



MARINE WORKS PROJECTS

DESIGN

SUPERVISION

PROJECT
MANAGEMENT

COASTAL
MODELING



WE DELIVER THE COMPLETE PACKAGE

Bower & Octant Engineering is a registered company in the Department of Economic Development of Dubai and approved by all authorities in UAE and MENA region.



Bower & Octant
Engineering

PROJECTS

RIG BERTHING PLATFORM AND TOWER CRANE FOUNDATION

FUJAIRAH BEACH HOUSE

LANO BEACH RESTAURANT

BVLGARI MANSION 10 JETTY

AL MAQTA FLOATING MARINE STATION

FLOATING PRIVATE MARINA CONSTRUCTION AT DUBAI
CANAL PROJECT

CAUSEWAY REVETMENT STABILITY

REINSTATING PORT RASHID

MAPUTO INTERMODAL CONTAINER TERMINAL, MOZAMBIQUE

DIERA OLD SOUQ MARINE STATION

SEA WATER INTAKE

DRYDOCKS PIER E EXTENSION

GEOTECHNICAL DESIGN OF TEMPORARY SAND BUND
FOR DUBAI CREEK HARBOR

BARRACUDA BEACH RESORT - SHORE PROTECTION

ENOC FLOATING GAS STATION, HAMRIYA

SOUTH YARD DEVELOPMENT-DRY DOCKS

AL DHAFRA BEACH HOTEL - BEACH SHORE RENOVATION
DANAT JEBEL DHANNA HOTEL & RESORT

SIX SENSES PALM JUMEIRAH - ENVIRONMENTAL STUDIES

THOE-MARINE DEVELOPMENT

QUAY WALL BEHIND ABU DHABI MALL

LADIES BEACH CLUB SILLA

DUBAI BALLOON INFRASTRUCTURE

THE HEARTH OF EUROPE-PORTOFINO HOTEL - THE WORLD

MASTER PLANNING OF NEW PORT IN HADRAMOUTH
REGION-YEMEN

CONDITION SURVEY OF THE PORT OF NOVI SAD

BOARD WALK AL KHALEEJ AL ARABI ROAD

SIX SENSES PALM JUMEIRAH - DESIGN OF JETTY
AND FLOATING PONTOON

FAIRMONT OFFSHORE BREAKWATER AND BEACH DESIGN

FATIMA LADIES BEACH

AL MAQTA CHANNEL

QUAY WALL IN MARYAM ISLAND

MARINA AL BATEEN-THE BLUE MARINA

WATERFRONT COASTAL MODELLING

THE HEARTH OF EUROPE MARINE WORKS
THE WORLD ISLANDS



WE'VE MORE THAN 30 YEARS EXPERIENCE IN ENGINEERING INDUSTRY

We provide design, management and supervision services for coastal, civil, architectural and MEP projects, both solely and in partnership with other companies. In the last three decades, our experienced engineers have been involved in the design and supervision of numerous major projects throughout the Gulf Region and around the world.



