

LIMA Programme 2023

Port/Harbour works and Dams

Risk assessment and Pricing

Thomas Kibet

Engineering Underwriter

September 2023

NOT IF, BUT HOW



01

Introduction

02

Harbour Works

03

Risk assessment

04

Conclusion

05

Dams

06

Q&A

Introduction

01



Port/Harbour works and Dams Risk assessment and pricing

02



Port/Harbour works and Dams

Risk assessment and Pricing



Source: [Transnet Port Terminal](#)

- Scope of work
- Engineering facilities

Port/Harbour works and Dams

Risk assessment and Pricing

Overall layout and design

- Interconnection between units
- Design complexity/state of art

Port/Harbour works and Dams

Risk assessment and Pricing

Overall layout and design



Source: [Durban Harbour](#)

- Neighborhood
- Access by Vessels

Port/Harbour works and Dams

Risk assessment and Pricing

Type of harbor works



Source: [Libyan Oil Port](#)

- Piling Works

Port/Harbour works and Dams

Risk assessment and Pricing

Type of harbor works



Source: [Libyan Oil Port](#)

- Piling Works



Port/Harbour works and Dams

Risk assessment and Pricing

Type of harbor works



Source: www.imia.com/wp-content/uploads/2023/08/

- Land Reclamation works

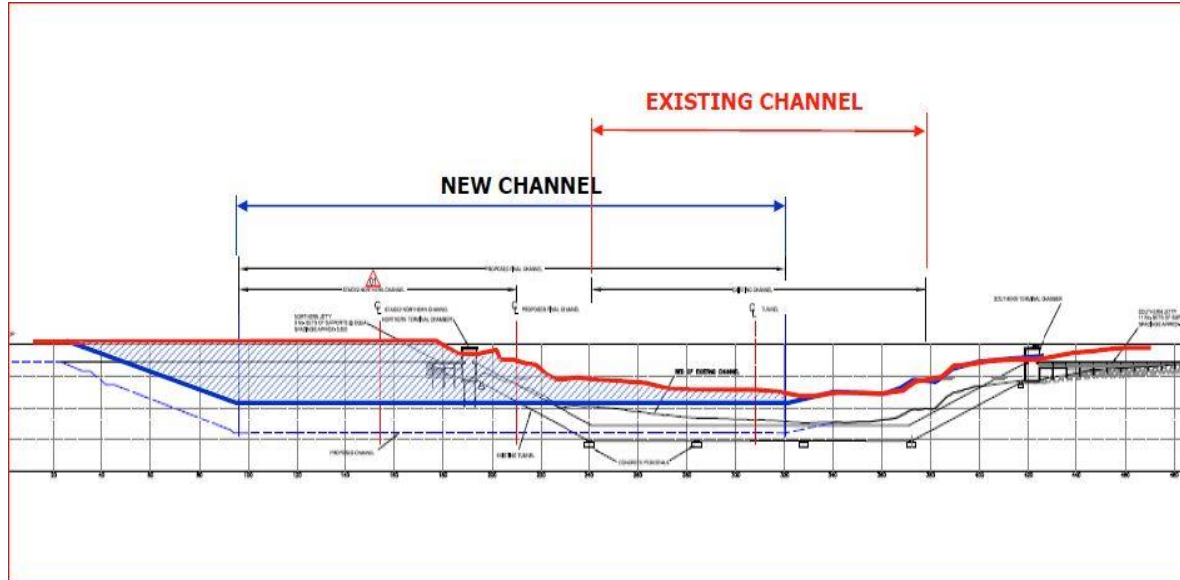


Source: [Port expansion project in China](#)

Port/Harbour works and Dams

Risk assessment and Pricing

Dredging Risks



- Depth and length
- Nature of sea material
- Marine life concerns

Port/Harbour works and Dams

Risk assessment and Pricing

Dredging Risks



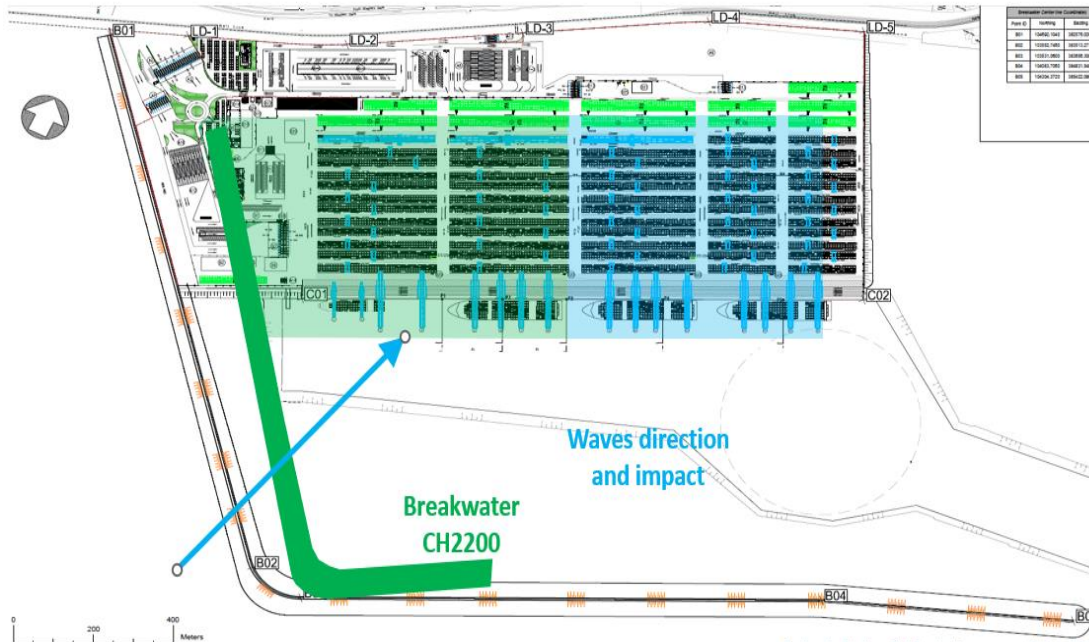
Source: [Backhoe Dredger 'PETER THE GREAT'](#)

- Equipment type
- Methodology
- Nature of sea material

Port/Harbour works and Dams

Risk assessment and Pricing

Wave/tidal/wind control



- Breakwaters design
- Forecasts

Port/Harbour works and Dams

Risk assessment and Pricing

Wave/tidal/wind control



Source: [Tema Port Expansion Project](#)

- Breakwaters construction material
- Maintenance
- Size/length

Port/Harbour works and Dams

Risk assessment and Pricing

Type of Machinery and equipment



Source: investor.maersk.com/static-files

- Type of equipment manufacturer
- Operator experience
- Site conditions
- Maintenance
- Age

Port/Harbour works and Dams

Risk assessment and Pricing

Quality of material

- Manufacturer
- Standards
- Design
- Contractor's experience

Port/Harbour works and Dams

Risk assessment and Pricing

Inspection of Machinery and equipment

- Records
- Timelines
- Type of checks

Thank you for your attention!

NOT IF, BUT HOW

