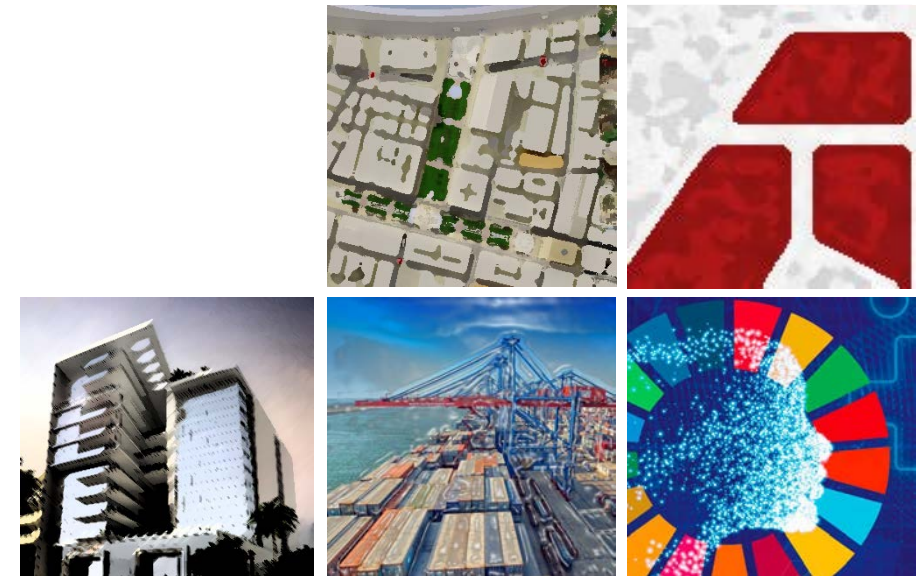


PACER Consultants

Quality Engineering Solutions





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Construction Management

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Social Responsibility

A helping hand to community



1. Welcome PACER Consultants

- **Here since 1950.** Offering top quality engineering solutions.
- Over a **100 Engineers** and technical staff with multitude of experiences.
- We have hundreds of **clients and partners...** and tens of Joint Ventures.. Local, Regional and International.





About Us

Our Philosophy ...

The firm was established by the late Dr. Hassan Ismail, with an intent to offer our community a better habitat.

With a record 60 years of experience, PACER built a reputation in local and international markets through the diversity of its services.

The company expertise covers master planning, architecture, civil, electro-mechanical engineering, infrastructure and maritime design.

There is also a special department that is in charge of construction and project management as well as sustainability studies.

Realizing the evolution in local and international markets, we find it our duty to serve the community by producing buildings that are practical, intelligent and sustainable.

A professional development program and a quality control program were established within the firm to ensure that services are performed up to the highest quality and technological levels, while maintaining the personal touch.

Our Team

PACER Consultants employs over 100 full time engineers, administrators and supporting staff; and around 200 highly qualified experts associated with PACER engaged on-the-need basis.

Our office standards are continuously developing; it is natural that we have accumulated a long list of satisfied clients, some have been with us for the past fifty years.

Management

- Eng. Essam Abdel Gawad: Managing Director
- Eng. Amr Ismail: Deputy Managing Director
- Eng. Tamer Abou Seida: Deputy Managing Director

Board Members

- Dr. Ahmed Ismail
- Dr. Mokhles Abou Seida
- Dr. Fathi Saleh
- Eng. Osama Balboul



2. Services

A multitude of expertise

- Design**
- Management**
- Studies**

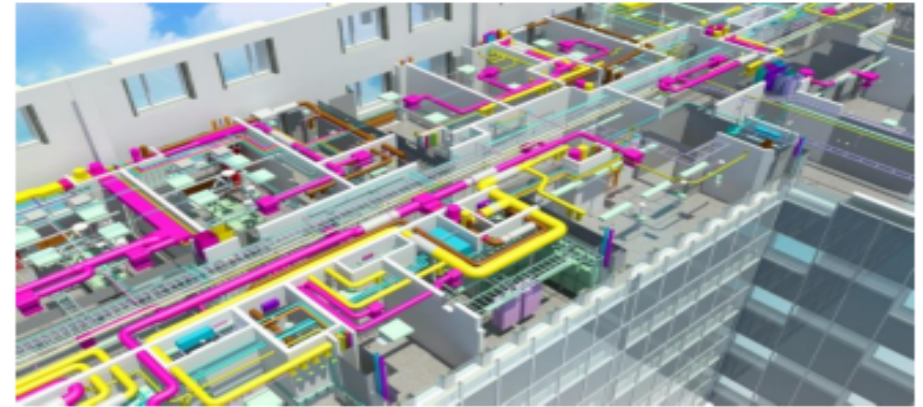
Services [Capability Statement]

Design

- Architectural
- Interior and Landscaping
- Civil and Structural
- Electrical and Mechanical
- BIM Compliant Drawings and Documentation

Project Management

- Design
- Tendering
- Construction
- Claims



Technical Studies

Asset Evaluation

- Commercial. Industrial properties
- Residential properties

Environmental Studies

- Sustainability Reports. LEED Recommendations
- Environmental Impact Assessment

Design...

❑ Urban Planning. Master Planning

PACER Consultants is regularly commissioned as architects for large housing developers and Housing Associations on major regeneration projects. This requires our master planning and urban design skills, usually for a mix of flats and houses over a large site areas, for which we also provide comprehensive planning and working drawing packages.

The site we have worked on date are generally in city centers although we have provided feasibility schemes for a wide range of sites throughout Egypt, KSA and Sudan. With our in-house planning expertise, we are able to offer Planning Policy advice to assist the developers for their long-term aims to specific sites.

❑ Architecture

Effective developments balance the need for focus and concentration, with flexible meeting and discussion spaces, to promote collaboration and communication. Ease of movement and access is essential to enable all staff and visitors, not only those with disabilities, to achieve maximum productivity during the working day, so it makes sense for these to be built in at the outset of developments.

Early identification of areas of potential added value leads to a more efficient design process and the elimination of abortive design.

Our aim is to deliver a cost effective solution that meets client aspirations and helps fulfil the end user obligations under current equality legislation, reducing the need for unnecessary future works and providing high quality working environments



Design...

□ Integrated Engineering

Developing a coherent inclusive design strategy for a commercial office building requires the integration of established regulations and codes of practice, together with a pragmatic approach to their application.

PACER Consultants undertook a number of sustainable designs for private and public office complexes.

The designs provides solutions for reducing the heat transfer studying the orientation of the buildings, specifying materials environmentally friendly, using sun shades, taking into consideration the UV values of the elevations, and providing natural ventilation systems.

□ Interior Design

Our design skills also cover interiors and engineering design, adding an extra dimension to our service, our interior design team brings creativity, innovation and fully manage and coordinate the engineering team to develop the most effective solution that meets the projects objectives and combine functionality with innovative designs.

Our interior design team is aware of alternative construction methods and materials available in the market, working together with our professional cost estimators, they are able to achieve interior themes within the required budgets.



Management

❑ Project Management

Project management is the art and science of driving the project safely, smoothly with the optimum cost, quality and time throughout its phases. We plan, coordinate, administer, monitor and control all activities of all participants in the project with a view to its timely and economically completion within the predetermined quality, schedule and cost parameters.

Over the years we have been developing and improving continuously systems related to all the blocks of the management; we have created manuals and different systems; we encourage all our employees to participate in enhancing those systems to guarantee that the enhancement add value to the client and the people directly involved in the application of such systems such as:

Integration Management, Tracking system, Cost estimation systems, Quality Control & Assurance, Contract Administration and Project Control

❑ Construction Management

Mobilization

- Approve Detailed Constr. Time Schedule
- Approve Detailed Constr. Cash Flow
- Approve Method Statement
- Ensure Work Procedure
- Value Engineering

Execution

- Follow up Meetings
- Monitoring Site Work Progress
- Review and Approve Contractor Invoices
- Contract Administration
- Apply Control Systems (Scope, Quality, Cost and Time)
- Reports | Recommendations

Handing Over

- Punch List
- Issue final Payment Certificate
- Procedures to Hand Over Project
- Closure Report



Studies

❑ Asset Evaluation

Based on the policy of PACER Consultants to utilize its various resources by utilizing these resources to maximize its return, the company has the honor to conduct Asset Evaluation studies - the purpose of the study is to determine the value of assets by finding (Estimate value, Replacement value, Market value and sale Value) of assets according to their quality and condition through:

- Data Gathering
- Inspections
- Asset Classification
- Depreciation analysis
- Market Surveys
- Cost Estimates
- Data Analysis & Reporting

❑ Environmental Impact Assessment

❑ Sustainability Studies

Environmental Impact Assessments (EIA) Studies cover predicted constraints and conflicts between proposed project and their environments; therefore, providing opportunities for mitigation measures to be incorporated to minimize problems upon the execution of different types of projects.

Firms already in operation undergo Environmental Compliance Action Plans (CAP) to put up with the new national and international stringent environmental regulations so as to reduce their rate pollution to become acceptable.. Ejesco Plant, Mill Construction Project, Van Leer Plant, Nile Car Manufacturing Plant and others have successfully rendered to the CAP regulations through Pacer's professional recommendations.





3.0 Portfolio

Our Projects

- Residential
- Commercial
- Industrial
- Maritime and Water Works
- Infrastructure





3.1 Portfolio

Housing and Residential

Developments

Urban Planning





Portfolio.. Housing & Residential

Mivida. Parcel 27

PACER Consultants' scope of work included Design Development and Tender Documents.

Mivida site is Located in New Cairo City. The Project area is around 3.5 Million square meters.

The project comprises single and multiple-family residential units of various standards, Healthcare facilities, hotels and other supporting services





Portfolio.. Housing & Residential

The Crown. Sixth Of October City

PACER Consultants' scope of work was Design services of all disciplines, BIM LOD 300.

Gated residential development with a total area of 190 Feddans where 92% of the land is dedicated for the development of an integrated urban community with a total area of 175 Feddans that will be developed on 3 phases.

The project comprise of 6 Types distributed on residential complex and including water features, gates as well as ancillary buildings.

The types comprise mainly of separate villas, Twin houses and apartments.





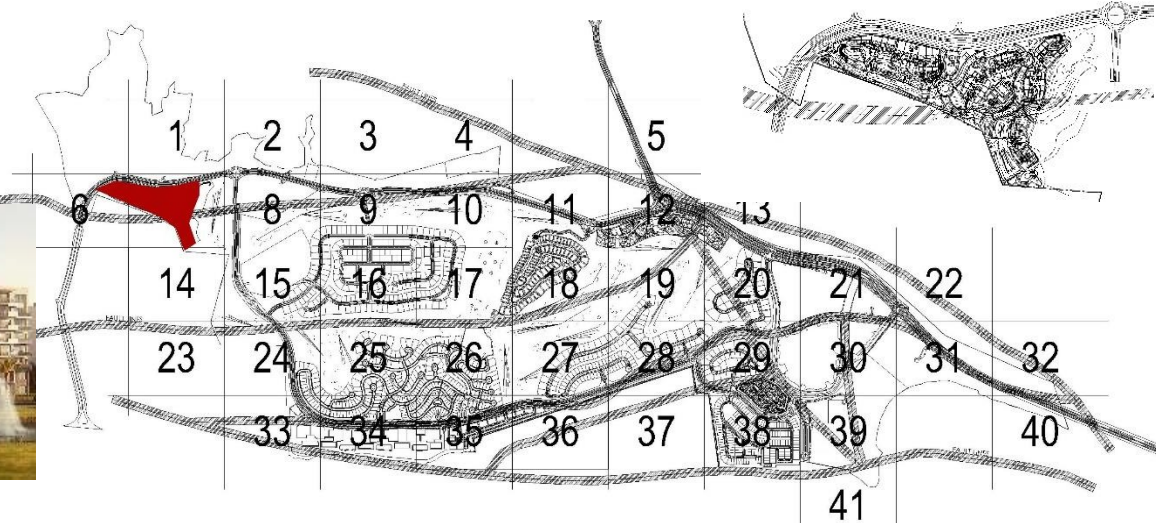
Portfolio.. Housing & Residential

Uptown Cairo, Village Z3

PACER Consultants' scope of work was Third Party Review on the tender documents and Value Engineering.

Turner "PM of UTC" assigned PACER Consultants to undertake a review of the developed tender packages to verify the completion, code compliance and constructability of the package (Drawings, specs, Calculations & BOQs).

Villages Z3 is a residential village located in a strategic position in the west end of Uptown Cairo. Village Z3 area is 89,992 m² and split operationally and contractually into two phase. Phase 1 of area 60,000 M² while phase 2 area is 29,992 M²





Portfolio.. Housing & Residential

YOUTH HOUSING COMPETITION

PACER Consultants were awarded an Honorable mention for Designing housing models for three regional zones in Egypt:

- Upper Egypt Zone.
- Central Cairo Zone.
- Northern Coastal Zone.

Works included designing 2 residential sizes of units for Every sector: (270 M² apartment) and (250 M² apartments)

Design included urban Master plan for each zone considering the Cultural and Climate diversity.





Portfolio.. Housing & Residential

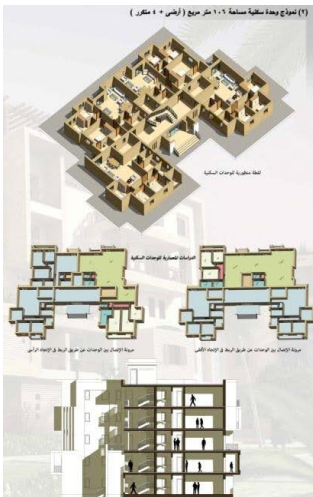
HOUSING Complex Borj El Arab

PACER Consultants was honored to join Egyptian Syndicate of Engineers' Design Competition.

The Project area is 302,500 M² and it was designed according to the LEED guides.

Three levels of creative external spaces were created to serve the residents of the complex:

- Children areas in between the buildings.
- Public spaces to practice physical activity and enjoy nature.
- Commercial, entertainment and restaurants.





Portfolio.. Housing & Residential

Royal Hills Compound

PACER Consultants role was to provide design of 4 types of villas, design coordination and review for the other 9 types, construction supervision of the whole project, Architectural, Structural, Power and Lighting, HVAC, Mechanical, and landscaping design, workshop drawings, presentation animation and construction, and project management services for the construction.

Tasks included: Planning, Scheduling, Reporting, time and cost control, Quality Control and Claims analysis.





Portfolio.. Housing & Residential

Al Hanaky Resident Towers. Jeddah, KSA

PACER Consultants role was to Redesign of Building Façade and Site Rendering.

PACER Consultants developed site rendering and exteriors in order to be included in the presentation of the project.

The project was designed by Salah EL Zogheiby consultants, KSA.

The Saudi Consultant assigned PACER Consultants to redesign the façade with the selection of materials, the new façade design was approved by the Client (Sheikh Abul Rahman Al-Hanaky)





Portfolio.. Housing & Residential

Garden Village Complex 2. Jubail, KSA

PACER Consultants' scope of work included Concept Design and Detailed Design.

The Residential Complex consists of 104 Villas Type A (3 bedrooms), 163 Villas Type B (2 bedrooms), 3 apartment buildings with a mix of 2 bedrooms apartments and studios in addition to services building.

All units have at least one parking slot, for the villas it is included near the entrance, while for the apartments the basement is used to accommodate the required parking spaces in addition to service rooms.





Portfolio.. Housing & Residential

Sadra Resort. Ras Sudr, Egypt

PACER Consultants' scope of work included Design Concept, Elevation Alternative

The design of the Resort was developed to host 160 residential units, 150 rooms hotel, six playgrounds, swimming pools and water features.

The design encouraged the presence of wide private gardens for the ground floor units, and a pedestrian network across the projects.

The design gives the flexibility of adding 40 residential units in the future.





Portfolio.. Housing & Residential

VILLA AMGAD SADEK

PACER Consultants' scope of work for VILLA AMGAD SADEK in Ofoq Compound Included Arch, Structural and Electromechanical Design.