OUR SERVICES

Marina Development and Design

Harbors, Ports & Shipyards

Quay Walls and Jetties

Pile Design

Sea Defense Structures,
Breakwaters

Floating pontoons Design

Geotechnical Evaluation Studies

Environmental Coastal Studies

Hydrogeological Studies

Dewatering design



COASTAL MODELING



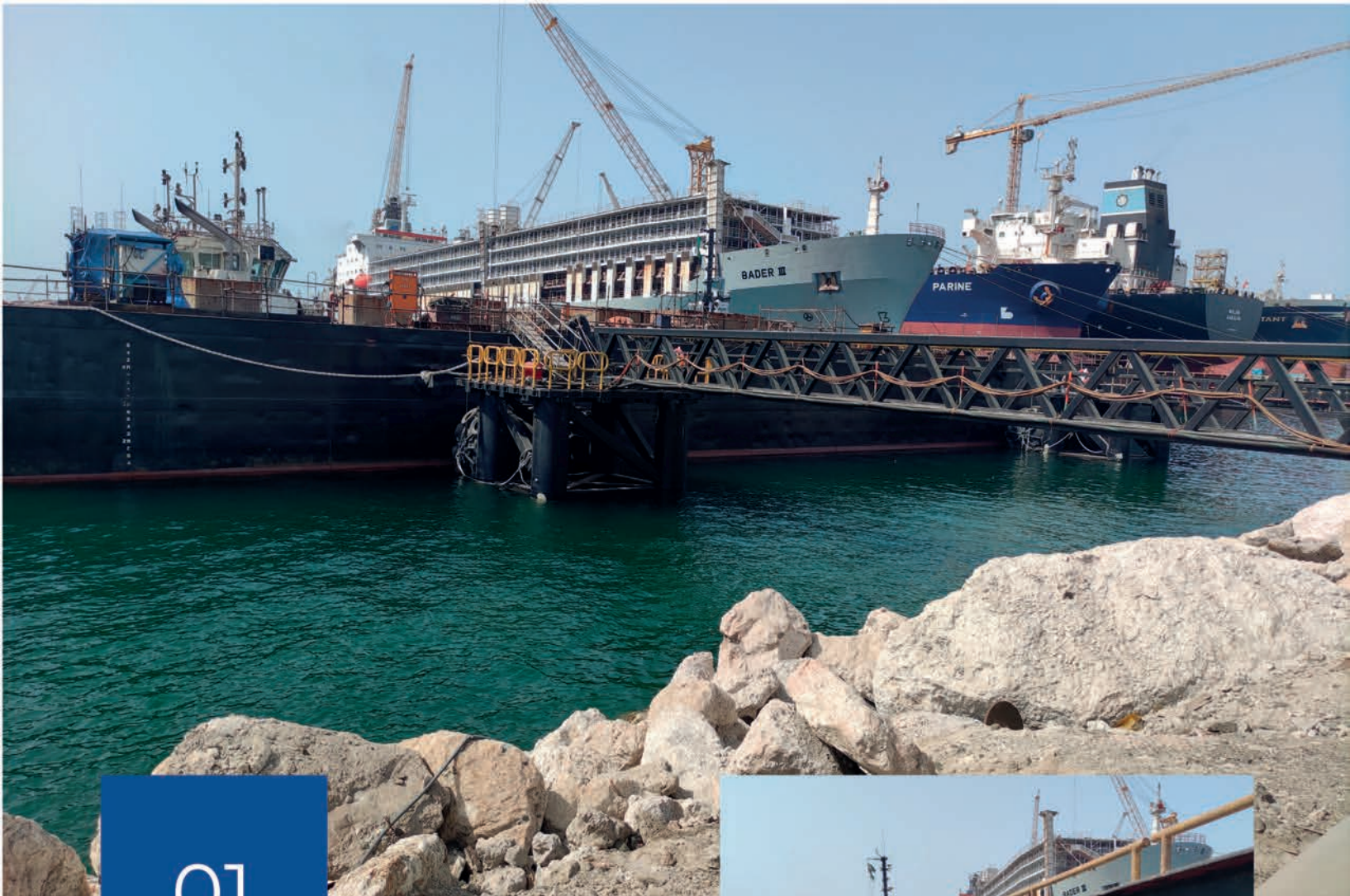
SUPERVISION



DESIGN



CONSULTANCY

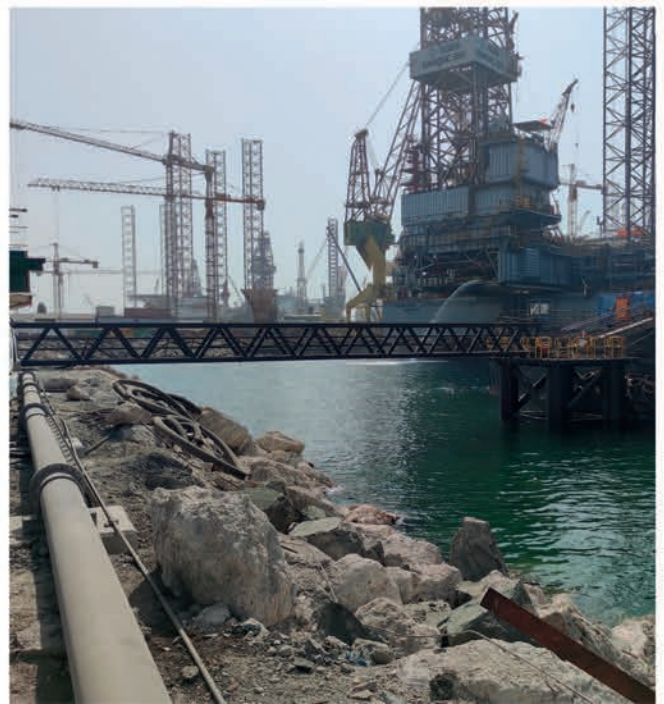


01

RIG BERTHING PLATFORM AND TOWER CRANE FOUNDATION

Client: Dry Docks
Location: UAE, Dubai
Authority: Dubai Municipality and TRAKHEES

• Detailed Structural Design of Piles, Gangway, Fenders and steel platform and approvals from authorities





02

FUJAIRAH BEACH HOUSE

Client: Eagle Hills
Location: UAE, Fujairah
Authority: Dibba Municipality

- Detailed Design of Breakwater
- Detailed Design of Beach profiles
- Detailed Design steps on revetment
- Detailed Design of culvert
- Hydrodynamic Modeling
- Sediment Transport Modeling and Study
- Wave Propagation and Transformation Modeling



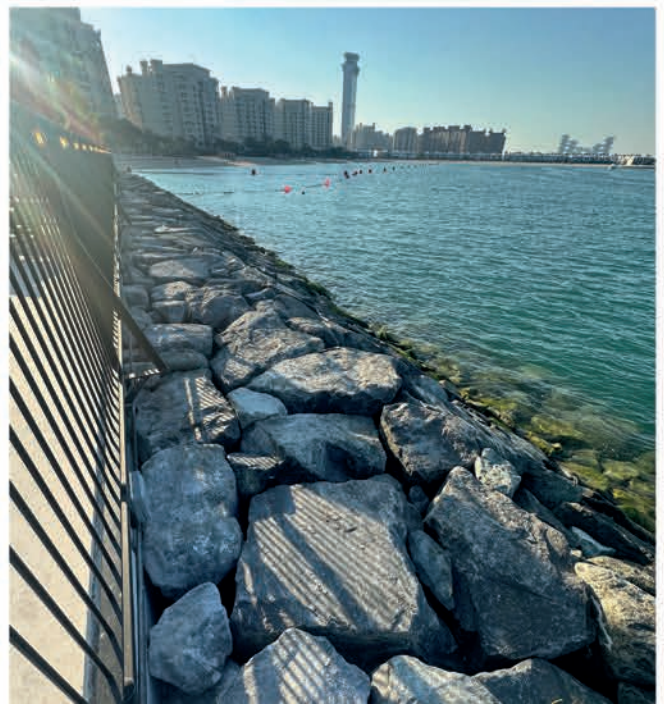


03

LANO BEACH RESTAURANT

Client: BVA Marine
Location: UAE, Dubai
Authority: Dubai Municipality

- Design review, design approval, supervision of construction of revetment and swimming pool
- Review submittals from the contractor
- Submission to authority for No Objection Certificates





04

DIERA OLD SOUQ MARINE STATION

Client: Waagner Biro

Location: UAE, Dubai

Authority: Dubai Municipality and TRAKHEES

- Detailed design for Marine structures.
- Marine and Structural calculations and drawings.
- Detailed plans and drawings with supporting calculation for the most efficient Structural and Marine design.
- Obtaining Building permit, architecture, structure, marine and MEP (AC, Electrical, Water, Drainage) approved drawings.
- Obtain NOC's from DEWA, DU, RTA and DCD.



05

Client: Abu Dhabi Ports
Location: UAE, Abu Dhabi
Authority: Abu Dhabi Municipality
and ITC

- Design of floating fuel station pontoon, design of anchorage, design of gangway.
- Obtaining approvals from Abu Dhabi Authorities.
- Review specialists' drawings to incorporate in the design.
- Supervision



AL MAQTA FLOATING MARINE STATION





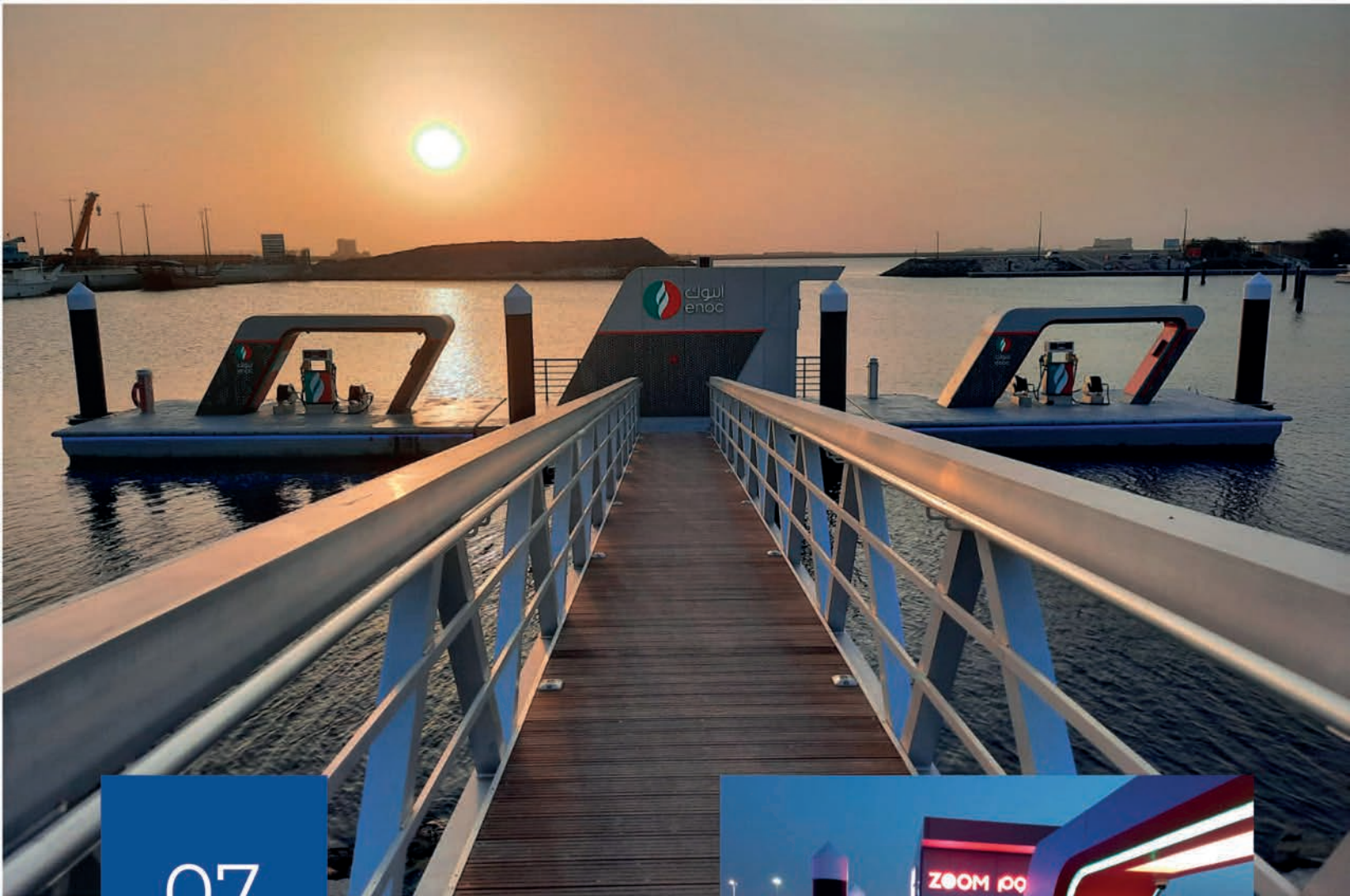
06

GEOTECHNICAL DESIGN OF TEMPORARY SAND BUND FOR DUBAI CREEK HARBOR

Client: DUTCO Construction Co. LLC
Location: UAE, Dubai
Authority: Abu Dhabi Municipality

