



#### EDUCATION

- University of Illinois at Urbana-Champaign
  - Bachelor of Science, Civil Engineering, 1983
  - Master of Science, Civil Engineering, 1985

#### PRACTICE AREAS

- Parking Structures
- Prestressed and Post-Tensioning
- Repair and Rehabilitation Design
- Concrete Deterioration
- Bridge Engineering
- Foundations and Retaining Walls
- Plazas and Terraces
- Steel Structures

#### REGISTRATIONS

- Professional Engineer in IL, KY, and MO
- Structural Engineer in IL

#### PROFESSIONAL AFFILIATIONS

- American Concrete Institute
- American Society of Civil Engineers
- Post-Tensioning Institute

#### CONTACT

- [jdonnelly@wje.com](mailto:jdonnelly@wje.com)
- 847.272.7400
- [www.wje.com](http://www.wje.com)

#### EXPERIENCE

James Donnelly has significant experience in the investigation and repair of concrete structures. This includes major investigations of distress in post-tensioned, precast, and conventionally reinforced concrete structures, including more than 150 parking structures. As an expert in concrete repair, he is a frequent speaker for a series of concrete repair seminars given by ACI.

Mr. Donnelly's experience also includes the investigation and repair of corroded steel structures, distressed and decayed wood structures, and foundation settlement problems. He also has experience in the inspection and repair of plazas, design of curtain wall framing, stone testing, and facade inspections. Mr. Donnelly has served as project manager and project engineer on a wide variety of structural investigations and evaluations.

#### REPRESENTATIVE PROJECTS

##### Parking Structures

- Northwestern Mutual Home Office Parking Garage - Milwaukee, WI: Extensive repairs of slab-and-beam post-tensioning
- Washington University in St. Louis - St. Louis, MO: Evaluation of all parking garages on main campus and development of repair and maintenance plan
- US Bank Plaza Garage - St. Louis, MO: Evaluation of structure and development of repair prioritization for annual repairs to this parking garage
- Des Plaines Casino Garage - Des Plaines, IL: Design review of precast concrete elements and investigation of partial collapse
- Children's Mercy Hospitals and Clinics - Kansas City, MO: Capacity evaluation due to low-strength concrete in garage structure
- Continuum Parking Garage - Austin, TX: Development of repairs for precast elements damaged by DEF
- Washington University in St. Louis - Clayton, MO: Annual repairs to floor slabs of the West Campus Garage

##### Repair and Rehabilitation Design

- Olympia Centre - Chicago, IL: Investigation and repair design for cracking in structural concrete frame

- Little Village High School - Chicago, IL: Investigation of collapsed hollow-core plank and design and construction review of entire floor system
- Palo Verde Water Treatment Facility - Tonopah, AZ: Development of repair design for structural rebuild of clarifier tanks
- Orlando Airport People Mover - Orlando, FL: Evaluation and repair recommendations for concrete guideways
- 612 South Clinton Street - Chicago, IL: Capacity evaluation of clay tile arch flooring and strengthening design
- Olympia Centre - Chicago, IL: Waterproofing and repair design for vaulted sidewalks
- Sentry Insurance Corporate Headquarters - Stevens Point, WI: Design and reconstruction of plaza system
- Pick 'n Save - Brookfield, WI: Investigation of roof collapse, evaluation of roof framing for snow loads, and development of repairs

##### Bridge Engineering

- Various Bridge Decks - IA: Performance evaluation and service life projection for bridge decks with epoxy-coated reinforcing steel
- I-129 Bridge Deck Over Missouri River - Sioux City, IA: Condition assessment and service life projection of bridge deck and comparative evaluation of bridge deck using multiple nondestructive testing techniques
- Broadway Street Viaduct - Council Bluffs, IA: Evaluation of concrete piers and abutments
- Piggott-Tudor Ramps - East St. Louis, IL: Deck investigation and repair design

##### Foundations and Retaining Walls

- Mill Creek - Buffalo Grove, IL: Underpinning and repair of selected condominium buildings
- St. Luke's Lutheran Church - Park Ridge, IL: Evaluation and underpinning of settled west wall

##### TECHNICAL COMMITTEES

- ACI 362 - Parking Structures, secretary
- ACI 423 - Prestressed Concrete
- PTI - Repair and Rehabilitation