Design take into account the environmental architecture using natural materials... for example the walls are executed with the Nubian stone and the upper floors using a brick molds of silt to maintain a normal moderate temperature inside the house.

Ceilings are built using domes, vaults and wooden ceiling taking into account the direction of rooms.

The large windows were made to overlook the north (wind direction)...



so as to provide natural ventilation.

Use of the roofs of the building to accommodate solar energy cells.





Portfolio.. Housing & Residential

VILLA Mohamed Abd El Kerim | Ashraf Afify

PACER Consultants carried out the adjustments and complete redesign of architecture, structural and electro mechanical phases for the villa which was located in Sudan.





Portfolio.. Housing & Residential

VILLA NASR EL DEEN

PACER Consultants' scope of work was Architecture and landscape Design of a private villa located in Khartoum with a total plot area of 750 M²





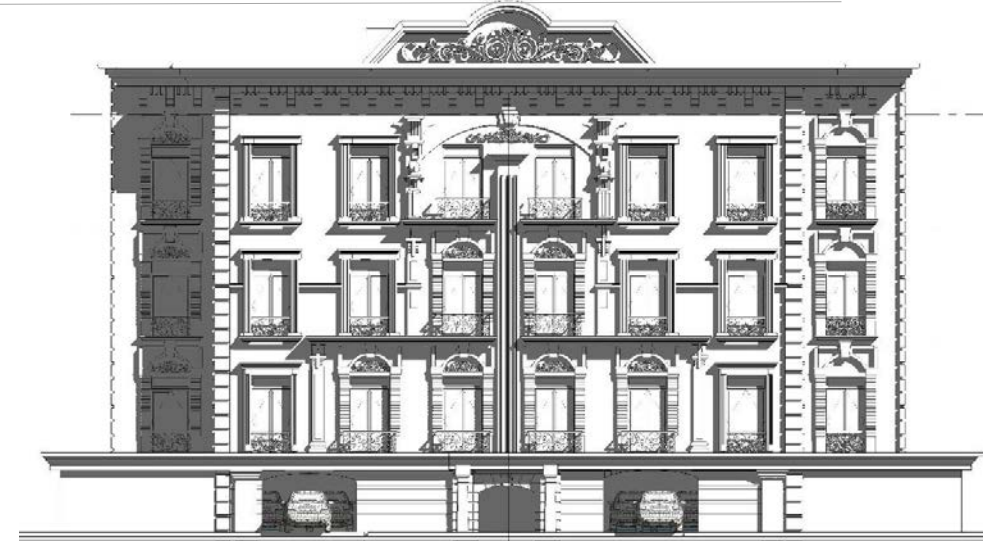
Portfolio.. Housing & Residential

Mr. Moussa El Morshed Residence

PACER Consultants' scope of work included Concept Design and Detailed Design.

A Resident in Jeddah consisting of fifteen 2 bedrooms apartment units distributed on three floors with areas that ranges from 70 - 125 M².

The ground floor was designed to accommodate a shaded parking area in addition to general facilities for the building.





Portfolio.. Housing & Residential

Festival Living Apartment. CFC, New Cairo

PACER Consultants' scope of work was Project Management in cooperation with Hosny Group.

The gated residential development composed of mid-rise apartment buildings, stream 1 consists of 7 blocks and stream 2 consists of 5 blocks.

The blocks apartment ranged in size from 126 to 330 M² offering 2, 3 and 4 bedrooms with a limited number of 4 bedroom duplexes.





Portfolio.. Urban Planning

MANSHEYA SQUARE

PACER Consultants won the 1st prize in 2012 Competition held by Alexandria Governorate.

Mansheya Square located in the central area of downtown Alexandria, a location rich with architectural heritage buildings.

Yet there is a current need for solving Vehicles and Pedestrian circulation, as well as reconstructing parking areas on site along with the landscaping and exterior elements arrangement to form a new Urban spirit in the center Of the old town in Alexandria.





Portfolio.. Urban Planning

Central Spine and Detailed Plan for Borg El Arab City

Description of the Project:

The project aims at revising different development programs of the city with a view on existing conditions and preparation of detailed development schemes for the first district's central spine.

Scope of Services:

- Preparation of housing and services facilities program.
- Urban design .
- Detailed infrastructure networks plan.

Comprehensive Plan for the North West Coast from Km100 to Km 268 West of Alexandria

Description of the Project:

Preparation of a plan to develop the resources of the coastal area from Km 100 to Km 268 of the North West Coast with a special emphasis on tourism, agriculture and agro-industries

Scope of Services:

Execution of the plan required five phases in which the following studies were carried:

- Phase I (study & analysis of present situation)
- Phase II (Development Concepts)
- Phase III (Development Programs)
- Phase IV Preliminary Comprehensive Dev. plan
- Phase V Final Comprehensive Dev. Plan



Portfolio.. Urban Planning

Master Plan of Suez City

Description of the Project:

The main objective of the project was to set a new plan for Suez City after the war of 1973 and prepare it to accommodate a population of one million inhabitants by the year 2000. This necessitated the planning and design of about 226,000 dwellings by that time and the creation of 400,000 job opportunities.

Scope of Services:

- Implementing studies
- Setting a Master Plan featuring
- Exploitation of all the resources in the Suez City and its surroundings

Preliminary Planning for the Area between Elmax and Km 34 West of Alexandria

Description of the Project:

As the growth of Alexandria city is physically restricted in the northern and southern directions; therefore, it was suggested that the development of the area to the west of Alexandria is the only outlet for absorbing future expansion of the city.

Scope of Services:

- Making a study to determine the guidelines of the future land use, economic activities and infrastructure required to reach the absorption target planned.
- Proposing legal and administrative measures required to realize the plan.



Portfolio.. Urban Planning

New Ameriyah City Phase I

Description of the Project:

Design of the city to accommodate about 500,000 inhabitants by the year 2000 with a possible increase of population to one million. The main goal of this project was to create a self sustained city through maximum utilization of the physical and economical potentials of New Ameriyah area.

Scope of Services - Making studies for each stage separately.

- The first stage (status study)
- The second stage (setting the principles & goals)
- The third stage (setting a detailed plan for the first development stage)

Regional Development Plan for the New Valley

Description of the Project:

Investigating and developing a maximum production potential of the based on the natural and human resources of the New Valley region.

Scope of Services:

- Development of a digital groundwater simulation model for the two layered aquifer.
- Development of a water use optimization strategy and water monitoring and management system.
- Development of policy for data management and retrieval system pertinent to the area of study.
- Development of a regional plan
- Analysis of the studies



Portfolio.. Urban Planning

Regional Development Plan for the Farafra Oasis

Description of the Project:

The project is concerned with the issue of a comprehensive development for Farafra oasis within the restrictions and potentials concluded from the previous studies integrated and updated on more detailed level for this area. The aim of the project is a multi-sector development of the area with the objective to accommodate agricultural population

Scope of Services:

- Application of the groundwater simulation model to divine economic water use until the year 2085.
- Development of data management and retrieval system for the area.
- Development of an administrative plan for the area's natural human resources.
- Development of the Project.

Siwa-Matrouh Kifar Omessaghir Pipelines

Description of the Project:

The project included research and soil tests for the areas of building of the pipelines. The first with a length of 320Km fro Matrouh to Siwa and the other with a length of 50 Km from Kifar to Omessaghir.

Scope of Services:

- Research and soil tests.
- Design of two major pipe lines for providing water to the new areas.
- Preparing tendering documents.

Portfolio.. Urban Planning



Regional Planning for the North West Coast

Description of the Project:

The North West Coast is part of the Western Desert which required multi-sector development. It was a vast area of sand with scarcity of water, lack of significant towns, overgrazed for sheep breeding and no industrial development.

Scope of Services:

- Identifying the regions resources in the sectors of agriculture, tourism and industry and analyzed the present constraints for development.
- Developing strategies and formulating socioeconomic justified projects related to the region.
- Rehabilitation of the grazing areas.
- Development of domestic & international tourism
- Establishing inorganic chemical industry.
- Developing an extension of the existing Nasser Canal for water supply.
- Integrating all the economic and social development factors in scheming the multi-sectored development plan for this coastal zone.



Portfolio.. Urban Planning

Suez Canal Region Tourism Development Plan

Description of the Project:

The area covering this project included Port Said, Ismailia, and Suez city; referred to as the Suez Canal Zone. Studies were required for the development of international and domestic tourism and the creation of local recreation projects in this area .

Scope of Services:

Studies carried out separately for each city and were then compiled together to set the whole development plan: (Port Said city, Ismailia city, Suez city).

- The study also took into consideration the potential visitors to Sinai through the tunnel of Ahmed Hamdi, tourists to Ayun Mousa Oasis and planned for developing a base for short excursions to the historic sites.

Structural Planning of the North West Coast Between KM 34 and KM 100 West of Alexandria

Description of the Project:

Preparation of land use policy for tourism, industry, mining, housing and reallocation of different housing cooperatives in the North West Coast region between Km 34 and Km 100.

Scope of Services:

- Preparation of the structural planning
- Reallocation of different housing cooperatives in the region
- Determination of major transportation axis, water supply, waste water, electricity and communication networks.
- Scheming a plan determining priorities of realization of different projects.



3.2 Portfolio

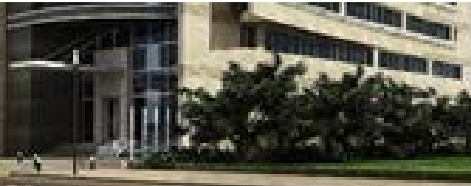
Commercial

Hotels. Resorts

Offices

Cultural

Retail: Shops...
Banks and
Supermarkets





Portfolio.. Hotels and Resorts

HYATT REGENCY HOTEL & RESORT

PACER Consultants' scope of work was Design management of HYATT REGENCY HOTEL & RESORT located in Sharm El Sheikh, Egypt. and coordination between 11 international design offices in different countries to prepare a coordinated tender package on time.

Hyatt Regency Hotel and Resort, a 432 guest room plus 60 Suites on 5 star hotel.

The total area is 268,600 square meters on two storey buildings.





Portfolio.. Hotels and Resorts

HILTON PYRAMIDS GOLF RESORT

PACER Consultants' scope of work was Redesign of HILTON PYRAMIDS GOLF RESORT located in 6 October City, Egypt to meet Hilton specs.

Scope includes architectural design development, architectural working drawings structural design, HVAC and mechanical design, power and lighting design, preparation of tender documents, tendering and evaluation.

The hotel is a 4 stars hotel and recreational anchor in Dream Land complex, 229 rooms, 17 suits, including indoor pools and recreational facilities, with a total area of 35,500 M²





Portfolio.. Hotels and Resorts

NEW NESSIMA RESORT. DAHAB. SINAI

PACER Consultants' scope of work was Architectural design, structural design, mechanical design, power and lighting design, Construction supervision and project management services.

As an application of the theory of using the natural material and ventilation system, this project was the first in Egypt to obtain a permit to be constructed completely using sand bricks.



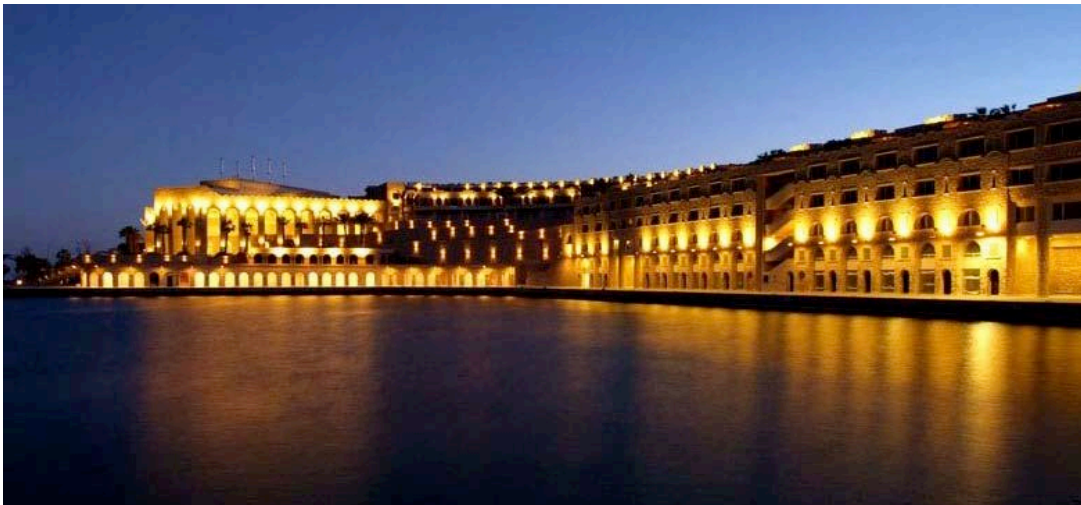


Portfolio.. Hotels and Resorts

MARINA AND LAGOON OBEROI HOTEL

PACER Consultants' scope of work was to carry out the marine design of MARINA AND LAGOON OBEROI HOTEL located in Hurghada, Egypt as follows :

- Review and analysis of the climatic and oceanographic condition.
- Carrying out the topographic and hydrographic surveys and issued maps.
- EIA studies were carried by the consultants.
- Preparing the general layout of the lagoon and marina.
- Designed and issued tender documents for maritime and other related works.



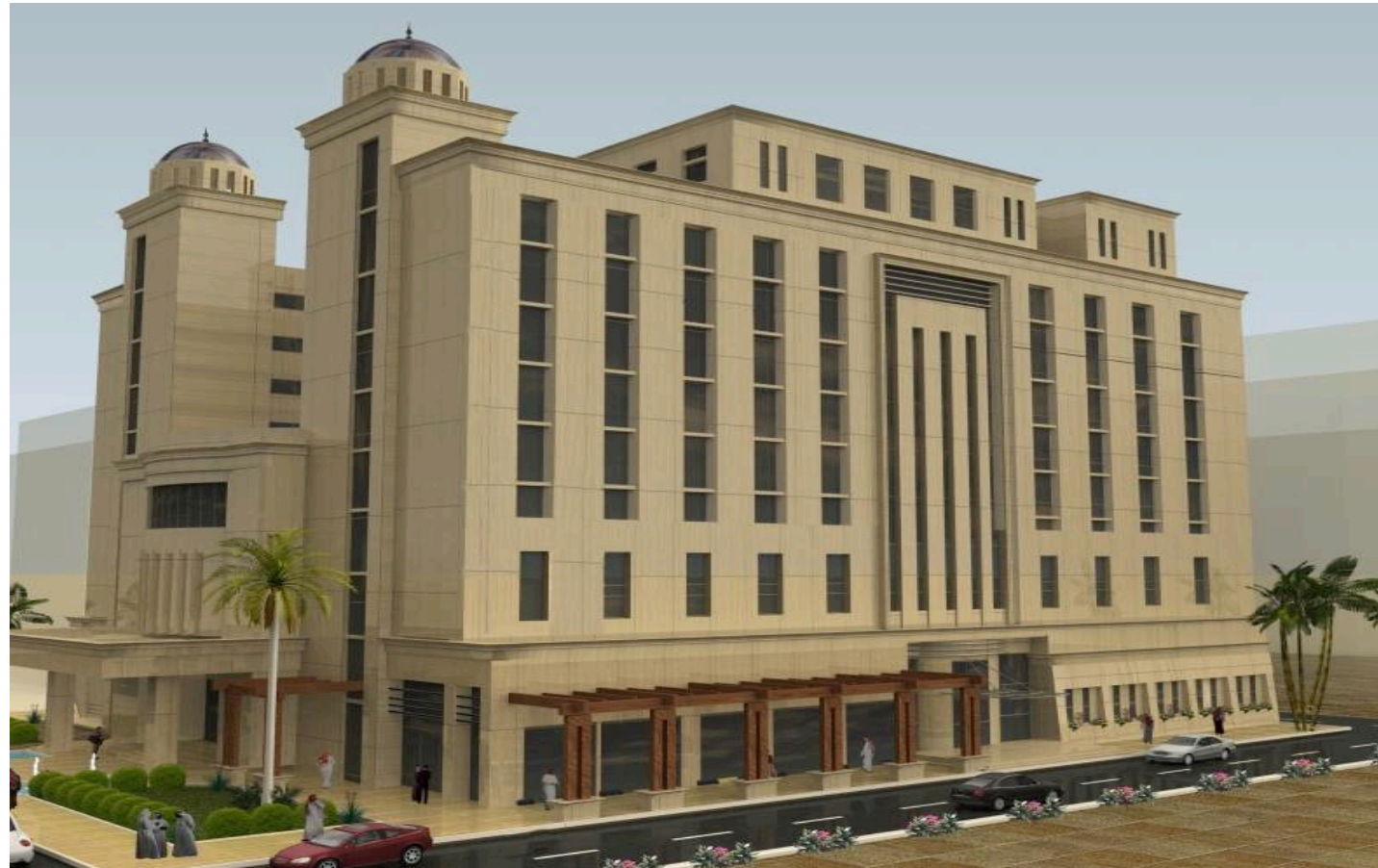


Portfolio.. Hotels and Resorts

AYAT MECCA HOTEL

PACER Consultants' scope of work for AYAT MECCA HOTEL located in Mecca. KSA. It included architectural design development, architectural working drawings structural design, HVAC and mechanical design, power and lighting design, preparation of tender documents and project management.

