

David M. Coles

Professional Qualifications

Bachelor of Science, Mechanical Engineering, University of Washington, 1970

Member, American Society of Heating Refrigeration and Air Conditioning Engineers (ASHRAE)

Registered Professional Engineer, State of Washington, Mechanical, 1974, No. 14822

Professional Experience Summary

Management and Administration: Ten years' experience planning, organizing, and directing the efforts of a diverse work group to successfully execute multi-million dollar projects.

Design: Over 30 years' experience designing heavy commercial and industrial facilities. Designed HVAC, plumbing, fire protection, process piping, and process exhaust systems, as well as controls and instrumentation; prepared cost estimates and specifications; and prepared pre-purchase specifications for long-lead and specialty equipment.

Construction: Served as Construction Manager on a \$43M remodel of an active facility. Throughout career, reviewed and approved submittals, estimated and negotiated change orders, reviewed and approved progress payment requests, and effectively resolved conflicts in the field.

Start-up and Commissioning: Responsible for the start-up and commissioning of a large pump station with a total connected pump horsepower of 14,000. Pump station force main included a 12-mile, eight-foot diameter, underground pipe installed through the heart of an industrial area. This facility was placed into continuous operation with a minimum of difficulty as a result of my thorough testing and pre-planning of sequential activities.

Professional Employment History

October 1994 to Present

Coles Consultants L.L.C., 10503 23 Ave NE Seattle, WA 98125

Firm's focus has been on providing mechanical and electrical engineering expertise for modifying and upgrading existing facilities. Additional focus includes testing and troubleshooting of existing equipment and systems, facility condition surveys, and construction administration. David M. Coles PE has served as an expert witness.

November 1993 to September 1994

Bouillon, Christofferson & Schairer, 1201 Third Avenue, Suite 800, Seattle, WA 98101

Project Manager: Responsible for a multitude of design projects and projects under construction.

March 1981 to November 1993

Municipality of Metropolitan Seattle, 821 Second Avenue, Seattle, WA 98104

Engineering Manager (May 1987 to January 1990): Responsible for the design of a \$578M sewage treatment plant expansion.

Manager of Procurement and Prefabrication (February 1990 to April 1992): Managed a diverse group of individuals who prepared pre-purchase specifications for long-lead items and specialty equipment. Also prepared bid documents, advertised for bids, answered questions during bidding, reviewed bids, and awarded contracts. Total number of contracts exceeded 70 and the total dollar volume was in excess of \$30M.

Construction Manager (May 1992 to November 1993): Managed \$43M renovation of active sewage treatment plant.

Manager (October 1985 to April 1987): Responsible for the start-up and commissioning of pump station and force main. Managed pre-purchase of equipment including four 650-horsepower and four 2,560-horsepower pumps, motors, and variable-speed drives.

Facilities Engineer (May 1981 to September 1985): Designed expansions and upgrades at existing sewage treatment and bus maintenance facilities.

March 1981 to April 1981

Self Employed: Consulting engineer in the HVAC field.

February 1977 to February 1981

Wood/Harbinger, Inc., 12707 – 12th Avenue NE, Kirkland, WA 98033

Senior Mechanical Engineer: Designed HVAC, plumbing, fire protection and piping systems for industrial and institutional facilities. Responsibilities included preparation of specifications, technical report writing, cost estimating, construction coordination, and energy audits/energy conservation studies. Also managed energy monitoring and controls and balancing and testing divisions.

March 1970 to February 1977

Bouillon, Christofferson & Schairer, 505 Washington Building, Seattle, WA 98101

Design Engineer: Responsible for HVAC, plumbing, and piping systems for industrial and institutional facilities.

Manager: Supervised balancing and testing of HVAC and piping systems for industrial and institutional buildings. Duties included estimating fees, overseeing their completion, and ensuring completion within budget.

Balancing and Testing Technician: Balanced and tested HVAC and piping systems for industrial facilities.