

# Aaron D. Dunlop, P.E.

# Forensic Engineering Consultant

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### **EXPERIENCE**

**Forensic Engineering Consultant:** Providing engineering consultation to law firms, insurance industry, and construction companies in coordination with William Dunlop, P.E. for 25+ years (100+ Cases, 60% plaintiff / 40% defense)

- Typical construction cases include, in part:
  - Falls from ladders, scaffolds, floor openings, open sided floors, roofs, structural steel, etc.
  - Excavation or trench collapse; i.e. shoring or sloping problems
  - Rigging and material handling problems
  - Crane operations, including tip overs and power line contact
  - Heavy equipment operations and steel erection
  - Site premises hazards / building code violations; slips, trips, falls, egress, etc.
- Services provided include:
  - Accident causation and determination of various parties responsibilities; i.e. owner, construction manager, general contractor, subcontractor, etc.
  - Safety research of building/construction codes, industry standards, and OSHA regulations
  - Site inspections to determine building code / OSHA standard compliance
  - Application of appropriate standards and industry practices
  - Detailed engineering reports, drawings, and creation of physical models as necessary involving engineering analysis, judgment, and code/standard interpretation
- Licensed Professional Engineer, State of Iowa # 21471 and Minnesota # 42690

## Operations Manager, Mississippi River: (2015-Present) US Army Corps of Engineers, Pleasant Valley, IA

- Lead, supervise, oversee, and execute approximately \$100 Million annually of heavy construction, maintenance, and repair
  on the Mississippi River through in-house government workforce of over 300 employees
- Construction, maintenance, and repair activities are typical of a large civil infrastructure construction company including; heavy equipment such as cranes, towboats, barges, excavators, dozers, forklifts, manlifts, and various other industrial and construction type equipment as well as working conditions including the hazards associated with heavy steel construction
- Responsible for ensuring safety of workforce through knowledge and understanding of applicable industry standards, OSHA Regulations, and enforcing Corps of Engineer safety regulations found in EM 385-1-1

### Chief of Maintenance, Mississippi River: (2008-2015) US Army Corps of Engineers, Pleasant Valley, IA

- Execute over \$14 Million annually of maintenance and repair on Locks and Dams along the Upper Mississippi River through subordinate supervisors and workforce of approximately 85 employees
- Overall responsibility for project site safety on large construction sites including aforementioned equipment
- Plan and manage Corps of Engineers bi-annual, 40 hour, Marine Safety Seminar in 2008, 2010, 2012, 2023

### Deputy Brigade Engineer: (2010-2011) United States Army, Army Sustainment Command, Bagram, Afghanistan

- Planned, oversaw, and executed over \$250 Million annually worth of heavy industrial facility construction, totaling over 320 active construction projects at military installations across Afghanistan
- Provided onsite inspection and oversight as the senior civilian government engineer with a team of engineers to ensure project completion schedules, specification accuracy, and worksite safety
- Provided practical construction guidance to local Afghan contractors and advice on safe methods for construction. This responsibility was particularly difficult in a developing third world country where safety and proper protective equipment and/or methods were not available and were largely not adopted or understood

**Previous Army Civilian Positions Held:** Deputy Director Public Works (Heidelberg, Germany); Quality Assurance Engineer (Heidelberg, Germany); Structural / Civil Engineer (St. Paul, MN)

# EDUCATION / CREDENTIALS / TRAINING / MEMBERSHIPS

University of Minnesota, Institute of Technology, Minneapolis, Minnesota, Civil Engineering Degree, June 1998 Emphasis in structures, construction, and construction management

Licensed Professional Engineer (P.E.), State of Iowa # 21471 and State of Minnesota # 42690

Lead Investigator on Multiple USACE Accident Board of Investigations, Providing Findings to Washington DC, 2019-present USACE Instructor, Operations Manager's Class, Navigation and Safety Subject Matter Expert, Washington DC, 2017-present Commissioner, City of Davenport, Iowa, Plan and Zoning Commission, 2023-present

Planned / Managed Corps of Engineers bi-annual, 40 hour, Marine Safety Seminar in 2008, 2010, 2012, 2023

OSHA 30 hour Construction Industry Training, 2006, 2013

Safety Inspection of In-Service Bridges, National Highway Institute