- Structural design of the bund with slope (temporary breakwater design)
- Seepage Analysis



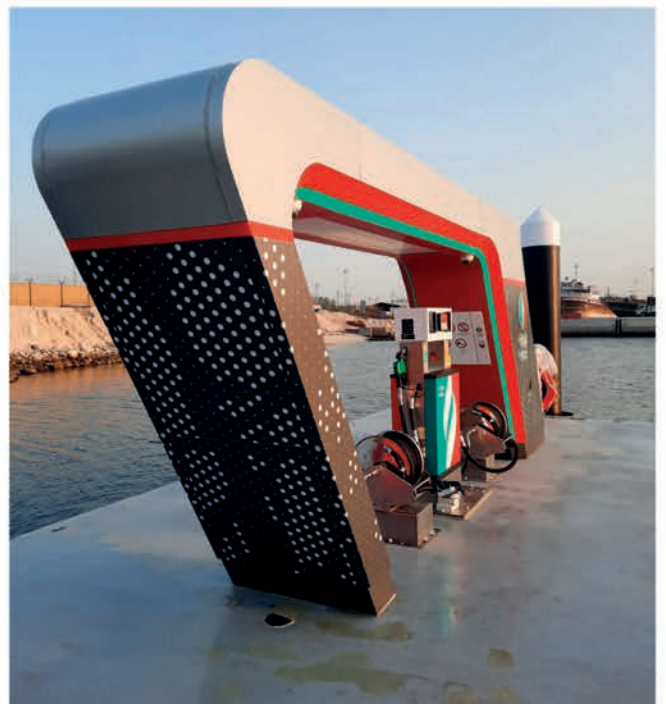


07

ENOC FLOATING GAS STATION, HAMRIYA

Client: ENOC
Location: UAE, Dubai
Authority: Dubai Municipality and TRAKHEES

- Detailed Design of Floating Pontoon review and approval
- Detailed Design of Piles and Pile Guides
- Detailed Design Gangway
- Hydrodynamic Modeling





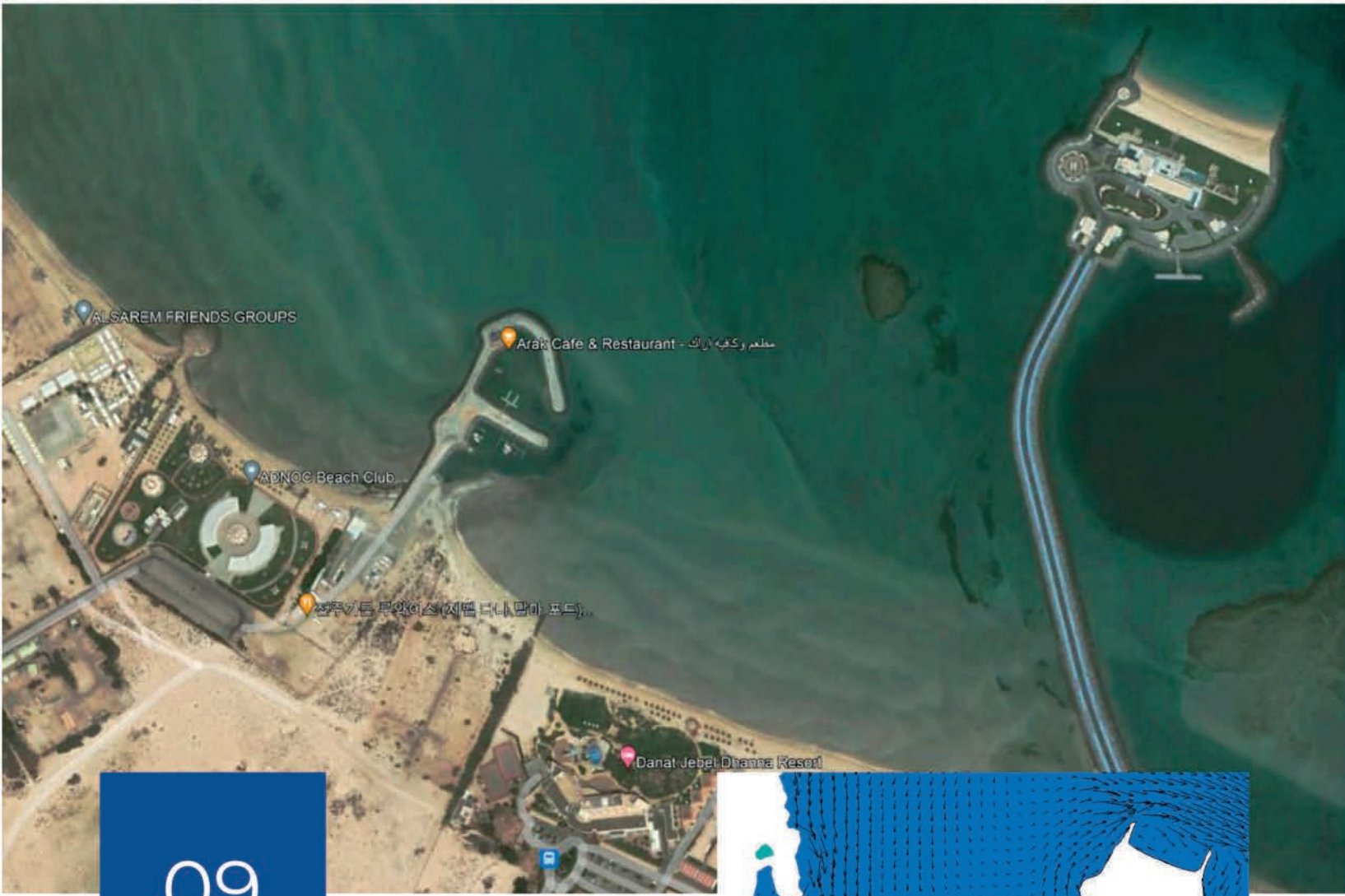
08

SOUTH YARD DEVELOPMENT DRY DOCKS

Client: Dry Docks
Location: UAE, Dubai
Authority: Dubai Municipality and TRAKHEES

