



Kuwait University uses GIS to capture, manage, analyze and visualize information about the campus site, buildings and facilities.

Kuwait University has committed to using geographic information system technology to support the planning, design, development and operations of the Sabah Al-Salem University City at Shadadiya.

The Challenge

In early 2010, Kuwait University recognized the need for specialized consulting and requirements documentation for geodatabase design of the Sabah Al-Salem University City project. In order for the plan to be successful, the needs of both Turner Projacs and Kuwait University were to be incorporated into the design and construction details of the project.

PROJECT GOALS INCLUDED:

- Establish a powerful geographic information system (GIS) for the University City

- Create a comprehensive geodatabase for the as-built data
- Manage campus assets
- Create advanced applications based on a comprehensive geodatabase
- Establish the GIS infrastructure for future geospatial needs

The Solution



Kuwait University requires a Master Program display over Master Plan map for status reporting.

With their expertise in enterprise GIS consulting, development and implementation worldwide, PenBay Solutions was asked to work with Openware, Kuwait University and Turner Projacs on this 5-year, multi-billion dollar project to create a strategic roadmap for understanding

the milestones and effort level of this facilities information infrastructure project.

PenBay specializes in providing the value of GIS to the facility life cycle, from strategic consulting engagements to integrating GIS into existing enterprise systems. In this case, PenBay is providing expertise in using GIS to capture, manage, analyze and visualize information about the campus site, proposed and existing buildings, facilities, grounds and surrounding communities.

THE COMPONENTS OF PENBAY'S CONSULTING ENGAGEMENT INCLUDE:

- Development of Master Planning Vision Document
- Documenting the requirements for geodatabase design
- Documenting GIS requirements for design and construction support subsystem
- Developing CAD and GIS standards to ensure submission of complete and accurate CAD and GIS data
- Developing materials to assist design consultants in providing CAD and GIS deliverables that comply with University standards
- Documenting requirements for the mapping and cartographic subsystem
- Designing a comprehensive Facilities Information Infrastructure geodatabase for the University system



The milestone schedule using Time Slider in Flex Viewer gives insight to construction management.

The Benefits

The benefits of using GIS technology to support this process include:

- Strengthening and streamlining the design and construction phases of the campus development process
- Implementation of key applications to support operations management while establishing a GIS

infrastructure that can be expanded to other advanced application areas.

- Development of a campus 'GIS Unit' that works in conjunction with the current team to start building a core technical capability that can eventually take over the operational system and expand to future applications.

Additionally, the same technology and much of

the data may be useful for helping support academic programs, including a living laboratory that students can use to develop new application ideas.