The foot print is 2,400 M² Basement floor, ground floor and 10 floors with total built-up area of 24,000 M²



Portfolio.. Offices

APEX PHARMA HEADQUARTERS

PACER Consultants was engaged to hold the redesign of building mass and Elevation and presented several design options until approval by the client. Upon approval PACER Consultants developed an Architectural and Structure detailed design and tender package for the elevations.

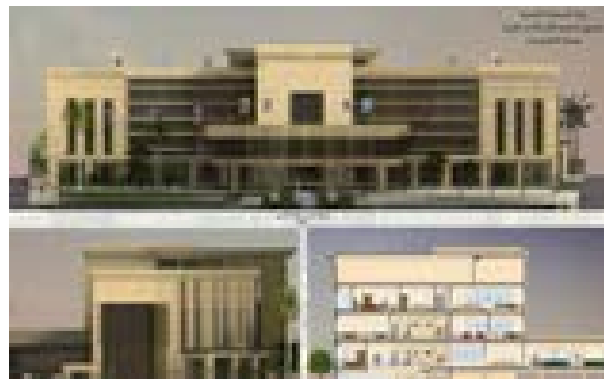


Portfolio.. Offices

Ministry of Tourism Headquarters

PACER Consultants won the 1st prize in Architecture competition and was contracted to provide detailed design and tender documents.

The project consists of 6 main buildings with landscape greenery and water features with a total site area of 41,000 M²





Portfolio.. Offices

BNP PARIBAS HEADQUARTERS

PACER Consultants was engaged to supervise the construction and fit-out of an office building for “BNP Paribas”.

The fit-out accommodates more than 1,500 staff in an open plan over the 6 levels within a space of 30,180 M²... This includes open workout spaces, closed offices, several quiet rooms, meeting rooms, boardroom and casual breakout spaces.

PACER Consultants was working closely with the building contractor to address a complex site issues



Portfolio.. Offices

CFC Southern Business Park C

PACER Jointly with Hosny Group are providing Project Management services for this project

The project consists of 4 new grade A office buildings including a double wing building (with total GBA of approximately 60,500 M² and total site area of approximately 66,654M²)





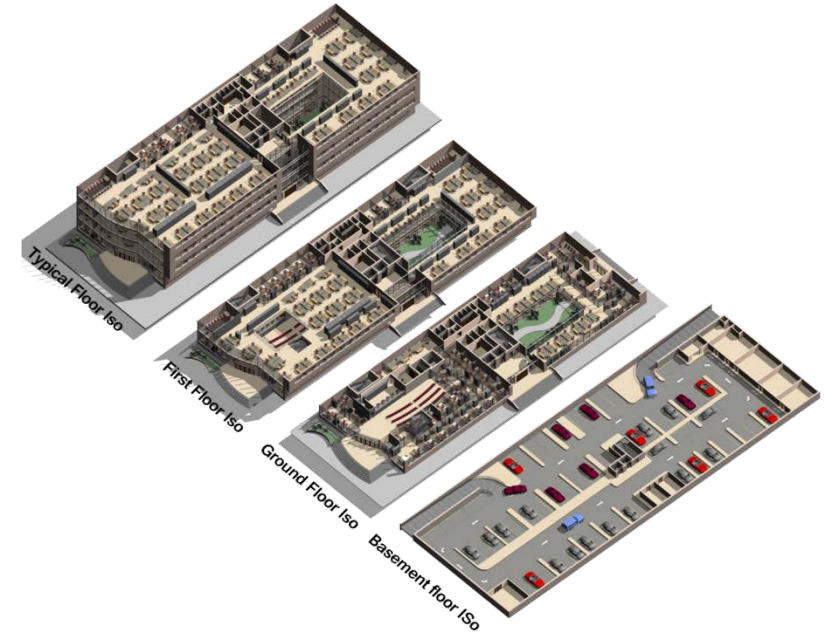
Portfolio.. Offices

QNB Headquarters. Sixth October City

PACER Consultants was engaged to design and supervise the construction and fit-out of an office building for “QNB El Ahli” located in 6th October

The fit-out accommodates more than 400 staff in an open plan over the 3 levels within a space of 3,250 M²

This includes open workout spaces, closed offices, several quiet rooms, meeting rooms, boardroom and casual breakout spaces.



Portfolio.. Offices



Schneider Headquarters

PACER Consultants team entered an interior design competition between several consultants for fit-out renovation of Schneider Headquarters located in the 5th Avenue.

Wining the competition, the interior design concept was followed by construction packages for site buildings.



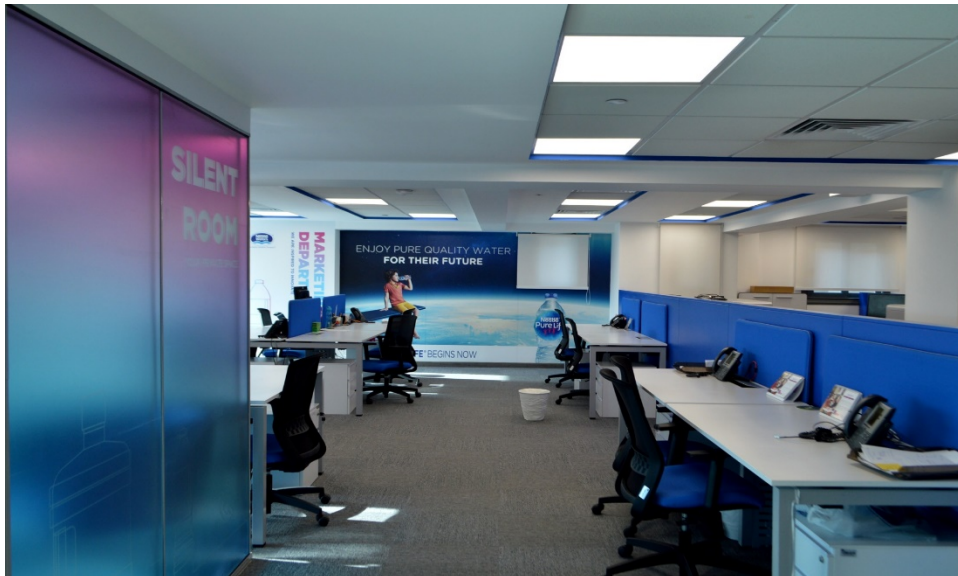


Portfolio.. Offices

Nestle Waters Egypt Head Office

PACER Consultants carried out the Fit out design, Construction Supervision and Project Management for the project” have successfully accomplished their role in Nestle Waters Egypt new headquarters at Cairo Complex, Egypt with a total area of 2,500 M²

The role included the design, Construction Supervision and Project Management.

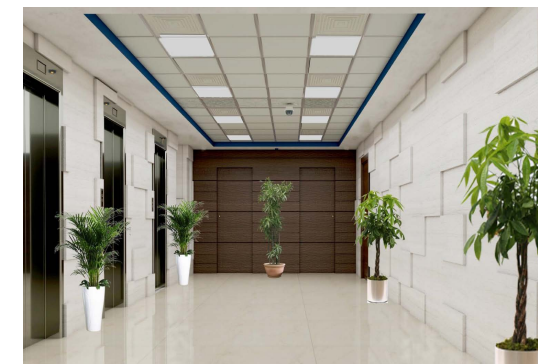
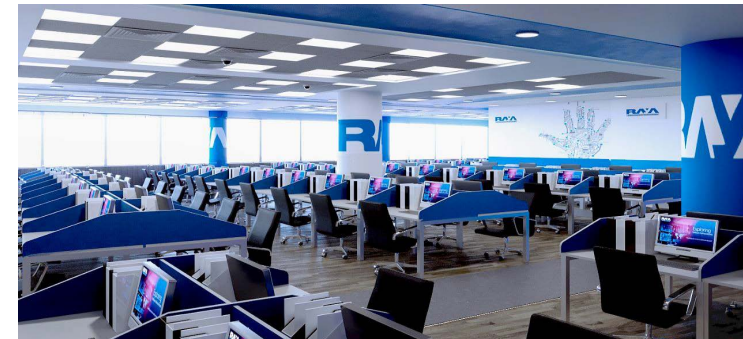




Portfolio.. Retail

RAYA Contact Center - Smart Village

PACER Consultants was engaged to design and supervise the construction RCC Smart Village Building, the building compromise of 3 basements and 6 floors with 15,266 M²





Portfolio.. Offices

Al Oula Head Office – Smart Village

PACER Consultants carried out the Fit out design and Construction Supervision of Al Oula Head Office located at the Smart compromised from 2 basements and 4 floors with a total area of around 6,500 M²



Portfolio.. Cultural

Science Center. Damascus, Syria

PACER Consultants was engaged to handle the project management of Science Center, Damascus, Syria.

Massar organization has an established and successful program of activities that address young people in Massar will communicate with the young people of Syria through live activities, a new major web site, print, television and the Discovery Centre in the Old International Fair Ground site in the heart of Damascus.



Portfolio.. Cultural

HURGHADA MIXED MEDIA EXPERIENCE

PACER Consultants' scope of work was Architectural design development, architectural working drawings, structural design, HVAC and mechanical design, power and lighting design project management services.

The project is a day and night time cultural leisure attraction for family audiences that will inform visitors about the rich cultural and historical heritage of Egypt.



Portfolio.. Cultural



Maereb Museum in Yemen

PACER Consultants' scope of work was Concept Design Stage covering the following parameters:

Final site requirements, final space requirement, functional relationships and adjacencies, look and feel, technology requirements, and other applicable guidelines, policies.

Schematic Design Stage covering the following;

Site plan, building elevations, schematic floor plans and furniture layouts, schematic reflected ceiling plans, outline preliminary architectural specifications, preliminary furniture and finish material and palettes and project areas breakdown.

The project is a regional museum in the province of Mareb provided by grant received from the United States government.

The foot print is 4800 M²... Ground floor and first floor with total built-up area of 11600 M²



Portfolio.. Cultural



Sayed Darwish Theater. Egypt

PACER Consultants' scope of work was Architecture and Interior, Landscape Design, Structural design, HVAC and mechanical Design, Theatre scenography design: (Theatre Lighting and Acoustics design, Theatre Machinery Equipment Design.

Restructuring and Renovation of a 1150 Seat Theatre Designed to host Opera performances as well as musicals with an orchestra pit to be created, the hall functions also as a cinema hall, Plot area 2300M², featuring fire alarm system, sprinklers fire fighting system, public address system, emergency underground water tank, stage machinery.



Portfolio.. Cultural



Khayrat Hall, Fenoon Academy. Egypt

PACER Consultants' scope of work Architecture and Interior, Landscape Design, Structural design, HVAC and mechanical Design, Theatre scenography design: (Theatre Lighting and Acoustics design, Theatre Machinery Equipment Design

Creating a 200 Seat Theatre Designed to host Musical performances, Plot area 800 M²; Featuring Fire alarm system, fire fighting system, Public address system, Stage Machinery.



Portfolio.. Cultural

Fenoon Academy Theater. Egypt

PACER Consultants' scope of work was Architecture and Interior, Landscape Design, Structural design, HVAC and mechanical Design, Theatre scenography design: (Theatre Lighting and Acoustics design, Theatre Machinery Equipment Design).

Restructuring & Renovation of a 400 Seat Theatre Designed to host Drama performances as well as musicals , Plot area 1900 M²; Featuring Fire alarm system, Sprinklers fire fighting system, Public address system, emergency underground water tank, Stage Machinery.



Portfolio.. Retail

MASHREQ Bank

PACER Consultants were chosen to be the sole consultant of Mashreq Bank for one year.

The scope of work consisted of Schematic Design, Detailed Design, Construction Supervision and Project Management.



Portfolio.. Retail

NSGB National Societe General Bank

PACER Consultants were chosen to design and supervise the construction of the new image for the bank. The design includes re-design of the façade, providing a more transparent colorful modern look for the bank. NSGB has assigned PACER Consultants to carry out consultancy services from Schematics to Handover for the following branches:

- Fagala
- Badr
- Ramsis
- Shehab
- Maadi



Portfolio.. Retail

CIB Commercial International Bank

CIB has assigned PACER Consultants to design and supervise the construction of the banks from Schematics to Handover for the following Branches:

- Nile Towers
- Port Said
- Aswan
- 6th October



Portfolio.. Retail

Tamex Tower. Uganda

PACER Consultants was contracted to provide Concept, detailed design and tender documents.

The building is composed of 2 sections:

1. Section 1 (Parking & residential)
2. Section 2 (Commercial and corporate)

The commercial section is located at the corner overlooking the two streets while the residential section is located in the back segregated area.



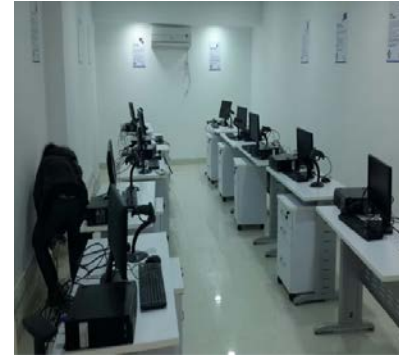


Portfolio.. Retail

VFS Tasheel

The creation of new working environment with an international firm is a rare opportunity.

While VFS Tasheel, an international collaborative enterprise hold by Tasheel VFS Global were entering the market of Egypt for the first time, PACER consultants were assigned to provide quality management on the fit-out of ten office spaces with areas varying from 1,500 M² to 2,800 M²



Portfolio.. Retail



BNP PARIBAS Priority Lounge

BNP Paribas has assigned to PACER Consultants to prepare a design Manual providing a design guideline with a description of the finishing and specifications of the priority area dedicated for VIP clients.

PACER Consultants developed a design Manual including Finishing & Furniture selections, Outline specifications and Cost Estimate



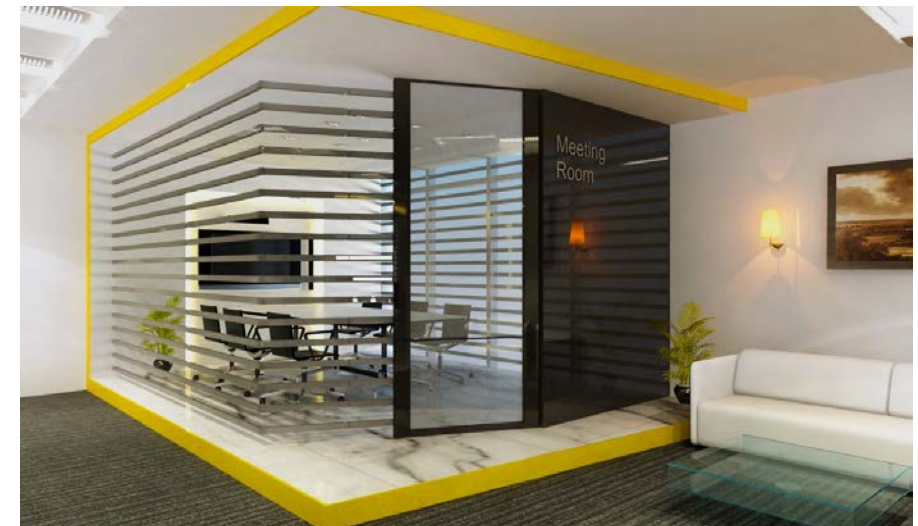


Portfolio.. Retail

Egyptian Arab Land Bank

Egyptian Arab Land Bank “EALB” has an intent to change the fit-out theme of the bank to unify his office space design.