- Design Review
- Site Supervision
- Project Management



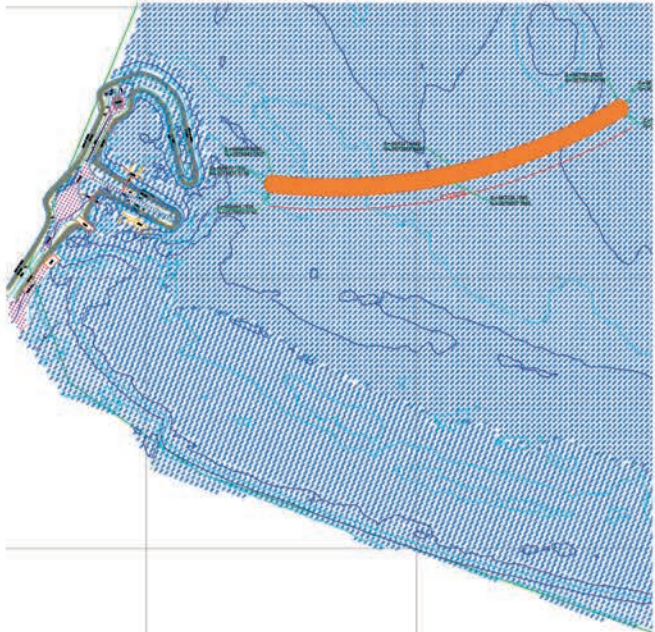
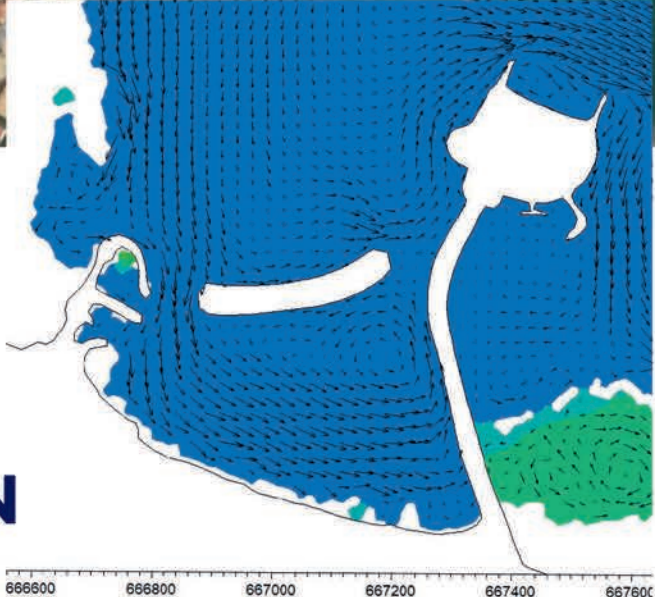


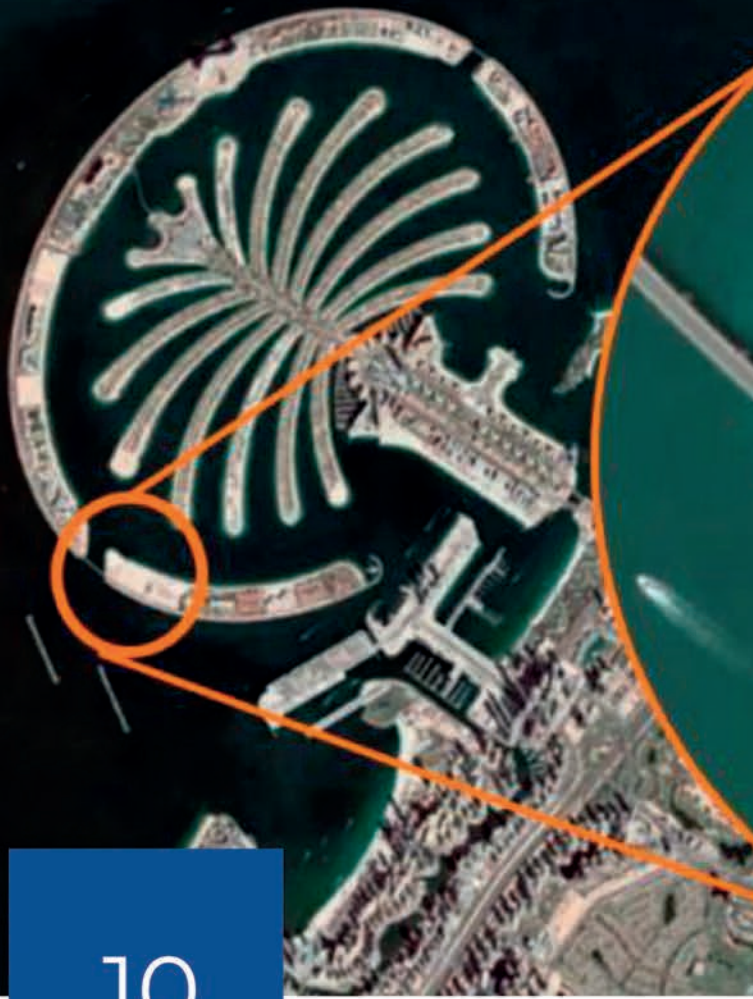
09

AL DHAFRA BEACH HOTEL – BEACH SHORE RENOVATION DANAT JEBEL DHANNA HOTEL & RESORT

Client: AYK Contracting
Location: UAE, Abu Dhabi
Authority: Abu Dhabi Municipality

- Hydrodynamic Modeling Study
- Flushing Modeling Study
- Sediment Plume Modeling Study
- Wave propagation Study
- Detailed Design of Offshore Breakwater
- NOC and approvals



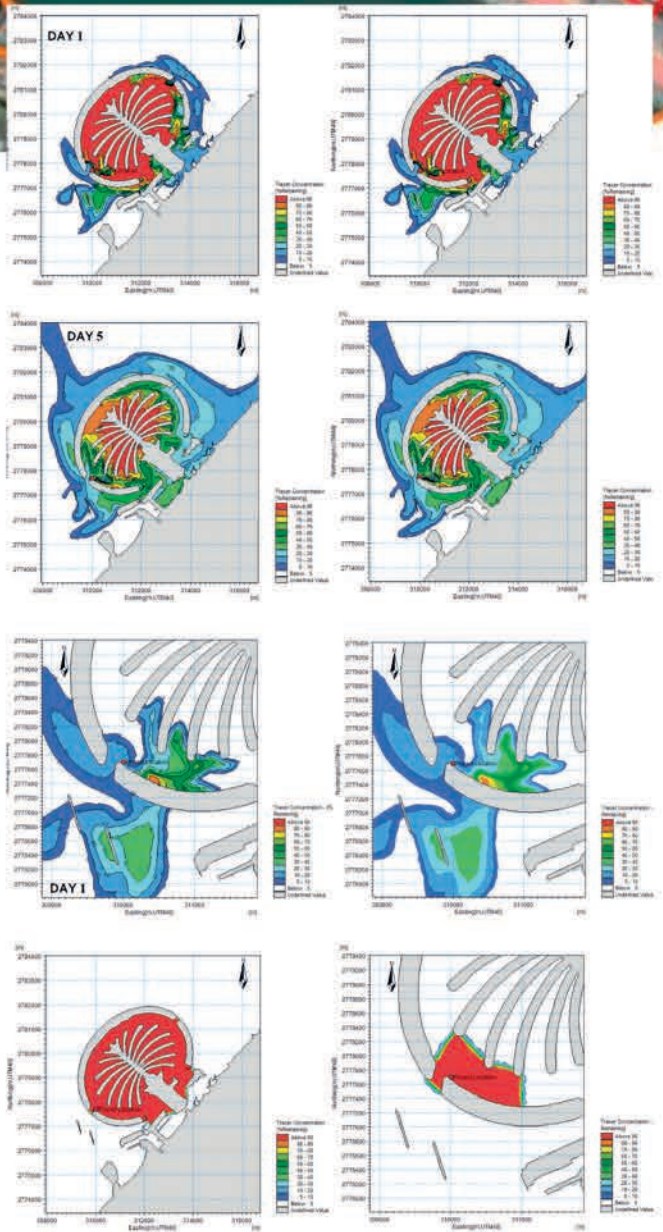


10

SIX SENSES PALM JUMEIRAH ENVIRONMENTAL STUDIES

Client: BYRNELOOBY
 Location: UAE, Dubai
 Authority: Dubai Municipality
 Environmental Department

