



PERSONNEL QUALIFICATIONS

Douglas L. Smith | Principal and Unit Manager



EXPERIENCE

Douglas Smith evaluates, investigates, and designs repairs for pavement systems, civil infrastructure, parking garages, building facades, and a wide variety of materials used in construction. He has particular expertise in solving materials problems related to performance, durability, and compatibility with other materials or systems. Mr. Smith works frequently with WJE's laboratories and has developed a number of test programs to assess construction materials. He is also the manager of WJE's Dallas operations.

Prior to joining WJE, Mr. Smith served as a vice president with 3D/International (3D/I), a program and construction management firm. He was also a materials engineer with Law Engineering and Environmental Services, Inc., and worked at Southwestern Laboratories, Inc., a geotechnical and construction materials testing firm. At his prior firms, Mr. Smith managed large construction programs, conducted many investigations on building structures, systems, and components, and developed considerable laboratory experience.

REPRESENTATIVE PROJECTS

Construction Materials

- Riverfront Thirteen-foot "Horseshoe" Concrete Tunnel - Dallas, TX: Assessed the condition of the 1,400-foot, thirteen-foot diameter, 1930s concrete tunnel for use in a redevelopment program
- Alvarado Junior High School - Alvarado, TX: Investigation of cracked cement-based and epoxy-based terrazzo floor systems
- Rowlett Sanitary Sewer Main - Rowlett, TX: Investigation of hydrogen sulfide corrosion of ductile iron pipe forced main and gravity system
- Corinth Street Viaduct - Dallas, TX: Investigation of fire-damaged concrete at historic 1930s bridge
- Whirlpool Distribution Center - Fort Worth, TX: Investigation of premature corrosion and failure of below-grade ductile iron pipe fire protection system
- Vernon Newsom Stadium - Mansfield, TX: investigated gypsum-based handrail anchorage system

Masonry

- River Bend Villas - Fort Worth, TX: Investigation of premature deterioration of clay brick masonry screen walls and building cladding
- Jones AT&T Stadium, Texas Tech University - Lubbock, TX: Investigation of cast stone exterior cladding
- Laredo Federal Courthouse - Laredo, TX: Investigation of limestone cladding distress
- Apartment Complex - Grapevine, TX: Investigation of adhered manufactured stone veneer system including in-situ shear bond testing
- Cleburne High School - Cleburne, TX: Investigation of and repair design for the failed CMU veneer anchorage system

Pavement Investigation

- Cottonwood Valley - Irving, TX: Investigation of pavement distress and design of repairs and replacement for three-hundred-acre residential development
- Ford Motor Company Arizona Proving Ground - Yucca, AZ: Investigation of distress of asphalt pavement at twenty-six-acre vehicle dynamic testing area
- Tampa Harbour Yacht Club - Tampa, FL: Investigation of distressed launch slab pavement at the high-load, multilevel dry storage boat barn

Repair and Rehabilitation

- Old Dallas High School - Dallas, TX: Investigation of historic concrete, reinforcing steel, cast iron, and wood and repair design support for the adaptive reuse of the early 1900s school
- West Texas Steam Electric Station - Monahans, TX: Repair design to address severe reinforcing steel corrosion and concrete deterioration of 25,000-square-foot concrete cooling tower basin
- The Montane - Dallas, TX: Investigation and design of repairs to the below-grade parking garage walls

EDUCATION

- Texas A&M University
 - Bachelor of Science, Civil Engineering, 1983
 - Master of Science, Civil Engineering, 1985

PRACTICE AREAS

- Construction Materials
- Masonry
- Pavement Investigation
- Repair and Rehabilitation

REGISTRATIONS

- Professional Engineer in TX

PROFESSIONAL AFFILIATIONS

- American Concrete Institute
- American Society of Civil Engineering, past president - Dallas branch
- International Concrete Repair Institute, North Texas chapter - past president

CONTACT

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