ENGINEERING & PROJECT MANAGEMENT

PROJECT SHEET

PROPOSED SECRETARIAT FOR THE FOOTBALL ASSOCIATION OF ZAMBIA, LUSAKA

DESCRIPTION

In the year 2000, the football Association of Zambia (FAZ) commissioned Bicon Zambia Limited as the consulting Engineers and project managers for their proposed Secretariat building on Alick Nkhata road. The project was funded under the FIFA Goal Project. The building is a double storey which shall accommodate the FAZ Secretariat on the ground floor and the first floor is to be let out to commercial tenants. Bicon Zambia is responsible for the design and supervision of the civil, structural, mechanical and electrical Engineering services.

Client: Football Association of Zambia
Architects: Anderson & Anderson International
Engineers: Bicon Zambia Limited
Contractor: China Jiangxi Corporation
Funding: FIFA Goal Project
Value: US$1.0 Million
DESCRIPTION
In the year 2000, the football Association of Zambia (FAZ) commissioned Bicon Zambia Limited as the consulting Engineers and project managers for their proposed Secretariat building on Alick Nkhata road. The project was funded under the FIFA Goal Project. Bicon Zambia were responsible for the detailed design and supervision of the water and sewerage reticulation on the project.
PROJECT SHEET

NEW CATHOLIC CATHEDRAL OF CHILD JESUS – LUSAKA, ZAMBIA

CLIENT: The Roman Catholic Church
FUNDING: The Roman Catholic Church
ARCHITECTS: Planning & Designing Consultants
ENGINEERS: BICON Zambia Ltd (All disciplines)
VALUE: US$ 2.7 million
DATE: 2000 to Date

DESCRIPTION

In 1999, The Project Committee of the Roman Catholic Church in Zambia commissioned the Planning & Design Partnership as Architects and Bicon Zambia in association with Towbridge, Higson-Smith of South Africa as Engineers.

The project which is to be the flagship cathedral of the Roman Catholic Church in the new millennium in Zambia, will be able to sit over 1000 people and host national and international masses and events.

Bicon Zambia Ltd are responsible for the design and supervision of all the engineering disciplines which include, civil, structural, mechanical, electrical engineering works and acoustics. The project is on site and will be completed in 2003.
In 1999, Anderson & Anderson Architects in association with Bicon Zambia Ltd were commissioned by ZESCO as the consultants on the rehabilitation of ZESCO’s Training Centre in Ndola, Zambia. The project aims at improving the Ndola Training Centre to World class standards with a view to secure the human resources requirements, build capacity and professionalism for ZESCO. The project will basically constitute two major parts. The first phase is the physical works which will involve comprehensive rehabilitation of the old buildings as well as construction of new buildings, with new technical workshops, a training substation, a laboratory, common room/gym, hostels, kitchen, canteen and an auditorium. The second aspect addresses upgrading the Training Centre Staff, development of curriculum based on needs of the electricity industry, purchase of appropriate training equipment/tools, and stocking the library with updated study materials.

Bicon Zambia Ltd were responsible for the design and supervision of all the civil and structural works on the project which is expected to be completed with a period of three years.
DESCRIPTION

In 2001, Anderson & Anderson Architects in association with Bicon Zambia Ltd were commissioned by Pyramid Plaza as the consultants on the construction of a three storey ultra-modern office block which will accommodate two international banks and an accounting firm.

Bicon Zambia Ltd are responsible for the design and supervision of all the civil and structural works on the project which is expected to be completed within a period of two years.

CONSULTANCY SERVICES FOR DESIGN AND SUPERVISION

Client: Pyramid Plaza

Funding: African Banking Corporation

Architects: Anderson + Anderson International

Consultant: Bicon Zambia (Civil and Structural Engineering)

Value: US$ 3.0 Million

Date: 2002 – To date
**DESCRIPTION**

This project, which is lead by Stauch Vorster of South Africa in association with PJP Associates of Zambia involves the construction of a 10,000m² office park in the Lusaka Agricultural and Commercial Showgrounds. The offices will accommodate a number of international and Local tenants.

Bicon Zambia Ltd are responsible for the design and supervision of all the civil, structural, Mechanical & Electrical Engineering works on the project.