- Hydrodynamic Modeling Study
- Flushing Modeling Study
- Sediment Plume Modeling Study
- NOC and approvals





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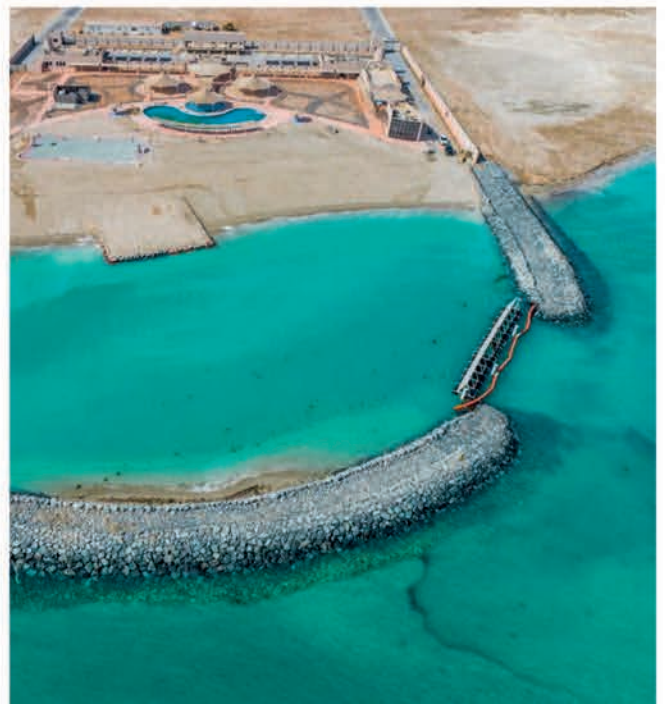
LADIES BEACH CLUB SILLA

Client: ARCAL ENGINEERING CONSULTANT L.L.C

Location: UAE, Abu Dhabi

Authority: Abu Dhabi Dubai Municipality (Ruwais)

- Detailed Design of Revetment
- Detailed Design of Beach
- Detailed Design of Breakwater
- Connection to the land development
- Project Management





12

DUBAI BALLOON INFRASTRUCTURE

Client: Atlantis
Location: UAE, Dubai
Authority: Dubai Municipality and TRAKHEES

- Detailed Design of Steel Platform
- Detailed Design of Piles and foundations
- NOC and approvals



B&O team conducted full Master Plan of completely new port

Client: Royal Clock
Value: USD 1.2 Billion

- Master Planning of the Port
- Site condition inspection
- Determining most suitable design for the given location
- Defining the Client's needs
- Developing the port facilities and maximum capabilities
- Cost budgeting and cost control





**MASTER
PLANNING OF
NEW PORT IN
HADRAMOUTH
REGION-YEMEN**





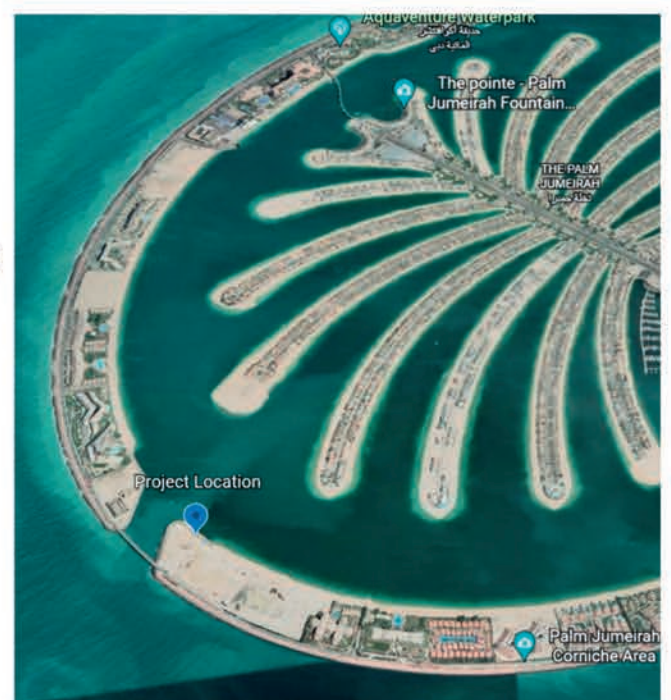
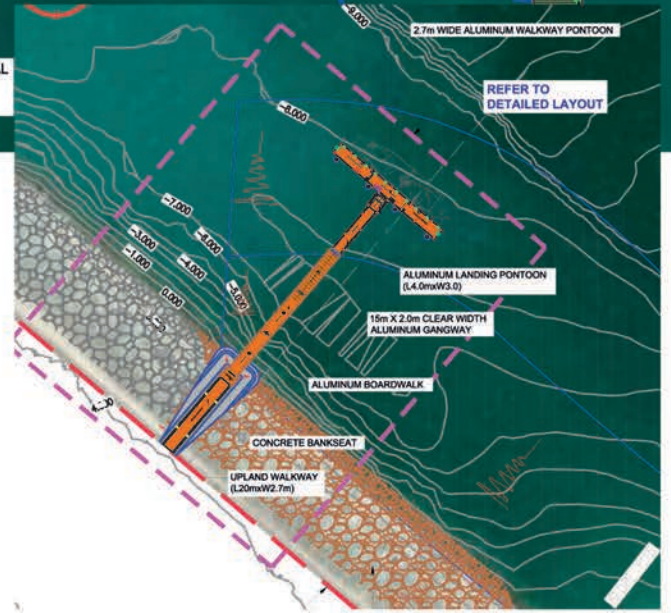
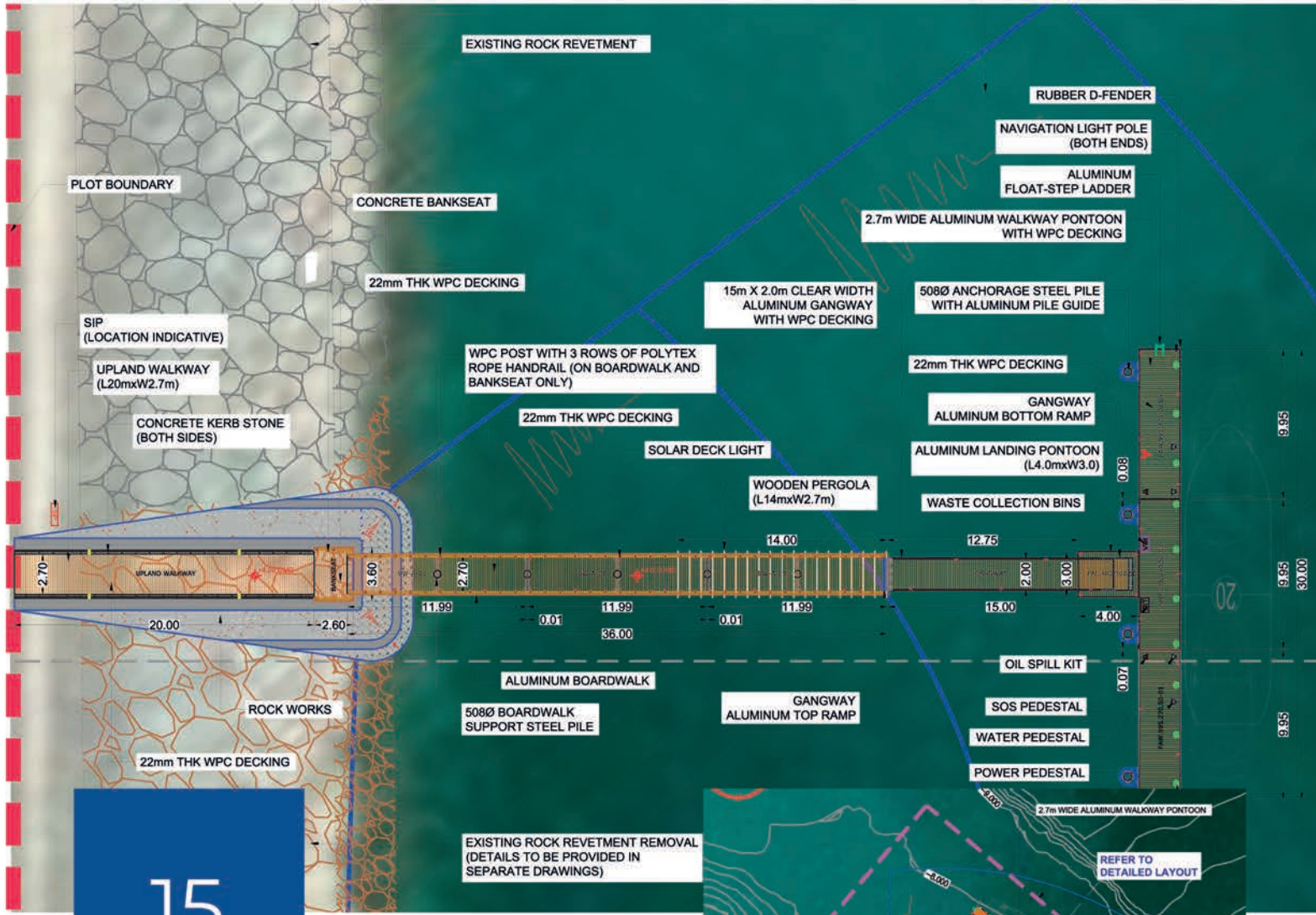
14

