WJE

PERSONNEL QUALIFICATIONS

Jeffrey West | Principal



EDUCATION

- University of Manitoba
 - Bachelor of Science,
 Civil Engineering, 1991
 - Master of Science, Structural Engineering, 1994
- University of Texas at Austin
 - Doctor of Philosophy,
 Structural Engineering, 1999

PRACTICE AREAS

- Bridges and Civil Infrastructure
- Structural Evaluation
- Instrumentation/Monitoring/ Load Testing
- Precast/Prestressed/Post-Tensioned Concrete
- Research and Testing

REGISTRATIONS

PE in AB, LA, MB, SK, ON, TX, and WA

PROFESSIONAL AFFILIATIONS

- American Concrete Institute, Fellow
- Precast/Prestressed Concrete Inst,

TECHNICAL COMMITTEES

ACI 222 - Corrosion

ACI 224 - Cracking

ACI 437 - Str. Evl./Ex. Concrete Str. ACI 562 - Evaluation, Repair, and

Rehabilitation of Concrete Struct. ACI 563 - Spcs./Rpr Str. Conc. Bldgs

CONTACT

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EXPERIENCE

Jeffrey West has more than twenty years of experience in structural engineering and materials research and consulting. His primary areas of expertise include the evaluation and rehabilitation of existing structures, structural testing, durability of concrete structures, posttensioned (PT) structures, and concrete materials. Project experience includes buildings, bridges, parking structures, maritime structures, concrete tanks, and flood control channels throughout the U.S.

Prior to joining WJE in 2017, Dr. West was a professor of civil engineering at the University of Waterloo in Canada for fifteen years. His research areas included modular systems and connections for steel-concrete composite bridges, concrete materials (fiber-reinforced concrete, use of recycled materials), and the assessment, repair, and rehabilitation of existing structures. Additionally, Dr. West has authored more than eighty technical publications in refereed journals and conferences.

REPRESENTATIVE PROJECTS

Bridges and Civil Infrastructure

- Bridgeport Bridge OK: Condition assessment and rehabilitation recommendations of substructure
- Elevated Expressway Dallas, TX: Field investigation and computational assessment of bridge substructure cracking
- Flood Control Tunnel Austin, TX: Field investigation and reliability-based strength evaluation
- Woodhouse Terminal Houston, TX:
 Assessment of existing grain elevator and associated structures and repair recommendations
- Barbours Cut Terminal Wharf 3 La Porte, TX:
 Strengthening of container wharf to support new, larger STS cranes in hurricane region
- Port Tampa Berth 3 FL: Evaluation of pileto-pile cap connection design
- Port of Houston Authority TX:
 Development of facility inspection and condition assessment program

Structural Evaluation and Design

- University of North Texas (UNT), Life Sciences Building - Denton: Structural and corrosion evaluation and foundation repair design
- UNT, Sage Hall Denton: Structural and geotechnical evaluation and foundation repair design
- Razorback Stadium Fayetteville, AK:
 Concrete wall assessment and repair design
- TTC Steeles West Subway Station Toronto, ON: Concrete wall repair design

Instrumentation/Monitoring/Load Testing

- Northshore Austin TX: Facade access equipment load testing and certification
- U.S. 181 Harbor Bridge Corpus Christi, TX: Load testing of concrete beams with Grade 75, No. 20 headed bars
- Museum and Amusement Attraction San Antonio, TX: Evaluation of structural vibrations and slab cracking
- Seabrook Station Nuclear Power Plant -Seabrook, NH: Concrete strain and internal humidity monitoring system development

Precast/Prestressed/Post-Tensioned Concrete

- Northshore Austin Austin, TX: PT slab assessment, repair design, and construction administration
- OBC Parking Garage Austin, TX: Evaluation of double-tee beam dapped end construction defects and design
- Garage Farmers Branch, TX: Evaluation of precast spandrel beam corbel failure
- Mid-Bay Bridge Destin, FL: Evaluation of external post-tensioned tendon corrosion **
- Pedestrian Bridge Charlotte, NC: Collapse investigation **

Research and Testing

- Shear strength of unreinforced interfaces in partial-depth repairs and new construction
- Static and fatigue assessment of shear stud and through-bolt connections in steelprecast concrete composite girders *
- Bond of Corroded Reinforcement in Partial-Depth Repairs: Experimental evaluation of anchorage and lap splice bond in repairs *
- * Indicates with University of Waterloo
- ** Indicates with previous firm

