



#### EDUCATION

- U.S. Military Academy at West Point
  - Bachelor of Science, Civil Engineering, 1991
- University of Missouri
  - Master of Science, Engineering Management, 1995
- Stanford University
  - Master of Science, Structural Engineering, 2001
  - Master of Science, Construction Engineering Management, 2001
- The University of Texas at Austin
  - Doctor of Philosophy, Structural Engineering, 2010

#### PRACTICE AREAS

- Bridges and Civil Infrastructure
- Structural Analysis/Computer Applications
- Construction Troubleshooting
- Structural Design
- Steel Structures
- Wood Structures

#### REGISTRATIONS

- Professional Engineer in MO, TX

#### PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- American Institute of Steel Construction
- Structural Stability Research Council
- American Society for Engineering Education

#### EXPERIENCE

Craig Quadrato brings more than twenty-five years of experience as a civil/structural engineer in the areas of structural analysis and assessment, heavy civil design and construction, steel and timber design, engineering and construction management, bridge analysis and repair, and engineering education.

Prior to joining WJE, Dr. Quadrato served for more than twenty-five years as a United States Army Engineer Officer, serving his last six years as an Academy professor in the U.S. Military Academy's Department of Civil and Mechanical Engineering. He was deployed worldwide, supporting U.S. and coalition forces by designing and managing the construction of roads, forward operating bases, and support facilities. Dr. Quadrato also led U.S. Army engineering design and construction units engaged in numerous projects in the United States and served as a consultant for the U.S. Department of Defense's industrial base modernization program.

#### REPRESENTATIVE PROJECTS

##### Bridges and Civil Infrastructure

- Fort Carson Fitness Trail - Colorado Springs, CO: Design and construction of ten kilometers of improved trail and pedestrian bridges\*
- Kandahar to Tarwin-Kwot Road - Afghanistan: Construction of sixty kilometers of road and drainage structures\*
- US-Mexico Border Road – TX, AR, and NM: Construction of 20-kilometer border road in support of U.S. Border Patrol\*

##### Structural Analysis/Computer Applications

- AISC Design Module - West Point, NY: Development of a beam-column member design program in Mathcad\*
- Autodesk Robot Structural Analysis Training - West Point, NY: Development of training and design program for undergraduate students\*
- Improved Cross Frame Details - Austin, Texas: Development of parametric analysis program for skewed steel girder bridges in ANSYS\*

#### Construction Troubleshooting

- Army Ammunition Plant Modernization - Holston, TN: Design of the modernization of an industrial noncontact cooling water supply system\*
- Forward Operating Base Sharana - Paktyka Province Afghanistan: Construction planning and quality assurance for the construction of a 500-member forward operating base\*

#### Structural Design

- Barracks and Office Structural Assessment - San Pedro de Copan, Honduras: Determination of strength and stability of office and living space for military forces\*
- Gardez Bridge - Paktyka Province Afghanistan: Rapid load classification for steel girder bridge\*

#### Steel Structures

- Fort Lewis Supply Storage Annex - Tacoma, WA: Construction of twelve prefabricated steel buildings\*
- Sharana Maintenance Facility - Paktyka Province Afghanistan: Construction of 4,000- square-foot fabric-covered steel-framed building\*
- Steel Bridge Test Superstructure - Austin, TX: Design and fabrication of full-size skewed steel girder bridge test specimen\*

#### Wood Structures

- Army Barracks Renovation - Tacoma, WA: Design and execution of the rehabilitation of thirty World War II-era barracks\*
- International Lodging Facility - Paktyka Province, Afghanistan: Design and construction of more than twenty living and office buildings\*

#### TECHNICAL COMMITTEES

- Structural Stability Task Group 02- Beams, chair
- American Society of Civil Engineers - Members Community Committee, chair  
\*Projects performed while with the U.S. Army

#### CONTACT

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