PACER Consultants was selected to prepare a fit-out new design for the Bank, the purpose was to demonstrate the new design, colors, materials, MEP fittings and furniture selection.



Portfolio.. Retail

National Bank for Development

PACER Consultants was engaged to design and supervise the construction for National Bank for Development Kasr El Nil Branch





Portfolio.. Retail

National Societe Generale Bank

PACER Consultants was engaged to design and supervise the construction for NSGB Branches “Shehab, Badr, Fagala”

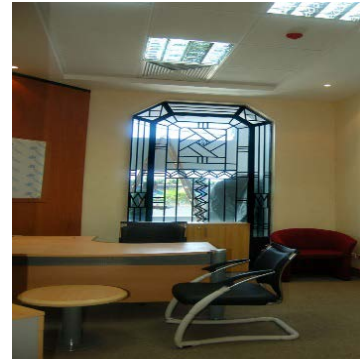
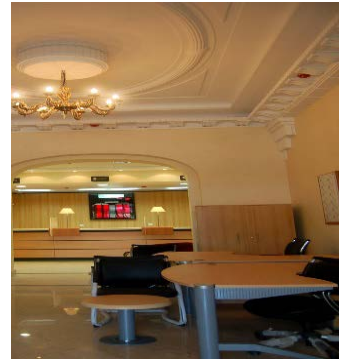




Portfolio.. Retail

BNP PARIBAS

PACER Consultants was engaged to design and supervise the construction for BNP PRIBAS Branches “Mahala, Alexandria, Ismailia, Menya, Thawra, Mirage, Manyal, Sharm El Sheikh, Merghany, Shoubra, Abbas El Akkad, Beirut, Dokki, Daher, Downtown,”





Portfolio.. Retail

Credit Agricole Bank

PACER Consultants was engaged to design and supervise the construction for Credit Agricole Branches “6th October, haram, Banha, Menya, 10th Ramadan, Borj El Arab, Mirage, Alexandria, Hurghada, Bustan, Heliopolis, Salah Salem, El korba, Mansoura, Mohy El Din, Nabaa, Um Kalthoum, Loran, Call Center, Tanta, Banha”



Portfolio.. Retail

Emirates NBD

PACER Consultants was engaged to design and supervise the construction ENBD Branches “Hurghada, Mansoura, Ras Shukeir, Beni Sweif, Jabco and Sheikh Zayed”

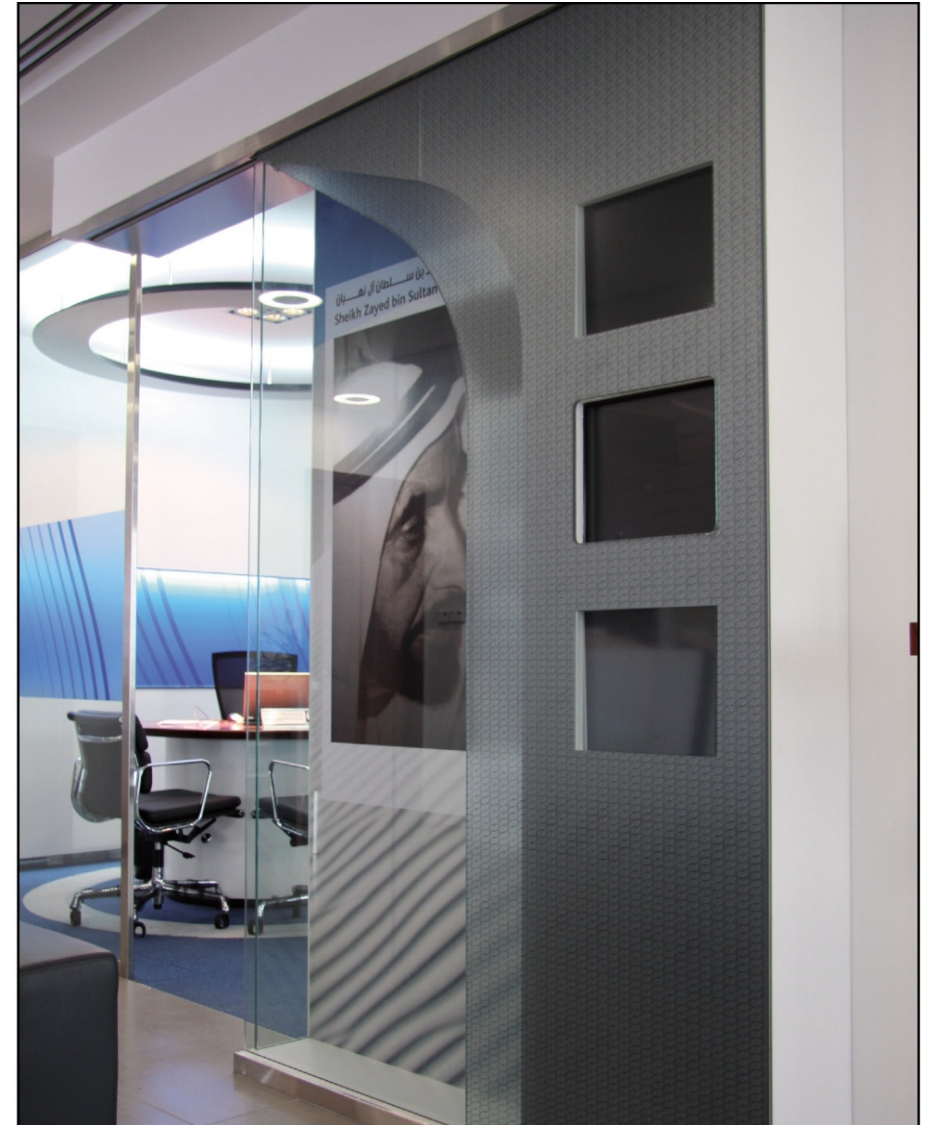




Portfolio.. Retail

Abu Dhabi Islamic Bank ADIB

PACER Consultants was engaged to design and supervise the construction for ADIB Branches “Kasr El Nil, Helwan, garden City, Emad El Dein, Sohag”



Portfolio.. Retail



Banque Misr

PACER Consultants was engaged to design and supervise the construction of the fit-out works of Banque Misr branch located in Mall of Egypt and its extension.

The scope also included the coordination of the Owner “MAF” to ensure all the requirements were full filled.

In addition to the construction supervision of Structure Skeleton of Abu tisht, Farshout and EL Noba Branches.



Portfolio.. Retail



QNB Al Ahli

PACER Consultants was engaged to design and supervise the construction for QNB Branches “Kafr El Sheikh, Majara, Dokki, Strip Mall, Mall of Arabia, Maadi”

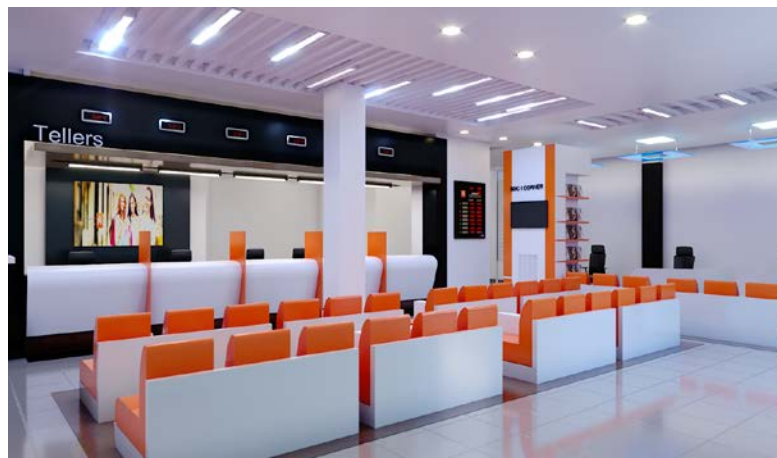




Portfolio.. Retail

Banque du Caire

PACER Consultants was engaged to design and supervise the construction for Banque du Caire Branches “Obour and City Light, Mokattam, Abbasia”



Portfolio.. Retail



National Bank of Kuwait (NBK)

PACER Consultants was engaged to design and supervise the construction for NBK Branches “Majjara Mall, City Center, Haram, Head Quarter VIP Entrance, HQ Signage





Portfolio.. Retail

National Bank of Egypt (NBE)

PACER Consultants was engaged to design and supervise the construction for NBE Branches “Shark El Qahirah, Marsa Allam , Madinty (Smart branch), Shebeen El kom, Abd El Aziz Fahmy”



Portfolio.. Retail

MAF Hypermarkets - Carrefour

PACER Consultants was engaged to design and supervise the construction for Carrefour Branches “Mokattam, Green Plaza, Royal Plaza, Al Moltaka, Mega Mall, Sun City, Alex west, Shorouk, Cairo Festival City, Alex East, Carrefour Headquarters, Mall of Egypt, Ismailia”





3.3 Portfolio

Manufacturing and Industrial



Portfolio.. Industrial

Habitat Furniture Plant and Show Room, Obour, Egypt

PACER Consultants' scope of work was:

- Full architectural and layout design works, structural design, water supply system, sewage system, fire fighting system, lighting and power system, CCTV, telephones & public address system and HVAC.
- Preparing and issuing tender packages and assist in contracts award for the successful bidders.
- Supervision of site work activities of the contracted scope of works and ensuring quality standards of work executed by different parties.
- Operation testing and handling over.
- Follow up of the project's raised issues through maintenance period.

Habitat Furniture plant has an area of 35,000 M²



Portfolio.. Industrial

Temsa Egypt Factory. 10th Ramadan, Egypt

PACER Consultants' scope of work was Review all drawings provided by TEMSA, Evaluation of architectural and landscape design and advise necessary modifications whenever required.

Follow up with involved contractors, suppliers, and ensure fulfillment of contract, Prepare the project master time schedule, cash flow for project activities, and update schedules according to actual performance on site, Coordination with different involved parties, Quality control through monitoring items executed by suppliers and contractors, and apply required tests, Mechanical & structural; engineering services, Follow up project items through maintenance period and giving instructions to contractors and suppliers to perform repairs of any defects that appear.

The plant occupies 52,000 M² (12 Feddans). It included a lounge with an area of 27,000 M² in addition to an administration, utilities and services' buildings.



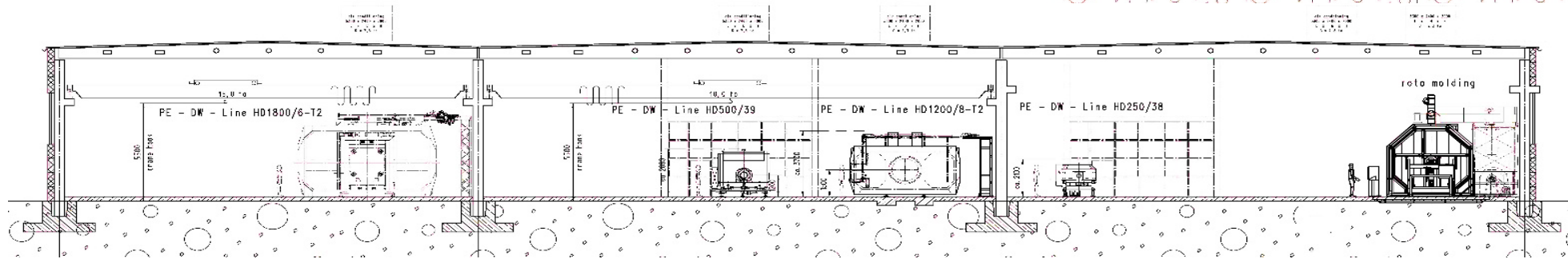
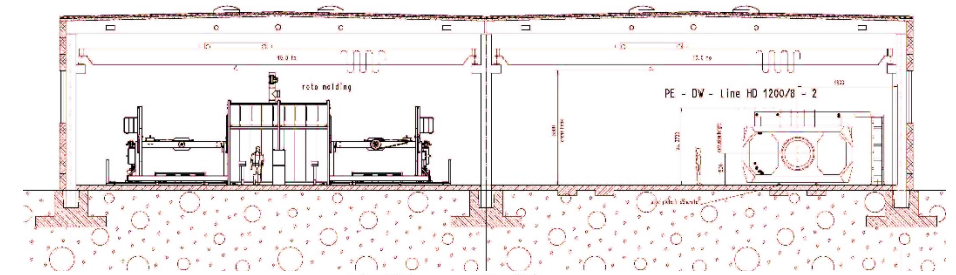


Portfolio.. Industrial

ICE FACTORY. TRIPOLI, LIBYA

PACER Consultants role was to provide the concept, detailed design and design coordination for the building (architectural, structural, electrical and mechanical), mechanical process, utilities and infrastructure of both building of the factory.

One floor building to assembly equipment of ice production for conservation fish during fishing and marketing, with approximate area 250 M² in addition to one floor building with refrigerated units, with approximate area 200 M²



Portfolio.. Industrial

ASWAN FISH PRODUCTION COMPLEX

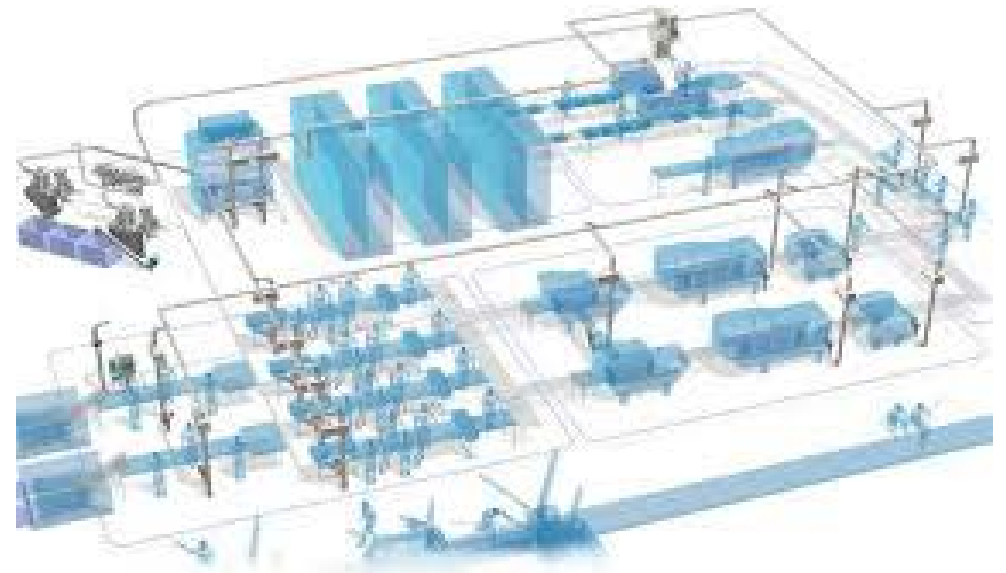
PACER Consultants provided engineering consultancy for the establishment of the fish-processing factory at Aswan.

The Complex included:

Fish processing plant capable of processing:

- 40 tons | day fillet.
- 40 tons | day of de-headed and gutted fish.
- 10 tons | day of round fish.
- 10 tons | day salted fish.

- Freezing plant of a total capacity of 40 tons.
- Cold stores of 1000 tons | day capacity.
- Fish - meal plant of 40 tons | day capacity.
- Ice plant of 100 tons | day.
- Wastewater treatment unit of 2500 M² | day capacity.
- Administration, services and accommodation building.
- Transformer station of total capacity of 2500 KVA



Portfolio.. Industrial

GELCY PLASTICS. SADAT CITY, Egypt

PACER Consultants have a long cooperation history with the company, during the first cooperation PACER's role was the design review of the electromechanical, utilities and infrastructure networks...

