



## **STEVEN C. HELFRICH**

### **EDUCATION**

- M.S. Civil Engineering 1977, Duke University, Durham, NC
- B.S. Civil Engineering 1976, Lehigh University, Bethlehem, PA

### **REGISTRATIONS**

- Civil Engineer, California, Certificate No. C40046, since 1985
- Geotechnical Engineer, California, Certificate No. GE389, since 1987
- Professional Engineer, Texas, Certificate No. 49273, since 1981
- Professional Civil Engineer, Nevada, Certificate No. 13474, since 1998
- Professional Engineer (Civil), Arizona, License No. 38408, since 2002
- Professional Engineer, Utah, License No. 8714078, since 2013
- General Building Contractor, California, License No. 720729, since 1996

### **PROFESSIONAL SOCIETIES**

- Member, American Society of Civil Engineers (ASCE), since 1976
- Senior Member, National Academy of Forensic Engineers (NAFE), since 1998
- Member, Sigma Xi, The Scientific Research Society, since 1976
- Associate Member, Structural Engineers Association of Southern California (SEAOSC), since 1998
- Member, National Society of Professional Engineers (NSPE), since 1998
- Member, Forensic Expert Witness Association (FEWA), since 2008

### **EMPLOYMENT HISTORY**

- Staff engineer, McClelland Engineers, Houston, Texas, 1978 through 1981
- Project engineer, McClelland-Suhaimi, Dammam, Saudi Arabia, 1981 through 1985
- Senior Engineer, McClelland Engineers, Ventura, California, 1985
- Senior Engineer, Converse Consultants, Pasadena, California, 1985 through 1989
- Vice President, Converse Consultants, Redlands, California, 1989 through 1995
- Graded the California geotechnical engineer license examination in 1992
- Provided structure evaluation services to the California Office of Emergency Services in 1992, following the Landers Earthquake

- **Provided complaint review and evaluation services to the California Board of Registration For Engineers and Land Surveyors between 1994 and 1996**
- **Part-time instructor, Civil Engineering Department, Cal-Poly Pomona, 1995 through 2001**
- **Consultant, Lambert-Menalo, Brea, California, 1995**
- **Self-employed, 1996 through 2005**
- **President, Helfrich-Associates, Inc. since 2005**

## **EXPERIENCE**

- **Practicing design engineer (approximately 70 % of time in past 10 years)**
- **Providing services to both plaintiffs (approximately 20%) and defendants (approximately 80%)**
- **Testified in more than 80 depositions and more than 20 trials and arbitrations since 1985**
- **Project design and construction experience in California, Nevada, Arizona, Texas, Saudi Arabia, Gulf of Mexico, Iraq, Kuwait, Trinidad, and Zaire**
- **Oil production and refining project design and construction experience between 1978 and 1985**
- **Residential, commercial, and industrial project design and construction experience since 1985**
- **Evaluated more than 1000 structures that were damaged by earthquakes since 1985**
- **Prepared structure repair scopes and plans for more than 200 damaged structures due to fires, wind storms, and vehicle impact since 1995**
- **Evaluated construction and design defects on more than 300 structures since 1995**
- **Evaluated surface drainage conditions at more than 100 sites since 1995, and provided remedial recommendations**
- **Evaluated more than 200 damaged structures, and prepared foundation repair recommendations, plans, and reports, since 1995**
- **Evaluated concrete and asphalt pavement failures at more than 50 projects since 1995**
- **Evaluated construction vibrations and the effects of vibrations on more than 100 structures since 1995**
- **Determined cause and origin of reported damage to more than 500 structures since 1995**

May 23, 2018