships Afloat
 - 348m long
 - 42.8m beam
 - 14.5m draft
 - Up to 8,000 TEU
- The Maersk Requirements
 - 16m of water
 - 100 Containers per hour average
 - No Waiting for Berths
 - High Reliability

Facilities (2)

- Container Ships Get Larger. Next Year -
 - 400m long
 - 57m beam
 - 15m draft
 - Up to 12,000 TEU
- Then Malaccamax?
 - 500m long
 - 65m beam
 - 21m draft
 - Up to 21,000 TEU

Container Ship Distribution



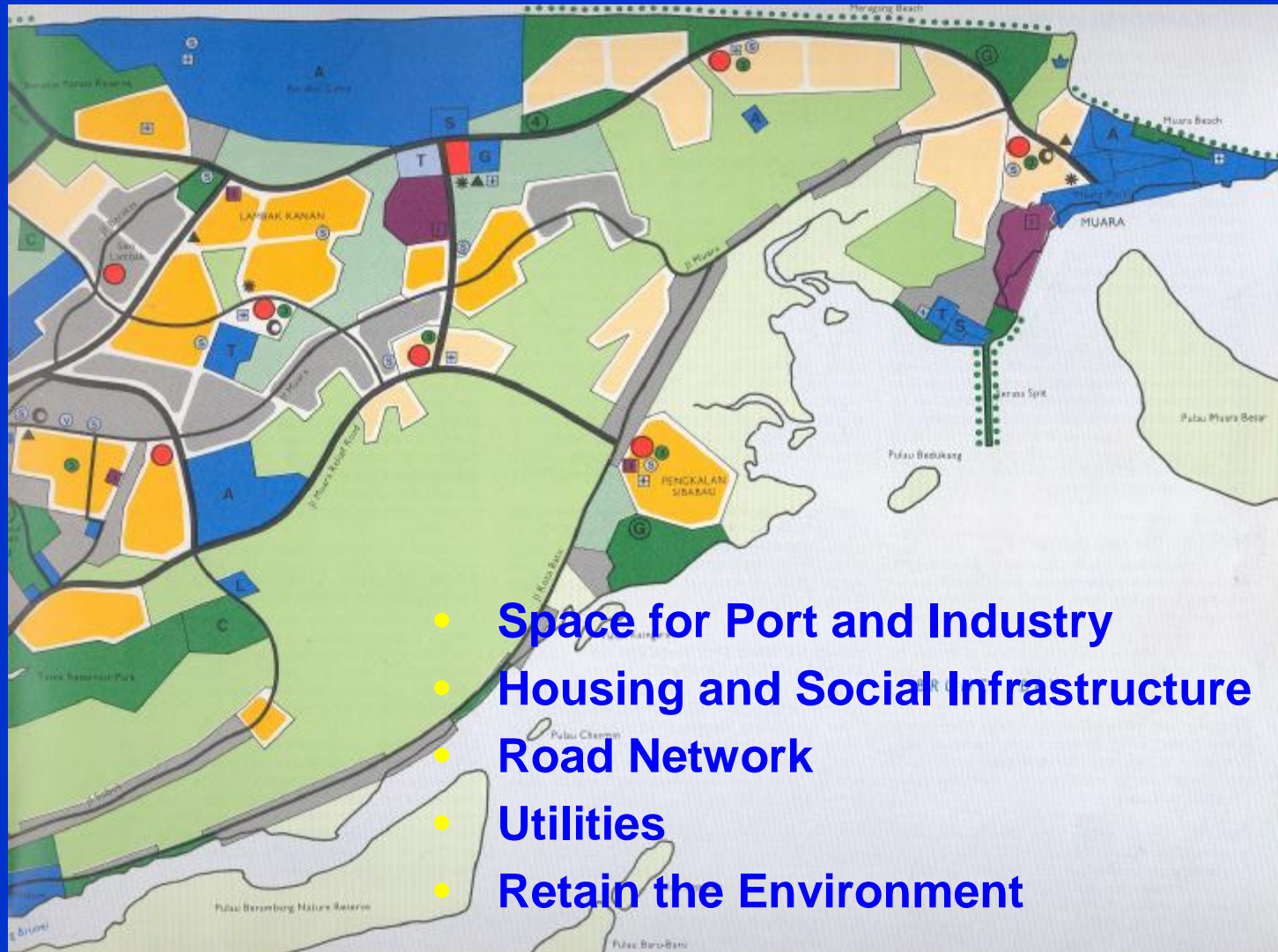
Muara Advantages

- Competitive Location
- Political and Financial Stability
- Deep Water 3Km from Shore
- Easy Dredging
- Easy Reclamation
- Flat Foreshore
- Strong Winds Rare

