PERSONNEL QUALIFICATIONS

Drew Bishop | Senior Associate

EDUCATION

- University of Illinois at Urbana-Champaign
  - Bachelor of Science, Civil Engineering, 2014
  - Master of Science, Civil Engineering, 2015

PRACTICE AREAS

- Bridges and Civil Infrastructure
- Instrumentation/ Monitoring/ Load Testing
- Failure/Damage Investigations
- Structural Analysis

REGISTRATIONS

- IDOT Certified Bridge Inspection Team Leader
- INDOT Certified Load Rating Engineer
- Professional Engineer in IL and IN
- Structural Engineer in IL
- NHI 130055 - Safety Inspection of In-Service Bridges
- NHI 130078 - Fracture Critical Inspection Techniques for Steel Bridges

CONTACT

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EXPERIENCE

Drew Bishop has specialized experience with the inspection, instrumentation, and retrofit design of steel and concrete bridges, concrete retaining walls, and other structures. Mr. Bishop is also well versed in several structural analysis programs and has used his skills to perform reviews of structural adequacy and code compliance for a variety of steel, wood, and concrete structures.

Mr. Bishop's previous work experience includes design work on pedestrian bridges as well as rail terminals. He has also worked with various community infrastructure projects in Nigeria and Panama, including the design of a pedestrian bridge.

REPRESENTATIVE PROJECTS

Bridges and Civil Infrastructure

- Truss Bridges Over Calumet-Sag Channel - Cook County, IL: Inspection and load rating for several trussed bridges for the Illinois Department of Transportation
- IL83 over the Calumet-Sag Channel - Cook County, IL: Fracture critical inspection for four truss bridges for the Illinois Department of Transportation
- Concrete Deck Bridges - Cook and Lake Counties, IL: Coring and pursuant test analysis for concrete deck bridges for the Illinois Department of Transportation
- Poplar Street Facility Bridge - East St. Louis, IL: Concrete coring, steel superstructure load rating, and condition assessment
- Ferry Hall Bridge - Lake Forest, IL: Investigation of concrete failure, including deck and retaining wall coring, followed by deck replacement design and construction administration services
- I-55 Girder Erection - Chicago, IL: Analysis of curved girder stability during all stages of erection
- IA 92 over Mississippi River- Muscatine, IA: Fracture critical inspection of truss, two-girder, and precast multibeam superstructure systems
- Metropolitan Rapid Transit System Terminal: PCC platform and terminal framing erection analysis
- Web Crippling Repairs - Lake Forest, IL: Design of repairs for rolled girders with severe deterioration at ends

Instrumentation/Monitoring/Load Testing

- IH 345 - Dallas, TX: Instrumentation data analysis
- Leo Frigo Bridge - Green Bay, WI: Management of a tied arch bridge suspender cable testing program

Failure/Damage Investigations

- Golf Course Retaining Wall - Buffalo Grove, IL: Root cause determination, repair design, and construction administration
- Solar Tracker Platform Retrofits: Analysis of failing solar tracker platforms and design of retrofits to address torsional deficiencies
- Chemical Dock Allision: Inspection of a dock facility displaying tilt after being struck by a barge

Structural Analysis

- IH 345 - Dallas, TX: Bridge finite element modeling for evaluation of effectiveness of proposed retrofits
- Michigan Avenue Bascule Bridge - Chicago, IL: Bascule bridge balance calculations
- Wind Turbine Litigation: Dynamic analysis of wind turbine towers; parametric study of base stiffness effects on deflection and dynamic characteristics
- Leo Frigo Bridge - Green Bay, WI: Analysis of steel-tied arch bridge to determine adequacy of members upon removing select suspender cables