



MICHAEL CLOUGH, PE - President of Engineering Support International
Providing Support for STC. **NOTE now with CARDNO:**
<https://db.tt/QFtyUUiP>

Mike and his team have been involved in the construction of the Sky Train Simulation: www.stc-in.com/STCweb.mpeg

OVERVIEW: Michael Clough has worked at the project management level in many different types of engineering projects. He has many years' experience in planning, design & owner representation during construction. He uses advanced computer design applications to perform analysis & design projects. As President of ESI, he is responsible for client interaction, technical design & workflow control for projects. He has been a Professional Civil Engineer for over 15 years & a Professional Agricultural Engineer for over 22 years. He has experience in designing & drafting in AutoCAD since 1988 and has many years of experience in many other types of engineering design and modeling software. He has over 20 years of experience working in consulting engineering, where he manages engineers, CAD designers, drafters and sub consultants such as structural engineers, electrical engineers and environmental consultants. Mike's company, ESI, supports the engineering activities of STC by drafting designs, Global Information System (GIS) development, creating animations and obtaining environmental and site permits.

EDUCATION and TRAINING:

BS Agricultural Engineering- Texas A&M University

Licenses:

Professional Engineer- Civil in Florida, Texas and Arizona

Professional Engineer- Agricultural in Arizona

Languages:

Spanish

RESEARCH AND PROFESSIONAL EXPERIENCE: continued

Professional Experience:

- * Project Manager for the design and permitting of a water distribution system for Nokomis, Florida. The project involved the design of potable water distribution to over 2,000 residences and businesses to connect them to the Sarasota County system.
- * Project Engineer for design and construction management for an equilibrium tank and pumping project for the Collier County South County Water Reclamation Facility.
- * Consultant for the site design of an addition to a Shell Creek Water Treatment Plant in Punta Gorda, Florida. Tasks included coordination with other consultants, drainage system layout, management of the preparation of the civil plans and local permitting.
- * Consultant for the design of irrigation of over 8,000 acres of pasture near Melbourne Fl.
- * Performed a study of treatment and reuse of water from a slurry station for the Alumbreira copper mine in Tucuman Argentina using a poplar plantation.
- * Project Manager for the design of a 500-acre earthworks project for a heap-leach project at the Mantos Blancos copper mine in Chile.
- * Project Engineer for the design of over four square miles of surface-irrigated farmland for Gila River Farms, a business entity for Gila River Indian Community in Sacaton, Arizona. Design included land leveling, canals and structures. Researched and placed into operation a novel design, level-basin irrigation, which saved water and produced higher yields of better quality crops than their existing system.

* Performed a water resources study for a 200-acre state-owned arboretum. The study included analysis of their irrigation system and recommendations for improvements, as well as study of their stormwater recovery and storage system.

* Project Engineer for the design of canals, ditches and structures for the development of a 10,000 acre farm in Sacaton Arizona.

Other Areas of Expertise:

Environmental assessments & obtaining local, state and federal permits.

PUBLICATIONS:

Clough, M. and A.J. Clemmens. 1994. Field Evaluation of Level-Basin Irrigation. ASAE 1994 International Summer Meeting. Kansas City, Missouri. June 1994; Clough, M. 1993. Computerized Irrigation Project Earthwork Design. ASCE National Conference on Irrigation and Drainage Engineering. Park City Utah. July 1993

Reports:

Preparation and submittal of a preliminary design report for the West Estero residential development in Estero Florida. The report described the proposed water and sewer systems for the development, analyzed the County Utilities, and proposed modifications that would be needed to connect the proposed residential development.

Preparation and submittal of an engineering report for the design of the irrigation system for a portion of Deseret Ranches in Melbourne Florida. The report described their wellfield capacity and permitted withdrawals, the soils, pasture grass irrigation water requirements, estimated runoff from storm events and described the design of the irrigation system.

Preparation of a report to describe the infrastructure necessary to connect Sloanes Gate, a residential development, to the North Fort Myers reuse water distribution system. The report investigated water requirements, available supply, estimated storage and pumping capacities, and provided a planning estimate of costs.

SYNERGISTIC ACTIVITIES:

Professional Memberships:

American Society of Civil Engineers-Past President, SW Florida Branch;

American Society of Agricultural and Biological Engineers-Past President, Arizona Section;

Inter-American Association of Sanitary and Environmental Engineering (AIDIS)-Director-at-Large, USA;

United States Committee on Irrigation and Drainage (USCID)-Member;

National Society of Professional Engineers-Member

Engineers Without Borders – Member and leader on a trip to Santa Cruz Ecuador on a mission to design a bridge for the small community.