Planning Implications

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Local Issues

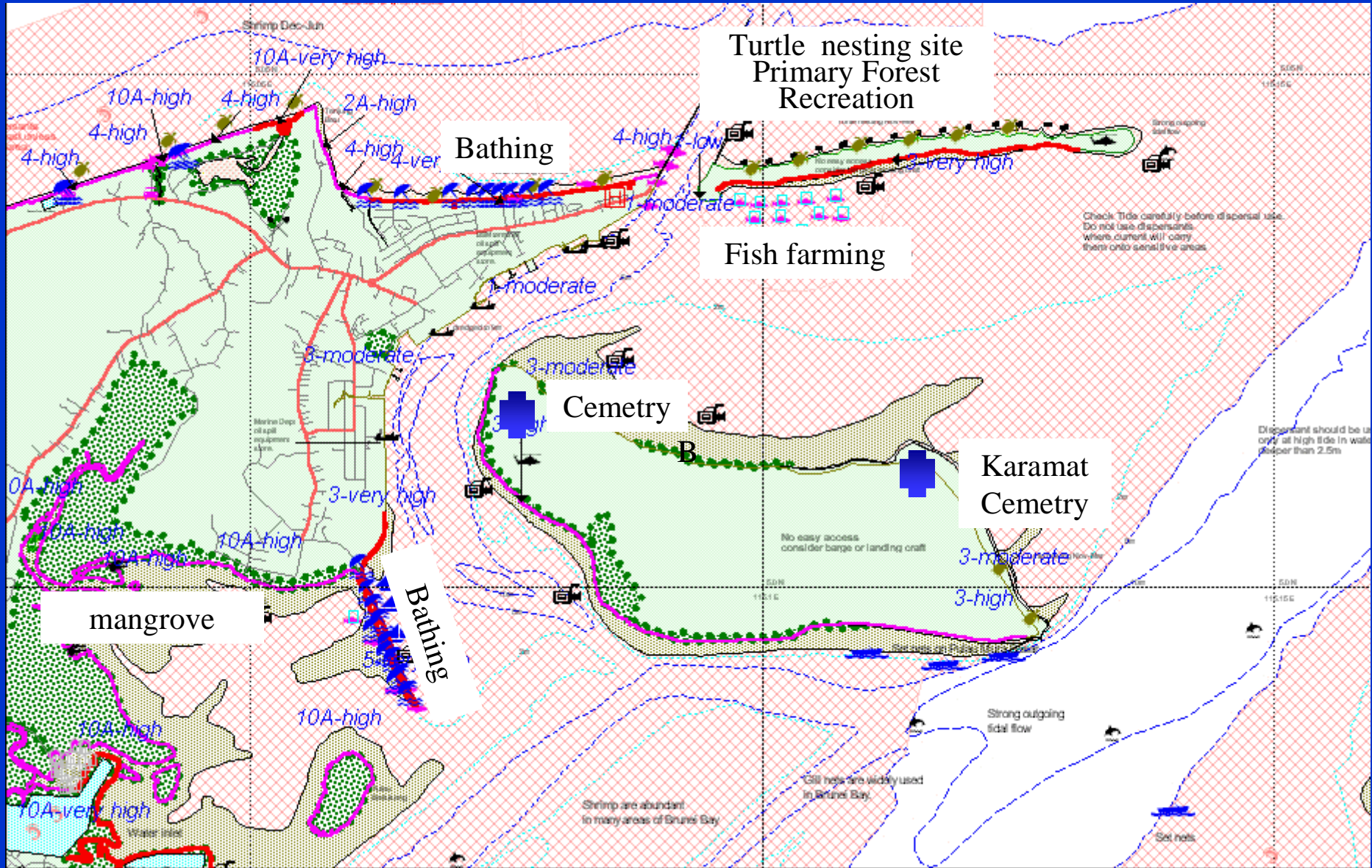


Environmental Issues

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Why is Brunei special?

- Beautiful scenery
- Rich marine biodiversity
- Healthy mangroves with rare species
- Unspoilt rain forest
- Thriving fishery and fish farms
- Rich cultural heritage
- A good place to live



How do environmental issues contribute to the economy?

- Demersal and pelagic fisheries - shallow waters
- Shrimp fisheries – sheltered mangroves for breeding
- Fish farming – calm waters with easy access
- Cultural tourism – religious and historic treasures
- Ecotourism – unspoilt rain forest and mangrove
- Mangrove harvesting – localised contributions

How can we build a port and all associated infrastructure and keep the beauty of Brunei?

- Thoughtful planning – understand the complex ecosystem
- Sensitive design – within reasonable cost, minimise impacts on views and ecosystems
- Avoidance of key environmental assets – choose the routes and locations carefully
- Mitigation of potential impacts – design features
- Replacement of valuable environmental assets – replace what would unavoidably be damaged
- Good emergency measures – rapid, effective response to pollution incidents

**How do we Make it
Happen?**

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The Main Requirements

- Special Zone with a Single Authority
- Long Secure Land Leases
- 100% Foreign Ownership Allowed
- Full Repatriation of Funds
- Good Labour Supply
- Good Infrastructure
- Careful Planning
- The Right Investors

Conclusion

- An Independent Objective Study is Needed
- A Window of Commercial Opportunity Exists
- The Site Conditions Mean Port Construction Costs will be Low
- The Commercial and Project Structures Need to be Analysed.

**BRUNEI ECONOMIC DEVELOPMENT BOARD
HALCROW GROUP**



WORKSHOP

***THE DEVELOPMENT OF
PULAU MUARA BESAR
INTO A
GLOBALLY COMPETITIVE PORT***

13 May 2003

Mutiara Ballroom, Brunei Darussalam