

# PIO ENGINEERS

## COMPANY PROFILE





**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIO  
ENGINEERS**  
*Eng. Bishoy I. Kamel*



## **Pre-Qualification Document**

---

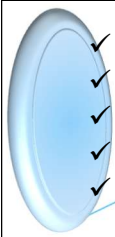
### **1. Executive Summary**

Pioneers Engineers is a leading multidisciplinary engineering consultancy established in 2005, serving as a premier provider of comprehensive engineering design, consulting, and technical solutions across the Middle East, Gulf area, and North American markets.

With nearly two decades of proven excellence, Pioneers Engineers has successfully delivered thousands of complex engineering projects in partnership with renowned developers, contractors, and engineering firms. The firm has emerged as a trusted partner for organizations seeking innovative engineering solutions, value engineering optimization, and advanced Building Information Modeling (BIM) services.

Our commitment to attracting and retaining top-tier talent, combined with an extensive network of carefully selected remote engineering professionals, positions us as a competitive advantage in an increasingly globalized marketplace. We leverage this human capital advantage alongside cutting-edge technology and proven methodologies to deliver exceptional results.

This pre-qualification document outlines our technical capabilities, experience, organizational resources, and commitment to excellence across all sectors of engineering specialization.



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PTO  
ENGINEERS**  
Eng. Bishoy I. Kamel

## 2. Company Overview

**Company Name:** Pioneers Engineers

**Year of Establishment:** 2005

**Headquarters:** Cairo, Egypt

**Legal Status:** Limited Liability Company (LLC)

**Primary Sector:** Multidisciplinary Engineering Consulting and Design Services

**Service Delivery Model:** Hybrid - In-house expertise with extensive remote professional network

**Market Focus:**

Egyptian Market (Primary)

North American Markets - USA and Canada

Gulf Cooperation Council (GCC) Countries

Pioneers Engineers operates as a fully integrated engineering consultancy providing end to-end solutions from concept development through project completion. Our service delivery model combines the stability and accountability of a traditional consulting firm with the flexibility and scalability of a distributed professional network.

## 3. History and Background

Pioneers Engineers was founded in 2005 with a vision to establish a world-class engineering consultancy capable of delivering technical solutions to complex development, construction, and infrastructure projects. Over the past 21 years, our firm has evolved from a boutique consultancy into a comprehensive multidisciplinary engineering house.

### Key Milestones:

**2005:** Foundation of Pioneers Engineers as an engineering design consultancy

**2007-2010:** Expansion of service into structural, MEP, and architectural design

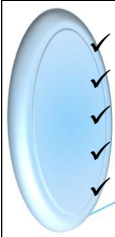
**2010-2012:** Establishment of value engineering and optimization services

**2015:** Launch of BIM services.

**2018:** International expansion with projects in USA and Canada; development of remote professional network

**2023:** Consolidation of BIM excellence; expansion to GCC markets; growth of North American project portfolio

**2023-Present:** Strategic focus on innovation, sustainability, and global market positioning



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PTO  
ENGINEERS**

**Eng. Bishoy I. Kamel**

Since establishment, Pioneers Engineers has successfully completed thousands of projects ranging from small-scale design consultations to large-scale complex developments, infrastructure projects, and comprehensive technical evaluations.

## 4. Organizational Structure

Pioneers Engineers operates with a hierarchical yet flexible organizational structure designed to accommodate diverse project requirements while maintaining quality standards and operational efficiency.

### Executive Leadership:

**Founder and Managing Director** (Bishoy I. Kamel)  
**Business Development Director** (Diana Naguib)  
**BIM Manager** (Salma Mohsen)  
**MEP Manager** (Abdallah Afifi)  
**Technical Managers.**  
**Engineering teams.**

### Bishoy I. Kamel biography

Eng. Bishoy I. Kamel is an accomplished Civil and Structural Engineer with over 22 years of international experience in engineering management, design, construction supervision, and technical office leadership. He is currently the Engineering Director at Many mega Companies and the Founder and General Manager of Pioneers Engineers for Engineering and Consulting (Egypt), further more Founder and Engineering Director of Imagine Global consultancy in UAE

He holds a Bachelor of Science in Civil Engineering (Structural Division) from Ain Shams University, graduating in 2003. His academic work focused on reinforced concrete structures.