During the second period, our role was to provide the client with the full tender document of the first extension, the tender documents included the architectural, structural and electromechanical designs, specifications and bill of quantities in addition to the site supervision during the construction. Same scope of work is currently in process for the second extension.

GELCY is a manufacturer of Environmental, wood-free and eco friendly pencils according to German technology operating since 1995.



Portfolio.. Industrial

SEWS Factory, 6th October, Egypt

PACER Consultants was assigned by client (SEWS-EG) to supervise the all construction related works of a new factory (46m X 97m) of area (4487 M²) with attached store (46m X 22m) of area (1025 M²) including soil Investigation, plain and reinforced concrete foundation, Steel structure for the factory area and storage area.





Portfolio.. Industrial

Sumitomo Electric Wiring Systems (SEWS) Factory New Extension

After the successful delivery of their factory in 6th of October SEWS-EG has assigned PACER Consultants to provide design and construction administration services for the extension of their factory in Port Said Egypt, the total area of the new extension is 7,410 M² and PACER Consultants has developed full tender documents comprising of Architecture, structure and MEP drawings, specs, BOQ and Contract draft.

PACER Consultants has worked closely with SEWS to develop the extension while connecting to the old factory and has studied the construction methodology to not affect the operation of the current Project The project is in the tendering phase and the construction activities will start shortly.



Portfolio.. Industrial

DNM TEXTILE FACTORY. DAMIETTA FREE ZONE, Egypt

Implementing a textile factory for spinning, weaving and dyeing in Damietta Free Zone.

The project includes a spinning, weaving, dyeing & preparation, boiler of water treatment, administration and an infirmary building. Plus a finished fabricated warehouse.

PACER Consultants' scope of work was Design, supervision and management of the following buildings:

- Spinning building with an area of 24,500 M²
- Weaving building with an area of 14,920 M²
- Finish fabricated Warehouse with an area of 11,340 M²
- Dying and preparation building with an area of 10,750 M²
- Boiler of water treatment building with an area of 755 M²
- Administration building with an area of 1,500 M²
- Infirmary with an area of 280 M²



Portfolio.. Industrial



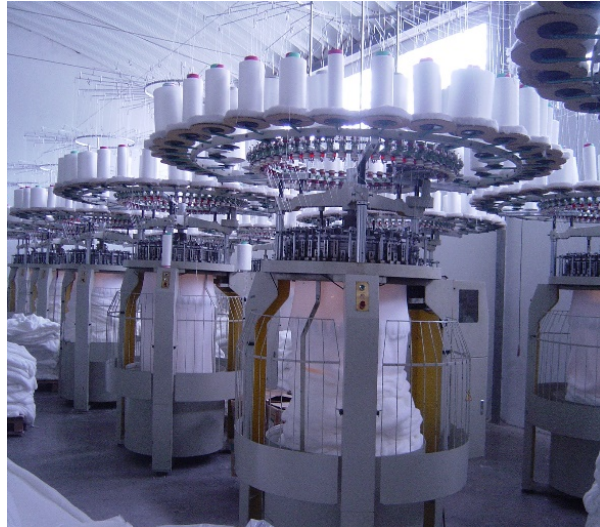
Textile Plant Ismailia National Company

PACER Consultants provided The following services for the new Unit:

Architectural design, Structural design, Structural steel shop drawings, Power and lighting design, Mechanical GMP design, HVAC design.

In addition of the redesign of an existing installed factory to receive new dyeing machines.

Construction of a fabric knitting & drying industrial unit with a total of 20,000 M² distributed among four levels.



Portfolio.. Industrial



15th May City Industrial Zone

PACER Consultants' scope of work was Detailed Planning, Infrastructure detailed design, and Tender Documents.

15th May City is considered one of the most successful new cities that were ever built in Egypt. As a direct result of the city growing population, the need of making job opportunity arises. Noting that the original master plan of the city has included industrial area named 'Central industrial collection area' which tended to be insufficient due to the population growth

The objective of the project was to make detailed planning and infrastructure design, the tender document for the area.





3.4 Portfolio

Maritime and Water Works

- Ports. Harbors
- Hydrological Studies
- River Navigation



Portfolio.. Maritime and Water

DESIGN OF NEW MULTI-PURPOSE BERTH IN PORT SAID HARBOR

PACER Consultants' scope of work included Design and specifications, Tender Document preparation for a 250 m long and 14 m deep Multi-purpose berth.

The project included in addition to the berth all the infrastructure and supporting facilities required for its operation. This includes open storage yards of 40,000 M², with water supply, ventilation, fire lighting, electrical and lighting and drainage systems. Transit shed of 7,500 M² equipped with sprinkler fire fighting system, administration building, gate house, fence and infrastructure networks. A ground water tank of a capacity of 300 M³ and a pump house were constructed to supply water to the automatic fire fighting system.

The design phase included supervision on geotechnical survey. More than 15 borings of 16 M deep were carried out.



Portfolio.. Maritime and Water

Suez Canal Container Terminal [SCCT] Phase I

Royal Haskoning DHV was responsible for preparing a master plan and conceptual design of a Greenfield container hub by Ministry of Transport to be privately managed.

Following the master plan, PACER Consultants in collaboration with Royal Haskoning DHV, was responsible for further planning, detail design, preparation of tender documents, tender assessment and project management for the terminal at East Port Said in Egypt.

Suez Canal Container Terminal [SCCT], which is majority owned by APM terminals, engaged Royal Haskoning DHV as their lead consultant associated with PACER Consultants for Suez Canal Container Terminal Development project [terminal area and associated buildings].





Portfolio.. Maritime and Water

Suez Canal Container Terminal [SCCT] Phase II

PACER Consultants was responsible for the detailed planning, detail design, project management and supervision of the construction for the complete infrastructure, civil, architectural, structural, mechanical and electrical works.

Following the successful completion of Phase 1, PACER Consultants | Royal Haskoning DHV was appointed to undertake consultancy work for a new 60 ha terminal for Phase 2.

The Consultants designed the terminal works which consisted of earthwork, paving, utilities and buildings.

The terminal site covers an area of 1,200m x 500m.

The second phase, which is double the size of the terminal, was completed in 2014.



Portfolio.. Maritime and Water

Container Yard. Port Said West

PACER provided detailed design and preparation of tender documents and construction supervision.

Port Said Container and Cargo Handling Co. has assigned to PACER Consultants the design and supervision of a new yard in Port Said West with a total area of 172,000 M²

The work included dry excavation with a depth of 2.6 meters and an area of 172,000 M² and a total volume of 450,000 cubic meters, 96,000 M² paving works, 65,000 M² fiber reinforced slabs, 150 tons weigh bridges, high masts firefighting networks, utilities and fences.





Portfolio.. Maritime and Water

Petroleum Storage and Bunkering Terminal. East Port Said

PACER Consultants' scope of work included:

1. Layout and design philosophy.
2. Marine works - shore protection, dredging, barge basin, and tanker berths.
3. Tanks including distillates tanks, fuel Oil tanks, gas oil tanks, gasoline tanks, and Jet fuel tanks.
4. Instrumentation and mechanical works including pipelines, firefighting, pumps, instrument air compressor, nitrogen plant, thermal heating unit, and loading arms.



Mashreq Petroleum Company is an Egyptian joint stock company incorporated in 2004 to develop and construct a rival state-of-the-art independent storage terminal for liquid bulk as well as introducing a quality bunkering service with a capacity of about 660,000 M³.

The terminal had two major operations, to store Petroleum products (500,000 M³) and to supply bunker fuel to ships and barges (160,000 m³).

The terminal facility comprises 32 tanks with capacity of 660,000 cubic meters. The tanks range in size from 5,500 m³ to 20,000 M³.

Portfolio.. Maritime and Water

CONTROL TOWER OF EAST PORT SAID PORT

PACER Consultants prepared the detailed design for the main building and the associated buildings, including all the drawings, cost estimates and the tender documents, and then carrying out the technical and financial appraisal for the contractor's proposals for the construction phase.

PACER Consultants provided a full supervision for the contractor, including the cost control and following up the time schedules proposed from the contractor.



The project contains the main building of control tower, the electricity room 100 M², and pump station and water storage tank of capacity 255 M³.

The main building consists of the ground and first floor of 1280 M² per floor, used as office and lodging for pilots. In the middle of the main building a control tower of 39.15 m high that consists of two floors each of 240 M².

The top floor is used for guidance purposes, where the lower floor is a restaurant. Slabs of the tower high floors are supported to a shaft with a hanging cantilever of span about 10m.



Portfolio.. Maritime and Water

Master Planning and Infrastructure. Damietta Port

PACER provided Master planning and infrastructure including the development of a computer model for import and export to determine the cargo movement till year 2000.

The study of the National Port Policy of Egypt, carried out by PACER Consultants and PRC Harris revealed the need of a new port on the eastern part of Egypt. Study of candidate locations indicated that the best location for the development of the new port is Damietta.

The Ministry of Reclamation and New Communities awarded PACER and P.R. Harris, the job of planning and infrastructure development of Damietta Port.

The master plan included the development of a computer model for import and export of cargo and determination of their movement so as to limit the cost of transportation to the minimum.



Portfolio.. Maritime and Water

GENERAL CARGO BERTH 8 & 9 (340M) - DAMIETTA PORT

PACER Consultants prepared the detailed design of construction of the berth. PACER also is to provide the technical assistance during the project period. PACER Consultants designed the potable, fire fighting and wastewater networks. Also PACER Consultants designed and supervised the construction of different buildings needed for operating the two terminals.

The project is located at Damietta and includes survey works, soil investigation, environmental report, detailed design, tender documents, assisting the owner in bid evaluation and construction supervision.



Portfolio.. Maritime and Water

SOKHNA OIL BUNKER JETTY. Ain El Sokhna, Egypt

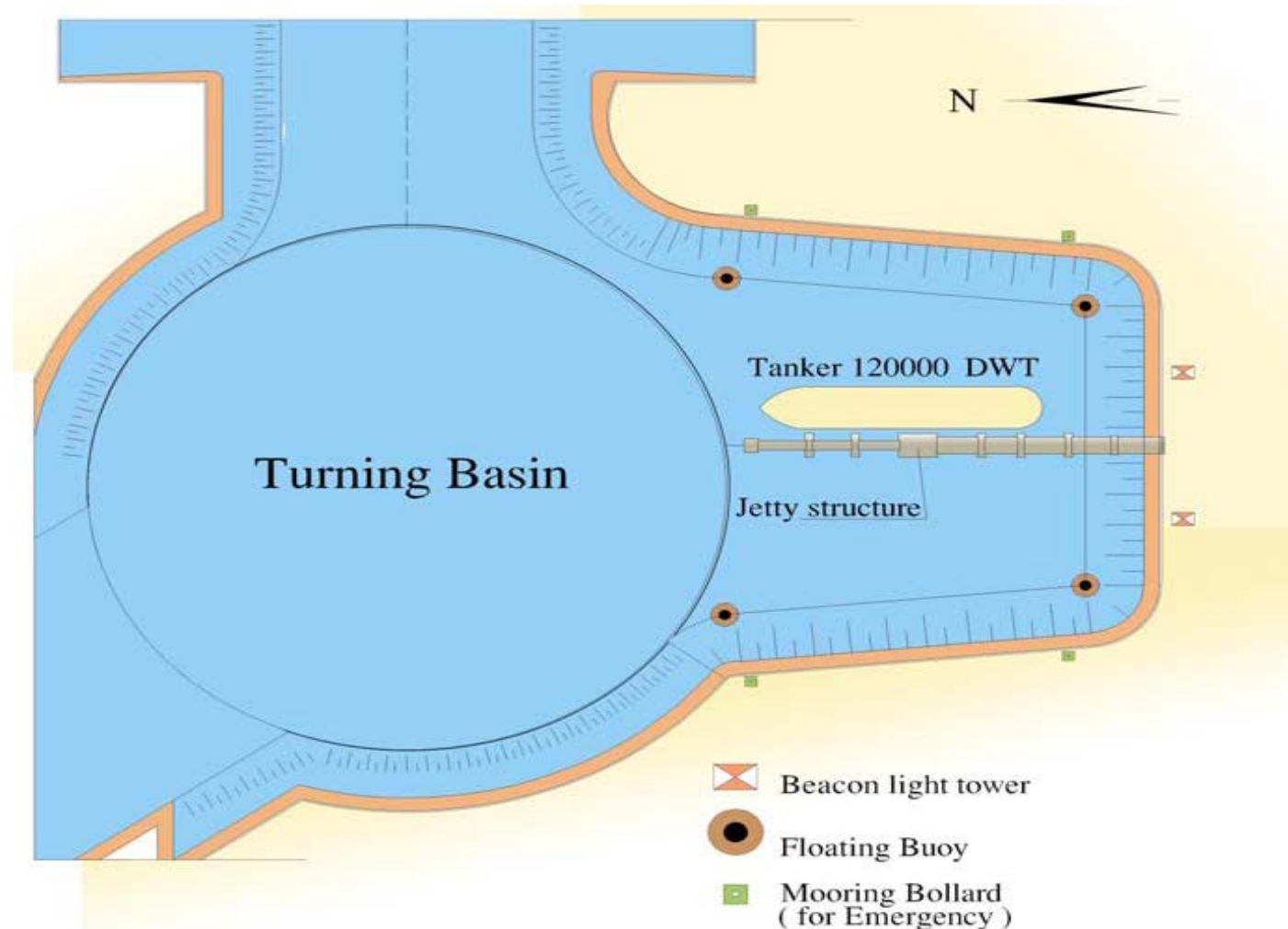
PACER Consultants' scope of work included:

A complete preliminary design supported with full set of drawings was presented including design of basin bank protection slopes as well as proposing guidance and recommendations for reducing operational hazards and environmental aspects.

Sokhna Port is located at south of Suez Gulf and considered one of the gigantic projects with respect to maritime transport in Egypt.

In order to diversify and integrate the port activities the Sokhna Port Development Company Decided to provide bunkering service for the ships.

PACER Consultants were assigned the task of preparing the preliminary design of this service.



Portfolio.. Maritime and Water

Sokhna Port Basin 1 Master Plan

PACER provided Master Planning, port layout options, zoning, conceptual designs, and cost estimates.

The initial objective of DP World is to prepare a master plan and conceptual design to enhance operation of terminal basin 1 by studying current circulation through the terminal, area of inspection and probability of extension to accommodate capacity demand without interrupting operations of the existing terminal.

Several alternatives were developed studying the suggested circulation, increasing the inspection area to achieve the required ground slots and achieve a back stacking duration of 5 days within the terminal.



Portfolio.. Maritime and Water

Coal Yard Facility. Sokhna Port

PACER Consultants' scope of work included:

1. Data collection
2. Review of site condition, utilities and environmental regulations
3. Structural design of flooring slabs and foundations
4. Design of water and drainage system including slot drain and septic tanks
5. Preparation of tender package



DPWS has decided to prepare a temporary Coal Yard Facility on area 160m x 200m the area will be used for receiving coal through stackers with a volume of 200,000 M³

The project pavement is formulated of precast slabs with concrete retaining boundaries surrounded by dust suppression system in addition to firefighting, lighting, water and sanitation networks.

DPWS has assigned to PACER Consultants for the preliminary design, study, detailed design and tender documents.

Portfolio.. Maritime and Water

Iron Oxide Pellets Terminal. Sokhna Port

DPWS has assigned to PACER Consultants the construction supervision of the works.

PACER Consultants has applied a design review on the tender package, applied fine adjustments, inspected and approved the works performed on site, approved materials of the permanent works, administer and witness all tests performed during the construction and applied testing and commissioning.

DPWS has decided to shift the stockpile area of the new Iron Oxide Pellets Terminal 136m to the backside of the terminal.

