PERSONNEL QUALIFICATIONS

Becky Skondre | Associate III

EDUCATION

- University of Washington
  - Bachelor of Science, Civil and Environmental Engineering, 2016
- Virginia Polytechnic Institute and State University
  - Master of Science in Civil Engineering, Structural Option, 2018

PRACTICE AREAS

- Failure/Damage Investigations
- Concrete Structures
- Repair and Rehabilitation
- Structural Analysis
- Instrumentation/Monitoring/ Load Testing

REGISTRATIONS

- Professional Engineer in VA and WA

PROFESSIONAL AFFILIATIONS

- Structural Engineers Association

CONTACT

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EXPERIENCE

Becky Skondre joined the Washington, D.C. office as a full-time associate in 2018. She has gained experience working on structural evaluations, failure investigations, and load testing of existing buildings. Ms. Skondre's analytical work includes the utilization of computer models for analysis of existing and temporary structures. She has worked on a broad range of projects involving the use of concrete, steel, wood, aluminum, and masonry. Ms. Skondre has a particular interest in the assessment, repair, and rehabilitation of concrete structures, including conventionally reinforced, prestressed, and precast sections for both structural and architectural applications.

REPRESENTATIVE PROJECTS

Failure/Damage Investigations

- 8555 Connecticut Ave - Chevy Chase, MD: Investigation of aluminum shoring collapse that occurred during concrete placement; analysis of shoring component capacities and applied loads
- Apartment Complex - College Park, MD: Investigation of floor distress and deflections of wooden floor trusses; identification of several failure types, including connector plate pullout and member fracture
- Rail Tunnel Assessment: Inspection and nondestructive testing of steel tunnel liner
- Warehouse Fire Loss Survey - Burtonsville, MD: Damage condition assessment of prefabricated steel warehouse following fire event

Concrete Structures

- Arlington Education Center - VA: Condition assessment of precast concrete exterior wall panels; detail development for repairs to deteriorated panels with architectural finish
- SOCO II Apartments - Austin, TX: Structural peer review of precast concrete parking garage foundations, including both the original design and required retrofits
- Liquefied Natural Gas (LNG) Tank Foundations - Cameron, LA: Investigation of reinforced concrete damage due to cryogenic LNG exposure

Repair and Rehabilitation

- Bricklayers Union Headquarters - Washington, D.C.: Detail development for repairs to cracked autoclaved aerated concrete block wall elevator shaft and reconfiguration of mounted elevator hardware
- Silo Point Parking Garage - Baltimore, MD: Assessment of corrosion-related deterioration to entrance ramp; detail development for drive ramp remediation
- The Surf Club - Surfside, FL: Structural analysis and detailing associated with aluminum trellis connection failures

Structural Analysis

- I-5 Interstate Bridge over the Columbia River - Portland, OR: Development of a 3D bridge model in SAP 2000 for use in refining the load rating for several truss spans of the southbound bridge
- Tower Structure Vibration Study: 3D finite element model of the air traffic control tower structure for assessment of dynamic impacts from blasting vibrations
- Oceans Edge Roof Replacement - Key West, FL: Wind load analysis on an existing hotel structure to help inform decisions about roof replacement

Instrumentation/Monitoring/Load Testing

- Lumiere Condos - Pittsburgh, PA: Instrumentation and monitoring of concrete floor slab deflections during load test; documentation of floor slab cracking; analysis of as-built floor slab system based on available information
- Avanti Parking Garage - St. Petersburg, FL: Load testing of precast concrete double-tee flange connections using a 3/4-ton truck; assessment and repair of failed connections
- Master's Thesis Project - Blacksburg, VA: Construction of concrete inverted-tee bridge system segment to perform service life fatigue and ultimate load testing; concluded that bridge system can be utilized in low-to-medium traffic zones with concrete-only interface between the precast beams and cast-in-place deck given adequate surface texture