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Batco Group is an unrivalled network of companies offering diverse operations in Engineering, Construction, Solid Waste Management and Water Treatment. With over \$3 billion of completed and on-going projects, the Group's current workforce consists of more than 5,600 employees with strategically located offices in Europe, the Middle East & Gulf region, and Africa.

The Group consists of the following companies:

- >> BATCO
- >> FEDERICI STIRLING BATCO
- >> LAVAJET
- >> EMIT GROUP



Engineering



Construction



Solid Waste Management



Water Treatment



>> AREAS OF OPERATION



/ ALBANIA

BAHRAIN

/ BELGIUM

/ CHINA

/ EGYPT

/ GEORGIA

/ INDIA

/ INDONESIA

/ IRELAND

/ IRAQ

/ ITALY

/ IVORY COAST

/ JORDAN

/ KENYA

/ KUWAIT

/ LEBANON

/ MOROCCO

/ NICARAGUA

/ NIGERIA

/ OMAN

/ POLAND

/ QATAR

/ ROMANIA

/ TAJIKISTAN

/ TURKEY

/ SAUDI ARABIA

/ UAE





>> BATCO

OVERVIEW

BATCO is a general engineering and contracting company offering a wide range of services including design/build projects such as roads and highways, infrastructure networks, bridges, underpasses, tunnels, buildings, water dams, marine works, solid waste sanitary landfills and other related works.

With multidisciplinary construction projects targeting a broad range of sectors, the firm has developed from a local engineering and contracting company in the 1970s to a well reputed corporation that has become one of the pioneers in its field.

- >> Transportation/ Roads & Highways/ Bridges/ Tunnels & Underpasses/ Slope Protection
- Infrastructure & Utilities/ Sewer Storm & Water Networks/ Potable & Irrigation Networks/ Communication, Power & Lighting Networks
- >> Buildings
- >> Dams & Flood Protection
- >> Geotechnical Works
- >> Engineering, Construction & Operation of Sanitary Landfills
- >> Marine Works, Seashore Protection & Outfall Pipelines







>> FEDERICI STIRLING BATCO

OVERVIEW

Federici Stirling Batco LLC (FSB) is a leading contracting company established in the Sultanate of Oman in 2007 by FEDERICI STIRLING, an Italian engineering and contracting company specialized in hydraulics works including dams, industrial & power plants, as well as airports, infrastructure and marine works; and BATCO.

With more than USD 700 Million worth of completed and on-going projects, FSB takes pride in offering an ideal blend of local expertise and international experience, through a wide range of engineering and contracting services including roads, bridges, tunnels, hydraulic and marine works.

FSB is renowned for its ability to perform all types of works related to the civil engineering sector using the state-of-the-art technologies and construction methods in order to provide the market with the finest construction services. In 2015, FSB signed a partnership agreement with the Italian company "Itinera", a partnership that aims at strengthening the presence of Federici Stirling Batco within the Omani and regional market.

- >> Transportation
 - / Roads
 - / Tunnels
- / Airports
- >> Hydraulic Works:
 - / Water Networks
 - / Aqueducts
- >> Industrial Works:
 - / Hydroelectric
 - / Thermo-Electric Power Plants
- >> Dams & Flood Protection
- >> Marine Works, Seashore Protection & Outfall Pipelines







>> LAVAJET

OVERVIEW

Founded in 1990, LAVAJET is an international provider of environmental waste management services and a recognized leader in its field with a proven record for achieving the highest standards of excellence.

Lavajet delivers innovative and environmentally responsible solutions to governments, industries, and businesses including but not limited to city cleansing, construction & operation of solid waste treatment plants and sanitary landfills.

With more than 3,000 staff including Engineers, Administrators, Technicians and a highly trained labor force, Lavajet services over 2 million people worldwide.

With over 22 years of experience in the waste management sector, Lavajet collects and transfers more than 4,000 tons of waste on a daily basis and processes more than 20,000 tons per day.

- >> Solid Waste Collection & Disposal
- >> City Cleansing
- >> Design, Construction and Operation:
 - / Transfer Stations
 - / Sorting and Composting Plants
 - / Sanitary Landfills: Municipal, Hazardous and Medical waste
 - / Construction & Demolition Recycling Plants







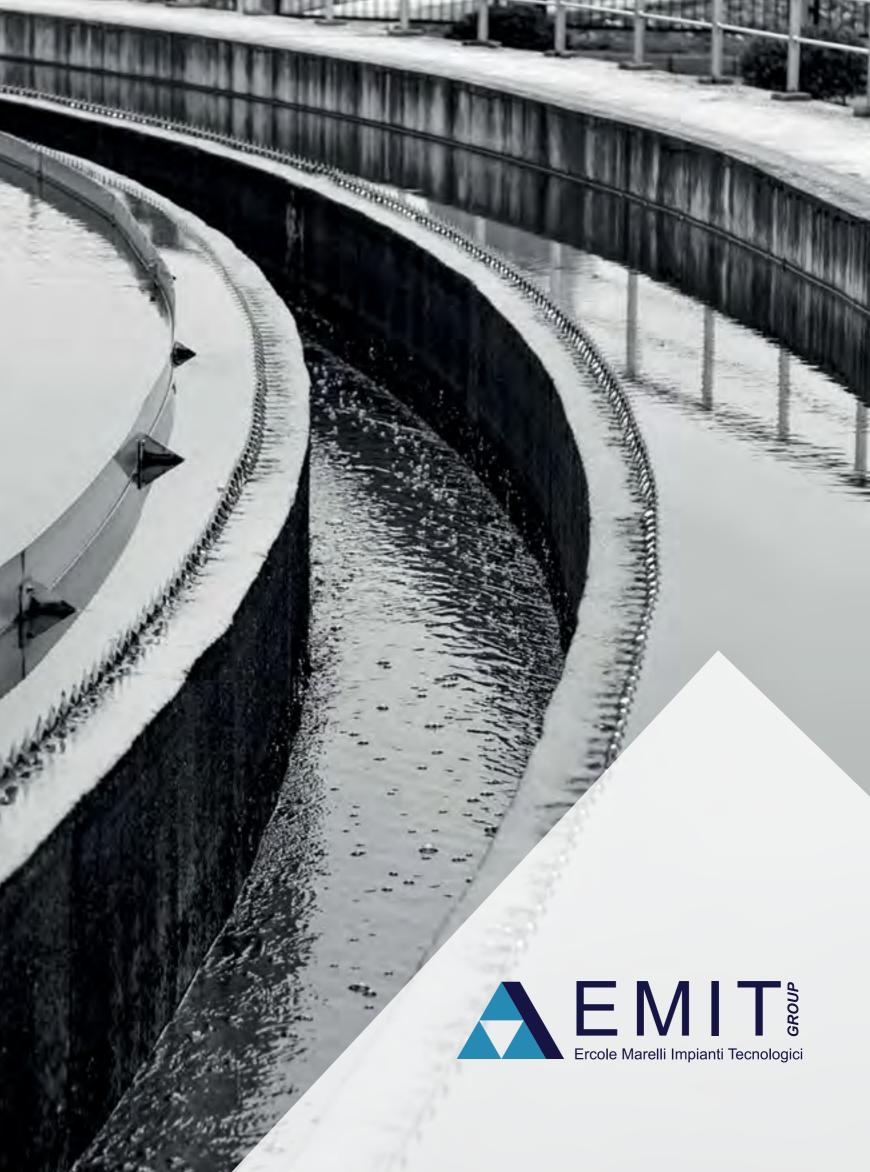












>> EMIT GROUP

OVERVIEW

Founded in 1973, EMIT Group is an EPC Italian company with a reputable record in the water sector including the design, construction and operation & maintenance of water and wastewater treatment plants. The company also has extensive capabilities in the energy production from renewable sources sectors.

The experience achieved in the study and construction of several type of plants together with the application of specific know-how and in-house technical capabilities, makes EMIT Group the leading company that offers the best Water and Wastewater Treatment services.

EMIT Group has successfully completed over 400 turn-key projects in its field. EMIT Group currently operates in more than 30 countries in Europe, Africa and the Middle East.

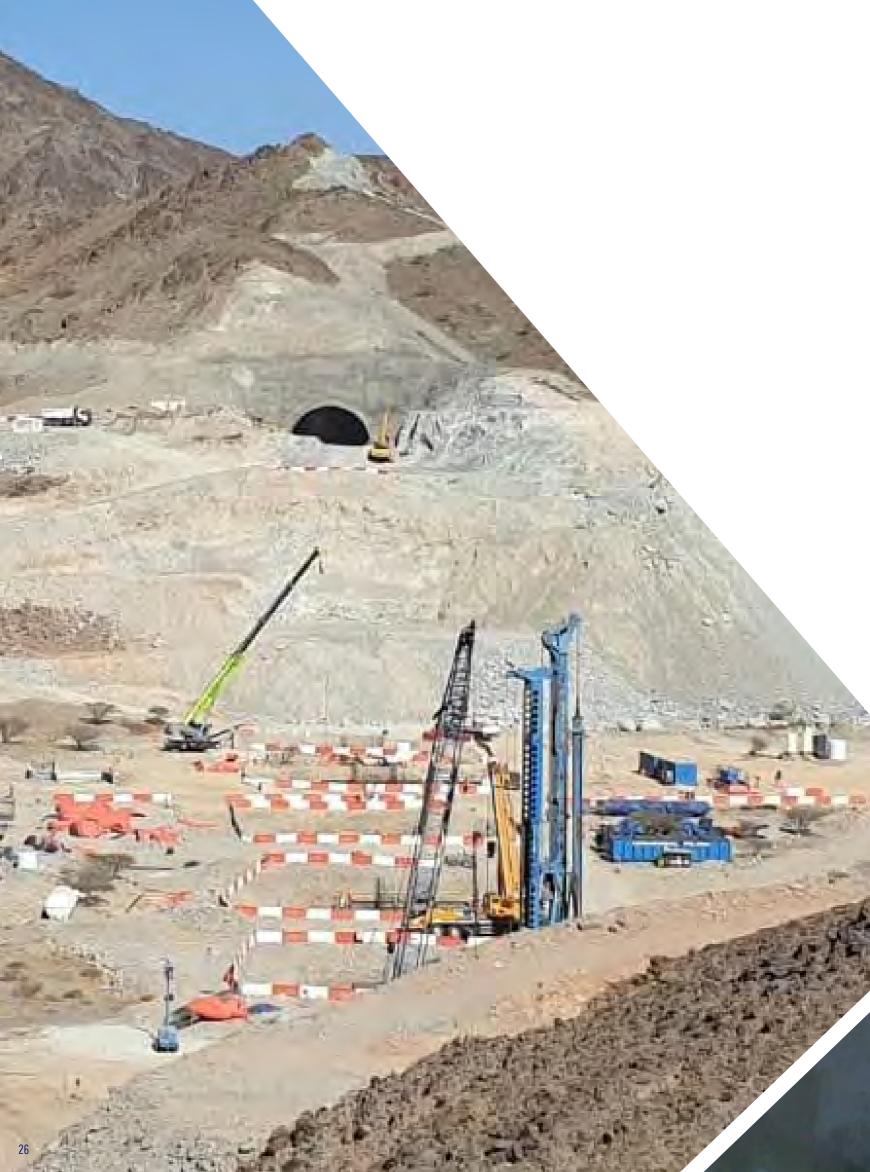
- >> Water and Wastewater Purification and Treatment Plants
- >> Solid Waste Treatment Plants
- >> Soil Remediation Systems
- >> Energy Production from Renewable Sources
- >> Process Engineering

	WATER TREATMENT PLANTS	>> capacity up to 720,000 m ³ /d
	WASTEWATER TREATMENT PLANTS	>> capacity up to 650,000 m³/d
	PUMPING STATIONS	>> capacity up to 600,000 m³/d
Г	SOLID WASTE & RECYCLING PLANTS	>> capacity up to 700 ton/d
	SANITARY LANDFILLS	>> capacity up to 16,000 T/d
	AIR POLLUTION CONTROL SYSTEM	>> including the largest desulphurization and denitrification plants of flue gas