Due to the slope of the bulk terminal area, the level of stockpile area will increase 1m. The belt conveyor BC2, which is running from the quay to the stockpile, will be extended with 136m (+1m elevation) and the road network around the terminals will be changed.



Portfolio.. Maritime and Water

BASIN 2 CONTAINER TERMINAL WORKS – SOKHNA PORT

PACER Consultants' scope of work included Carrying out the detailed design and provide the technical assistance during project construction.

The project is located at Sokhna and includes the new terminal operations at basin 2 will be fully integrated and compatible with the existing terminal at basin 1. Both terminals will be operate under one management.

The new terminal in basin 2 will support the operation of up to 13 ship-to-shore gantry cranes to serve Super Post Panamax container ships, rubber-tired gantry cranes, storage of 'dry' and refrigerated containers and associated services, operations, maintenance and gate facilities.



Portfolio.. Maritime and Water

REHABILITATION OF PORTS OF ALEX- PHASE I

The project is located at Alexandria and includes rehabilitation of two berths at Alex and Dekheila.

Alexandria International Container Terminal (AICT) is intending to convert two general Cargo berths (500m * 300 m per each) to Container terminals.

The tender is design built.

PACER Consultants prepared the detailed design of rehabilitation of the quay wall to accommodate gantry Cranes. This includes repair of the existing quay wall, design of land side rail (supported on piles) and the deck slab.

In addition to the design of the repair of the quays PACER Consultants designed the potable, fire fighting and wastewater networks.



PACER Consultants designed and supervised the construction of different buildings needed for operating the two terminals.

Portfolio.. Maritime and Water

MARASSI MARINA

The site is on the Alexandria Marsa Matrrouh International Coastal Highway on the southern side and facing the Mediterranean Sea on the Northern side.

The project comprises design studies to enhance and modify the previous design of Marina and Construction Supervision.

PACER Consultants developed the new design of the inner Marina, dry excavation package, infrastructure network, and assisted Mapes in the design of the outer Marina and PACER Consultants is responsible for the construction supervision of the following packages:

- Dry Excavation
- Inner Marina
- Marina Infrastructure
- Outer Marina





Portfolio.. Maritime and Water

Maintain and Develop Gesreya Fishing Port Study, Libya

PACER in cooperation with the Libyan Technical Consultancy Co. carried out numerical model and designs for Gesreya fishing port.

PACER Consultants' scope of work included:

1. Preparation of modelling reports inclusive of construction recommendations.
2. Collecting and analyzing weather and wave data to determine prevailing wave direction.
3. Carrying out land survey and bathymetry.
4. Carrying out the soil investigation for the proposed project area and preparing Geotechnical report; which includes the files.
5. Studying alternatives to the port entrance and determining general layout of the port.
6. Carrying out numerical models to study the wave height, distribution of alternatives, circulation and effect of construction of the port on shoreline change due to sediment transport.
7. Design works (maritime, architectural, structural, mechanical and electrical designs) of marine works and service buildings of the port.
8. Preparing project specifications and the bill of quantity of all the project items.



Portfolio.. Maritime and Water

Maintain and Develop Ziliten Fishing Port Study, Libya

PACER in cooperation with the Libyan Technical Consultancy Co. carried out numerical model and designs for Ziliten fishing port.

Pacer Consultants' scope of work included:

1. Preparation of modelling reports inclusive of construction recommendations.
2. Collecting and analyzing weather and wave data to determine prevailing wave direction.
3. Carrying out land survey and bathymetry.
4. Carrying out the soil investigation for the proposed project area and preparing Geotechnical report.
5. Studying alternatives to the port entrance and determining general layout of the port.
6. Carrying out numerical models to study the wave height, distribution of alternatives, circulation and effect of construction on shoreline change due to sediment transport.
7. Design works (maritime, architectural, structural, mechanical and electrical designs) of marine works and service buildings.



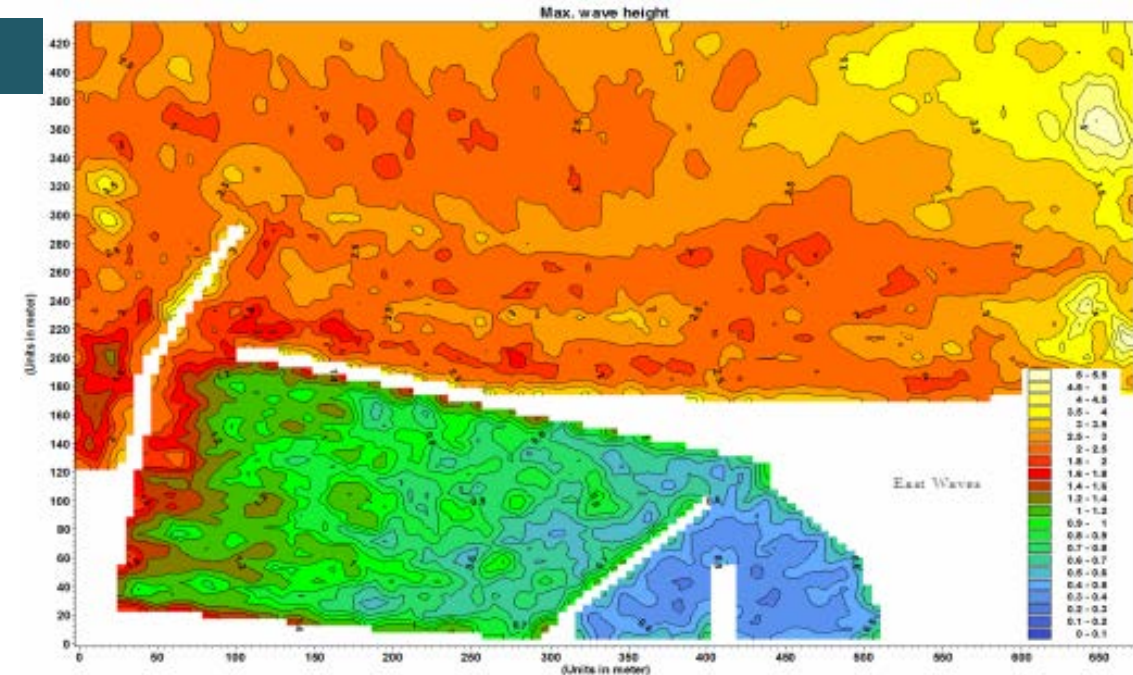
Portfolio.. Maritime and Water

Al Maresa Fishing Port Study, Libya

PACER in cooperation with the Libyan Technical Consultancy Co. Carried out physical and mathematical models of Maresa fishing port 25 km south west of Benghazi, Libya.

PACER Consultants' scope of work included:

1. Collecting and analyzing the wave data and wave rose
2. Analyzing bathymetry data.
3. Evaluating geotechnical data to determine particle characteristics.
4. Carrying out the numerical model to determine the wave height distribution, the circulation and the effect of construction of the port on the shoreline change due to sediment transport.
5. Carrying out the physical mode experiments for the stability of breakwaters in cooperation with Suez Canal Authority.
6. Preparation of the technical report including the modelling results and recommendations during construction



Portfolio.. Maritime and Water

Improve Navigation Conditions Surman Fishing Port. Libya

The study aims to improve navigation conditions and wave disturbance inside and at entrance of the harbor to cope with limited values needed for safe entrance and berthing of fishing ships in addition to control sediment transport that reaches the navigable channel and management plan.



Pacer Consultants' scope of work included:
Numerical model and employing the following software:

- Mike 21 Spectrum wave SW - used to transfer deep water wind and wave data to coastal waves taking into account wave transformations
- Mike 21 Flow Module HD which calculates, circulation and shore current, using radiation stress.
- Mike 21 Business Module BW which calculates wave agitation in the near shore area, the navigation channel and the harbour basin using Mike 21 Spectrum wave Module.
- Sediment transport Module ST is used to carry out sediment transport analysis.
- Data viewer and plot composer modules used to ensure high quality graphic output.
- Design of layout including landscaping, water supply, sewer network, roads and lighting.



Portfolio.. Maritime and Water

Improve Wave and Navigation Conditions Tajura Fishing Port. Libya

The study aims to improve navigation conditions and wave disturbance inside and at entrance of the harbor to cope with limited values needed for safe entrance and berthing of fishing ships in addition to control sediment transport that reaches the navigable channel and management plan.



PACER Consultants' scope of work included:

- Application of numerical models to get the wave distribution at the navigable channel entrance and at the outer and inner basins of the harbor.
- Apply a mathematical circulation model to ensure the proper water circulation inside the basin and check the effect of dredging a channel to connect the inner basin to the outer basin to reach acceptable residence time of water.
- Apply a sediment transport model to get the quantity of sediments and the dredging requirements.
- Propose a management program for the control and collection of sea weeds using proper equipment.
- Design of final layout including landscaping, water supply, sewer network, internal roads and lighting.
- Design of service buildings including mosque, police office, refrigeration building, Workshop and treatment building.

Portfolio.. Maritime and Water

Study and redesign of breakwater and west basin of ZRIG fishing port Libya

Zrig fishing harbor is located on the Libyan coastline at 30 km west of Misurata. The breakwater of Zrig fishing port was designed using natural rocks for main armor layers facing the sea waves. Most of the natural blocks used are of one gradation i.e. (7-10 ton), this weight of armor is difficult to be available in the limited time of construction. Therefore the general authorities for maritime wealth requested the consultant to redesign the breakwater using concrete blocks and they recommended Accropode Type Blocks for this purpose.



PACER Consultants' scope of work included:

- Redesign the main layer of break water cross sections to be Accropods layer instead of natural stone (5.0-10.0) tons.
- Redesign the filter layer according change of main layer design.
- Design a service road 4.0 m width above break water.
- Design of west internal basin of quay wall for small vessels.



Portfolio.. Maritime and Water

Port Policy Study for the Ports of Egypt

PACER Consultants and P.R.C. Harris were assigned the job of rehabilitation of Port Said Port. To determine the integrated port capacity for all other ports in Egypt, it was essential to determine the strategy of the whole system of ports. The study was based on forecasting exports and imports by group of commodities (40 groups) moving to and from eight regions through seven ports in Egypt (Mersa Matrouh, Alexandria, Damietta, Port Said, Ismailia, Suez and Safaga)

The study considered that the commodities will flow between Egyptian ports, main European ports, American ports (north flow), Australian, Asian ports (south flow)

The objectives of the study were:

- Determination of the optimum capacity of each existing port
- The need of new ports.



Portfolio.. Maritime and Water

Damietta Cairo Inland Waterway Rehabilitation

The project was Improvement of 225 KM waterway between Damietta and Cairo to accommodate traffic from the port estimation.

The construction of the High Dam had an important impact on the downstream regime of the river Nile, the Damietta and Rosette branches and other waterways. As a result, the average water level fluctuates much less than before, and waterway ports constructed before the High Dam including Athar Elnabi port at Cairo have berths which are much too high (reaching about 8 m in some cases) from the present water level. Construction of new Damietta port generated high demand on inland waterway transportation (mainly Damietta Branch).

PACER Consultants' scope of work included:

- Carried out all technical, economic and financial studies.
- Environmental Impact Assessment.
- Prepared all relevant designs, drawings, specifications, bills of quantities and other contract documents, evaluate bids and prepare evaluation reports.
- The studies also included the impact on fishery, public health and other relevant aspects.



Portfolio.. Maritime and Water

Industrial Area Port at Rasheed Branch – Kafr Elzayat

In order to enhance the internal navigation waterways in Egypt between Cairo' and Alexandria, the River Transport Authority contracted PACER Consultants to carry out the planning and design works of the new Port in El Rasheed Branch in the industrial area of Kafr el Zayat.

PACER Consultants' scope of work included:

- Survey works of existing Port and all structures in the project area, preparing survey maps with suitable scale showing contour lines, network map, levels and traverse maps.
- Soil investigation for the proposed project and preparing technical report includes the field and lab tests and recommendations concerning foundation level and type of foundation.
- Determining the best location of the new Port according to the allowed distances between the existing structural works.
- Preparation of the project environmental report.
- The design works of all Building in the New Port.
- Preparing the tender documents for all packages.
- Construction site supervision






Portfolio.. Maritime and Water

THE NEW LOCK AND BARRAGE OF EL RAYAH EL TAWFIKI CANAL, EL Kanater, Egypt

PACER Consultants' scope of work was Design and site supervision of the new regulator and lock on El Rayah El Tawfiki canal that included :

- Survey works of the old barrage and lock and all the structural works crossing El Tawfiki
 - Canal and residential area on the right and the left sides of the Canal and preparing survey maps with suitable scale showing contour lines, network map, levels and traverse maps.
 - Determining the best location of the regulator and lock according to the allowed distances between the existing structural works on the Canal
- 
- The design works (hydraulic, structural, mechanical and electrical designs) of all members of the regulators, downstream the regulator and the operation building.
 - Preparing the detailed drawings of all the designs listed before.
 - Preparing project specifications and the bill of quantity of the project items.
 - Preparing the tender documents
 - Sharing the owner in bid evaluation

Portfolio.. Maritime and Water

Navigation Channel and Lock. Bolein. El Beheriy Canal

The project was Construction of a new navigation channel and lock at Bolein on El Beheiry Canal, and rehabilitation of existing channels between the industrial areas of Kafr El Zyat and Bolein.

To enhance internal navigation waterways between Cairo and Alexandria, the Authority commissioned PACER to carry out planning and design works of the navigation channel and lock at Bolein.



- Survey works of existing lock and all structures in the project area, preparing survey maps with suitable scale showing contour lines, network map, levels and traverse maps.
- Soil investigation for the proposed project and preparing technical report includes the field and lab tests and recommendations concerning foundation level and type of foundation.
- Preparation of the hydrographic cross section of El Beheiry canal and Rosetta branch.
- Determining the best location of the new lock according to the allowed distances between the existing structural works and the new navigation channel.
- Preparation of the project environmental report.
- Design of all members of Lock, a steel bridge, lining of the canal upstream and downstream the lock, and operation Building
- Construction Supervision

Portfolio.. Maritime and Water

New Navigation Channel and Lock Construction. Nubareya

The project was Construction of a new navigation channel and lock at KM mark 100 – on Nubareya Canal. Project aimed to enhance internal navigation waterways in Egypt between Cairo and Alexandria. The Authority contracted PACER to carry out planning and design works of the new navigation channel and lock as required.

PACER Consultants' scope of work included:

1. Survey works of existing locks and all structures in the area.
2. The resultant maps included specific information about contours, network maps, levels and transverse maps.
3. Extensive soil investigation and preparation of final reports and test results.
4. Preparation of canal's hydrographic cross section and environmental impact studies.
5. Preparation of a complete detailed design package. Tender documents and construction supervision.





Portfolio.. Maritime and Water

New Navigation Locks. Esna Upper Egypt

The project was construction of the new navigation locks at Esna Upper Egypt.

Project aimed to enhance the internal navigation waterways between Cairo and Upper Egypt regions.

The Arab Contractor in his capacity as the prime contractor of the project commissioned PACER to carry out planning and hydraulic designs of the Esna lock.



PACER Consultants' scope of work included:

1. Survey works of existing lock and all structures in the project area, preparing survey maps with suitable scale showing contour lines, network map, levels and traverse maps.
2. Preparation of hydraulic and civil detailed designs for the lock chamber, upstream and downstream head structures, outlet structure and the control building.
3. Preparation of the project environmental report.



3.4 Portfolio

Infrastructure Works

- Airports**
- Roads. Bridges**
- Irrigation Works**
- Utilities**



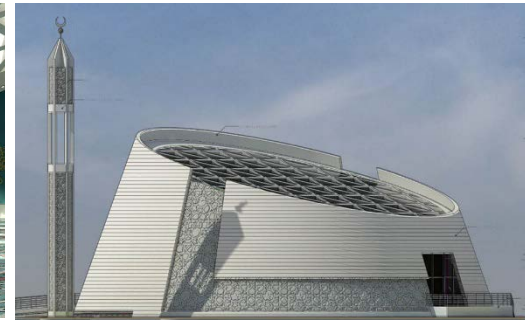


Portfolio.. Airports

King Abdulla Bin Abdul Aziz Airport. Jazan, Kingdom of Saudi Arabia

PACER consultants' Scope of work included carrying on the conceptual, preliminary, detailed design and preparation of tender documents.

