

# **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

#### August 12, 2013