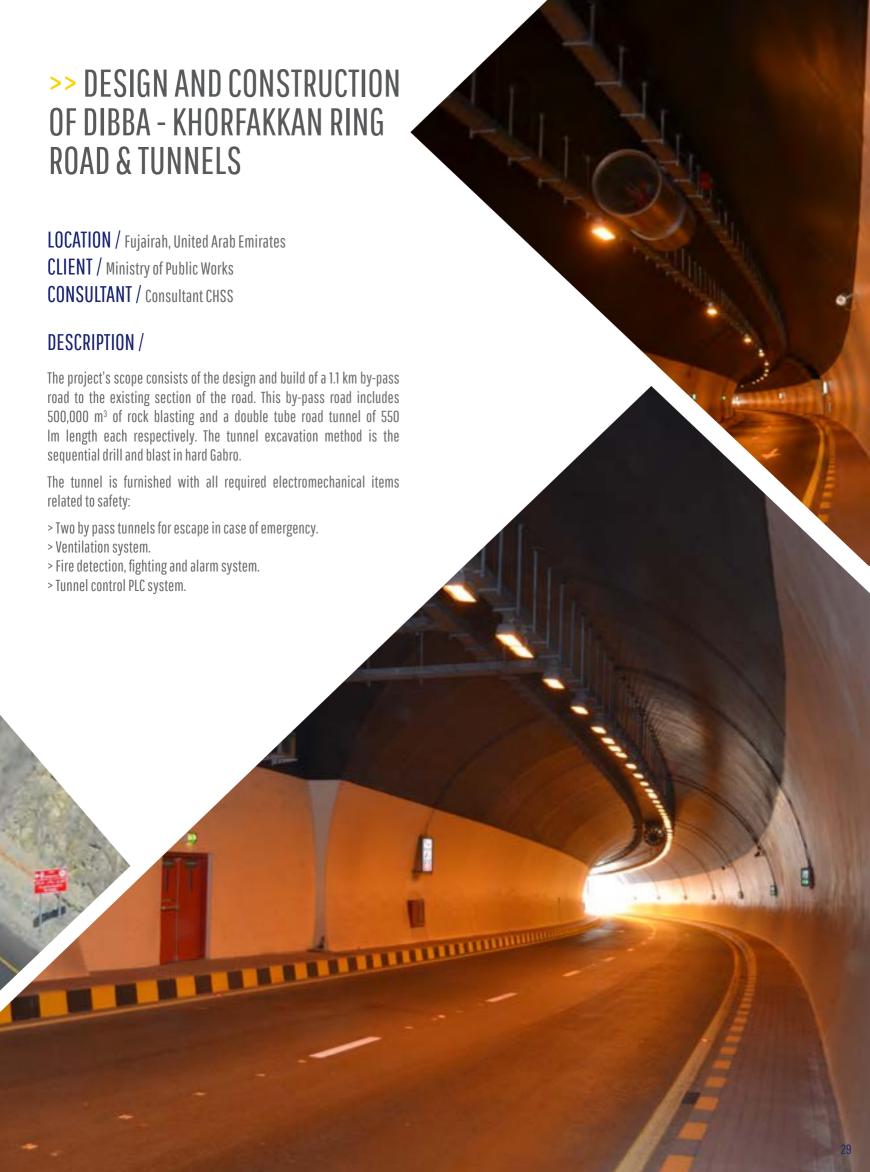
SELECTED PROJECTS >> Transportation

/Roads, Bridges, & Tunnels

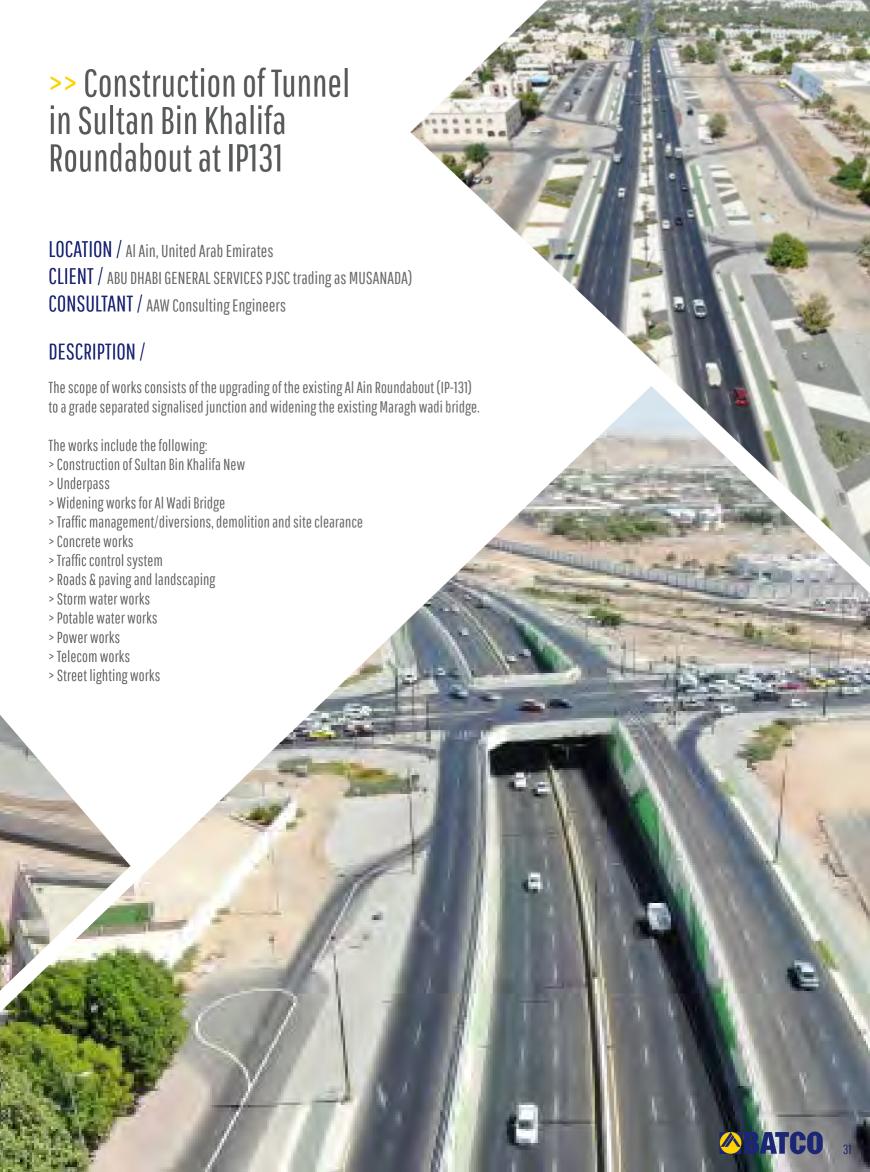
















>> REHABILITATION OF ROADS & SERVICES IN THE SOUTHERN SUBURB TUNNEL OF HARET HREIK-SANDS

LOCATION / Beirut, Lebanon

CLIENT / Council for Development and Reconstruction

CONSULTANT / Dar Al Handasah Shair & Partners

DESCRIPTION /

Haret Hreik - Sands Tunnel constitutes a major part of an overall drainage system project designed to collect stormwater from Haret Hreik together with its surrounding sectors and discharge into the Mediterranean Sea at Ouzai Sands Beach, below the Ouzai main street. It is considered one of the most important hydraulic infrastructure projects in Beirut, and it is the longest in Lebanon.

The works comprised of the construction of a 1,760 m tunnel with a cross section of 12.3 m^2 and included the following:

- > Boreholes for soil consolidation: 32,600 m.
- > Excavation works: 105,000 m³ (including tunnel excavation of 30,000 m³).
- > Shotcrete: 7,200 m³ with thickness of 40 cm.
- > Steel beams: 600 tons.
- > Reinforced concrete box culvert 1,200 m, cross section 12,5 m².
- > Reinforced concrete 22,500 m³ including reinforcing steel of 1,752 tons.
- > Main shaft is 7 m in diameter, 24 m deep lined with circular steel beams and shotcrete and 40 cm thick concrete lining.
- > Two shafts have a 3 m diameter and 12 m depth lined with circular steel beams and shotcrete and 20 30 cm thick concrete lining.





LOCATION / Batroun, Lebanon
CLIENT / Ministry of Energy & Water
CONSULTANT / Libanconsult

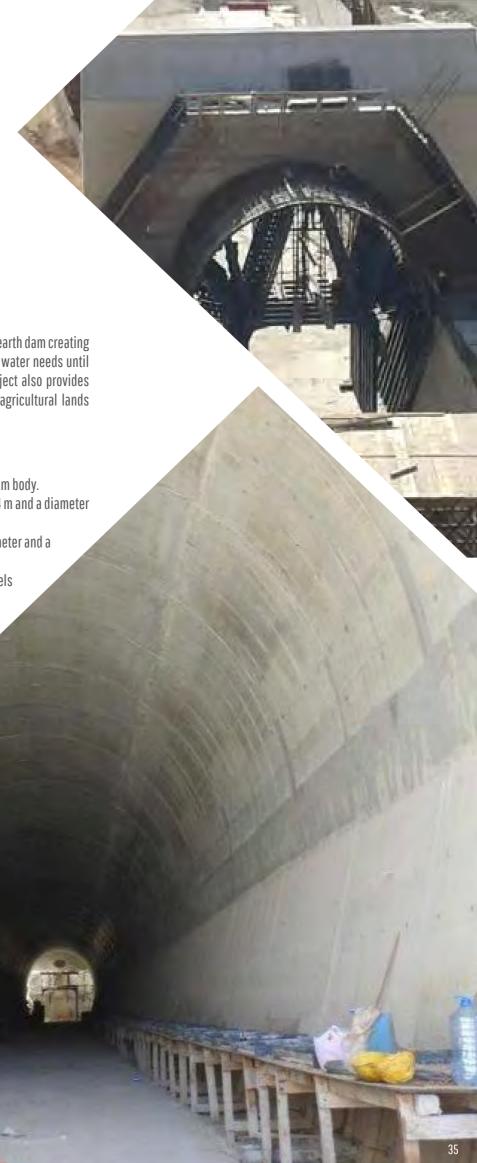
DESCRIPTION /

The project consists of the construction of a 400 m long and 35 m high earth dam creating a reservoir with several functions including the provision of drinking water needs until 2030 for part of the localities in Batroun and Koura regions. The project also provides water for industries and the irrigation of around 1,000 hecatres of agricultural lands located mostly north of Nahr El Jaouz.