The Project is a new Greenfield Airport located on an area of about 12km by 5.5km. the design of the new airport is to develop a planning period of 30 years until 2040 to accommodate annual passenger movements of 3,000,000 passengers.





Portfolio.. Airports

ARAR INT'L AIRPORT, Arar, Kingdom of Saudi Arabia

PACER consultants' Scope of work included designing all service buildings including architectural, structural, mechanical and electrical drawings. Prepare all tender documents.

Develop the existing Arar Local Airport to be International Airport according the IATA requirements. The runway will be developed to match IATA specification and many of service buildings will be Designed to accommodate the increase of passengers.

The service buildings are Main Terminal, Royal Pavilion, Fire and Secure, Cargo Building and Administration Building.





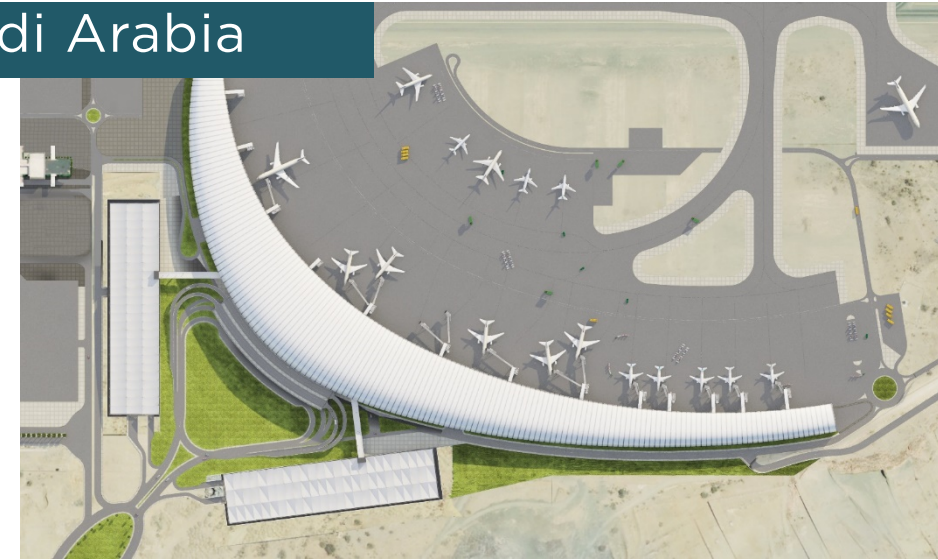
Portfolio.. Airports

ABHA REGIONAL AIRPORT, Abha, Kingdom of Saudi Arabia

PACER Consultants' Scope of work included carrying on the conceptual, preliminary, detailed design and preparation of tender documents.

Abha Regional Airport (AHB) is one of the important regional airports in the Kingdom of Saudi Arabia. The airport is located in the Asir Province and is considered to be an important tourist destination.

The design of new Abha Airport is to develop the airport over a planning period of 30 years until 2038 to accommodate annual passenger movements of 5,000,000 passengers.





Portfolio.. Roads and bridges

Design of Zaker Elzaher Highway in Mecca, Saudi Arabia

The project was composed of the design of the highway and tunnels in the area of Zaker el Zaher in Mecca, Saudi Arabia. Both the highway and tunnels are four lanes in both directions.

The design of the highway also includes landscaping and street illumination. The design of the tunnel included the civil works and the different supporting system.

The length of the highway and tunnel is about 2.5 km. The length of each of the long tunnels is 890 m. The length of each of the short tunnels is 430 m.

Design of Tazerbo Road 30 Km length, Libya

As part of the improvement of Libya roads Network, PACER Consultants in collaboration with the Libyan Technical Consultancy Co. were responsible on the preparation of technical studies and engineering designs of Tazerbo road with a total length of 30 km.

PACER Consultants scope of services in this collaboration included the following:

Road design including the coordinates and points change of directions and information needed to the horizontal curves, Roads profiles, Structural design of pavement layers of road, Road marking, Road specifications, Bill of quantities and recommendation for construction.



Portfolio.. Roads and bridges

Design of El Kofra Road, Libya

The Libyan Roads & Bridges Public Services has mandated PACER Consultants to carry out the consultants' services concerning the study and design of El Kofra Road in Libya.

PACER Consultants scope of services in this collaboration included the following:

- Design of the horizontal projections of the road.
- Prepare all the necessary data to execute the new co-ordinations and the points of change directions.
- Design of the Pilot sectors of the road.
- Prepare (constructional design of Cross-sections, model drawings, special drawings for the transects, Bill of quantities and the technical specification for all the items of the project.

Wadi Al Asala, East Jeddah, KSA

Wadi Al-Asla is more than just a framework or a master plan for 130 sq.km to the east of Jeddah, it is an integrated approach between a multidisciplinary international consultant team that aims to tie in the design of a new community that will provide much needed entertainment, leisure and open space for the residents of Jeddah, whilst creating a solution that will alleviate the flooding problems of the city.

PACER Consultants scope of services in this collaboration included the design of infrastructure network including highway design.



Portfolio.. Irrigation and Utilities

Ein Quifar Study

PACER Consultants' Scope of Services Provided:

The study of water uses of the Quifar spring and thirteen other wells in the area was achieved through the following three stages:

- The phase of data collection and investigation.
- The second phase followed by a field research work .

El Hammam Canal Extension Project

This extension project includes the construction of a 57 Km lined canal with 5 regulators, 8 bridges, intakes and drainage to reclaim and serve 148,000 Feddans in the North Western coast.

Scope of Services Provided:

Pre-Construction Phase: (Field inspection & data collection, Review of existing designs, Develop construction cost estimates, Prepare tender documents, drawings and contracts, pre-qualify contractors, and issue bid packages and evaluate tenders).

Phase II (1992 - 1994) During construction, in which the following tasks were carried: (Develop and control all construction schedules, QS and invoices' approval, Ensure quality control, Control cash flow, Issue certificates of substantial completion, and Assist with arbitrations and litigations)



Portfolio.. Irrigation and Utilities

El Sheikh Zayed Canal Project to Reclaim Land at East Suez Canal

Description of the Project:

(Completing design works and planning, and supervision on the construction of Sheikh Zayed Canal, East Port Said - Expansion of Sinai Canal - Construction and execution of the siphon under the Suez Canal - Construction of a lined canal at a length of 72 Kilometers - Constructing 4 ducts and constructing 29 bridges - Constructing 3 siphons to serve and reclaim 40,000 Feddans in Sinai).

Scope of Services:

Before Construction: (Preparing the site and collecting data, Review and approve the current designs, Preparing tender documents, drawings and contracts for the project, and Evaluating the contractors biddings)

During Construction: (Update and development of the time schedule, Making the bill of quantities, Quality Control, and Financial control Issuing certificates)

Land Reclamation of 13700 Feddans

Description of the Project:

The area in which the project is being executed lies within the South Port Said at El Hussianieh. The aim of the project is to reclaim 13700 Feddans covering three villages to be rehabilitated.

Scope of Services:

(Supervision of construction, Reviewing the survey works, Preparing hydraulic and construction calculation notes, Preparing mechanical drawings, Quantity estimations, Preparing a detailed time schedule, considering the different activities)



Portfolio.. Irrigation and Utilities

Integrated Development Study for Suez Canal Region

Description of the Project:

The Ministry of Development & Reconstruction and the U.S. aid commissioned the consultant to run a feasibility study for the Agricultural Development in Suez Canal region.

Scope of Services:

Making a survey of Egypt's agricultural land reclamation governmental policy during the 25 years and tracing its results, Classifying the different kinds of soils, Studies included irrigation water resources, and The study also took into consideration, the economic agricultural pattern and the annual production of both old and new projects

Irrigation Improvement Project (IIP)

Description of the Project:

The IIP is a component of the larger Irrigation Management System (IMS) which comprises ten primary projects. The project aims for bettering the use of the Nile River Waters in irrigated agriculture.

Scope of Services:

Performing study data through, Computer processing of the model, Performing a land use survey ,The SAADA model, Determination of most suitable crops to be cultivated, and Provide the first stage of IIP with considerable expatriate expertise, equipment.



Portfolio.. Irrigation and Utilities

Land Reclamation of 7800 Feddans at Om Khalaf

Description of the Project:

The area in which the project is being executed lies within the South Port Said at El Hussianieh. The project land was covered with may fisheries. The aim of the project is to utilize these lands in increasing the agricultural areas in Egypt.

Scope of Services:

- Reviewing the survey works of the project and preparing the longitudinal and cross sections.
- Preparing hydraulic and construction calculation, detailed mechanical drawings , detailed electrical drawings, detailed drawings for main and route roads, and detailed time scheduleQuantity estimations of all executed works

Updating Economic & Technical Feasibility Studies for the Irrigation of 150,000 Hectares from the River Dijla

Description of the Project:

The General company for major projects (formerly) - General Irrigation Directorate of Tigris and Khabour Basin (later), Directorate of Water Resources in Hassakeh (currently) has signed a contract no. 4/80 dated 24/4/1980 with the Bulgarian company (Agrocomplect) about the works of full studies and designs of the Tigris irrigation project.

Scope of Services:

Review and inspect contract works agreement, and Implementation of the project studies in three stages



Portfolio.. Irrigation and Utilities

Master Plan for Land Resources

Description of the Project:

Implement an ideal Master Plan for the utilization of the land resources in Egypt. The project included the master plan for water resources in parallel with the human and natural resources' development.

Scope of Services:

Due to the fact that Egypt is facing a problem in the field of Agricultural production, expansion of land reclamation became a must requiring an efficient plan to increase this production.

New Extension of Water Plant for Sixth October City

Description of the Project:

The project's aim was making an extension of modern water works in the 6th of October City, South West of Cairo to cope with the increasing demand for treated water. The first stage of the water works was a discharge rate of 1 M³ | second to serve 250,000 inhabitants. The rapid growth of the city elevated the demand for treated water beyond the capacity of the existing plant. Accordingly it was decided to increase the capacity of the facilities of the city to 2 M³ | second.

Scope of Services:

Detailed specifications, Detailed drawings, Providing catalogues related to different equipment forming the contract



Portfolio.. Irrigation and Utilities

Preventive Maintenance & Channel Maintenance Project (PMP|CMP)

Description of the Project:

Focuses on intervention in the maintenance of canal structures and the channels that make up the irrigation delivery and drainage systems. The Channel Maintenance component of the program's place initially in five selected irrigation governorates in Egypt.

Scope of Services:

Delivery and drainage, structure, equipment & spare parts, Maintenance requirements for irrigation structures & maintenance equipment, Development of tracking system, Operation system and Arabization of Morrison Knudsen Engineering equipment, management system and material management system, Assigning key professional staff, developing policies and procedures and assigning responsibilities, Construction of maintenance shops and other facilities

Re-use of Wastewater in Sanaa - Yemen

Description of the Project:

The aim of the project is to re-use the treated wastewater of about 50,000 m³/day; which is about 17 million M³ | year (present capacity) from the Sanaa wastewater treatment plant (SWWTP) through pipes to irrigate a total area about 1,040 ha by gravity.

Scope of Services:

(Reviewing the feasibility study issued in Nov. 2003 by Hydrosult Inc., Estimate the necessary water demands. Diverting, and Review the feasibility study issued by Hydrosult)



Portfolio.. Irrigation and Utilities

Re-use of Wastewater in Irrigation Purposes Project

Description of the Project:

The project aims at studying the impact of utilizing different types of irrigation waters on the following factors: soils, plantation products, and environment, social and economical conditions of the farmers.

Scope of Services:

Executing the project of Land irrigation with wastewater, Setting the main guidelines, Collecting data, Surveys were carried out , A data base has been executed through which water has been managed to irrigate the requested amount of land

Study and Planning of Jongli Canal (Sudan)

Description of the Project:

The project involved an extensive field research work to select the optimum plan for the canal in relation to different technical points of view such as soil conditions, topographic characteristics, technical requirements, navigation requirements and environmental impact.

Scope of Services:

Results of the field research work through the below mentioned studies have been implanted leading to vital results which affected suggestions taken. Among them are: (A study of the canal's intake site, Hydrological studies, A study covering the survey of the building materials , A model of Jongli Canal was developed).



Portfolio.. Irrigation and Utilities

Salam Siphon Under Hadoos Drain

Description of the Project:

The Salam canal transports Nile Water to Sinai for the irrigation of 585,000 Feddans. It crosses the Hadoos navigable drain at Km 477 from its mouth which necessitated the construction of a siphon below the drain.

Scope of Services:

Fulfilling Laboratory tests in order to determine the design parameters, Supervision of the procedures, Analysis of tests and determination of soil properties, General and specific recommendations

Sanitation Project in Kafr Tambedy Village

Description of the Project:

Construction of sanitary network, pressurized pipe lines and sanitary pump stations of Kafr Tambedy Village.

Scope of Services:

Reviewing and approving (designs, designs and construction of pressurized pipe line and its pumps station to deliver the sanitary discharge, the initial report for estimating village delivered sewage, general and technical specifications, the bill of quantities and tender documents).



Portfolio.. Irrigation and Utilities

Sanitation Project in Sarabum Village

Description of the Project:

Construction of Sanitary Network, pressurized pipe lines, sanitary pump station and wastewater treatment plant.

Scope of Services:

The consultant has undertaken the responsibility of reviewing and approving designs of a sanitary pipeline network Sarabum Village.

Storage of Winter Closure Nile Water in Lake Burullus

Description of the Project:

About 1.8 milliard cubic meters are spilled into the Mediterranean sea every year through Rosetta branch during the winter closure period.

Scope of Services:

- Six scenarios were investigated considering providing the entire area of the lake on its western part with different water levels.
- Carrying out the preliminary engineering design of the required infrastructure
- Preparation of engineering cost estimates.



Portfolio.. Irrigation and Utilities

Study of Soil Properties for 70 tons Bridge on Salam Canal

Description of the Project:

A study is concerned with the soil properties for a 70 tons bridge on Salam Canal. The study covered the physical and chemical properties for the construction site of the bridge at Serw area at Km 135.

Scope of Services:

Laboratory tests, Proposing recommendations for the type and depth of foundation with determination of allowable loads on the foundation level, Providing the general and specific recommendations for design of foundations, Advising of the precautions that should be considered during the execution of construction.

50 Liters/Second Water Pump Station in Mazata, elSheikh Gabr, Mahros Hesa Villages

Description of the Project:

Preliminary consultancy services for the construction of five surface potable water, pump stations, type (50 Liters | sec.) in four villages.

Scope of Services:

- Preparing preliminary report describing the project, design criteria, survey map, population studies and initial financial studies.
- Reviewing, modifying and approving designs and drawings.
- Preparing tender documents.



Portfolio.. Irrigation and Utilities

West Nobariya & North-West Coast Land Reclamation

Description of the Project:

The project is part of the North West Coast potential land reclamation. This extension includes the construction of El Bostan Main Canal, 3 branch canals, 7 drains and all the infrastructure required to reclaim 155.000 Feddans.

Scope of Services: I. Pre-construction Phase: (Field inspection and data collection, Review of existing design and optimizing them, Prepare tender documents, drawings and contracts, Issue bid packages, Evaluate tenderers and assist with contract award).

II. Construction Phase: (Develop and control all construction schedules, Quantity Survey, Ensure quality control, Control cash flow, Issue certificates of substantial completion, Assist with arbitration and litigation, Monitoring the performance of the project for one commissioning year).

Completion of the 2nd Pipeline Extension from Imbaba Water Pump Station to Rimayah Club, Egypt

Description of the Project:

Constructing and supervising the 2nd pipeline extension with a diameter of 1000mm from Imbaba Water Pump Station to Rimayah Club at Haram.

Scope of Services:

Supervision of the construction of the water works extension.