**CONSULTANCY SERVICES FOR DESIGN AND SUPERVISION**

- **Client:** Commonwealth Development Corporation
- **Funding:** Commonwealth Development Corporation
- **Architects:** Stauch Vorster Architects
  In association with PJP Associates
- **Consultant:** Bicon Zambia (Civil, Structural, Mechanical & Electrical Engineering)
- **Contract Value:** US$ 9.0 Million
- **Date:** 2002 – To date
PROJECT SHEET

ENGINEERING & PROJECT MANAGEMENT

PREPARATION OF STANDARD DRAWINGS & CONTRACT DOCUMENTATION FOR ZAMSIF

**DESCRIPTION**

In the year 2000, the Zambia Social Investment Fund (ZAMSIF) appointed Bicon Zambia Limited as Structural and Civil Engineers for the review of all existing ZAMSIF standard designs and specifications and develop standard and non standard designs for community based micro-projects.

These community based projects covered the following sectors:
- Health
- Education
- Housing & Infrastructure
- Economic & Community Facilities
- Bridges

Bicon Zambia was also tasked to convert all designs including Architectural Mechanical and Electrical to computer aided design Applications i.e Autocad.

**Client:** Ministry of Finance & Economic Development

Zambia Social Investment Fund (ZAMSIF)

**Architects:** Spectrum Architectural Consultants

**Quantity Surveyors:** Adam Hood & Partners

**Mechanical & Electrical Engineers:** RM Consulting Engineers

**Civil & Structural Engineers:** Bicon Zambia Limited

**Funding:** Zambia Social Investment Fund (ZAMSIF)

**Value:** US$0.1 Million
Bicon has over the past 35 years been responsible for a wide range of projects in the region. These projects have included feasibility studies, designs, and construction monitoring and project management in the following fields of expertise:

- Full range of municipal services
- Regional water supply and sanitation schemes
- Sewerage networks and main sewers
- Urban and rural water distribution schemes
- Reservoirs and pressure systems
- Water and wastewater conveyance through pump station, pipelines, etc
- Canalisation of rivers and streams
- Specialist hydraulic problems
- Water and sanitation pricing studies
- Treatment process and detailed design of water treatment plants
- Treatment process and detailed design of wastewater treatment plants
- Handling and treatment of industrial and toxic effluents
- Treatment and disposal of organic sludge
- Establishment of private/public participation initiatives
- Operations and maintenance
- Environmental health awareness training
- Housing infrastructure development
- Bulk urban water supply management
- Project management
- Leakage management
- Municipal management services
- Technology transfer

For each of these fields of specialisation, significant experience has been gained over the years to conduct and complete a project from its conceptualisation, through the feasibility studies, design, tendering and construction monitoring.
DESCRIPTION

This is the headquarters of the Geological Survey Department; all the collected geological data of Namibia are also stored in these buildings. Bicon was responsible for the design and supervision of all engineering services, i.e. civil, structural, electrical, electronic and mechanical.

Due to the poor soil conditions some buildings are on a compacted gravel fill raft while others have the subsoil strengthened as soil-crete.

Client: Department of works Ministry of Works, Transport & Communications
Value: US$ 4 Million
Date: 1991 – 1992
ENGINEERING & PROJECT MANAGEMENT

PROJECT SHEET

NATIONAL ASSEMBLY,
WINDHOEK, NAMIBIA

DESCRIPTION

The National Assembly building includes the Hall as well as offices for the Councillors. It is a multi storey building.

BICON NAMIBIA was responsible for all Civil/Structural/Mechanical/Electrical and Electronic design and supervision. It includes sophisticated air-conditioning and electronic equipment.

Client: Department of works
Consultant: Bicon Namibia
Value: US$ 4 Million
**Description**

The project consisted of an 8 storey (ground + 7) office block as well as the renovations and upgrading of the old prison to an office and recreation area. All engineering services had been provided involving the planning design and supervision of civil and structural as well as electrical and mechanical engineering.

The latter included: Electrical Installation, Telephone and Communication, Security Installation, Air-Conditioning Installation, Lift Installation, Fire Protection, Computer Power Supplies. The headquarters of the Geological Survey Department; all the collected geological data of Namibia are also stored in these buildings. Bicon was responsible for the design and supervision of all engineering services, i.e. civil, structural, electrical, electronic and mechanical.