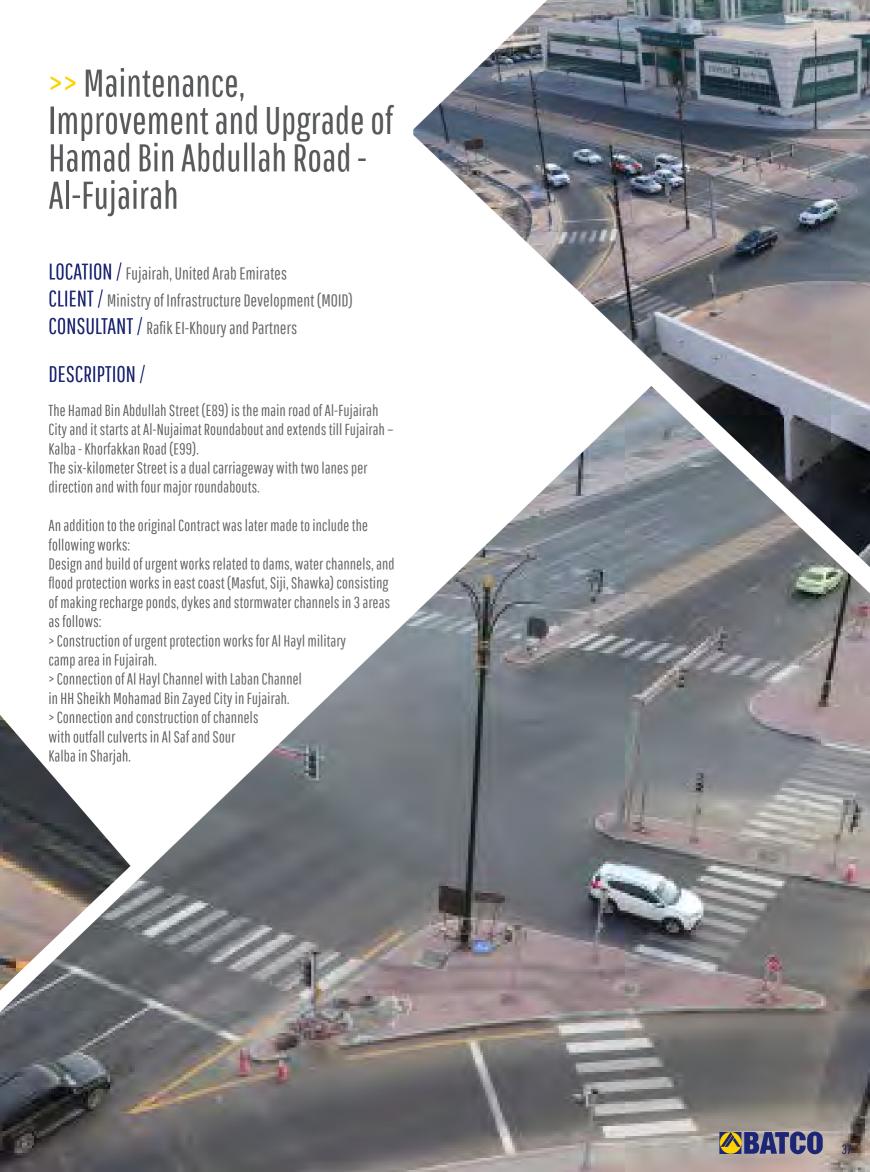
The works include the following:

- > The construction of a 13 m high cofferdam integrated into the final dam body.
- > A provisional diversion tunnel on the left bank having a length of 324 m and a diameter of 5 m (horseshoe section).
- > A spillway that consists of a circular well, 27 m high and 10 m in diameter and a discharge gallery 131 m long and 9 m in diameter.
- > A water intake tower and outlet structural tunnel staged at three levels installed on the left bank.
- $^{\rm >}$ Design and construction of diagram walls with depth up to 60 m and length 300 m.

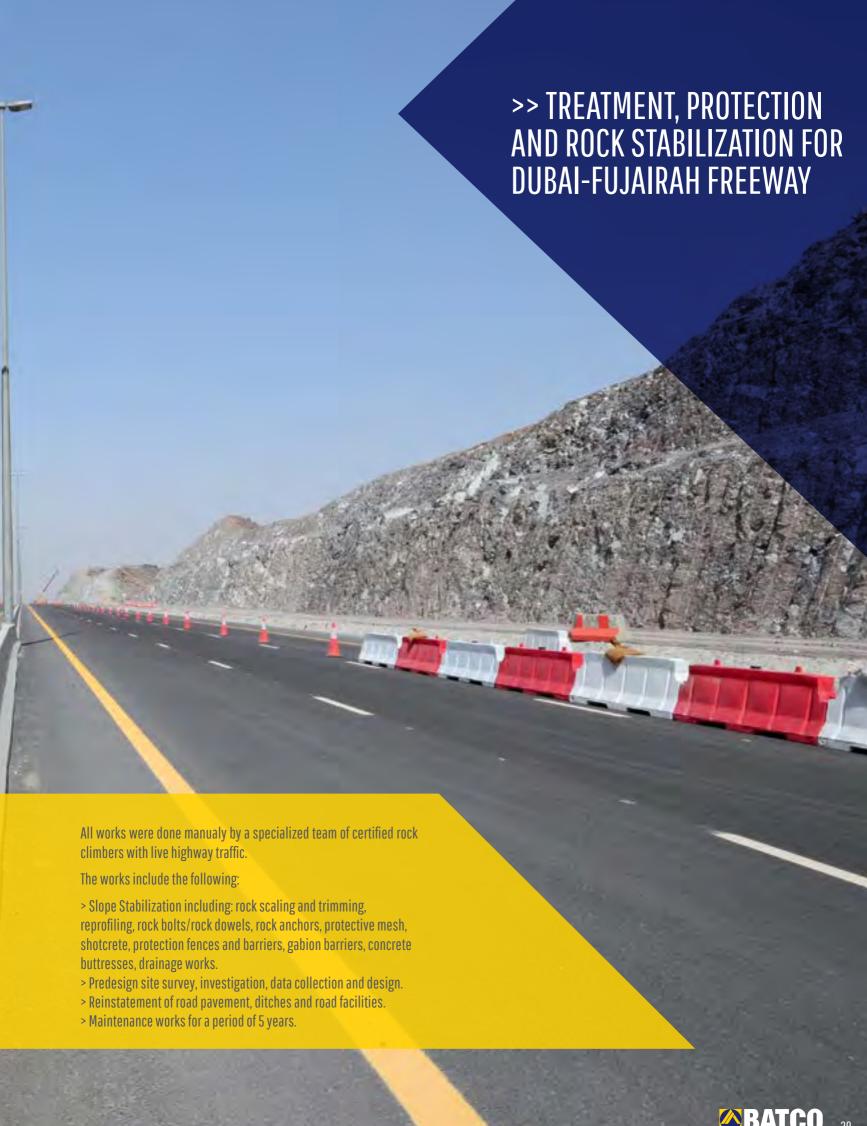
> Concrete injection and slope protection of lake.







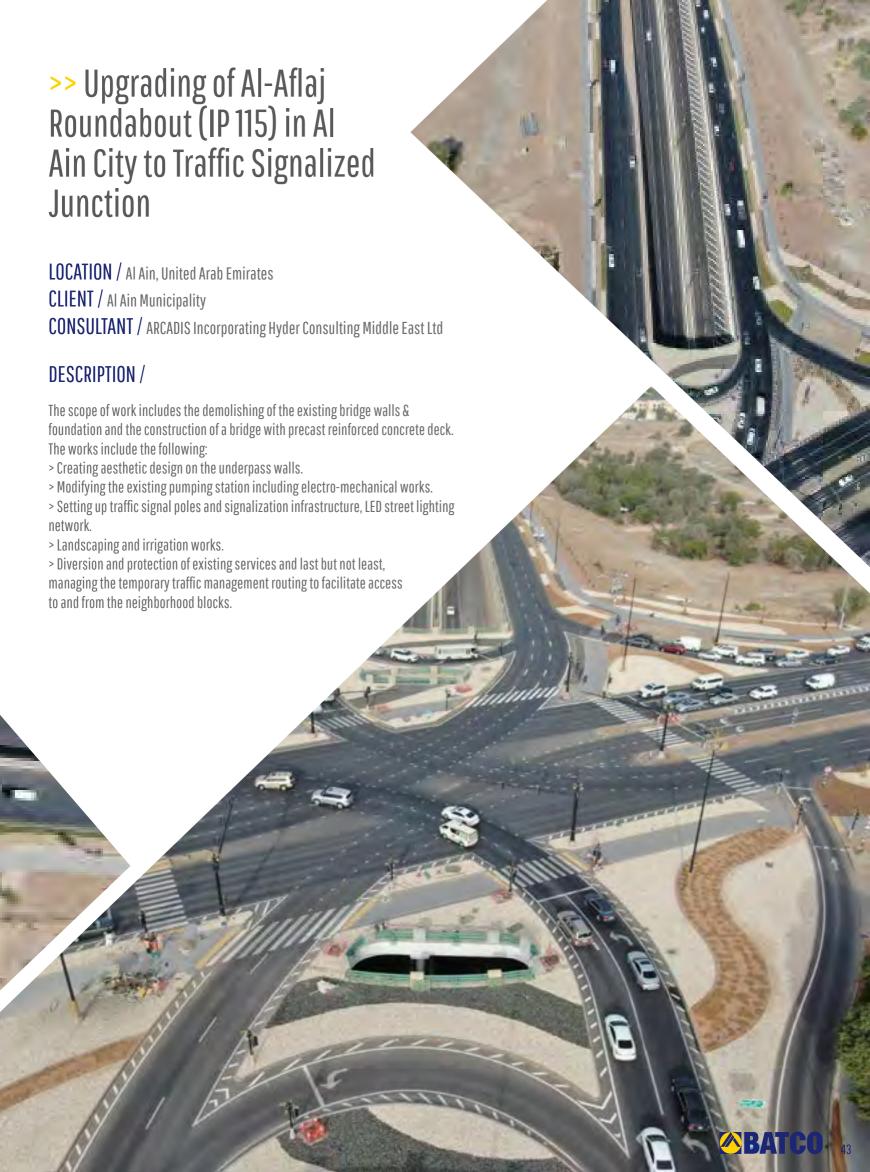




















>> CONSTRUCTION OF YUP-2 UNDERPASS AT AL YAS ISLAND DEVELOPMENT

LOCATION / Abu Dhabi, United Arab Emirates
CLIENT / Aldar
CONSULTANT / Halcrow

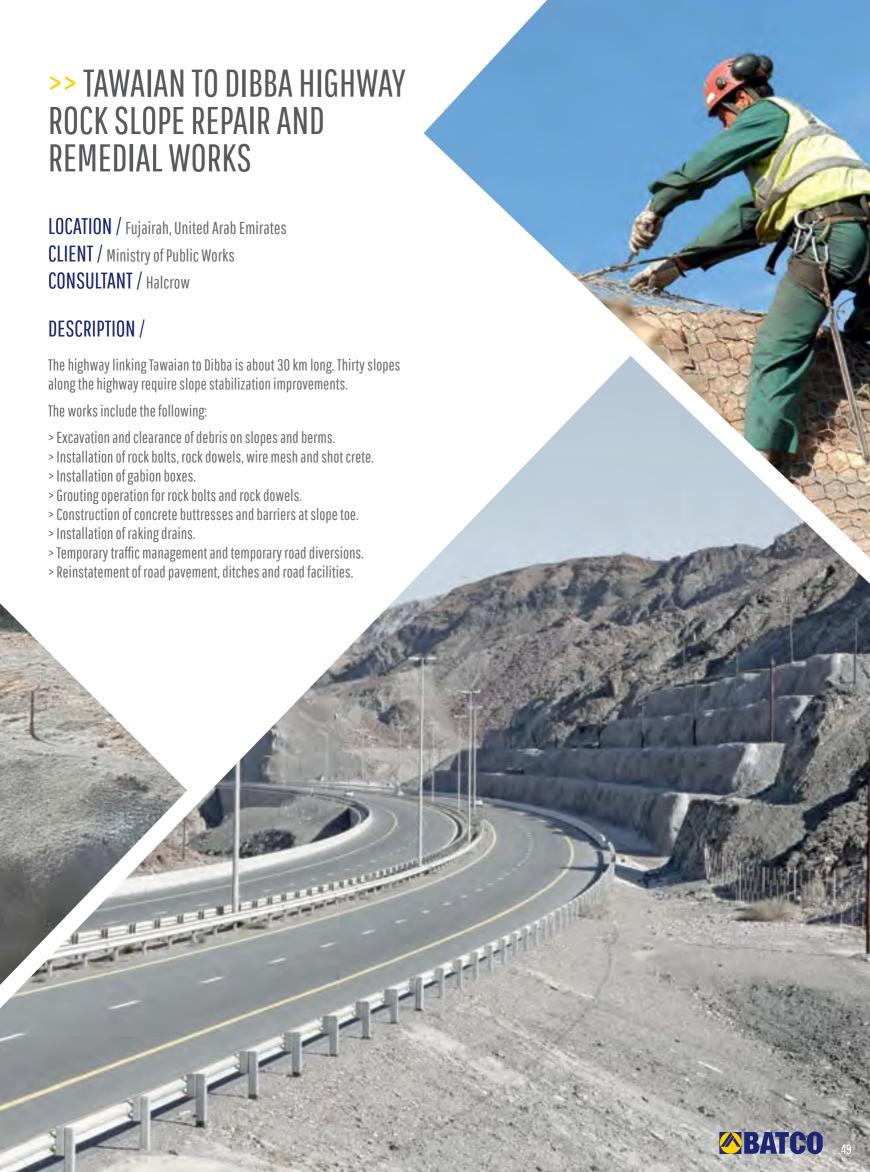
DESCRIPTION /

The project consists of the construction of an underpass with a total length of 537 m including retaining walls at both sides of the underpass.