BOARD WALK AL KHALEEJ AL ARABI ROAD

Client: ICON-INTELLIGENT CONSULT
- CONSULTANTS ENGINEERS LLC
Location: UAE, Abu Dhabi
Authority: Abu Dhabi Municipality

- Detailed Design of Revetment
- Connection to the land development
- Project Management





SIX SENSES PALM JUMEIRAH DESIGN OF JETTY AND FLOATING PONTOON

Client: Majestic Marine
 Location: UAE, Dubai
 Authority: Dubai Municipality and TRAKHEES

- Detailed Design of fixed jetty
- Detailed Design of Piles
- Detail Design of Pontoons
- NOC and approvals



16

FATIMA LADIES BEACH

Client: Musanada
Location: UAE, Abu Dhabi
Authority: Abu Dhabi Municipality

- Hydrodynamic Modeling
- Sediment Transport Modeling and Study
- Wave Propagation and Transformation Modeling
- Detailed Design of Revetment
- Detailed Design of Beach
- Detailed Design of Breakwater
- Connection to the land development
- Supervision of the project
- Project Management



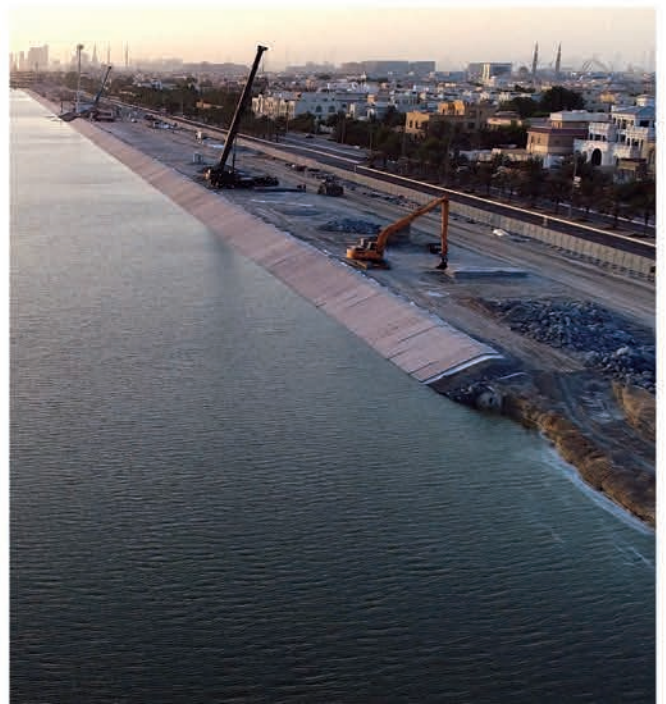
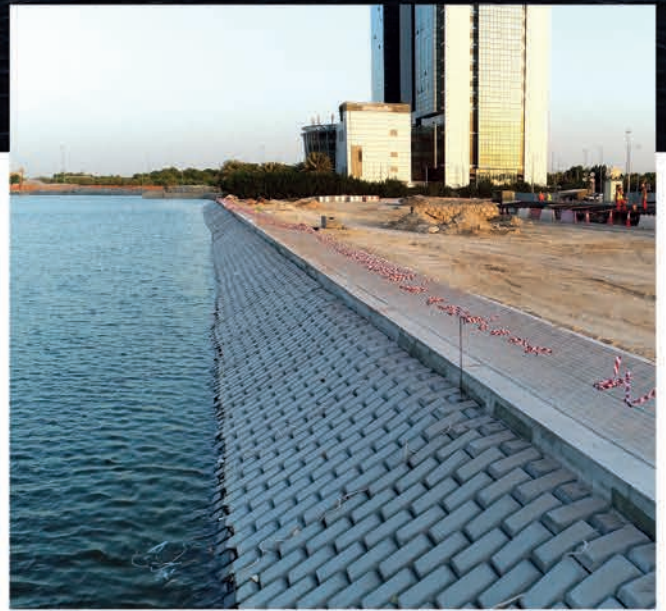


17

AL MAQTA CHANNEL

Client: Musanada
Location: UAE, Abu Dhabi
Authority: Abu Dhabi Municipality

- Detailed Design of Revetment
- Connection to the land development
- Supervision of the project
- Project Management



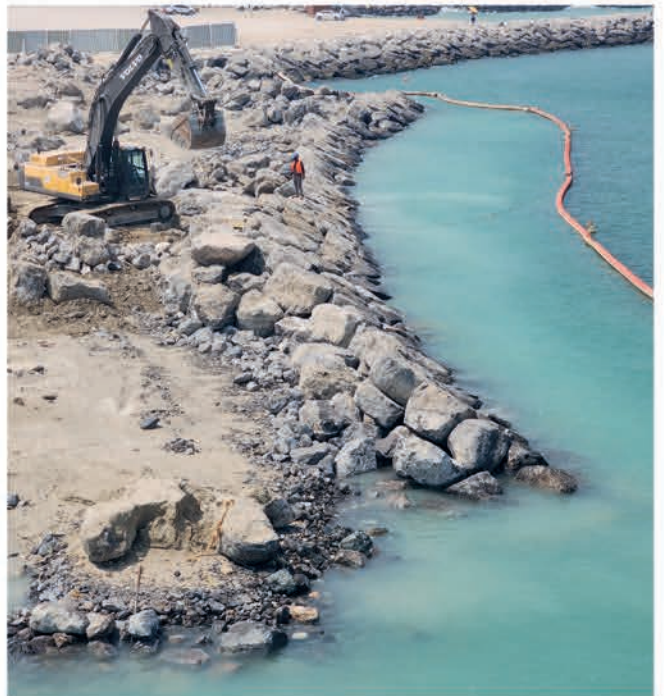


18

QUAY WALL IN MARYAM ISLAND

Client: MAR Marine
Location: UAE, Sharjah
Authority: Sharjah Municipality

- Detailed Design of In-Situ Concrete Quay Wall
- Environmental Studies
- NOC and approvals