Due to the poor soil conditions some buildings are on a compacted gravel fill raft while others have the subsoil strengthened as soil-crete.
The project is the headquarters of the Ministry of Mines and Energy. BICON was responsible for design and supervision of all structural, civil, electrical, electronic, lifts, air-conditioning and mechanical installation.

The building is a post-tensioned flat slabs and column construction with three lifts.

Due to the poor ground conditions the structure stands on piles.
ENGINEERING & PROJECT MANAGEMENT

PROJECT SHEET

GOVERNMENT OFFICE PARK

Client: Ministry of Works Transport & Communication
Developer: Developer Stocks & Stocks (Namibia) Pty. Ltd.
Engineers: Bicon Namibia
Architects: Pierre Smith Architects
Value: US$ 20 Million
Date: 1996 - 1998

DESCRIPTION

The project consisted of several office blocks in a park-like surrounding for the different Government Ministries.

Bicon Namibia was responsible for providing all engineering services covering the planning, design and supervision of the civil, structural, electrical and electronic engineering components.

It included the traffic flow study, the geotechnical investigation, the concrete post tensioned structure, the electrical installation, telephone and communication, security installation, air-conditioning lifts, fire protection and detection, computer power supply etc.

The project was built on a fast-track method.
DESCRIPTION

The project consisted of three office blocks, while one block was an existing building renovated and made to fit into the architecture of the other two.

They are five storey block buildings with two floors of parking underneath of reinforced concrete frame structures with post-tensioned slabs.

BICON Namibia Inc. was responsible for the planning, design and supervision of all civil, structural, electrical and electronic engineering components.

The project was built on a fast track method.
DESCRIPTION

The new central Bank of Namibia situated in a prominent position in the capital Windhoek. Strict security requirements necessitated a special design for blast resistance for the vault on an extensive communication network and a bulk of electronic devices.

The security installations not only affected the electrical side of the project, but also the structural and mechanical parts. BICON was responsible for the reporting, planning, design and supervision of all Civil, Structural, Electrical, Electronic and Mechanical components.
Pollock Williams & Partners in association with Bicon Zambia were commissioned by Air Products of South Africa to design and supervise the new control and switch-gear room at Chambeshi Mine. This project is part of the US$100 million COSAC smelter project by Anglovaal Minerals of South Africa to extract copper and cobalt from existing dumps at Chambeshi mine. Pollock Williams of South Africa was responsible for the design and contract documentation whilst Bicon Zambia was responsible for the site supervision and project management.
DESCRIPTION
In the year 2002, the American International School commissioned Bicon Zambia Limited as the consulting Engineers and Grinaker – LTA as contractors for a “Design and Build” project to extend the existing American International School.

The project involves construction of new class room blocks, football pitch parking area and access road.

Bicon Zambia Limited are responsible for the design and construction supervision of all building services, including the Electrical, Mechanical Structural/Civil disciplines.
DESCRIPTION

In the year 2002, Spectrum Architectural Consultants as Architects and Bicon Zambia Limited as the Engineers were appointed by the Zambia Institute of Chartered Accountants (ZICA) for the design and supervision of works for the construction of their resource centre. This project consists of the main office block building accommodating the Resource Centre and Library with parking and access roads as phase I and phase II being the Conference Centre and Cafeteria including access Roads and parking space.

Bicon Zambia Limited are responsible for the design and supervision of civil, structural, mechanical and electrical works including water and Sewerage reticulation.
DESCRIPTION

In the year 2002, the Zambia Revenue Authority commissioned PJP Associates as Architects and Bicon Zambia Limited as the Engineers for the Design and Supervision of the construction of the border post, warehouse, vehicle and truck parking areas and staff houses in Luangwa.

Bicon Zambia Limited are responsible for the design and supervision of civil, structural, mechanical and electrical works including water sewerage Reticulation and quality control
DESCRIPTION

In the year 2002, Bicon Zambia Limited were appointed as Engineers by Pegasus Energy South Africa for the design and supervision of works for the construction of the new Service Station in Livingstone. This project consists of the main building to accommodate a shop, filling station and adjacent fuel depot.