- Career Overview

Bishoy has led diverse teams and delivered major projects across Egypt, the Gulf, North Africa, and even Australia. His expertise includes:

- Managing engineering departments and aligning them with corporate goals
- Leading full-cycle design and construction operations for residential, industrial, and infrastructure projects
- Supervising BIM teams and technical offices
- Developing cost-effective, value-engineered solutions tailored to each project's unique demands
- Representing firms in high-stakes meetings with consultants, contractors, and government authorities

He has proven success in:

- Structural design of buildings, bridges, power stations, and specialized facilities



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PTO  
ENGINEERS**  
*Eng. Bishoy I. Kamel*

- Full technical packages including BOQs, shop drawings, and value engineering reports
- Direct site involvement from initial design through construction and delivery

#### Leadership & Integrity

Bishoy is known for his ethical approach, precise attention to detail, and unwavering dedication to project success. His leadership inspires trust. He builds disciplined, efficient teams that consistently deliver under pressure.

His career reflects:

- Exceptional technical knowledge
- Hands-on field experience
- High standards of integrity and accountability
- Deep commitment to professional mentorship:

Bishoy's diverse, global experience combined with his honesty, leadership, and technical depth positions him as a respected figure in the construction industry. His work continues to shape the built environment with excellence and responsibility.

---

## Core Departments:

### Architectural and Urban Design

Responsible for architectural design, master planning, and interior design.

### Structural Engineering

Specializing in structural design, Repairing, and technical office services

### MEP (Mechanical, Electrical, Plumbing)

Comprehensive mechanical, electrical, and plumbing systems design

### Value Engineering and Optimization

Cost optimization, constructability analysis, and value enhancement services

### BIM and Digital Services

Building Information Modeling, 3D coordination, and digital documentation

### Technical Office

Site Technical Support, Shop drawings, and site coordination

### Professional Network:

Beyond our core in-house team, Pioneers Engineers maintains an extensive, carefully curated network of specialized remote engineering professionals across multiple disciplines and geographic locations. This network includes:



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PTO  
ENGINEERS**  
*Eng. Bishoy I. Kamel*

Structural specialists and analysis engineers  
MEP systems experts  
Architectural designers and urban planners  
BIM engineers, coordinators, and managers  
Cost and value engineers

This dual approach—combining dedicated in-house expertise with a selective remote professional network—allows us to scale rapidly for large projects while maintaining consistent quality and deep client relationships.

---

## **5. Core Competencies and Services**

Pioneers Engineers offers a comprehensive suite of engineering and consulting services tailored to meet the diverse needs of our clientele across multiple sectors and markets.

### **Primary Service Areas:**

#### **1. Architectural Design and Detailing**

Building design and architectural planning  
Interior design and space planning  
Facade and envelope design  
Architectural detailing and specifications  
Heritage conservation and restoration

#### **2. Structural Engineering**

Structural design and analysis  
Foundation design and engineering  
Seismic and wind engineering  
Renovation and rehabilitation design

#### **3. MEP Systems Engineering**

HVAC design and optimization  
Electrical systems design  
Plumbing and sanitary systems  
Fire protection systems  
Building automation and controls  
Renewable energy integration



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PTO  
ENGINEERS**  
Eng. Bishoy I. Kamel

#### **4. Value Engineering**

- Cost analysis and optimization
- Constructability review and enhancement
- Design alternatives evaluation
- Life cycle cost analysis
- Supply chain and material sourcing optimization

#### **5. Technical Office Services**

- Detailed drawings, Rebar distributing drawings and BBs.
- Preparing Tender document preparation

#### **6. BIM Services (Building Information Modeling)**

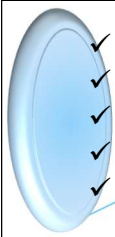
- 3D architectural modeling
- Structural modeling and analysis
- MEP systems modeling
- 4D scheduling and sequencing
- 5D cost estimation and tracking
- Clash detection and coordination
- Model federation and coordination
- BIM documentation and handover
- As-built modeling and asset management

### **6. Technical Expertise and Specializations**

Pioneers Engineers brings specialized expertise across diverse engineering disciplines and project types.