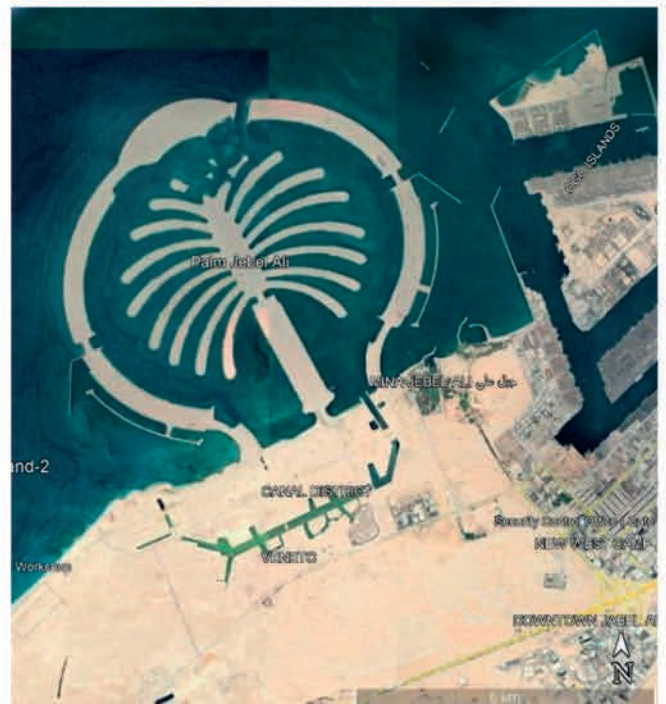


19

WATERFRONT COASTAL MODELLING

Client: Dome LLC
Location: UAE, Dubai
Authority: Dubai Municipality
Environmental Department

- Hydrodynamic Modeling 2D and 3D
- Flushing/Tracer Dispersion Study
- Sediment Plume Study (3D)
- Offshore Metocean Study - Statistical analysis
- Wave Modelling (Propagation and transformation) Study
- Boussinesq Wave Modelling (Tranquility) Study
- Shoreline Evolution Modelling Study





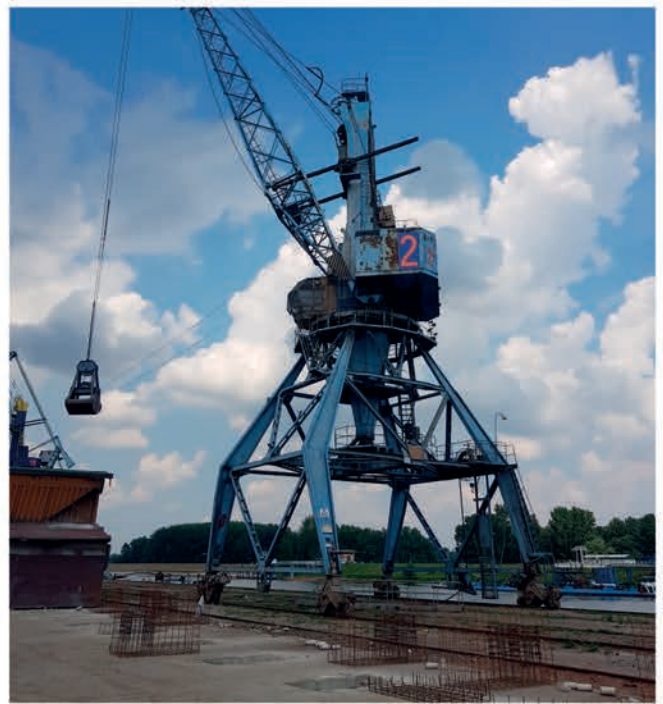
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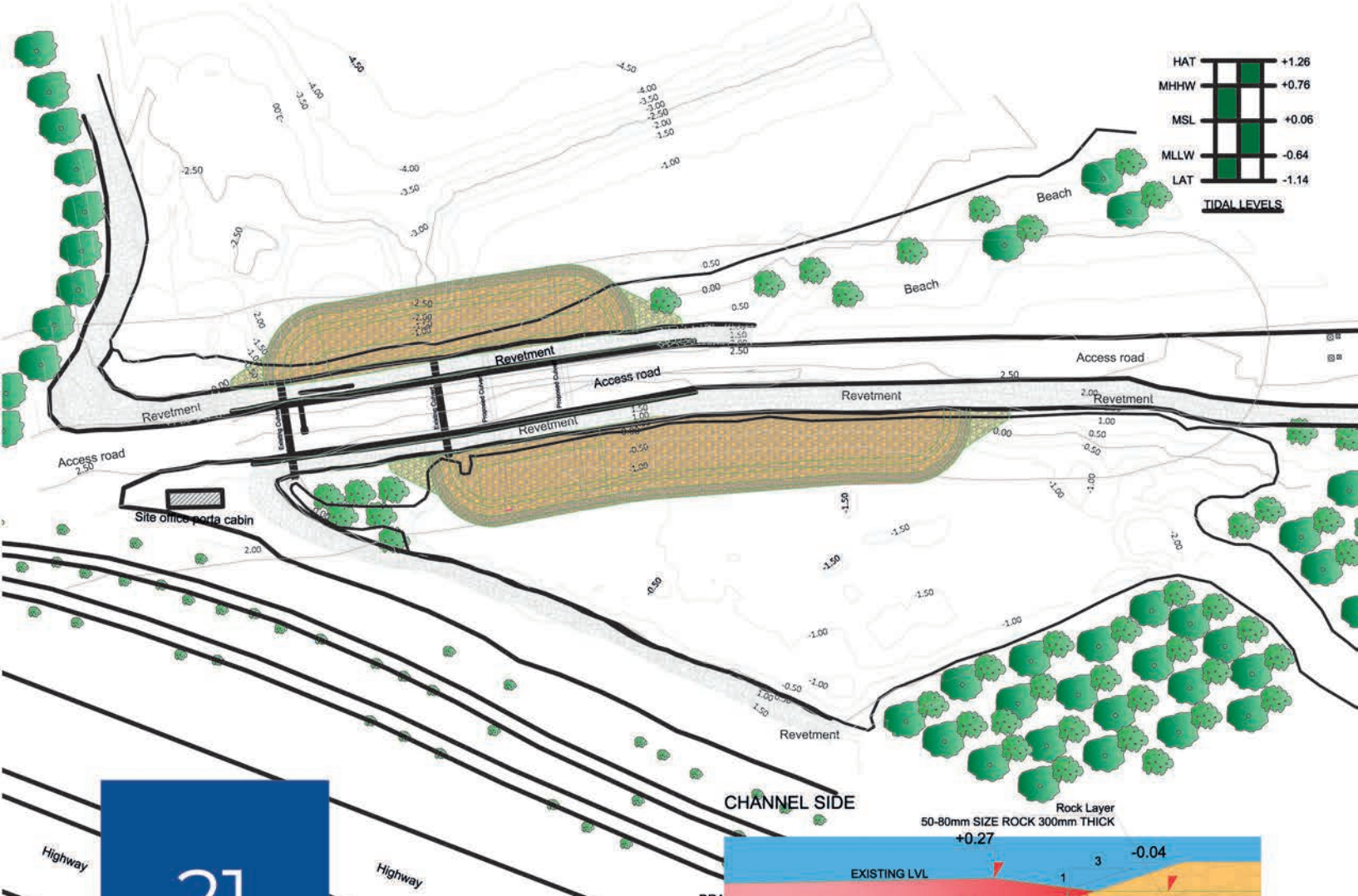
CONDITION SURVEY OF THE PORT OF NOVI SAD

Client: DP World
Location: SERBIA, Novi Sad

B&O team of experts has evaluated current condition of the Port of Novi Sad.