The works include the following:

- > Construction of a 143 m long box-section with a width of 13.9 m.
- > Construction of two 394 m long U-sections with a width of 13.9 m.
- > Waterproofing membrane, painting works, and wall tiling.
- > Precast concrete side barriers.
- > Construction of a pumping station for the storm water drainage of the underpass.





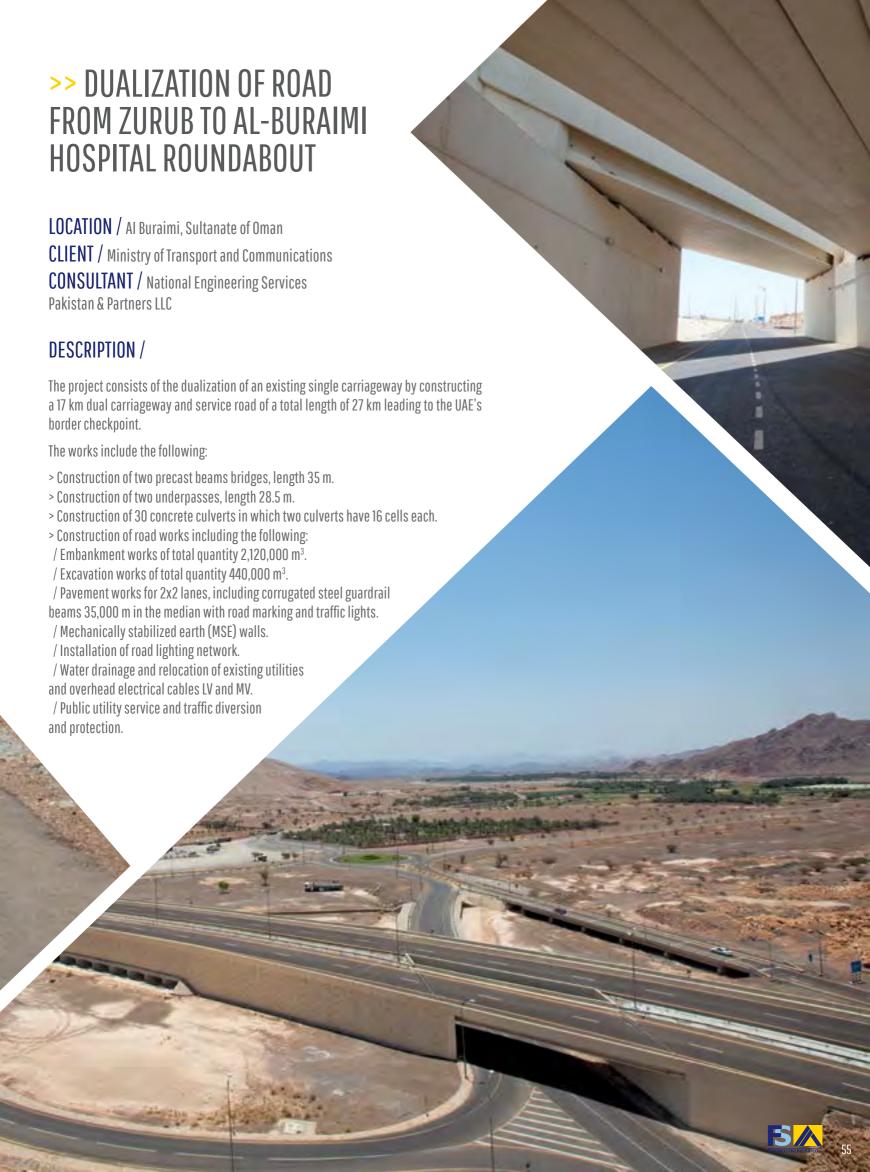




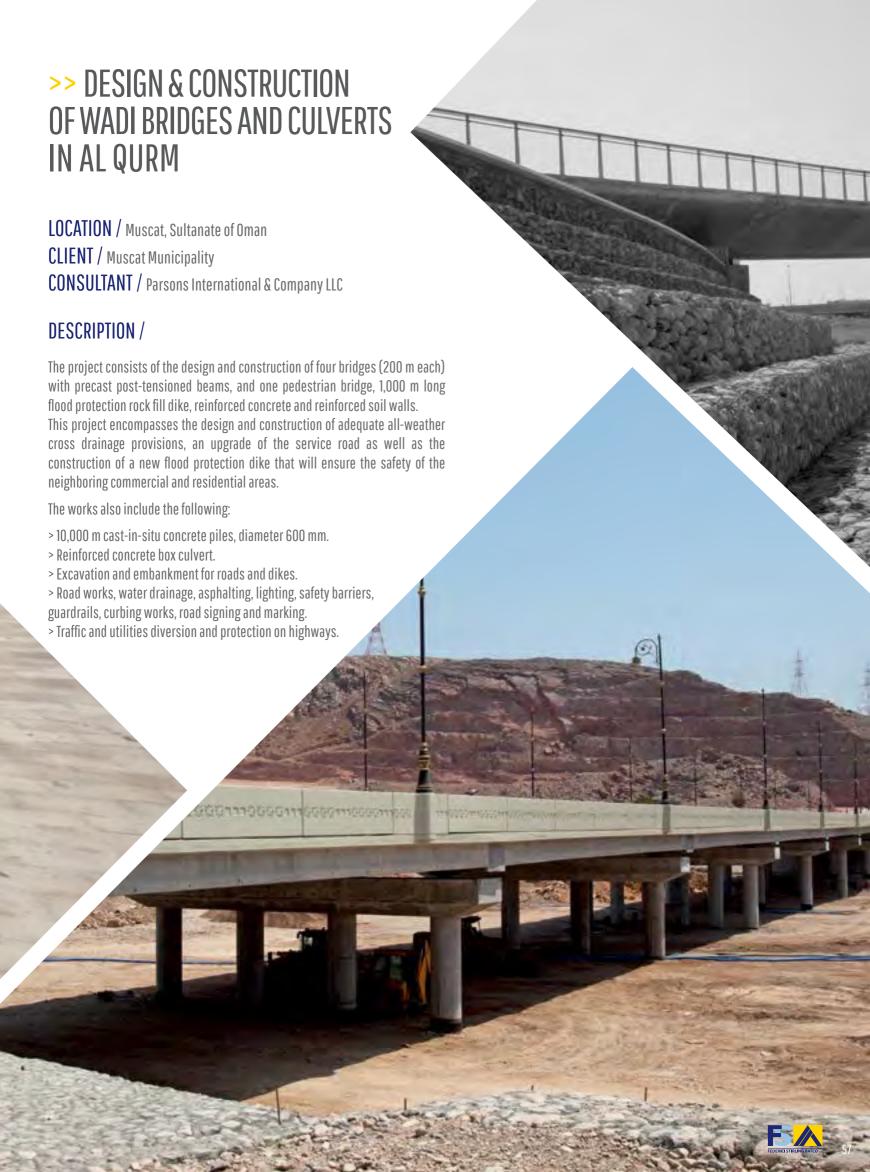
















>> REHABILITATION WORKS FOR ROADS, BRIDGES AND WADIS IN QURIYAT, LOT 2

LOCATION / Quriyat, Sultanate of Oman
CLIENT / Muscat Municipality
CONSULTANT / Idroesse Infrastructure SPA

DESCRIPTION /

The project comprises raising up traffic over the main and secondary wadis all along Daghmar-Quriyat Road and to replace the Irish crossings by either box culverts or wadi bridges to ensure the non-interruption of traffic during flooding (10 km). It also includes the rehabilitation of Al Mazaraa road of 15 km.

The construction works include the following major structures:

- > Construction of three wadi bridges (210 m, 180 m and 91 m) length, which were constructed by pre-cast post tensioned L girders. The foundations of the bridges inside the wadi were built on a stabilized soil by the jet grouting columns technology.
- > Arrangement of the wadi bed by excavating more than 1 million cubic meter and constructing side earth dykes protected by RC walls, riprap and gabion boxes for a length of around 6000 lm.
- > Construction of 4 km road works including widening & repairing, water drainage, asphalting, road lighting, safety barriers, sidewalks, road signing and marking.
- > Execution of multicells box culverts of sizes (3 m x 4 m) and Irish crossings.





LOCATION / Muscat, Sultanate of Oman CLIENT / Muscat Municipality

DESCRIPTION /

The project consists of the design and construction of two interchanges intended to provide free flow access to Al Mubaila from the Muscat expressway, the second of the two major corridors serving the Muscat Capital area.

The works include the following:

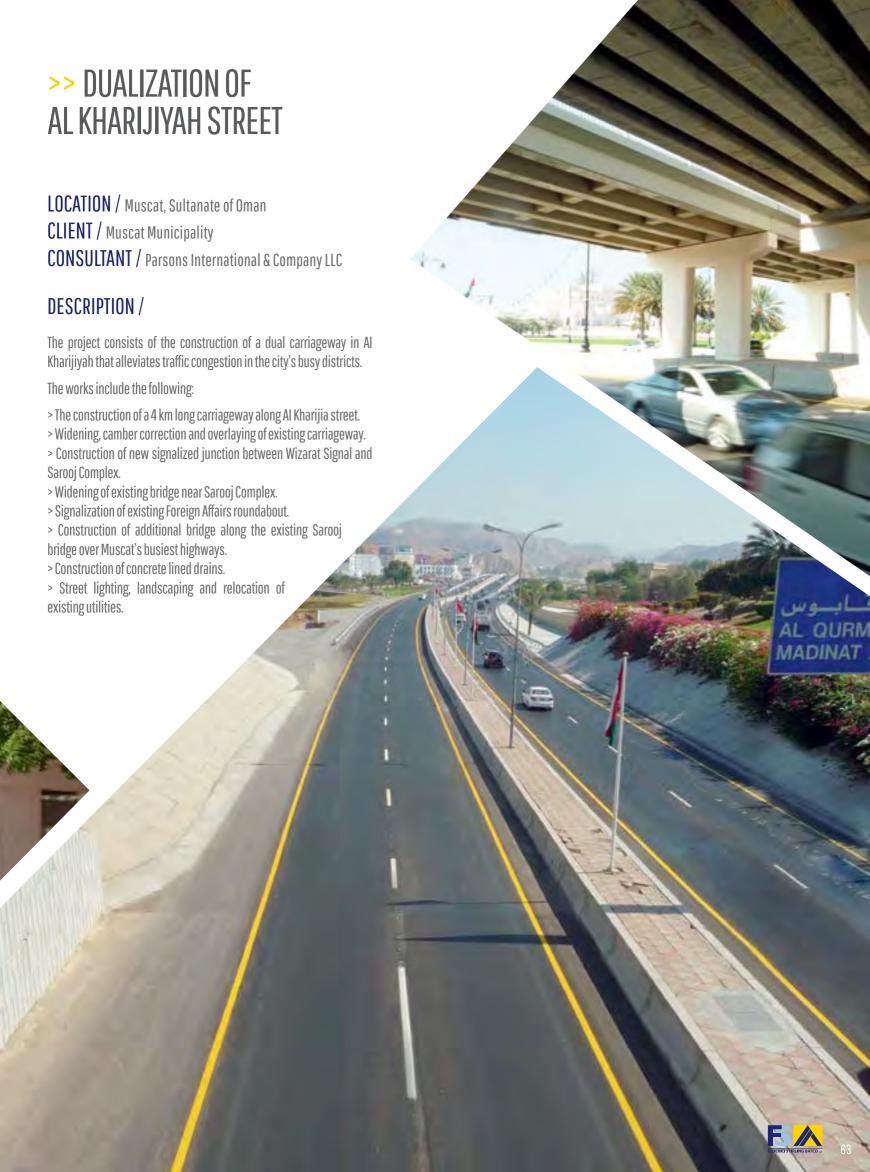
- > The design and construction of three post tensioned concrete viaducts across the above mentioned expressway with a total area of 5000 \mbox{m}^2 including the construction of a temporary steel gantry structure to support the bridge deck formwork without interruption of traffic.
- > The design and construction of all complementary roadway elements including the following:

/ The drainage network consisting of concrete box culverts, pipe culverts and the surface drainage works, floodway across Wadi al Khoud.

