## PERSONNEL QUALIFICATIONS



# **Heather K. Todak** | Senior Associate



## **EDUCATION**

- Virginia Polytechnic Institute and State University
  - Bachelor of Science,
    Civil Engineering, 2014
- Purdue University
  - Master of Science,
    Civil Engineering Materials and
    Structures, 2015

# **PRACTICE AREAS**

- Nondestructive Evaluation
- Concrete Structures
- Construction Troubleshooting
- Structural Evaluation
- Condition Assessment
- Repair and Rehabilitation Design

#### **REGISTRATIONS**

Professional (Civil) Engineer in CA

## **PROFESSIONAL AFFILIATIONS**

- American Concrete Institute
- California Preservation Foundation
- Structural Engineers Association of Southern California

## **TECHNICAL COMMITTEES**

- ACI 228 Nondestructive Testing of Concrete
- ACI 228-0B Visual Condition Survey of Concrete (Chair)
- ACI E905 Training Programs

# **CONTACT**

htodak@wje.com 626.696.4650 www.wje.com

#### **EXPERIENCE**

Since joining WJE in 2016, Heather Todak has worked on numerous projects involving concrete assessment and repair design, structural evaluation, and nondestructive testing. Her work has involved both existing or historic structures and construction period services.

Ms. Todak specializes in the application of nondestructive evaluation techniques for the assessment of concrete and masonry structural elements. She is an experienced practitioner in the fields of ground-penetrating radar, impact echo, ultrasonic shear wave tomography, and ultrasonic pulse velocity. Ms. Todak has investigated, tested, and provided repair recommendations for bridges, high-rise concrete structures, parking structures, posttensioned concrete structures, water and wastewater treatment infrastructure, pavements, foundations, and historic buildings.

She is affiliated with several nondestructive testing related committees and subcommittees with the ACI, including technical committees 228 and associated subcommittees through which she has assisted in the development of ACI documents and certification programs. Ms. Todak currently serves as Chair for the ACI 228-0B subcommittee for Visual Condition Survey of Concrete and serves on the board of directors for the ACI Southern California Chapter.

#### REPRESENTATIVE PROJECTS

# **Nondestructive Evaluation**

- Electrical Power Research Institute -Charlotte, NC: Nondestructive evaluation capabilities research study for reinforced concrete elements and grouted posttensioning ducts
- Trimont Condominiums Pittsburgh, PA: Concrete facade evaluation with electromagnetic scanning methods
- Lone Star Legal Aid Building Houston, TX:
  Fire damage-related assessment of concrete framing
- United States Coast Guard Sector San Juan, Puerto Rico: Fast response cutter pier investigation, including structural assessment, service life modeling, instrumentation, and load testing

- El Nuevo Amanecer Apartments Los Angeles, CA: Fire damage evaluation and load testing
- USC Pacific Asia Museum Pasadena, CA: Basement moisture investigation and monitoring of historic building

## **Concrete Structures**

- Pasadena City College Pasadena, CA:
  Parking structure condition assessment and repair design
- 901 East 3rd Street Los Angeles, CA:
  Nonductile concrete building assessment
- The Ritz-Carlton Hotel Laguna Niguel, CA: Parking structure evaluation and repair of post-tensioning components
- Susquehanna Nuclear Power Plant -Susquehanna, PA: As-built survey of reinforcement and embedments for structural modifications
- Colorado Center Tower 3 Denver, CO: Evaluation and repair of joints between precast concrete columns
- Ford Amphitheatre Los Angeles, CA: Historic concrete evaluation and repair documents

# **Construction Troubleshooting**

- Rinconada Water Treatment Plant Los Gatos, CA: Reinforcement cover assessment and repair design
- Inland Empire Regional Water Recycling Plant
  Chino, CA: Construction period services,
  concrete condition assessment and repair
  design
- Puente Hills Recycling Facility Whittier, CA: Reinforced concrete placement and finishing evaluation
- R&B Shultz Early Childhood Education Center
  Paso Robles, CA: Evaluation of concrete slab-on-ground

## Structural Evaluation

- Ice House Building Cleveland, OH: Structural evaluation and as-built survey of concreteframed building
- King Edward Apartment Building Pittsburgh,
  PA: Structural evaluation of existing concrete columns
- Peabody Stadium Santa Barbara, CA:
  Concrete retaining wall investigation
- 442 West Ocean Boulevard Damage evaluation and repairs for structural slab movement during construction phase