Portfolio.. Irrigation and Utilities

300 Liters/second Water Pump Station in Nobaria and Galia Villages

Description of the Project:

Providing consultancy services for the Construction of two surface potable water pump stations type (300 lit | sec) for the villages of Nobaria and Galia in Egypt.

Scope of Services:

- Preparing preliminary report covering the project's description, design criteria, survey map, population studies and initial financial studies.
- Reviewing, modifying and approving designs and drawings
- Suggesting modifications and other considerations to be taken during the construction of the project.
- Preparation of tender documents.

Damietta Master Plan

Description of the Project:

Providing a detailed description and an evaluation study of the current potable water and sewage system in the rural and urban areas in the governorate. The project covers all the villages in Damietta

Scope of Services:

Prepare (a study with different recommendations, tender documents, the master plan till the year 2037 for the potable water and drainage system in the urban and civilized areas in the governorate)



Portfolio.. Irrigation and Utilities

Construction of Water Intake of New Cairo City Water Pump Station, Turbid Pipelines and Boosting Pump Station to the Water Purification Station

Description of the Project:

The water intake is to be constructed on the south side of the intake of Maadi Pump station, north the Orthodox Church on the Nile and east of the Kornish road, the turbid pipelines and the boosting pump stations to the water purification station.

Scope of Services:

PACER is to carry out the consultancy services and the designs of the intake and the transferring pipelines to the water purification station at New Cairo.

Construction Mansheya Potable Water Purification Plant

Description of the Project:

Supervising construction of Mansheya potable water plant with its components.

Scope of Services:

Pump stations and row water pipe lines, Works of mixers and flucturators, Row of filters and pups laundry, Ground reservoirs, Chemicals building, Transformers and distributor buildings Emergency generator building, Workshop building, Administration building and laboratories, Basin of sediments, Apartment building for workers, Retaining walls, fences and gate works, Mechanical and electrical works, Preparation of tender documents.



Portfolio.. Irrigation and Utilities

Construction of Tap Water and Drainage Network for Suez Territory

Description of the Project:

The project consists of a study for the available networks, the water pump stations and the drainage system of Suez Territory. The study made suggestions and offered solutions to cover the city's needs on the long run..

Scope of Services:

After the war destruction that Suez faced it was essential to restore its tap water and drainage network in a set short time schedule to enable its residence to rehabilitate. Scope of the studies covered the following topics:

- Study of the current situation of all the networks including:
- Planning a short term plan.

Ein El Sokhna Area Water Supply

Description of the Project:

Building a pipeline branching form the main Suez Cement Factory pipeline running along the Suez Gulf road to Ein El Sokhna city (20Km.) The pipeline runs through different soils (sandy, swampy and rocky).

Scope of Services:

- Research works.
- Design of a pipeline to supply potable water to a number of tourists and industrial area in Ein El Sokhna south to Suez City
- Several ground tanks 1000m³ capacity each.



Portfolio.. Irrigation and Utilities

New Ameriyah City Water Works Extensions

Description of the Project:

The project required the continuation of modern water works in New Ameriyah City, 50 Km west of Alexandria to cope with the damaged of treated water. The first stage of water works was a discharge rate of 1 M³ | second to serve 250,000 inhabitants.

Scope of Services:

- Prepared detailed specifications and drawings.
- Provided catalogues related to different equipment forming the contract. These equipment are for raw water intake, raw water pumping station, micros trainer house, chlorination house, chemical house, filter house and light lift pumping station.

Siwa-Matrouh Kifar Omessaghir Pipelines

Description of the Project:

The project included research and soil tests for the areas of building of the pipelines. The first with a length of 320Km from Matrouh to Siwa and the other with a length of 50 Km from Kifar to Omessaghir.

Scope of Services:

- Research and soil tests.
- Design of two major pipe lines for providing water to the new areas.
- Preparing tendering documents .



Portfolio.. Irrigation and Utilities

Physical Planning Studies and Infrastructures for the North West Coast Km 104 & Km 146 West of Alexandria

Description of the Project:

The study aimed at revising the Regional plan of the North West Coast within the existing conditions. Structural plan was required and tourism areas were selected from the region and planned for.

Scope of Services:

- Preparation of structure plan for the area
- Preparation of a master plan
- Preparation of Detailed plans for tourism in selected areas.
- Preparation of tender documents for water supply networks, green areas, irrigation networks and roads' networks.

Water Supply Projects in Canal Cities

Description of the Project:

Rehabilitation and enhancing the existing facilities of water supply in the Suez Canal cities (Port Said, Ismailia, and Suez) construction additional units for pumping extra networks and enhancing capacities for pumping stations.

Scope of Services:

Executing projects in each of the three cities (Port Said, Ismailia, and Suez) separately.



Portfolio.. Irrigation and Utilities

Rehabilitation of the Main Water Pipe Line of Six October City

Description of the Project:

The 6th October city is supplied by raw water from an intake on the River Nile near Giza where the water pumping station is pumped in a single pre-stressed concrete pipeline 1500 Mm in diameter.

Scope of Services:

- Hydraulic studies of the pipeline .
- Study of the water hammer protection devices.
- Studying the stresses in the pipe line body.
- Defining alternatives and choosing the most economic and safe solution.
- Determination of suitable specifications and complete working drawings for an intermediate boosting pumping station at Km 145 from the intake.

Study of Development of Tap Water & Wastewater Network for Suez Territory

Description of the Project:

The project concentrated on the studying the water and wastewater networks and pump stations for Suez City to prepare it to accommodate a population of 1 million inhabitants in a short pre-set scheduled time frame.

Scope of Services:

- Studying the current situation for the networks, pure water pump stations, and wastewater networks.
- Setting a short plan system.



Portfolio.. Irrigation and Utilities

Salawa Al Batahaa

Description of the Project:

Construction of a ground water reservoir and extending water pipes at a length of 120km from Salwa territory to Al Batahaa in Saudi Arabia.

Scope of Services:

- Review preliminary hydrological design.
- Make all design drawings including different types of air & water valves.
- Review the water hammer design.
- Design of the ground reservoir at the end of the pipe.
- Design of the saline water outfall into the Arab Gulf.
- Completing all the detailed and executed designs necessary for the project.

Study of Salinity Phenomena in Potable Water in New Borg Elarab City

Description of the Project:

The supply of potable water to new Borg Elarab city and some summer resorts on the North West Coast was mainly provided from Maryout Canal , a branch of Nubariya main canal. It was noticed that the salinity was increasing with time which raised complains from the inhabitants and industries of the area.

Scope of Services:

Investigating the phenomena was through the following:

- Analysis of potable water quality of the new Borg Elarab city
- Recommending suitable actions to upgrade the water supply to the national standards.



Portfolio.. Irrigation and Utilities

Sanitation Project in Kafr Tambedy Village

Description of the Project:

Construction of sanitary network, pressurized pipe lines and sanitary pump stations of Kafr Tambedy Village.

Scope of Services:

- Reviewing and approving (designs, designs and construction of pressurized pipe line, the initial report, general and technical specifications, the bill of quantities and tender documents)

Rehabilitation Movable Bridge over Damietta Lock

Description of the Project:

- The bridge was supposed to operate manually and electrically; however due to the damage of the opening and closing cylinders of the bridge is doesn't function at all.
- The PLC units responsible for operating the bridge from the main control room of operating the bridge, the barrage was damaged.
- The unit of operating the bridge from the subsidiary panel located at one of the edges of the barrage is also damaged

Scope of Services:

- Review of the existing structural system, Calculation of the storming actions, Preparing design, calculation notes, Preparing all tender drawings and documents



Portfolio.. Irrigation and Utilities

Sanitation Projects in Canal Cities (Port Said, Ismailia And Suez)

Description of the Project:

- Rehabilitation of the existing facilities of sanitation in the Suez Canal cities
 1. Enhancing capacities of pumping stations
 2. Providing additional units for sewage treatment plants and extra networks

Scope of Services:

Urgent Renewal And Rehabilitation Projects, Connection of the existing branches and stations of the city, Construction of 5 discharge pipelines, Construction of the new collectors for the neighborhoods, Construction of main stations, Construction of a main station in Abuatwa

Water Treatment Plant of the Tenth of Ramadan City

Description of the Project:

The total output of the complete water works projected by this study is 864,000 m³/day (1m³ /second) sufficient for 250,000 inhabitants; in addition, to the industrial water requirements.

Scope of Services:

- Detailed specifications, drawings, and catalogues related to different equipment forming the extensions of the potable water stations.
- Preparation of working drawings for mechanical and electrical works for pumping station number 1.
- Completion & modifications of pumping stations number 2 and 3.
- Implementing studies for the project.



Portfolio.. Irrigation and Utilities

The Construction of the New Port at the Industrial Area at Rasheed Branch

Description of the Project:

In order to enhance the internal navigation waterways in Egypt between Cairo and Alexandria, the River Transport Authority contracted with PACER Consultants to carry out the planning and design works of the new port in El Rasheed branch in the industrial area of Kafer El Zayat.

Scope of Services:

Survey works of existing port , Soil investigation, Determining the best location of the new port , Preparation of the project environmental report, The design works (structural, mechanical and electrical designs), Prepared the detailed drawings of all the designs, Sharing the owner in bid evaluations, Construction site supervision

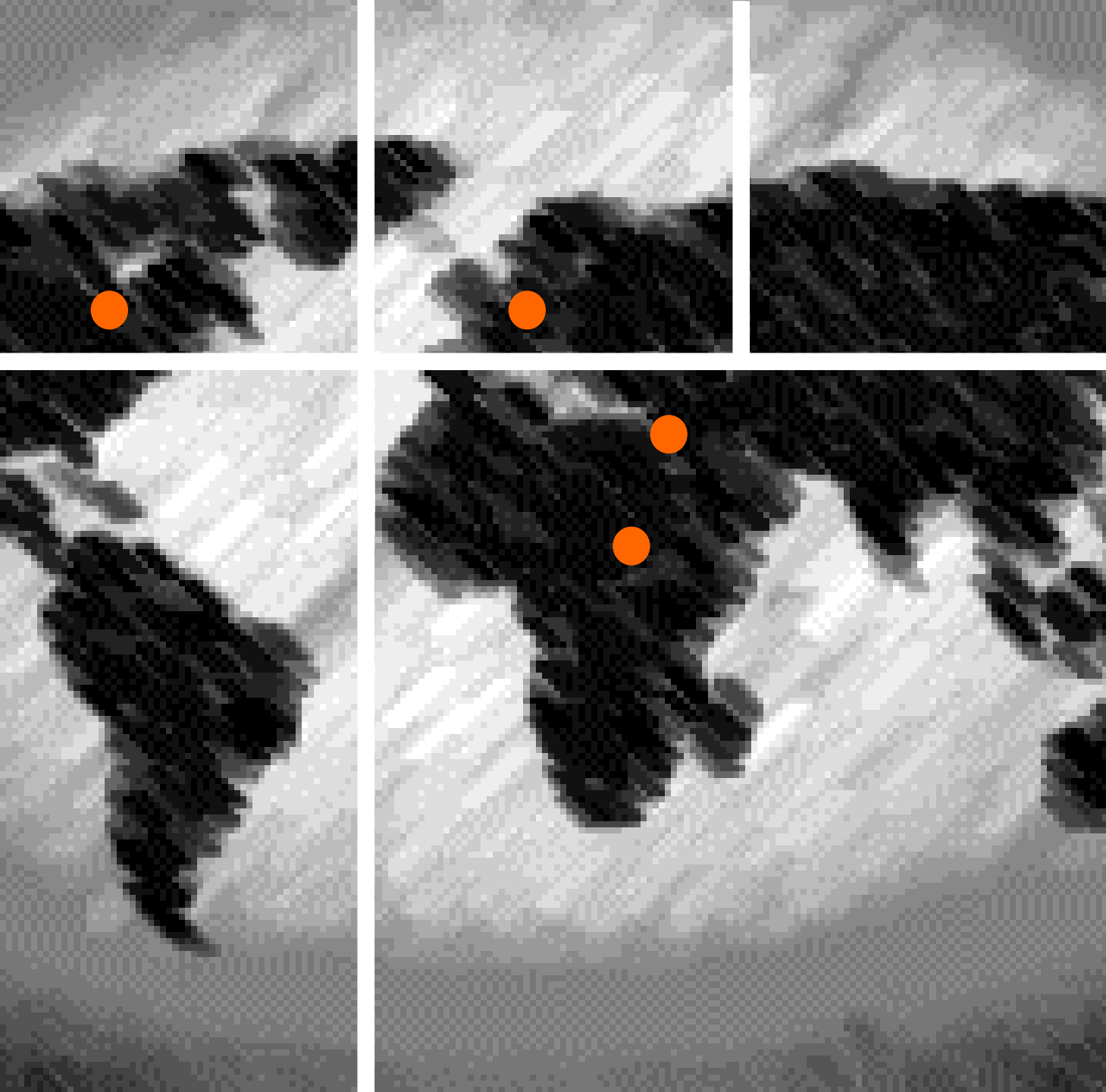
Water Pipeline to Cement Factory in Suez City

Description of the Project:

Constructing pipeline from Suez Canal Authority pumping station to feed the factory. A separate pumping station was proposed to supply the line that feeds the factory, some communities, the industrial area of Cabanon free zone in Adabia and the industrial area of Ein El Sokhna

Scope of Services:

Carrying out survey of the pipeline area, soil investigations and borings, Preparation of the tender documents, evaluation of bids and choice of contractors, Supervision of contract during construction



4.0

A Global Outreach

- Clients**
- Joint Ventures and Partners**

A Client Base in the 100's

Private Sector. Public Sector. Government

USAID
FROM THE AMERICAN PEOPLE

US AID

LIFELONG LEARNING

AFRICAN DEV BANK

AFRICAN DEVELOPMENT BANK

OBEROI HOTELS & RESORTS

OBEROI HOTELS

VFS TASHEEL INTERNATIONAL

VFS TASHEEL

SCHNEIDER ELECTRIC

SCHNEIDER

QNB BANK

CITI BANK

EMIRATES NBD BANK

CREDIT AGRICOLE

JICA

CAIRO AMERICAN COLLEGE

CARREFOUR CHAINS

Mercedes-Benz

BNP PARIBAS BANK

MASHREQ BANK

WORLD BANK

UNITED NATIONS

HILTON HOTELS

HYATT REGENCY

IBRD

Metro Markets

MANSOUR GROUP

Worked with almost every Egyptian Ministry like..



Joint Ventures

International. Regional and Local Partnerships



Dorsch Group



SOGREAH, FRANCE



RHINE RUEHR
INGENIEUR, GERMANY



LAHMEYER, GERMANY



HASKONING, UK



WYG, UK

A. GIBB

A. GIBB, UK

Posford
Duvivier

POSFORD DUVIVIER,
UK

Euroconsult

EUROCONSULT,
NETHERLANDS



DHV CONSULTING,
NETHERLANDS



XROSS KULTURAL



DIEDRICH ARCHITECTS



SOCOTEC



Cultural Innovations. UK



LACKNER &
PARTNERS, GERMANY



HOK, UK



KDH ASSOCIATES, UK



ROYAL HASKONING,
NETHERLANDS

F.R. HARRIS



HALCORW, UK



NEDECO,
NETHERLANDS

ILACO

ILACO, NETHERLANDS



ELLERBE BECKET



ELLERBE BECKET P.C.



BLACK AND VEATCH



RAFAEL VIÑOLY
ARCHITECTS

RAFAEL VINOLY
ARCHITECTS



5.0 Social Responsibility

We do believe that.. “a business that makes only money is a poor business”.. Therefore we prioritize giving back to the community..

Our CSR component focuses on:

1. Employee development
2. Volunteering
3. Caring for the environment.

These 3 areas are covered by our participation in these initiatives:

VeryNile

A pioneer movement to clean up the Nile and raise awareness about the environment. VeryNile.org organizes cleaning events and develops eco-friendly solutions to remove trash from the river.

EG Green Building Council

A professional association promoting principles of sustainability and green buildings. EGBC develops standards for more efficient buildings in Egypt and the region.

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