/ Drainage works, pipes of concrete culvert, relocation of 33 KV & 24" oil and gas line, 1.3 Million m³ earthworks, pavement works, street lighting & finishing and road marking.









>> QURUM TO SAROOJ ROAD IMPROVEMENTS

LOCATION / Muscat, Sultanate of Oman
CLIENT / Muscat Municipality
CONSULTANT / WS Atkins International & Co.

DESCRIPTION /

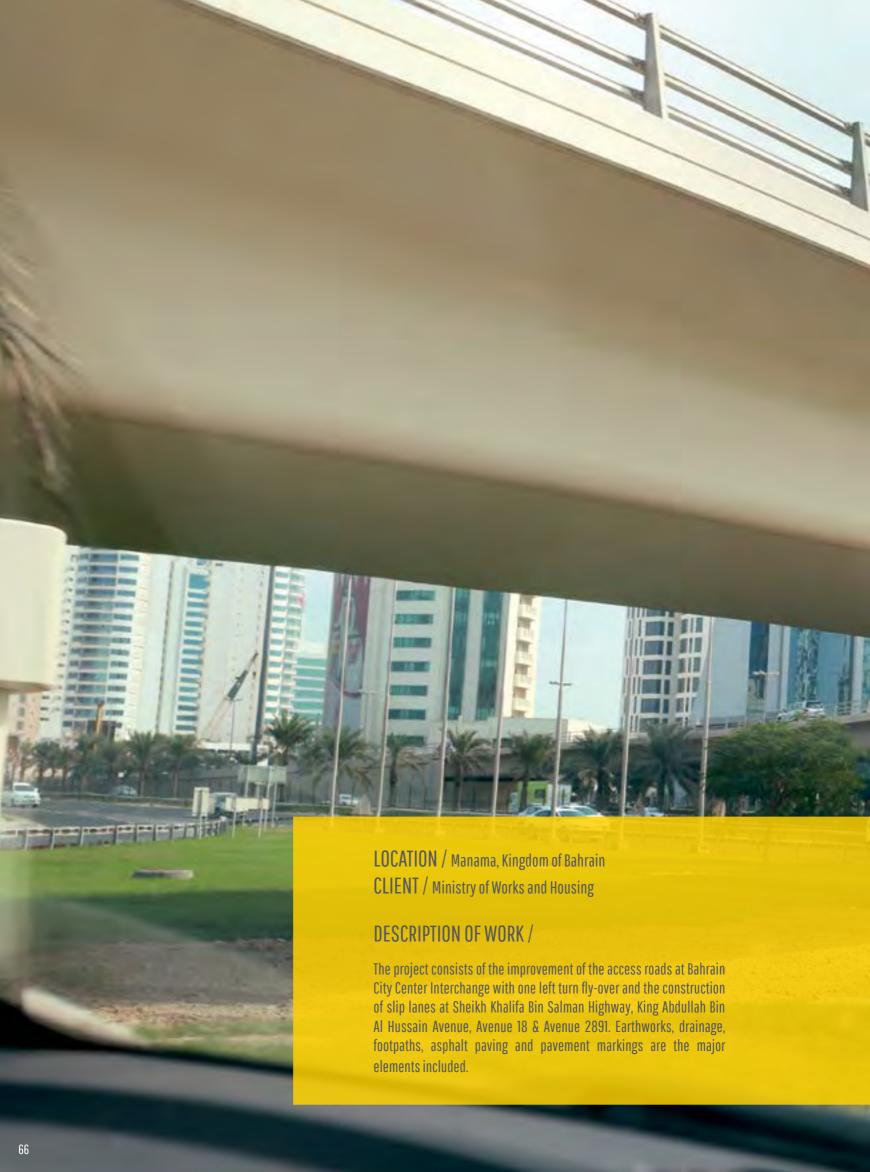
The project consists of the construction of two bridges over two tidal lagoons that were created as a result of the 2007 floods that hit the Qurum to Sarooj beach road.

The works focused on protecting the beach and mangroves area as well as avoiding pollution while maintaining access to the mangroves.

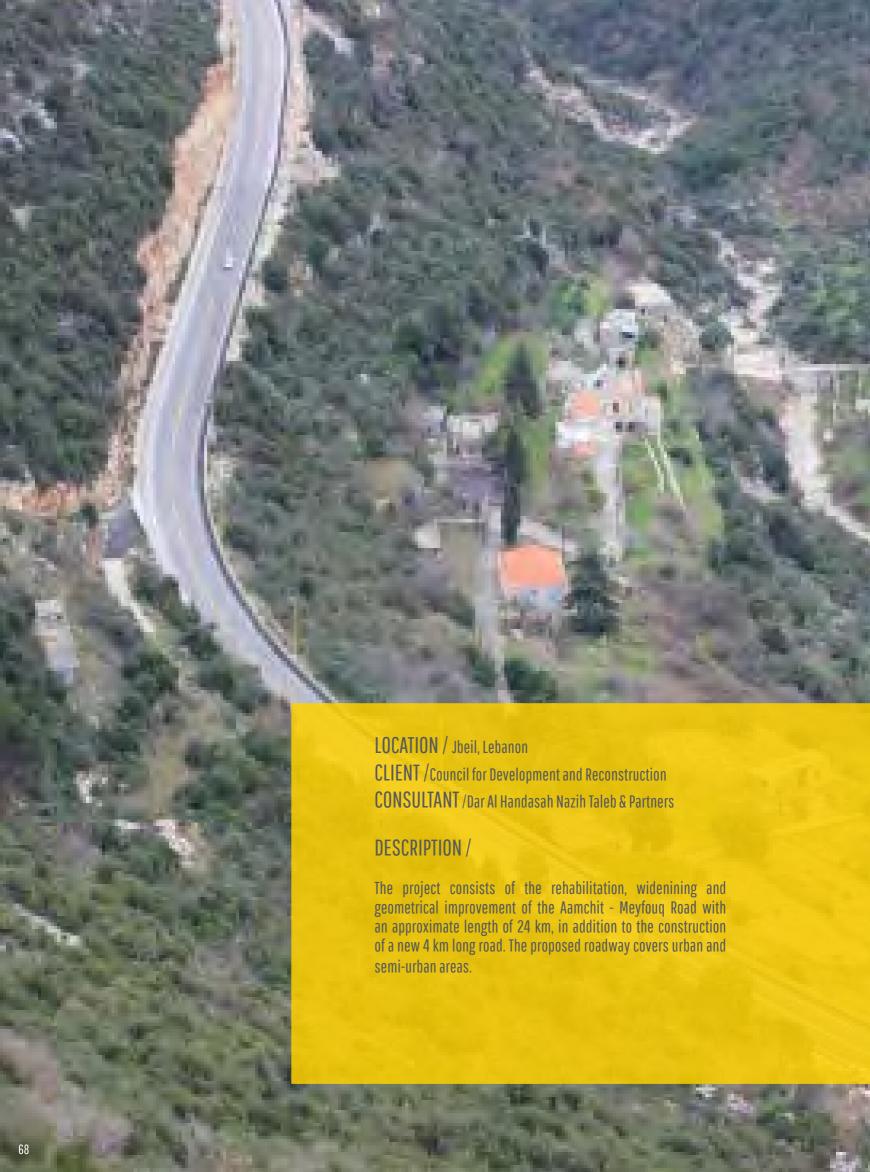
The works include the following:

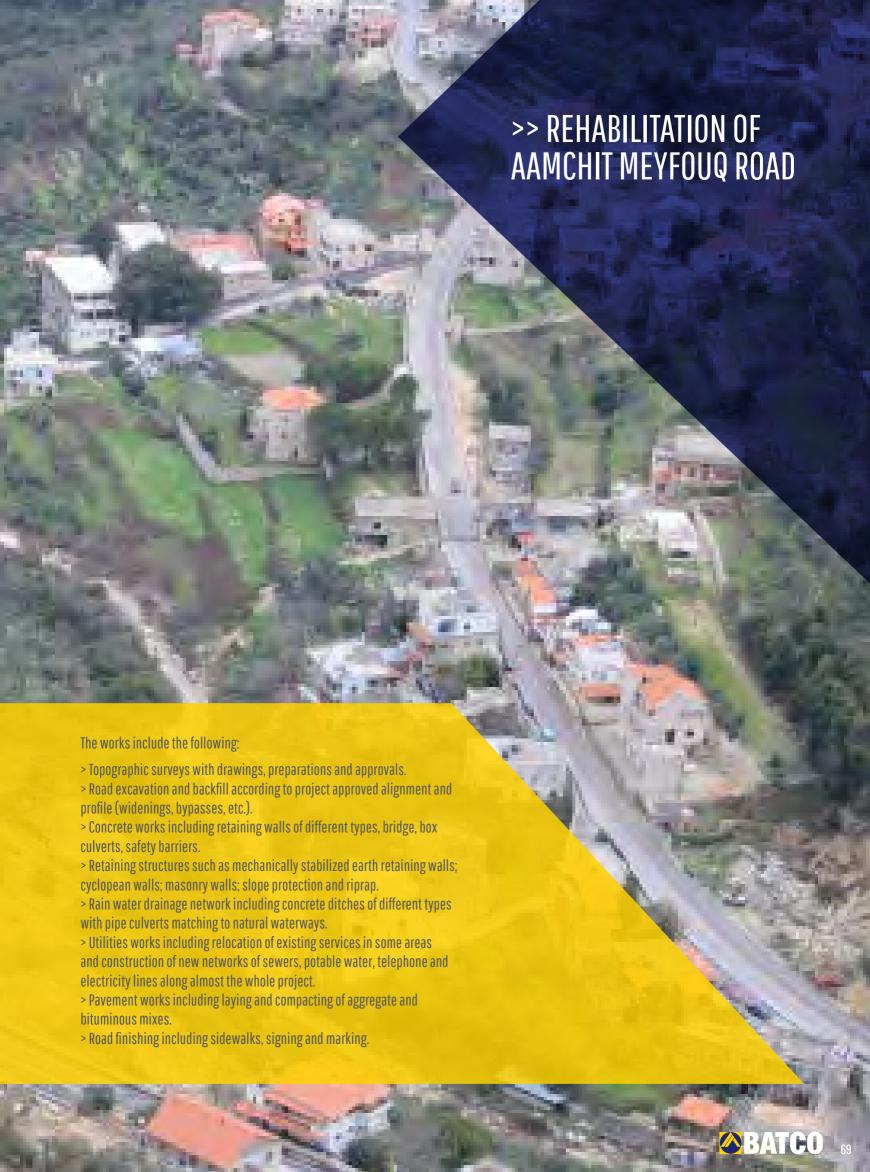
- > Construction of two bridges with respective lengths of 30 m and 150 m with precast posttensioned girders.
- > Implementation of concrete beams and cast-in-situ concrete piles of a diameter of 600 mm and 6,000 m length in the lagoon.
- > Road works including asphalting, road lighting, safety barriers, paving & curbing, and road signing & marking.