#### **Building Sectors:**

- Commercial office buildings
- Residential developments (apartments, villas, mixed-use)
- Hospitality facilities (hotels, resorts, serviced apartments)
- Retail and shopping centers
- Educational facilities (schools, universities)
- Healthcare facilities (hospitals, clinics, medical centers)
- Industrial and manufacturing facilities Infrastructure projects



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PTO  
ENGINEERS**  
Eng. Bishoy I. Kamel

## **BIM-Centric Project Delivery**

As leaders in BIM implementation, we offer:

- Full BIM coordination for multidisciplinary projects
- Clash resolution and design integration
- BIM-enabled construction planning
- Cost and schedule optimization through BIM
- Facilities management BIM preparation
- Virtual construction and visualization

## **7. Geographic Markets and Experience**

### **Egyptian Market:**

Pioneers Engineers has established a strong presence in the Egyptian engineering market with extensive experience across Cairo, Giza, New Cairo, New Administrative Capital, Alexandria, and other major cities. Our Egyptian portfolio includes:

- Commercial and mixed-use developments
- Residential communities and compounds
- Healthcare facilities
- Educational institutions
- Industrial facilities
- Infrastructure projects

### **GCC Markets (Gulf Cooperation Council):**

Our regional expansion has established us as a recognized consulting firm in:

- Saudi Arabia (Riyadh, Jeddah, Dammam)

Our GCC experience includes major luxury residential projects, and hospitality facilities.

### **North American Markets (USA and Canada):**

Pioneers Engineers has involved in the North American market, establishing our firm as an international provider of BIM and engineering design services.

Our focus in North America centers on:

#### **United States:**

- Residential condominiums and apartments
- Industrial and warehouse facilities

#### **Canada:**

- Residential projects



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PTO  
ENGINEERS**  
*Eng. Bishoy I. Kamel*

Our North American expansion reflects our commitment to global market presence and our BIM expertise, which is increasingly sought by North American developers and contractors.

## 8. Quality Management Systems

Pioneers Engineers maintains rigorous quality management standards across all operations to ensure consistent delivery of high-quality engineering solutions.

### Quality Assurance Framework:

#### Design Quality Standards

- Comprehensive design review protocols
- Multi-disciplinary coordination and clash detection
- Specification development and document review
- Constructability analysis
- Design compliance verification

#### Professional Standards Compliance

- Adherence to international engineering codes and standards
- Compliance with local building codes and regulations
- Professional practice standards
- Ethical guidelines and professional conduct
- Intellectual property protection

## 9. Personnel and Key Team Members

The strength of Pioneers Engineers lies fundamentally in our people—a carefully selected group of talented, experienced professionals dedicated to engineering excellence.

### Human Capital Strategy:

Our personnel strategy combines:

- **In-house Core Team:** Highly experienced, dedicated professionals forming the foundation of our firm
  - **Specialized Expertise Pool:** Remote professionals with deep specialization in specific technical areas
  - **Project-Specific Resources:** Additional expertise engaged as required for unique project demands
  - **Continuous Development:** Investment in ongoing professional development and training
- Team Composition**



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PTO  
ENGINEERS**  
Eng. Bishoy I. Kamel

Our team includes:

Structural engineers with expertise in analysis, design, and rehabilitation  
Architectural designers with aesthetic sensibility and technical excellence  
MEP engineers specializing in systems integration and optimization  
Value engineers focused on cost optimization and constructability  
BIM specialists with advanced modeling and coordination skills

## 10. BIM Capabilities and Infrastructure

Building Information Modeling (BIM) represents a strategic focus area for Pioneers Engineers. Our BIM capabilities position us at the forefront of modern engineering practice.

### BIM Services Offerings:

#### BIM Model Development

Architectural BIM modeling from design through as-built phases  
Structural BIM modeling and coordination  
MEP systems BIM development  
Model accuracy and detail appropriate to project phases

#### BIM Coordination and Integration

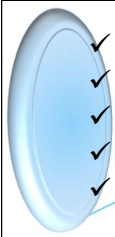
- Multidisciplinary model federation
- Automated and manual clash detection
- Coordination meetings and clash resolution
- Model management and standards compliance
- Document extraction from BIM models

#### Advanced BIM Applications

- 4D scheduling and construction sequencing visualization
- 5D cost estimation and budget tracking through BIM
- 6D sustainability analysis and optimization
- 7D facility management and operations integration
- Virtual reality (VR) and augmented reality (AR) visualization

#### BIM Infrastructure and Technology:

Pioneers Engineers has invested in comprehensive BIM technology infrastructure including:



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PTO  
ENGINEERS**  
*Eng. Bishoy I. Kamel*

- Advanced modeling software (Revit, ArchiCAD, Navisworks, etc.)
- BIM collaboration platforms (BIM 360, Assemble Systems, etc.)
- Server infrastructure for large model management
- Cloud storage for secure project data management
- Visualization and presentation tools
- Analysis software for specialized engineering

**BIM Team Expertise:**

- Certified Revit specialists
- BIM managers and coordinators
- Model auditors and quality specialists
- BIM standards developers and implementers
- Virtual design and construction (VDC) experts

---

## **11. Strategic Partnerships and Network**

### **Network Philosophy:**

Pioneers Engineers operates on the principle that modern engineering excellence requires strategic collaboration. Our network of partnerships and professional relationships represents a significant competitive advantage.

### **Strategic Partnerships:**

#### **Architectural and Engineering Firms**

Partnerships with complementary consulting firms for specialized services and expanded capacity

#### **Contracting and Construction Companies**

Relationships with major contractors and construction companies for integrated project delivery and constructability feedback

#### **Developers and Project Sponsors**

Long-standing relationships with experienced developers across Egypt, GCC, and North America

#### **Remote Professional Network:**

Central to our service delivery model is a carefully curated network of remote engineering professionals strategically distributed across multiple geographic locations. This network includes:

#### **Geographic Distribution:**

Professionals in Egypt and GCC countries  
North American-based specialists



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*

## 12. Technology and Innovation

Pioneers Engineers recognizes that technology drives modern engineering excellence and remains committed to continuous innovation and technology advancement.

### Software and Technology Stack:

#### Design and Modeling Tools

- Revit (Architectural, Structural, MEP)
- AutoCAD (2D drafting and design)
- ArchiCAD (alternative BIM platform)
- Rhino and Grasshopper (parametric design)
- SketchUp (conceptual design and visualization)

#### Analysis and Engineering Tools

- Structural analysis software (ETABS, SAP2000, etc.)
- MEP load calculation and simulation tools

#### BIM Collaboration and Coordination

- Navisworks (model coordination and clash detection)
- BIM 360 (project collaboration platform)
- Assemble (design review and coordination)

#### Visualization and Presentation

- 3D visualization software
- Virtual reality (VR) visualization
- Augmented reality (AR) applications Rendering and presentation tools
- Animation and sequencing software

#### Innovation Initiatives:

Pioneers Engineers actively pursues innovation through:

- Adoption of emerging technologies
- Research into new engineering methodologies
- Sustainability innovation and green technologies
- Digital transformation and automation
- Process improvement and efficiency enhancement
- Collaborative innovation with partners and clients



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
Eng. Bishoy I. Kamel

## Digital Transformation:

Our digital transformation initiatives include:

- Cloud-based project delivery
- Remote collaboration capabilities
- Automated quality assurance processes
- Data analytics for project insights

## Client Satisfaction:

Client feedback consistently highlights:

- Technical competency and expertise
- Responsive and collaborative approach
- Quality of deliverables
- Efficiency and cost-effectiveness
- Problem-solving and innovation
- Professional project management
- Clear communication and coordination





**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
Eng. Bishoy I. Kamel

## 13. Sample of projects

### 1- Structural design and technical office services

- **Assiut Supercritical Power Plant 1x650 MW:** (Technical office services)  
Located in Assiut, Egypt; implemented by PGESCo, Upper Egypt Electricity Production Co., and Siemens JV; ~2016-2020 execution; 650 MW supercritical steam plant with civil, mechanical, and electrical



engineering for power generation.

- **Institute of intelligence and Security studies** (full structural design)  
Located in Cairo Egypt; by Afaq construction 2020





**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*

- **Cairo Metro warehouse Line 3:** (Technical office services)

Located in Cairo, Egypt; implemented by NOMIDAL, VINCI Construction, and Orascom; 2006-2024 phased execution; 18+ years duration; ~EGP 97-100 billion cost; 35km metro line with tunnels and stations, urban transit infrastructure.



- **Village Gardens Kattamia Compound:** (Technical office services)

- Located in 5th Settlement, New Cairo, Egypt; implemented by Palm Hills Developments; 2010s execution; 285,000 m<sup>2</sup> residential compound with green spaces and modern Mediterranean architecture.





