

JOHN ELDER, PE, SE – PRINCIPAL STRUCTURAL ENGINEER

PROFESSIONAL LICENSED CIVIL/STRUCTURAL ENGINEER – AZ, CA, HI, MD, NC, NJ, NV, TX, UT

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PROFILE

- Founding partner of structural consulting firm United Structural Design, LLC
- Master's-level licensed structural engineer with significant professional experience working in major building construction markets including Las Vegas and Phoenix
- Model Law Structural Engineer with ability to obtain civil and structural licensure in all 50 states
- Expertise in management and design of photovoltaic (PV) projects
- Innovative use of 3D modeling and photorealistic renderings in proposals to increase success rates of project awards

Key strengths include:

Building design	Concrete design
Solar structures	Foundations
Remodels/Additions	Earth retention structures
Wind and seismic design	Masonry design
Project management	Wood design
Seismic base isolation	Cold-formed steel
Revit modeling	Business development
3D building analysis	Inspections and Field activities
Steel design	Forensic engineering

- **Industries:** Aviation, Education (K-12), Healthcare, Industrial, Corrections, Hospitality, Public & Institutional, Religious, Retail, Solar, Technology, and Mining.
- **Certifications:** Licensed Structural/Civil Engineer (AZ, CA, HI, MD, NC, NJ, NV, TX, UT), NCEES model law structural engineer, Occupational Safety and Health Administration trained (OSHA 30-hour)
- **Computer Skills:** Bluebeam, Adobe Acrobat, Microsoft Office, Project Information Management Software
- **CAD/Design Packages:** AutoDesk (Revit and AUTOCAD), RAM Structural System, SAP2000, Risa 2D/3D, Tedds, RAM Concept

PROFESSIONAL EXPERIENCE

United Structural Design, LLC, Phoenix, AZ
Partner, Principal
March 2014 – Present

Founding member/principal of United Structural Design, LLC a full-service structural engineering consulting firm. Responsible for business management and technical activities. Directs and provides full-service structural engineering services for building and non-building projects.

- Responsible for developing solar, forensic, and commercial storage business sectors.
- Created 3D modeling and drafting standards for company.
- Involved with negotiating and winning long term contracts to provide engineering design services for major steel fabricator.

PK Associates Structural Engineers, LLC, Scottsdale, AZ**Associate, Senior Engineer***August 2013 – March 2014 (8 months)*

Responsible for managing multiple building projects with complex architectural designs to completion including: conceptual design, detailed design, assisting with financial control, representing the company at project meetings, and supervising and reviewing work done by structural designers and E.I.T.s.

- Responsible for design of major structural steel casino project.
- Identified creative solutions for complex cathedral project featuring curved timber members.
- Value engineered large tilt-up concrete panel project.

M+W U.S. Inc, Phoenix, AZ**Structural Engineer 7***October 2012 – August 2013 (10 months)*

Engineer for several multi-billion dollar fast-track microelectronics manufacturing projects located in Chandler, Arizona and Malta, New York along with research facilities in Iowa.

- Responsible for client deliverables, problem resolution, value engineering, development of repair methods, and client relations during construction.
- Lead structural engineer responsible for multidiscipline coordination.

CH2M HILL – Structural Design Group (formerly Paragon Structural Design), Phoenix, AZ**Structural Engineer 4***March 2011 – October 2012 (1 years, 8 month)*

Field engineer for multi-billion dollar fast-track microelectronics manufacturing project located in Chandler AZ. Responsible for client deliverables, problem resolution, value engineering, development of repair methods, and client relations during construction.

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- Utilized BIM techniques to streamline multidiscipline coordination.

Barker Drottter and Associates, Las Vegas, NV**Project Engineer***June 2007 – June 2009 (2 years)*

Started professional engineering career at Barker Drottter and Associates where I was given projects of increasing scope and complexity. Responsible for engineering of multiple high profile public sector and not-for-profit projects including K-12, Corrections, Retail, Performing Arts, Healthcare, and Gaming.

- In charge of projects' complete life cycles from schematic design to construction.
- Known for providing excellent Services During Construction (SDC) including: Request For Information (RFI) responses, submittal review, and periodic site observations
- High seismic design experience

ACADEMIC QUALIFICATIONS

M.S.C.E., Structural Engineering, University of Nevada

B.S., Civil Engineering, University of Nevada

CONFERENCES AND RELATED TRAINING

- 10-Hour OSHA Course in Construction Safety and Health

PERSONAL INTERESTS

- Father and husband
- Active in sports including: golf, beach volleyball, and roller hockey. Played club hockey in college.
- Enjoys outdoor activities including hunting, camping, and fishing.
- Skilled do-it-yourselfer

DISTINGUISHED PROJECTS

- **Intel F42 – Chandler, Arizona**
1.3 million sq ft large-scale semiconductor campus expansion. The expansion included a new 200,000 sq ft high volume manufacturing facility, fab support and utility buildings, multi-story office, and site infrastructure upgrades.
- **Global Foundries – Malta, New York**
The project consisted of a \$1,400,000,000; new four-story high volume semiconductor manufacturing facility, with 300,000 sf of cleanroom space; fab support and central utility buildings, and site infrastructure upgrades
- **Prison 8 Maximum Security Prison – Indian Springs, Nevada**
With a construction budget of \$230,000,000, the project consisted of a southern regional medical facility, administration, guard towers, gymnasium, dining, and central plant buildings and was designed as essential facilities with a Seismic Design Category of D.
- **Bishop Gorman High School – Las Vegas Nevada**
The \$96,000,000 Bishop Gorman High School project included state-of-the art classrooms, a performing arts center, library, and football stadium and was designed as an essential facility with a Seismic Design Category of D.
- **McCarran International Airport Security Wing – Las Vegas, Nevada**
With a construction budget of \$109,000,000, the expansion of the structure was designed as an essential facility with a Seismic Design Category of D with Special Steel Moment Frames for the lateral force resisting system.
- **Baseline Self Storage Facility – Phoenix, AZ**
Two story – 100k SF mini self-storage facility comprised of cold-formed steel shear walls, concrete over metal deck floors and conventionally reinforced mat slab foundation.
- **Dysart Self Storage Facility – Phoenix, AZ**
Three story – mini self-storage facility comprised of cold-formed steel shear walls, concrete over metal deck floors and conventionally reinforced mat slab foundation.