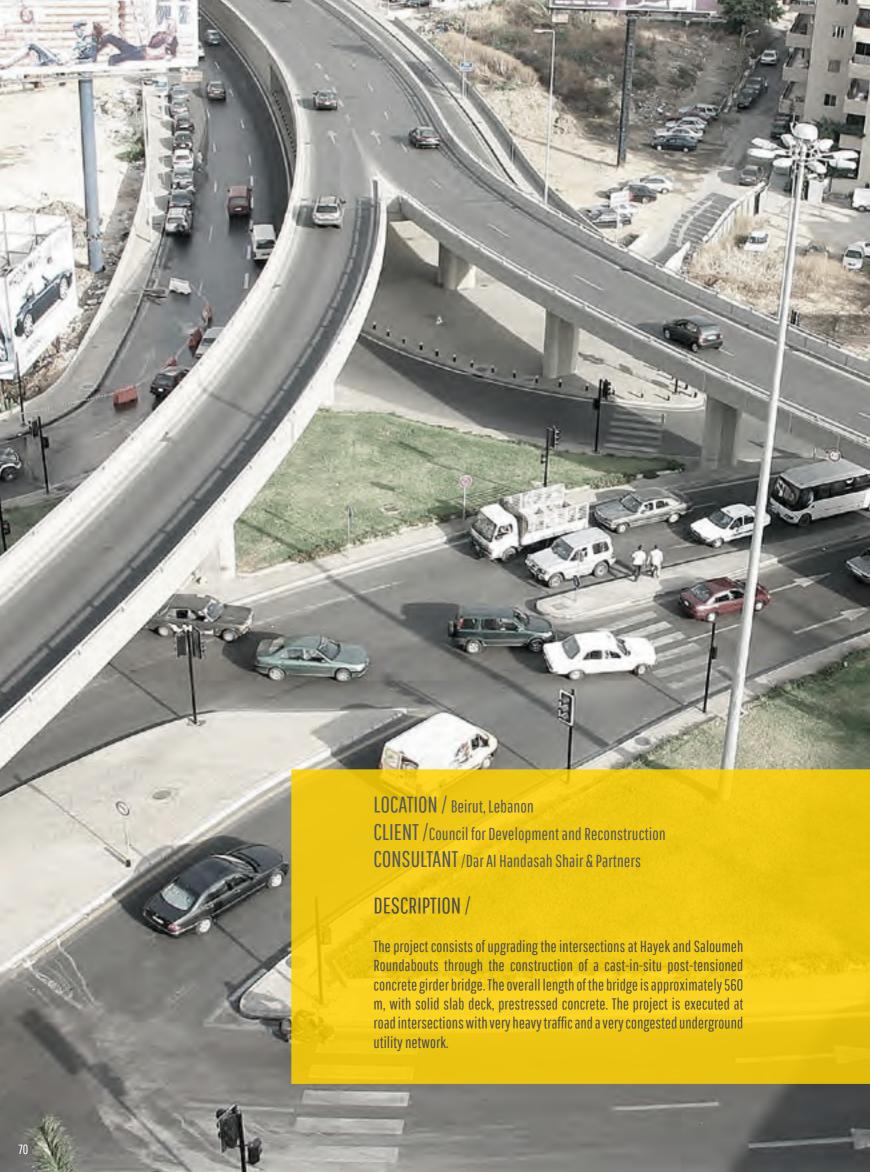


















>> THE CONSTRUCTION OF THE M10 FREEWAY - PHASE I

LOCATION / Port Harcourt, Nigeria
CLIENT / Greater Port Harcourt City Development Authority
CONSULTANT / GIBB Engineering & Services

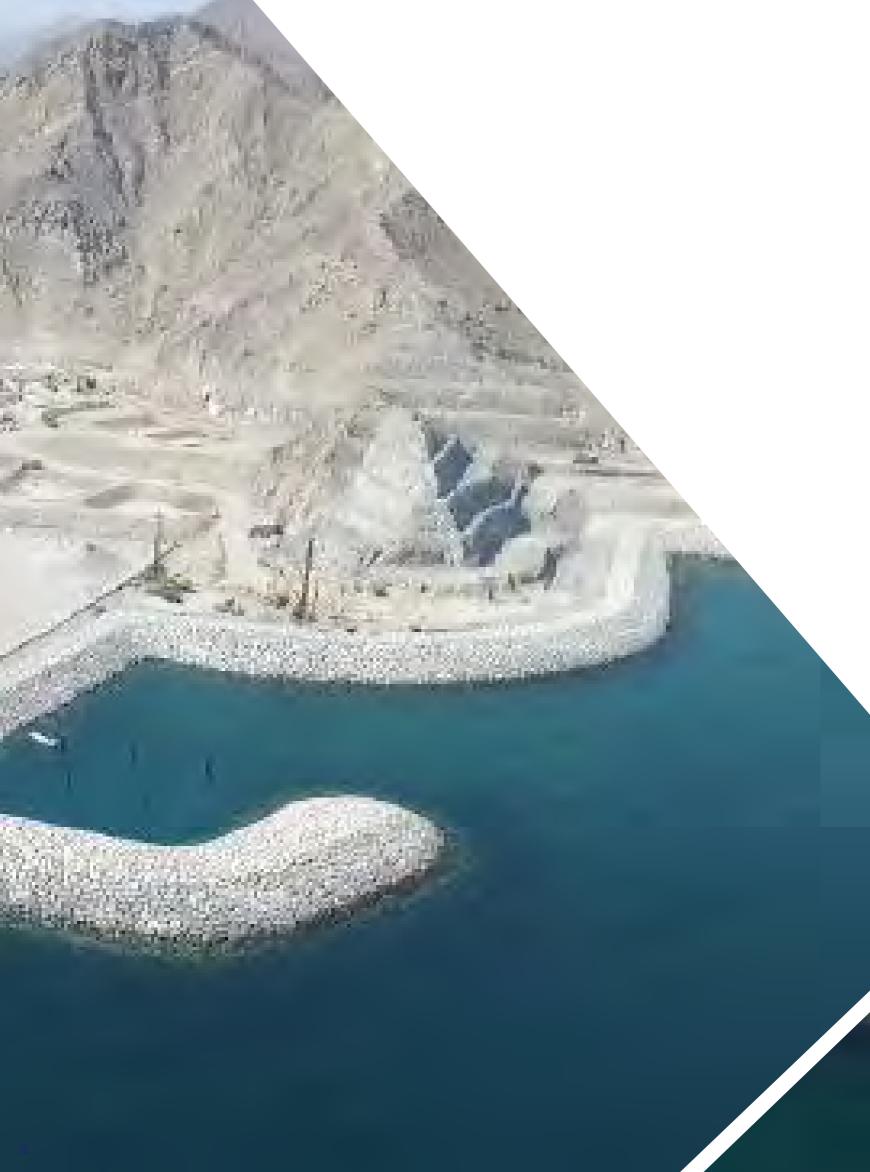
DESCRIPTION /

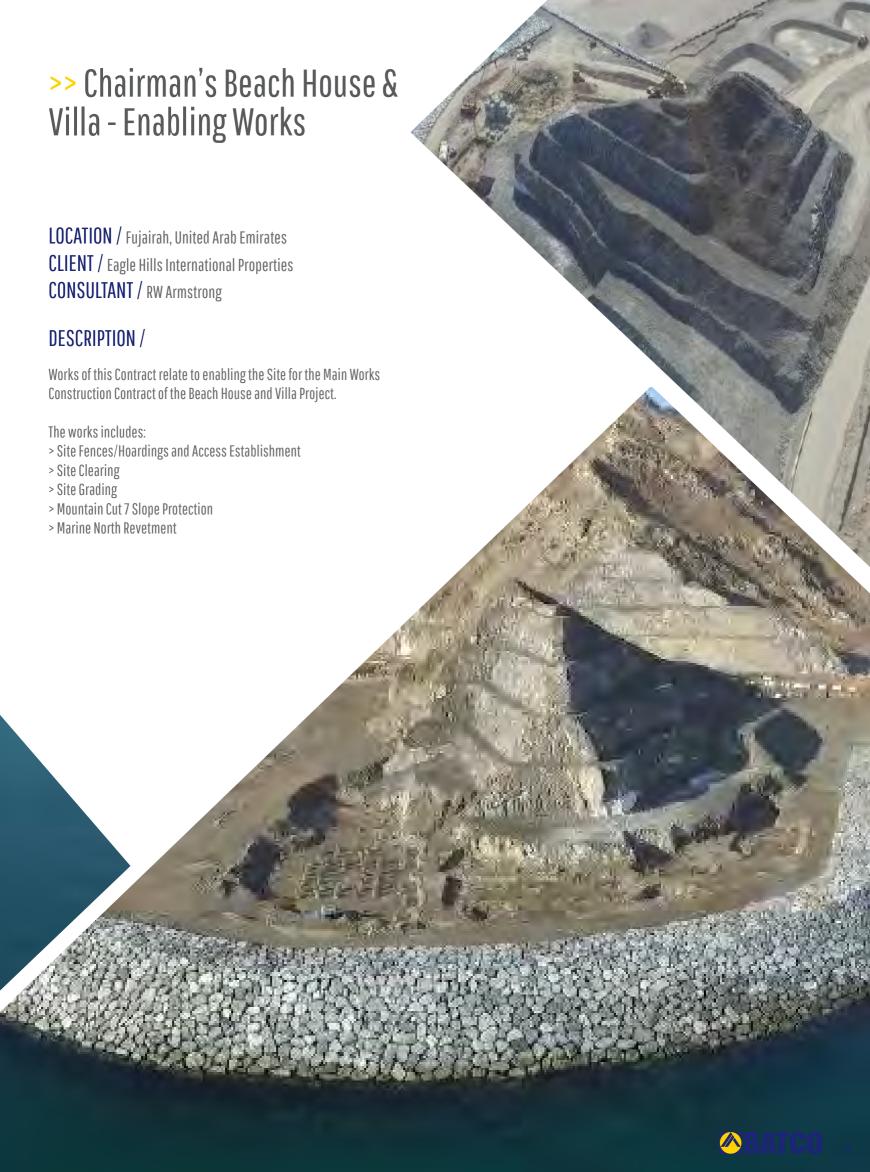
The project includes the construction of about 10 km of freeway and the design and construction of five bridges, a few kilometers from Port Harcourt International Airport.

The works include the following:

- > Construction of bridges on pile foundation and with post-tensioned precast concrete beams.
- > Installation of new jersey barriers.
- > Drainage work.
- > Street lighting.
- > Installation of curbstone and sidewalks, etc.
- > Electrical and street lighting.
- > Traffic signing and road marking.
- > Boring and pouring of piles.
- > Pile cap foundation.
- > Piers, diaphragm beams and bearings.
- > Post-tentioned precast girders.
- > Precast slab with cast-in-situ top slab.

SELECTED PROJECTS >> Infrastructure









>> Chairman's Beach House & Villa - Piling Works

LOCATION / Fujairah, United Arab Emirates
CLIENT / Eagle Hills International Properties
CONSULTANT / RW Armstrong

DESCRIPTION /

The contract consists of Piling works to the Chairman Beach House.





>> DESIGN AND BUILD OF PEDESTRIAN BRIDGES IN ABU DHABI

LOCATION / Abu Dhabi, United Arab Emirates
CLIENT / Department of Transport
CONSULTANT / AECOM Middle East Itd

DESCRIPTION /

The project consists of the design, procurement and construction of eight steel pedestrian bridges within Abu Dhabi City, including all associated design, approvals & permits, environmental protection works, civil works and testing & commissioning.