- On site port inspection
- Determining tests to be taken in order to evaluate structural stability
- Port Expansion recommendation
- Feasibility study reporting





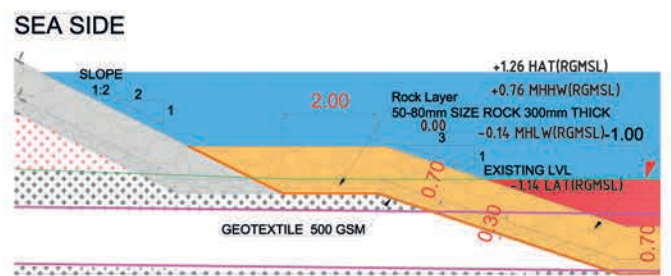
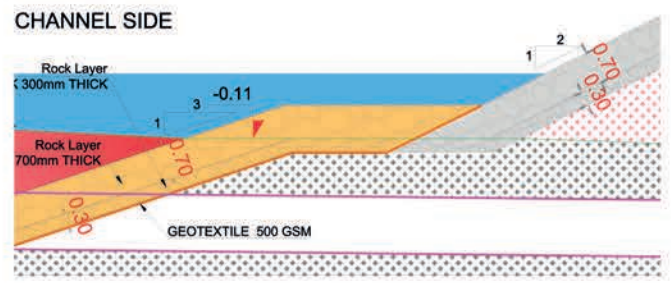
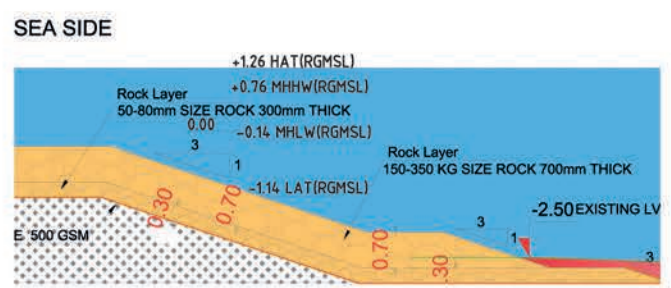
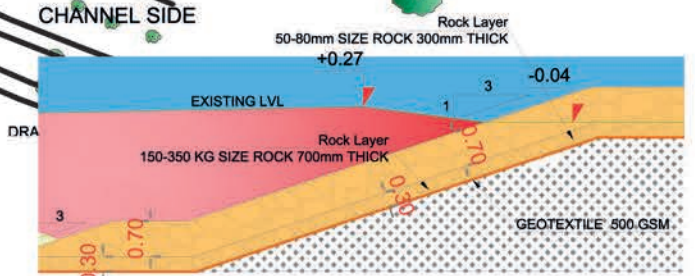
TIDAL LEVELS	Value
HAT	+1.26
MHHW	+0.76
MSL	+0.06
MLLW	-0.64
LAT	-1.14

21

CAUSEWAY REVTMENT STABILITY

Client: Abu Dhabi Ports
 Location: UAE, Abu Dhabi
 Authority: Abu Dhabi Municipality

- Settlement and Vibration Study to check the safety of "existing structure and Cable troughs" during construction due to pipe jacking, NBRC, equipment loads and etc.
- Design of proposed Rock structures
- Analysis of Safety distance between the existing causeway and dredging.
- Dredging slopes and Rock layer on the dredged slope design
- Design of Temporary cofferdam / other works.
- Dewatering and heave checks for temporary works.
- Monitoring regime – for the existing causeway and Cable troughs for Settlement and Vibration.

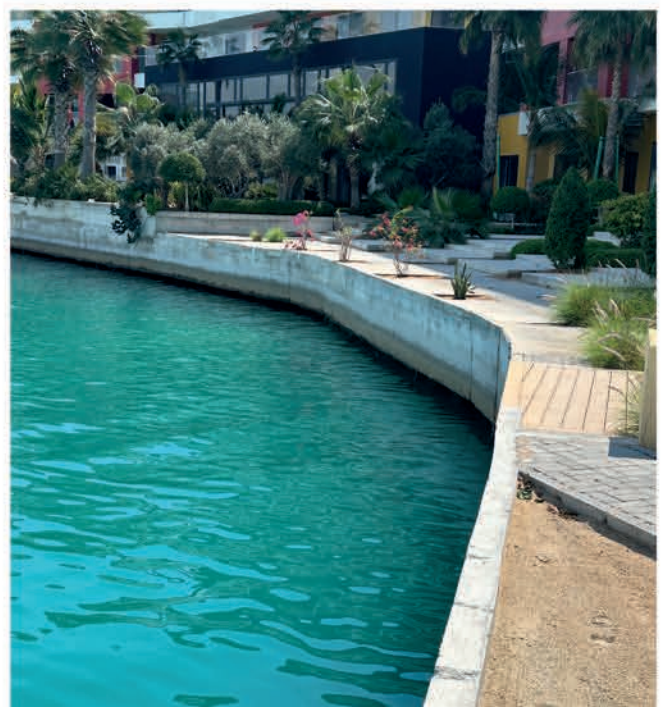


22

THE HEARTH OF EUROPE MARINE WORKS - THE WORLD ISLANDS

Client: THOE
Location: UAE, Dubai

- Detailed Design of Quay Wall
- Detailed Design of Floating Marina
- Structural Design and floatability calculations of Floating Sea House
- Detailed Design of Navigation
- Connection to the land development
- Dewatering Design
- Drainage Design



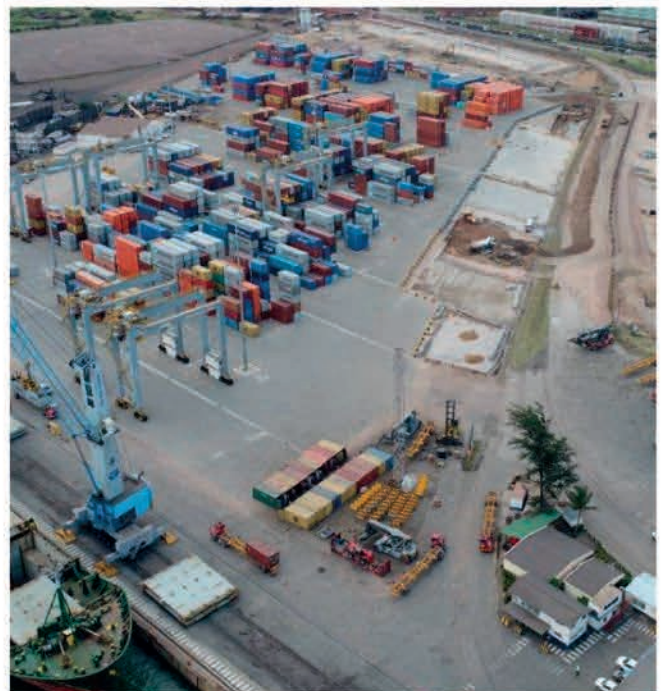


23

MAPUTO INTERMODAL CONTAINER TERMINAL, MOZAMBIQUE

Client: DP World

- Review of Heavy Duty Pavement Design
- Alternative Design of Heavy Duty Pavement



LET'S CREATE SUCESSFUL PATH TOGETHER



The B&O staff has undertaken engineering works at both regional as international levels.

**MAKE
THE RIGHT
CHOICE
FOR YOUR
NEXT PROJECT**



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