Bicon Zambia Limited were responsible for the design and supervision of civil, structural, mechanical and electrical works including water and Sewerage reticulation, access roads and drainage works.
DESCRIPTION

In June 2003, the Confederation of African Football (CAF) through the Football Association of Zambia (FAZ), commissioned Bicon Zambia Limited as the Consulting Engineers and Project Managers for their proposed Regional Football Academy at the Independence Stadium, on the Great North Road. The project is to be funded by CAF. The Academy will comprise a double-storey Administrative Building to accommodate offices, work areas, a cafeteria, lecture rooms, a multi-purpose sports arena, etc, and two football fields.

Bicon Zambia will be responsible for the design and supervision of the civil, structural, mechanical and electrical engineering services.
DESCRIPTION
In the year 2003, the Zambia Social Investment Fund (ZAMSIF) appointed Bicon Zambia Limited as Structural and Civil Engineers for the improvement of water supply and sanitation to Lwitikila Girls Secondary School. The school is in Mpika.

Bicon Zambia Limited are responsible for the construction supervision of all building services, water supply and sanitation and all Civil disciplines.
In 2004, The Association of Jehovah’s Witnesses in Zambia commissioned BICON Zambia Limited as Project Managers for the construction of the new Assembly Hall along Kamloops road in Lusaka. The project, which is to be one of the biggest Assembly Halls for the Association in Zambia, will be able to sit over 3000 people and host national and international masses and events.

Bicon Zambia Ltd are responsible for the design and supervision of all the engineering disciplines which include, civil, structural, mechanical and electrical engineering works. The project is on site and will be completed in February 2005.
PROJECT SHEET

ADDITIONS AND IMPROVEMENTS TO NSEFU HOUSE FOR MADSON INSURANCE, LUSAKA, ZAMBIA

DESCRIPTION

In 2004, Madson Insurance Company (Zambia) Limited commissioned BICON Zambia Limited as Civil/Structural and Electrical Engineers for the Rehabilitation and Extentions to Nsefu House on Cairo Road in Lusaka.

The project, which consists of extending the existing 3 storey building to 6 storey shall be the Headquarters of Madson Insurance Company (Zambia) Limited.

Bicon Zambia Ltd are responsible for the design and supervision of all the engineering disciplines which include, civil, structural, mechanical and electrical engineering works. The project is on site and will be completed in 2006.

CLIENT : Madson Insurance Company (Z) Limited
FUNDING : Madson Insurance Company (Z) Limited
ENGINEERS : BICON Zambia Ltd
ARCHITECTS : Reynold & Vida (S.A) in association with G Nyau Architects (Zambia)
CONTRACTOR : Yangts Jiang Enterprises Limited
VALUE : US$ 3.0Million
DATE : 2004 to Date
DESCRIPTION

In 2005, Lawrence Sikutwa Associates (LSA) commissioned BICON Zambia Limited as Civil/Structural and Electrical Engineers for the Rehabilitation and Extensions of New offices on Plot No. 316 Independence Avenue, Lusaka.

The project, which consists of rehabilitating and extending the existing building shall be the Headquarters of Lawrence Sikutwa Associates (LSA).

Bicon Zambia Ltd are responsible for the design and supervision of all the engineering disciplines which include, civil, structural, mechanical and electrical engineering works.

CLIENT: Lawrence Sikutwa Associates (LSA)
FUNDING: Lawrence Sikutwa Associates
ENGINEERS: BICON Zambia Ltd
ARCHITECTS: Reynold & Vida (S.A) in association with G Nyau Architects (Zambia)
CONTRACTOR: Yangts Jiang Enterprises Limited
DATE: 2005 to 2008
In 2004, Madson Insurance Company (Zambia) Limited commissioned BICON Zambia Limited as Civil/Structural and Electrical Engineers for the Rehabilitation and Extentions to Nsefu House on Cairo Road in Lusaka.

The project, which consists of extending the existing 3 storey building to 6 storey shall be the Headquarters of Madson Insurance Company (Zambia) Limited.

Bicon Zambia Ltd are responsible for the design and supervision of all the engineering disciplines which include, civil, structural, mechanical and electrical engineering works. The project is on site and will be completed in 2006.