

R&M ENGINEERING CONSULTANTS
NORMAN L. BENNION, P.E., S.E.

PRINCIPAL ENGINEER

Current Responsibilities

Principal Engineer responsible for all structural and civil engineering work performed. A licensed engineer in most the Western United States, Mr. Bennion as the owner of R&M Engineering has experience in project and construction management.

Job Related Experience

41 years.

Selected Task Assignments

Design Engineer: Mr. Bennion has performed civil design work including hydrological work site selection, roadway design, site drainage, and overall site drawings. A few of the projects completed are listed below. Arby's restaurants in Utah and California, 13 mile road design for Kennecott minerals, 3.5 mile access road and complete site design for hazardous waste incinerator site for Aptos, numerous site design and hydrology calculations for runoff on facilities in Utah.

Project Manager: Coal train unloading and ship loading facility located in San Francisco Bay, California. Complete design for train unloading hoppers, track layout, dock rehabilitation, overland conveyors, and ship loader. Restructuring of wharf and dock facilities and equipment designed to handle Panamax vessels to send and receive coal, coke, and other bulk materials to overseas locations. The entire dock was restructured by adding new piles and decking with electrical inset on the dock.

Value Engineer: Employment Securities Building, Main Office in Salt Lake City, Utah; Utah State Prison in Draper, Utah; Eccles Events Center at the University of Utah in Salt Lake City, Utah; Academic Service Center at SUSC in Cedar City, Utah; Agricultural Education Building at Utah State University in Logan, Utah; and Employment Securities Building, South Branch, in Murray Utah. On all of these projects, Mr. Bennion provided value engineering input for the entire project with emphasis on the civil and structural engineering aspects of the design.

Design Engineer: Structural and architectural design for industrial and commercial facilities. Work included design of pre-cast concrete tilt-up units and floor systems for a change house in Southern Utah and a large 40-foot tall warehouse structure in Salt Lake. These designs required knowledge of many areas of construction as well as the critical connections to tie different building components together.

Design Engineer: Mr. Bennion has provided foundation and site civil design for many warehouse structures in Salt Lake and surrounding areas. Using pre-engineered buildings as the basis, design code requirements have been met for structural design, hydrology, and building safety. Mr. Bennion has coordinated numerous projects from client concept through permitting with City and County officials.

Design Engineer: Numerous coal industrial facilities in Utah, New Mexico, and Wyoming have provided experience in structural steel reinforced concrete, railroad design, and roadwork, 1,200-foot slurry waste pipeline, foundation design for a 5-story, 100-foot by 80-foot industrial building, design of a 100-foot high concrete stacking tube and reclaim tunnel. Work also included a 500-ton surge bin and 3-story steel structure with numerous conveyors to feed and discharge the bulk material.

Design Engineer: Structural design of waste coal handling facility including 15 conveyors, 3 crushers, 2 screens, 3 silos, truck unloading. The project design was completed in 1991 with an additional loop system in 1993.

Design Engineer: Experience with design of numerous wood structures for commercial developers, Western Style Restaurant, condominiums, shopping center project, modular buildings for a kitchen and dining facility for the Air Force, and numerous school buildings in Utah. These structures have long-span, glue-lam beams with a high concern for safety.

Design Engineer: Structural and Civil design of numerous projects where terminals for the transfer of crude oil and other products are trans-loaded from truck and trains to storage and eventually to either trains or ships for transport. The extent of the work includes road and rail design, pipe supports as well as all buildings and support structures. The work also includes work on dock structures for the loading of vessels.

Design Engineer: Structural and civil design of crude shipping and receiving terminals located in North Dakota and Delaware including the rail trackage and pump stations, support buildings and civil work associated with the project. Construction management of the facility was provided for code compliance and for structural observation of the project.

Education

B.S., 1975, Civil Engineering, Structural Emphasis, University of Utah. Graduate Study in Engineering Administration, 1977 to 1983.

Certificates/Registrations

Utah Certified Structural Engineer
Professional Engineer (Civil/Structural); Utah Original License Total of 12 states including Washington.
Cold Regions Engineering Course, Seattle, 1985

Organizations

Utah Professional Engineering and Land Surveying Licensing Board (8 years, Past Chair)
American Council of Engineering Companies - Utah
Structural Engineers Society of Utah
Utah Engineers Council, Past Chairman
Past Member, Chi-Epsilon, Civil Engineering Honor Society
American Institute of Steel Construction, Professional Member

ATTACHMENT A