**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*

- **Mall of Egypt:** (value engineering)  
Located in 6th October City, Giza, Egypt; implemented by Orascom Construction and Besix JV; 2011-2017 execution; ~6 years duration; USD 400-770 million cost; 162,000-210,000 m<sup>2</sup> shopping mall with ski park and multi-story retail structures.



- **Grand Egyptian Museum:** (Take part of the main haul structural design)  
Located near Giza Pyramids, Egypt; implemented by Orascom Construction and Besix JV; 2005-2023 execution; 18 years duration; USD 1-1.2 billion cost; 32,000 m<sup>2</sup> artifact museum with pyramid-inspired





**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*

- **Damietta Bridge:** Located over Nile River, Damietta, Egypt; (full structural design) originally relocated 1927-1929, MOPCO rehab in 2010s; historic implementation; duration N/A; LE 40,000 original costs; steel swing bridge rehabilitated as cultural site with civil engineering.
- **Ain Saleh Buildings Package:** (structural design and technical office services) Located in Ein Salah, Algeria; implemented by OCI Engineering (technical office); execution N/A; duration N/A; cost N/A; residential and office buildings for BP petroleum camp in desert environment.
- **Undercrossing of Sorfert:** (structural design and technical office services) Located in Arzew, Algeria; implemented by Orascom Construction for Sorfert plant; 2008-2011 execution; 3 years duration; part of \$2 billion plant cost; fertilizer plant infrastructure with civil and chemical engineering.
- **Nigeria-Agura Power Plant:** (structural design and technical office services) Located in Agura/Azura, Nigeria; implemented by Siemens and Julius Berger (Azura); 2016-2018 execution; 26 months duration; \$900 million cost; 461 MW gas-fired thermal power station.



- **Onsi Sawiris Vocational Training Institute:** (structural design and technical office services) Located in 6th October City, Egypt; implemented by Orascom Construction and Sawiris Foundation; 2023-2025 execution; 2 years duration; TVET construction school with vocational educational facilities.
- **Yanbu Precast Substation:** (Technical office services) Located in Yanbu, Saudi Arabia; implemented by GE and NPCC for Yanbu-4 IWP; 2021+ execution; duration N/A; cost N/A; 380kV GIS electrical substation with precast elements.



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*

- **Porto Marina Resort Towers:** (structural design)

Located in Hacienda Bay, North Coast, Egypt; implemented by Porto Group and Amer Group; 2010s phased execution; luxury high-rise residential and touristic towers.

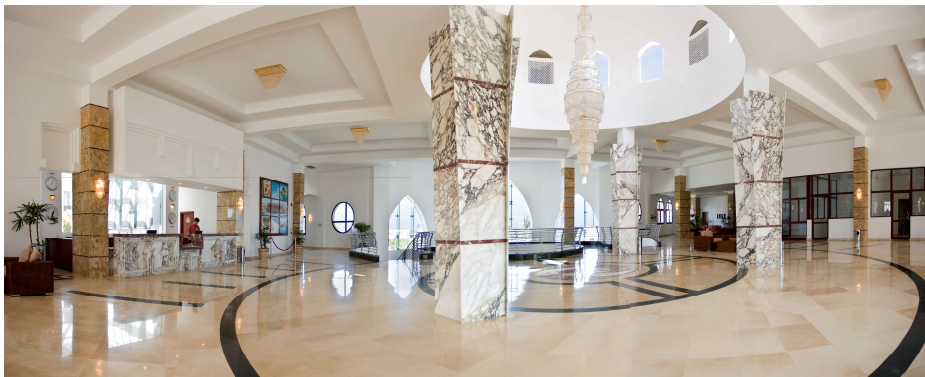
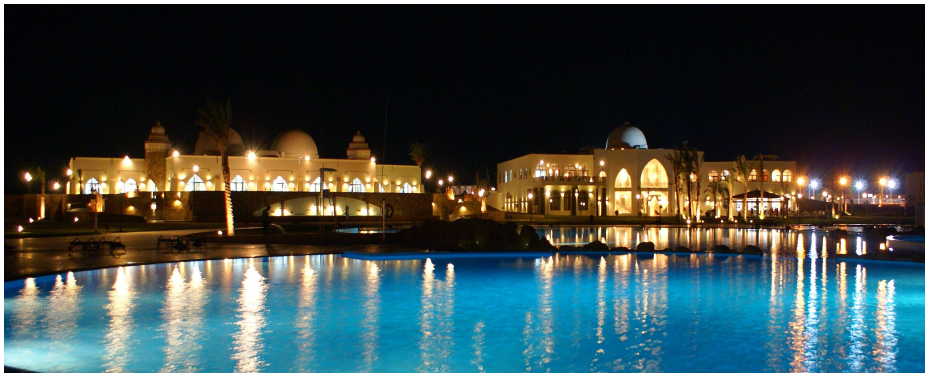




