PERSONNEL QUALIFICATIONS

Joshua White | Associate Principal and Unit Manager

EDUCATION

- Abilene Christian University
  - Bachelor of Science, Physics, 2008
- Texas A&M University
  - Master of Science, Civil Engineering, 2012
- University of Texas at Austin
  - Doctor of Philosophy, Structural Engineering, 2020

PRACTICE AREAS

- Nondestructive Evaluation
- Structural Analysis/ Computer Applications
- Bridges and Civil Infrastructure
- Failure/Damage Investigations
- Instrumentation/Monitoring/ Load Testing
- Repair and Rehabilitation

REGISTRATIONS

- ACI NDT Testing Specialist
- ACI Examiner for ACI NDT Speclst.
- NHI Courses 130055 and 130078
- PE in AL, FL, KY, LA, MS, OK, TX

PROFESSIONAL AFFILIATIONS

- American Concrete Institute
- American Soc. of Civil Engineers
- American Society of Nondestructive Testing
- ASTM International
- Structural Engineers Association of Texas

CONTACT

jwhite@wje.com
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EXPERIENCE

Since joining WJE, Joshua White has been involved in the condition assessment, evaluation, and repair/rehabilitation design of numerous engineering projects, including concrete, steel, and wood structures. Dr. White specializes in the development and application of nondestructive evaluation (NDE) technologies, including but not limited to mechanical wave/vibration, electromagnetic, and electrochemical-based techniques utilizing multimethod approaches.

Before joining WJE, Dr. White worked as a graduate research assistant with the Texas A&M Transportation Institute, where he participated in numerous sponsored research projects. For these, he evaluated and developed NDE technologies for bridge, roadway, and tunnel inspections, large-scale testing programs, strut-and-tie design, and finite element modeling. Before and during his graduate studies, Dr. White accumulated more than ten years of experience in construction, including owning and operating a residential construction company.

REPRESENTATIVE PROJECTS

Nondestructive Evaluation

- Retaining Wall Collapse - Holly Springs, GA: Assessment and localization of failure plane
- Facility Paving and Flatwork Surveys - Various locations throughout TX
- Petrochemical Facility - La Porte, TX: Subsurface NDE for locating utilities/obstructions/foundation elements
- Retail Center - Austin, TX: Precast concrete survey for identifying reinforcing configuration/cover and subsurface NDE for characterizing foundation elements
- Airport Parking Structure - Dallas/Fort Worth, TX: Void detection within post-tensioned (PT) beams
- Gas Export Terminal - LA: Evaluation of tabletop pedestal cracks
- Sky Rise Condominium - Dallas, TX: Evaluation of cold joints within PT slabs
- Petrochemical Facilities - Various Locations Throughout TX: Evaluation of voids and consolidation-related deficiencies within concrete compressor foundations and blast-proof walls

Structural Analysis/Computer Applications

- Port of Houston Authority - Houston, TX: Condition assessment and repair recommendations for wharf structures
- Multistory Office Building - Houston, TX: Condition assessment and structural analysis of steel framing and foundation

Bridges and Civil Infrastructure

- Various Rail and Vehicular Bridges - TX, OR, and WA: Initial, routine, and in-depth condition assessments
- Various PT Bridges - TX, OR, and WA: NDE surveys, statistical grout sampling, and material assessment
- Port of Houston Authority - Houston, TX: Condition assessment, repair recommendations, and rehabilitation design for wharf structures

Failure/Damage Investigations

- Funeral Home - New Orleans, LA: Investigation of roof collapse
- Governmental Facility - Houston, TX: Investigation and structural analysis related to roof collapse; storm drainage review
- Cambridge Parking Garage - Houston, TX: Structural assessment of damaged beams and subsequent repair design
- Chemical Plant - Baton Rouge, LA: Investigation of steel framing failures
- Educational Facility - College Station, TX: Investigation and repair recommendations for foundation-related distress conditions
- Storage Facility - Conroe, TX: Investigation of concrete and steel construction defects
- Staybridge Suites - Houston, TX: Damage assessment and structural evaluation of framing member failures

Instrumentation/Monitoring/Load Testing

- United States Coast Guard, Atlantic Area Sector: FRC pier investigation, including structural assessment, service life modeling, instrumentation, and load testing
- Spherical Chemical Tank - Houston, TX: Condition assessment, including foundation/support instrumentation and monitoring
- Cambridge Parking Garage - Houston, TX: Instrumentation and load testing for double-tee beam repairs