PERSONNEL QUALIFICATIONS

Howard J. Hill | Senior Principal and Associate Executive Director of Project Operations

EDUCATION

- University of Illinois at Urbana-Champaign
  - Bachelor of Science, Structural Engineering, 1982
  - Master of Science, Structural Engineering, 1986
  - Doctor of Philosophy, Structural Engineering, 1988

PRACTICE AREAS

- Bridge Engineering
- Failure Investigation
- Earthquake Engineering
- Earthquake Damage Assessment
- Repair and Rehabilitation Design
- Structural Investigation
- Structural Analysis

REGISTRATIONS

- Civil Engineer in CA
- Professional Engineer in IN
- Structural Engineer in CA and IL

PROFESSIONAL AFFILIATIONS

- Earthquake Engineering Research Institute

CONTACT

hhill@wje.com
847.272.7400
www.wje.com

EXPERIENCE

Howard Hill joined WJE in 1988 and has since participated in hundreds of structural investigations and evaluations. His experience includes investigation of structural failures, assessment of damaged structures, evaluation of structural stability, evaluation of construction and design errors, design of repairs and retrofits for existing structural systems, peer reviews of proposed designs, instrumentation and data analysis, expert testimony, and the preparation and presentation of technical papers and seminars. Dr. Hill's work has involved structural materials—such as steel, concrete, masonry, and timber—and many types of structural systems, such as bridges, buildings, stadiums, parking garages, towers, and industrial facilities.

REPRESENTATIVE PROJECTS

Bridge Engineering/Analysis/Evaluation

- Saylorville Bridge - Polk City, IA: Investigation of wind-induced oscillations
- Fairview Road Bridge - Oshkosh, WI: Design review; load rating; evaluation of excess deflection issues
- Maumee River Bridge - Toledo, OH: Evaluation of bridge components for severe construction loads
- Various Bridges - Nationwide, U.S.: Development and implementation of methods for evaluating effects of deterioration in bridge truss gusset plates

Collapse/Failure Investigation/Analysis

- Route 69 Bridge - Clifton, TN: Analysis of 1,200-foot steel plate girder bridge that collapsed during construction
- I35W Bridge - Minneapolis, MN: Investigation of the collapse of forty-year-old interstate highway bridge
  Monroe Antenna Tower - Monroe, LA: Investigation of 1,900-foot guyed tower collapse

Earthquake/Seismic Engineering/ Analysis/Evaluation

- Poplar Street Complex - East St. Louis, IL: Seismic performance evaluation and design of retrofits
- Wabash River Bridge - IN: Seismic performance evaluation of main bridge and approach systems and design of retrofit measures for deficient sections
- County Courthouse - Greene County, IN: Critique of various seismic retrofit approaches
- Northridge, Koacelli, and Bhuj Earthquakes: Post-earthquake damage assessment of many structures in the United States, Turkey, and India

Repair and Rehabilitation Design

- Hospital Inpatient Tower - Cooperstown, NY: Modification of previous seismic retrofit design to meet owner objectives
- Bridge Erection Gantry - Toledo, OH: Design modifications to 300-foot-long box girder erection gantry and its operations manual to accommodate unique project demands
- Shady River Bridge - Roseburg, OR: Determination of cause of damaged box girder web elements and design repairs
- Various Bridges - Nationwide, U.S.: Development and implementation of methods for efficiently increasing the strengths of deteriorated gusset plates