Professional Record

Mr. Hayward is a licensed electrician qualified to inspect and/or install electrical work for industrial facilities. He specializes in inspection, advanced technical wiring, motor control, instrumentation wiring, schematic diagrams and fire alarm systems. As an electrician, he consistently brought major projects to a successful completion on schedule and within the budget limits.

Mr. Hayward has planned, supervised and successfully completed the electrical installation of the following Florida Intracoastal movable bridges, water/wastewater treatment plants, and industrial installations:

- SR/804/Boynton Beach Bridge
- SR-804/Hillsboro Blvd. Over Intracoastal
- SR-870/Commercial Blvd. Over Intracoastal
- Daytona Main Street Bridge
- · St. Augustine Bridge of Lions Bridge
- Barge Canal Bridges Cape Canaveral
- Bel Air Causeway Bridge
- 14th Street Bridge, Pompano Beach
- Lake Worth Bridge
- Hillsboro Inlet Bridge
- Southern Boulevard Bridge
- Atlantic Boulevard Bridge
- Sunrise Boulevard Bridge
- Oakland Park Boulevard Bridge
- Well Field Expansion, Sunrise
- Odor Control Facility, Margate
- Conveyor System American Express

Mr. Hayward is uniquely qualified to provide construction inspection for industrial projects or any other construction implementation aspect related to movable bridges or numerous other industrial complexes.

Dan W. Hayward Electrician



BAILEY ENGINEERING CONSULTANTS, INC.

Academic Credentials:

Union Electrician Apprentice School, 1983-1987
• Graduate

Licensed Electrician:

Broward County #90-WE-2642-X Palm Beach County #J15606

Employment Record:

Feb. 1998-Present-Bailey Engineering Consultants

 Responsible for all aspects of construction supervision. This includes shop drawing review, responding to contractor questions and field supervision of contracted work.

Feb. 1991-Feb. 1998 - Edwards Electric, Inc.

 Performed electrical installation and supervision as foreman for various electrical contracts including movable bridges, water and wastewater treatment facilities, and conveyer systems.

Jan. 1988-Feb. 1991 - Hayward Electric Inc.

 Performed electrical installation and supervision as foreman for all phases of residential electrical work including estimates and preparation of proposals for clients.

Principal Areas of Expertise:

- Advanced technical wiring
- Motor control
- · Instrumentation wiring
- Schematics
- Fire alarms systems

Professional Activities:

• Member of Local Union 728 - 12 Years



COMPANY PROFILE

Bailey Engineering Consultants, Inc. is a multi-disciplined consulting engineering firm specializing in electrical and instrumentation design for municipal and industrial projects. We provide consulting engineering services to the public and private sectors with preferential services to other consulting engineers.

In April 1992, Bailey Engineering Consultants, Inc. was formed. We are a second generation consulting firm. Our present staff includes two registered electrical engineers, one field supervisor, one electrical designer and two designer/Cadd operators. Our experience includes moveable bridge designs, municipal lighting projects and electrical and instrumentation system designs for numerous water and wastewater treatment plants located throughout the Southeastern United States.

We take pride in the fact that while we are a small sized firm, we utilize state of the art computerization to accomplish our design projects and project management. The use of CADD systems provides us with enhanced production quality, lower operating costs and closer engineer participation thereby ensuring a higher quality product for the owner.

To reinforce our emphasis on quality in all electrical designs, the company uses an internal quality assurance/quality control system and interfaces with designers from complimentary disciplines to review standards and specifications for specific project needs.

Our electrical distribution systems experience covers the full range up to 13KV distribution with significant experience involving 4,160 volt distribution systems and paralleled generators. Our instrumentation systems design includes SCADA and PC based systems, as well as numerous traditional WWTP monitoring and control panel designs and moveable bridge designs throughout Florida. Our design experience encompasses computer/PLC controlled systems utilizing SCADA based systems for interfacing to remote locations, as well as hard wired relay controlled custom solutions.

Bailey Engineering Consultants, Inc. is staffed to provide electrical, instrumentation and HVAC engineering services from inception through design, bid, and construction completion.

Professional Record

Mr. Bailey is an electrical engineer experienced in designing electrical power and control systems for heavy industrial and municipal applications. management responsibilities His project encompass preliminary and final design, cost estimating, and construction/start-up services. Mr. Bailey has significant experience in 480 volt power systems, PLC-based control systems and applications involving variable frequency drives similar to those utilized in movable bridges. He participates on quality assurance/quality control teams to evaluate conformance codes and design adherence of the electrical systems. Mr. Bailey is also familiar with communications technologies.

Mr. Bailey has approximately 18 years of electrical engineering experience with other consultants and communications firms. He designed electrical and control systems for water and wastewater treatment and disposal facilities, water distribution systems and instrumentation and control systems for municipal and industrial facilities.

Mr. Bailey was the project manager, in responsible charge, for all electrical design concerns for the following projects:

- NCHRP Project 10-43
 Transportation Research Board
 "Moveable Bridge Inspection, Evaluation and Maintenance Manual"
- Hillsboro Inlet and Lake Worth Bridges Florida DOT, District 4
- District Wide Structural Design and Emergency Response, Florida DOT, District 4
- SR-870/Commercial Blvd. Over Intracoastal Waterway Broward County, Florida
- SR-810/Hillsboro Blvd. Over Intracoastal Waterway Broward County, Florida
- SR-804/Boynton Beach Bridge FDOT, District 4

Stephen E. Bailey President



BAILEY ENGINEERING CONSULTANTS, INC.

Academic Credentials:

Bachelors of Electrical Engineering Georgia Institute of Technology, 1983 Power and Control Theory

Professional Engineer - Florida, Virginia, Georgia, North Carolina

Employment Record:

1992-Present-Bailey Engineering Consultants 1986-1992 - C.E. Bailey & Associates, Inc. 1984-1986 - Advanced Micro Devices 1983-1984 - Hewlett-Packard

Principal Areas of Expertise:

Electrical and Control Design of Water and Wastewater Treatment Facilities, Pump Stations, Industrial, Environmental, Municipal and Commercial Projects

Electrical Studies, Value Engineering, and All Phases of Project Management

Professional Activities:

National Society of Professional Engineers (NSPE)
Institute of Electrical and Electronic Engineers (IEEE)
Florida Engineering Society (FES)
Florida Institute of Consulting Engineers (FICE)
National Fire Protection Association (NFPA)
Instrument Society of America (ISA)