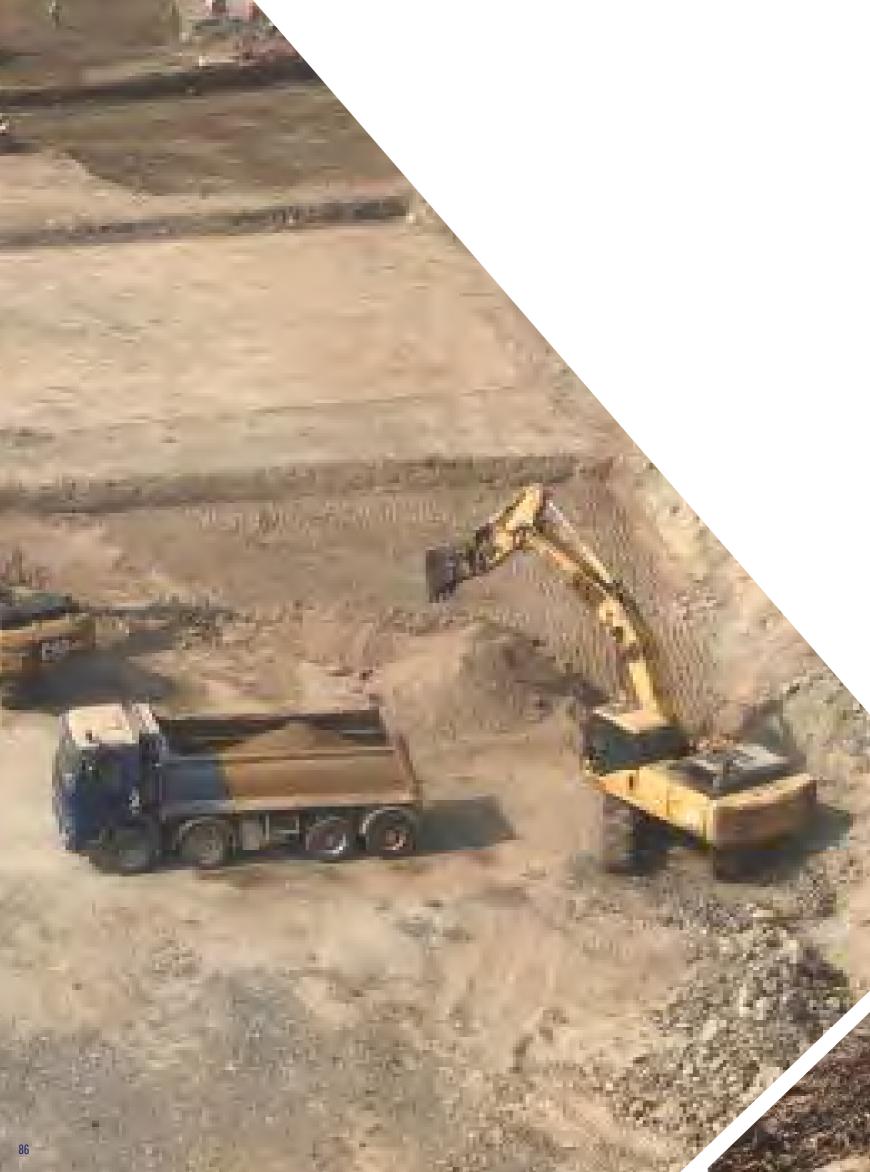
- > The bridge decks span between 52 m (bridge Y4 Airport road) and 150 m (Delma bridge), with a 3 m wide walkway & stair case and one level elevator implemented at both sides of the bridge.
- > The bridges' substructure comprise two steel structure abutments integrally connected to the superstructure and supported on cast-in-situ concrete bored piles.
- > The bridges were enclosed within aluminum cladding fixed using hidden steel subframes to enhance the aesthetics of the bridge.
- > The pedestrian walkway leading to the bridges was tiled with interlock as per the design taking into consideration access for the handicaped.





SELECTED PROJECTS

>> Buildings













LOCATION / AI Ain, United Arab Emirates
CLIENT / Abu Dhabi Authority for Culture and Heritage (ADACH)
CONSULTANT / Rafik EI-Khoury and Partners

DESCRIPTION /

The construction of the Qattara Art Center aims to promote artisanal art forms and encourage the local community to support handmade art. The project entails the construction of three new structures within the confines of the existing fort along with an adjacent underground energy center.

The works include the following:

> Restoration of the existing fort structures.

> Construction of a new exhibition building, public facilities and new teaching/arts studio buildings.

> Construction of a new performance hall and accommodation.

> Construction of underground plant room/energy center.









>> Construction of Frontier Camps - Package 1

LOCATION / Al Buraimi, Sultanate of Oman
CLIENT / Ministry of Defence
CONSULTANT / Gulf Engineering Consultancy

DESCRIPTION /

The project consists of the EPC of three camps along the geographic border of Oman with the United Arab Emirates. Each camp is compounded by boundary wall, main gate, guard house, main watch tower and corner watch towers.

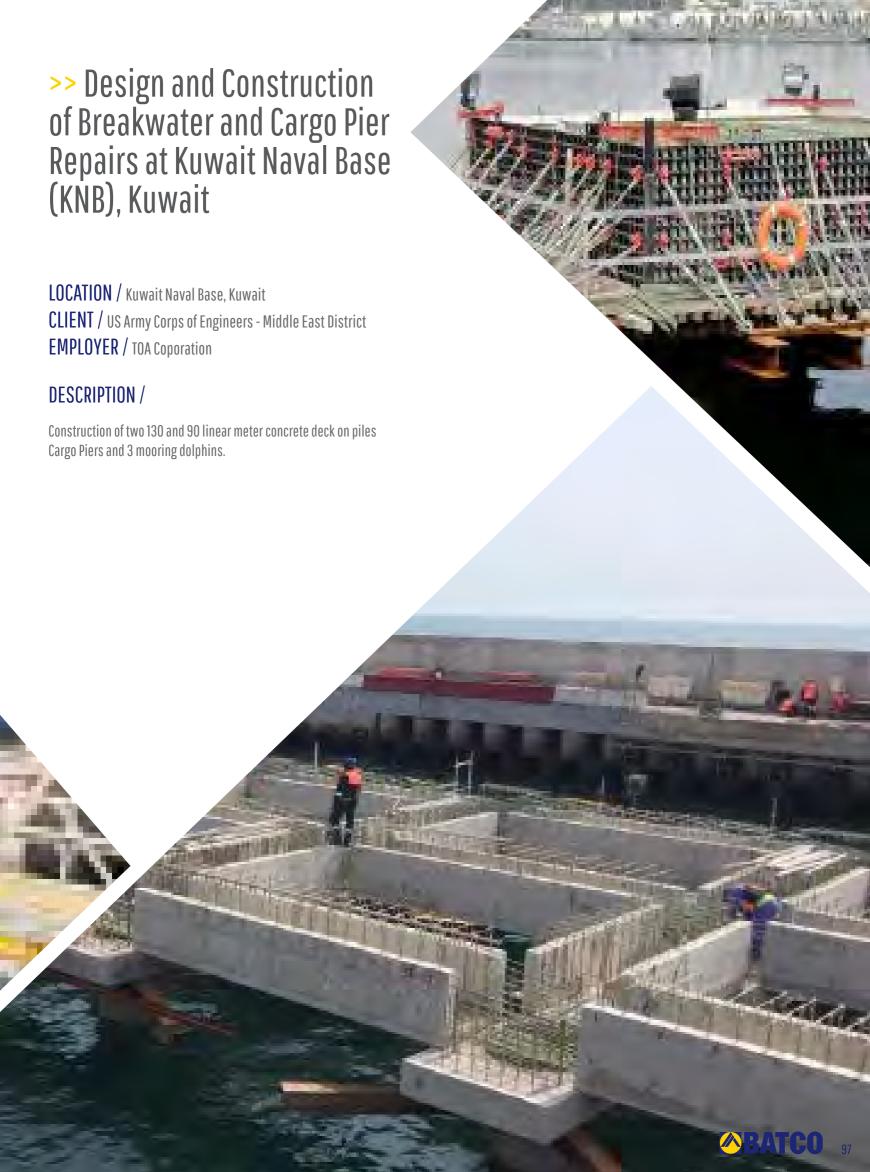
Works include:

- > Infrastructure works,
- > Water works,
- > Electrical and sewer systems.



SELECTED PROJECTS >> Marine Works









>> The Address Fujairah Resort & Spa: Marine and Grading Package

LOCATION / Fujairah, United Arab Emirates
CLIENT / Eagle hills (Sharm Fujairah Real Estate LLC)
CONSULTANT / RW Armstrong

DESCRIPTION /

The works include the following:

Surveying, design, execution and installation including: Mountain cut, Embankment Fill, Structure Fill, Slope Protection,

Marine works include:

- > Revetments design & construction and
- > Design & construction of Two Breakwaters with geotube to protect the new beach development including Dredging to obtain required sand for Beach Top Layer,
- > Design & construction of Marina
- > Supply and Installation of Rock for the Construction of Revetment, Groynes Breakwater, Rock Scour Protection System and Design Fabrication Furnishing and
- > Installation of Marina.

Project Related Activities:

- > Mountain Cut and Blasting,
- > Slope Protection,
- > Embankment (Earthwork),
- > Beach Development,
- > Marine Breakwaters,
- > 2 Revetments and Marina.

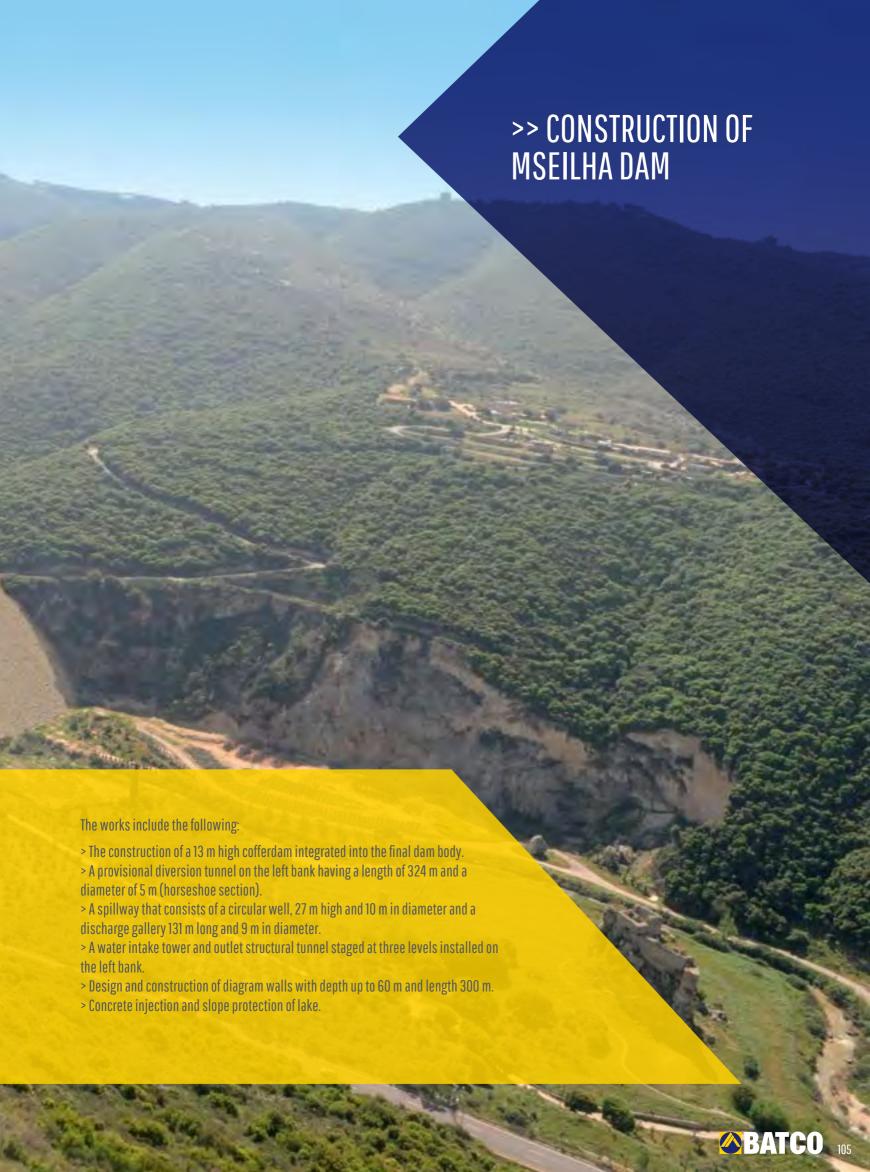




SELECTED PROJECTS

>> Dams





LOCATION / Danniyeh, Lebanon
CLIENT / Council for Development and Reconstruction
CONSULTANT / Dar Al Handasah Nazih Taleb & Partners



>> CONSTRUCTION OF BRISSA DAM AND LAKE

DESCRIPTION /

The Brissa Dam project is located in the upper part of the Menieh-Danniyeh Caza. The construction of the 700 m long dam with a 24 m crest elevation and a reservoir capacity of 1,700,000 m³ aims to provide a better distribution of irrigation requirements to nearby agricultural lands.