**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*

- **Verona Land Resort:** (structural design and technical office services)  
Located in Marsa Alam, Red Sea, Egypt; implemented by Verona land Tourist Development; exec; 23-building beach resort with eco-touristic chalets.





**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*

- **Dar El Fouad Hospital:** (Technical office services)  
Located in Nasr City, Cairo, Egypt; implemented by Alameda Health Care; 1999 with 2010s expansion; multi-specialty hospital with ICUs and modern healthcare structures.





**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*

- **Al Fayah Bridge:** (structural design)  
Located in Abu Dhabi, UAE (likely Al Maryah Island); implemented by Besix and Six Construct; 2016+ execution; pedestrian and vehicle urban connectivity bridges.



- **Al-Raha Resort Bridges:** (structural design)  
Located in Al Raha Beach, Abu Dhabi, UAE; implemented by EAWorld; 2002 execution; AED 20 million cost; 10 multi-span pre-stressed concrete access bridges (30-70m)



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*



## **2- Electromechanical Services Projects**

Electromechanical engineering and infrastructure works, with **20 years of experience** in residential, industrial, and commercial projects.

We provide a full range of Engineering designs, Studies, Calculations & Shop Drawings through a highly qualified and multidisciplinary team, supported by academic expertise from top Egyptian universities.

We deliver all types of design works and technical reports in compliance with both **local and international codes**, including bills of quantities and design drawings.

Our office also offers comprehensive technical support services:

- Preparation and approval of shop drawings.
- Issuance of as-built drawings.
- Quantity surveying and verification.
- Supervision and technical support for project execution.

We adopt the **BIM (Building Information Modeling)** system, ensuring high accuracy, speed, and quality in all our engineering outputs.



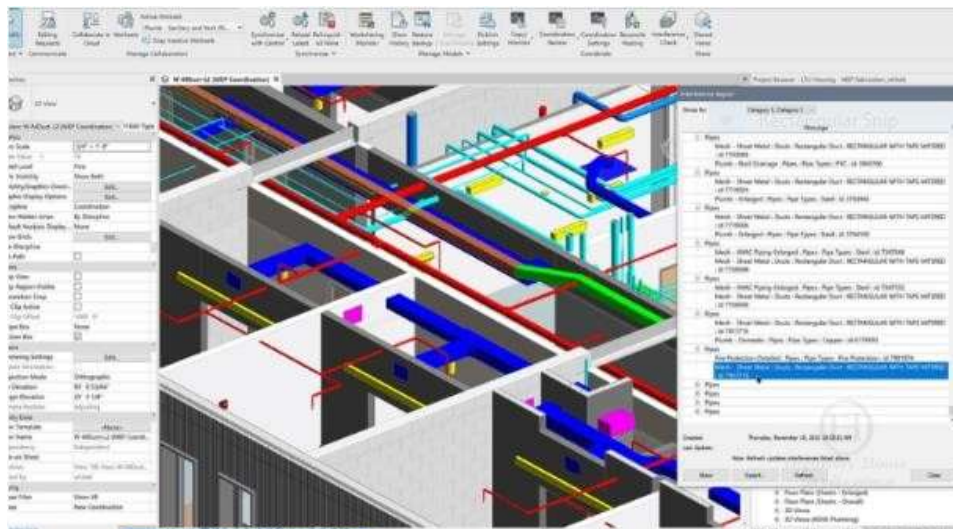
**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**

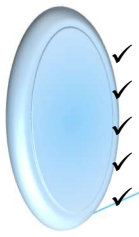
**Eng. Bishoy I. Kamel**

- Infrastructure networks (Water – Sewage – Gas).
- MEP systems (HVAC – Firefighting – Plumbing – Electrical).
- Water treatment plants (process design, hydraulic calculations, related civil, electrical, and architectural designs).
- Medical gases & compressed air networks.
- Compressor rooms, pump stations, and sewage lifting stations.
- Steam boiler rooms (in collaboration with Bosch and Spirax Sarco).