SELECTED PROJECTS >> Solid Waste









LOCATION / AI Ain, United Arab Emirates
CLIENT / TADWEER
CONSULTANT / Entec

DESCRIPTION /

The project consists of collection & transfer to composting plant & landfill of 1,040 tons per day of solid waste including community collection points and door-to-door collection.

Additionally it includes servicing, washing & desinfection of solid waste containers, graffiti removal, sand removal, litter picking, mechanical & manual street sweeping & cleansing.

The works also cover special & selected services to palaces in the project's area.













>> AL DHAFRA LANDFILL AND AL MAFRAQ TRANSFER STATION

LOCATION / Abu Dhabi, United Arab Emirates
CLIENT / TADWEER

DESCRIPTION /

The project consists of operation and maintenance for the Al Dhafra Solid Waste Landfill and Al Mafraq Solid Waste Transfer Station. The project includes the rehabilitation works of facilities' entrances, upgrading of landscaping areas and installation of new electronic weighbridges with on-line monitoring.

Project Specifics /

> Duration: 3 years, extended for 2 years.

\ Start date: 2010 \ End date: 2015

> Tender Awarded for 2015-2018

> Daily Tonnage:

\ AI Dhafra Solid Waste Landfill: 20,000 t/d (daily

capacity)

\ Al Mafraq Waste Transfer Station: 2,000 t/d









>> ABU DHABI BEACH CLEANING & WASTE MANAGEMENT SERVICES

LOCATION / Abu Dhabi, United Arab Emirates
CLIENT / SERCO and Abu Dhabi Municipality

DESCRIPTION /

The project consists of a three years contract for three beaches in Abu Dhabi: Corniche Beach, Bateen Beach and Ladies Beach.

The works include the following:

- > Janitorial works.
- > Waste segregation, collection & removal.
- > Beach cleaning: /Sandy beach area & associated beach furniture; /Litter picking;

/Cleaning gardens & walkways.





>> Waste management services to the Mega Plant facility for Pepsi in Jeddah

LOCATION / Jeddah, Kingdom of Saudi Arabia CLIENT / Middle East & North Africa Manufacturing Company - Pepsi

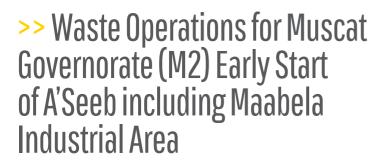
DESCRIPTION /

The Contract consists of providing waste management services to Pepsi's mega plant facility in Jeddah.









LOCATION / As Seeb, Sultanate of Oman CLIENT / Be'ah

DESCRIPTION /

The Contract consists of the waste operations for Muscat Governorate (M2) early start of A'Seeb including Maabela Industrial Area.

The services include but are not limited to the following:

- > Municipal Solid Waste Collection Services within all public areas and at designated collection points.
- > Collection, Transportation, Treatment and Disposal of Bulky Waste Collection including e-waste & tires, Green Waste, Farm, Stockyard & Livestock Waste (including Fallen Stock) and House-hold repair and maintenance/C&D waste.
- > Response and Unscheduled (On-Call) Services & Special Requests.
- > Operation, Maintenance and Management of Transfer Facilities.
- > Provision and operation of volume reduction and/or treatment technology that effectively diverts waste from landfill.







LOCATION / Nabatiyeh, Lebanon
CLIENT / Urban Community of Chqeif Nabatieh

DESCRIPTION /

The scope of work includes Operation and Maintenance of a Material Recovery and Biological Treatment Facility including:

- > Mechanical and Manual Sorting, Handling and Recovery of waste;
- ${\scriptstyle >}$ Biological Treatment (Composting: fermentation and maturation) of Organic waste.
- > Transfer of rejects to landfill
- > Sales of recyclables







SELECTED PROJECTS
>> Water & Wastewater
Treatment

>> AMMAN WATER SUPPLY PROJECT STAGE 1 & 2

LOCATION / Amman, Jordan
CLIENT / Ministry of Water and Irrigation

DESCRIPTION /

The works include the following:

- > Primary pipeline distribution with 14 km of ductile iron diam. 800 mm pumping station construction.
- > Pumping station rehabilitation and installation of chlorination equipment,
- > Two reservoirs construction with a combined capacity of 14,500 m³.
- $\,>$ Secondary and tertiary distribution pipelines with 115 km of ductile iron with diam. from 100 to 700 mm.
- > Associated house connections.



>> SANLIURFA WATER TREATMENT PLANT AND PUMPING STATION

LOCATION / Sanliurfa, Turkey

CLIENT / Ministry of Energy and Natural Resources General Directorate of State (DSI)

TREATMENT CAPACITY / 270,000 m³/d





>> 5 WASTEWATER TREATMENT PLANTS AND 2 SEA OUTFALLS-IZMIT

LOCATION / Izmit, Turkey CLIENT / Iller Bankasi TREATMENT CAPACITY / 93,000 + 91,000 + 81,000 + 29,000 + 23,000

DESCRIPTION /

The works include the following:

- > Pre-Treatments
- > Biological Denitrification
- > Biological Nitrification
- > Final Sedimentation













DESCRIPTION /

The project consists of the design and construction of the Craiova wastewater treatment plant.

The works include the following:

- > Pretreatments
- > Primary sedimentation
- > NBR activated sludge system
- > Final sedimentation
- > Sludge thickening
- > Sludge anaerobic digestion
- > Mechanical sludge dewatering
- > Co-generation system

>> SAADIYAT ISLAND WASTEWATER TREATMENT PLANT STP2

142





LOCATION / Bursa East and Bursa West, Turkey
CLIENT / BUSKI Bursa Water and Sewerage Administration
TREATMENT CAPACITY / 351,000 + 165,000 m³/d

DESCRIPTION /

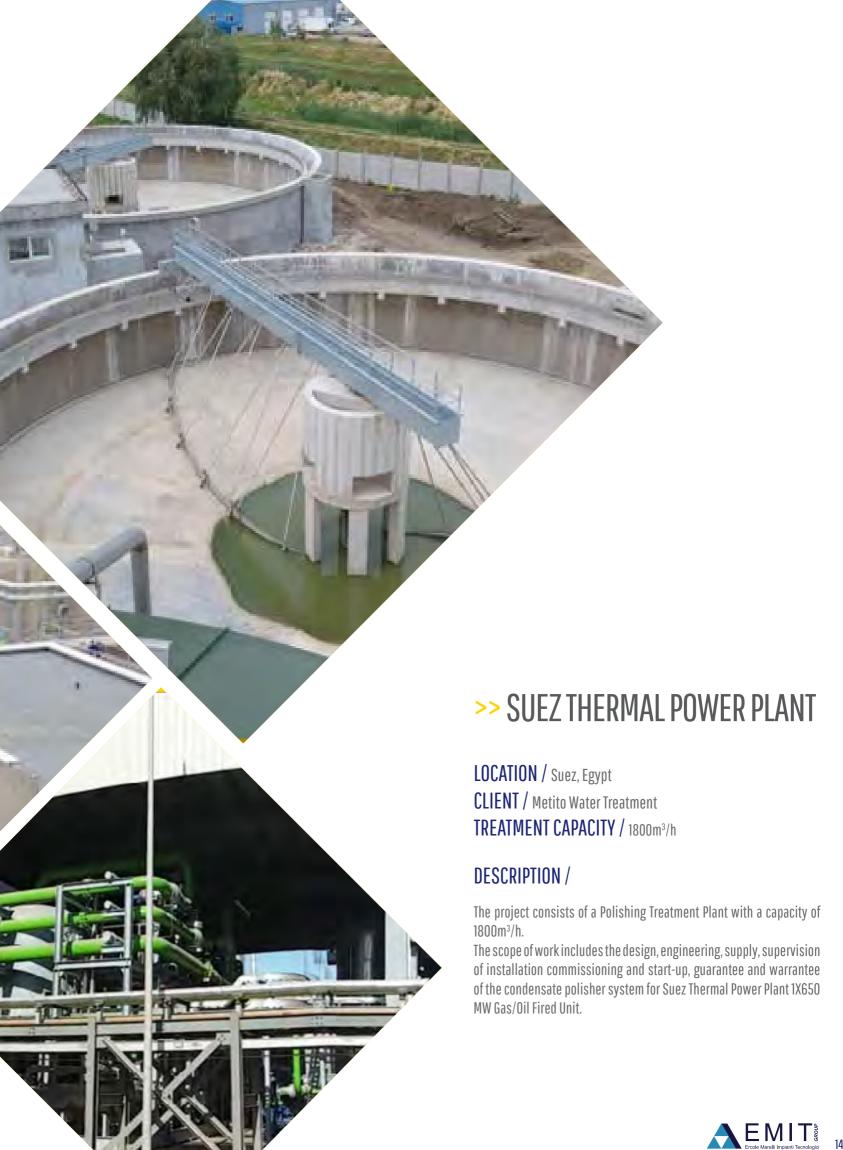
The project consists of the construction and operation of Bursa East and Bursa West wastewater treatment plants.

The works include the following:

- > Pre-treatments
- > Biological phosphorus removal
- > Bod removal
- > Biological denitrification
- > Biological nitrification
- > Final sedimentation
- > Sludge stabilization and dewatering

>> VASLUI, BARLAD AND HUSI WASTEWATER TREATMENT PLANT





>> IASI WASTEWATER TREATMENT PLANT UPGRADE

LOCATION / Iasi, Romania
CLIENT / S.C. Apavital S.A. Iasi
CONSULTANT / SC EPTISA ROMANIA SRL





LOCATION / Iasi, Romania
CLIENT / S.C. Apavital S.A. Iasi
CONSULTANT / SC EPTISA ROMANIA SRL
TREATMENT CAPACITY / 14,470 m³/d.

DESCRIPTION /

The project consists of the rehabilitation of three wastewater treatment plants in lasi province.

The scope of work includes: electromechanical engineering, equipment supply, supervision of erection and start up.



>> ISALNITA'S WASTEWATER TREATMENT PLANT





DESCRIPTION /

The project consists of the construction of a water treatment plant with a capacity of 7,600 m³/d and collectors in Rastu Nou & Bechet.

The scope of work includes the design, supply and erection of electromechanical works, start up, commissioning and assistance during DNP, and construction of part of the sewage line.







>> CERTIFICATIONS





Lloyd's Quality Management Systems - ISO 9001







UKAS' Quality Management System - ISO 9001





UKAS' Environmental Management System - ISO 14001





OHSAS' Occupational Health & Safety Management Systems - ISO 18001

In relation to the EPC activity in Italy, EMIT Group holds the associated top ranking qualifications for public works:

CATEGORY	CLASSFICATION	DESCRIPTION
OS 14	V	>> Disposal and recovery solid waste plants
OS 12	IV	>> Sanitary landfills and polluted soil remediation
0S 22	VIII	>> Water and wastewater treatment plants
089	V	>> Power Plants
0\$6	VII	>> Pipelines





batco-group.com