Delivering **high-quality engineering services** built on expertise and modern technologies to ensure client trust and satisfaction.



- Wastewater treatment plant at North Coast – El Diplomatic Village.
- Several wastewater treatment plants (20,000 m<sup>3</sup>/day capacity) under **Hayah Karima Project**.
- HVAC systems for **Pharco Pharmaceuticals factories**.
- Infrastructure works for **El Burullus Power Plant / Egypt – 8,400 MW**.
- Electromechanical works for **New Alamein Beach Towers – 42 Floors**.
- Steam lines, compressed air, firefighting, and water networks at **El-Mahalla Textile Factories**.
- Electromechanical works at **El-Mahalla Power Plant**.
- Design of compressor rooms & pump stations in cooperation with **Atlas Copco**.

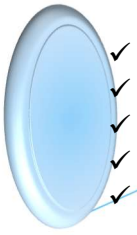


**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIONEERS**  
**ENGINEERS**  
*Eng. Bishoy I. Kamel*

### **3- BIM Services Projects**

- BOROUGE Compound, Ismailia Road
  - Client: Emkan Misr | General Consultant: Mimar
- KAZAN Plaza 1&2.
  - (Consultant: International Engineering Consultancy Co. & Consultant: Injaz developments)
- KAYA Mall.
  - (Consultant: International Engineering Consultancy Co. & Consultant: Injaz developments)
- Silva Compound.
  - (Consultant: International Engineering Consultancy Co. & Consultant: Injaz developments)
- Opal Compound.
  - (Consultant: International Engineering Consultancy Co. & Consultant: Injaz developments)
- Carnelia Sokhna
  - (Mimar Engineering Consultants & Sites)
- NEW GIZA #Neighborhood 4 and 7 PROJECT.
  - Scope includes 16 Fully Finished Residential Buildings (OWNER: NEWGIZA - Consultant: ECG)
- **SODIC 25.**
  - Scope includes 11 semi-finished Residential Buildings and water tank (OWNER: SODIC - Consultant: EMC)
- **Central Business District of the New Administrative Capital TOWERS (B01&B02).**
  - Scope includes 2 Hotel Towers with 50 meters Hight. (OWNER: New Urban Communities' Authority - Consultant: Dar EL-Hanadasa)
- **MID TOWN MALL.**
  - Scope includes Mall with 24914 m2 consists of basement, ground, first and second.



**STRUCTURAL DESIGN**  
**SMART SOLUTIONS & VALUE ENGINEERING**  
**ARCHITECTURE DESIGN & LANDSCAPE**  
**BUILDING INFORMATION MODELING (BIM)**  
**BUILDING CONSTRUCTION & REPAIRING**

**PIO  
ENGINEERS**  
*Eng. Bishoy I. Kamel*

- **OCTOBER PLAZA.**
  - (owner: International Engineering Consultancy Co. & Consultant: Ehaf)
- **New Giza #Neighborhood 4.**
  - It is Project Contain 10 Town Houses and 5 special Villas and 5 Lakeside view Town Houses. (Owner: New Giza & Consultant: ECG)
- **Wadi Al-Naqab Dam Project**
  - Created full Civil 3D models for the Wadi Al-Naqab Dam, including alignments, profiles, cross-sections, and earthwork quantities.
  - Supported BIM coordination for integrating dam structural models with related infrastructure in Revit.
  - Ensured model accuracy, data integrity, and compliance with technical standards.
  - Coordinated with engineering teams to resolve design issues and deliver high-quality, fully coordinated BIM models.
- **Emirates Road (E611) As-Built Project**
  - Delivered as-built drawings for an 8.5 km section of Emirates Road (E611) using Civil 3D.
  - Updated alignment, profiles, cross-sections, and corridor details to reflect actual site conditions.
  - Modeled associated bridges in Revit to ensure accurate representation and coordination with other disciplines.
  - Managed BIM coordination tasks, resolving conflicts between models and ensuring adherence to project specifications and standards.
  - Collaborated with multidisciplinary teams to align deliverables with client and consultant requirements.

*Pioneers Engineers remains committed to engineering excellence, professional integrity, and delivering solutions that create lasting value for our clients and the communities we serve.*

