



EDUCATION

- Macomb Community College
 - Associate Degree, General Education, 2005
- Lawrence Technological University
 - Bachelor of Science, Civil Engineering, 2010
 - Master of Civil Engineering, 2014

PRACTICE AREAS

- Structural Analysis
- Instrumentation/Monitoring/Load Testing
- Repair and Rehabilitation
- Failure/Damage Investigations
- Facade Assessment
- Building Enclosure Testing

REGISTRATIONS

- AWS Certified Welding Inspector
- Professional Engineer in MI

PROFESSIONAL AFFILIATIONS

- American Welding Society (AWS)
- American Wood Council (AWC)

CONTACT

nwaraksa@wje.com
248.594.0160
www.wje.com

EXPERIENCE

Since joining WJE in 2017, Neil Waraksa has been involved with projects related to structural engineering and architectural claddings. His responsibilities have included field investigation and analysis of existing and damaged structures, development of technical repair documents, conducting field-performed investigative testing, and performing construction observations and assessments. He has performed structural analysis on masonry, wood and steel structures. Mr. Waraksa has also completed multiple condition assessments and has experience with water penetration investigations and review of design/construction regulations.

Prior to joining WJE, Mr. Waraksa performed structural material testing as a project engineer at Lawrence Technological University, including GFRP, CFRP, concrete and steel materials. Additionally, he performed construction materials testing, including concrete compressive strength tests and soil properties testing.

REPRESENTATIVE PROJECTS

Structural Analysis

- First Presbyterian Church of Adrian - Adrian, MI: Ceiling collapse investigation; timber truss analysis and repair design; mortise and tenon joinery analysis
- 4967 Crooks Screen Wall - Troy, MI: Assessment, analysis, and design for rooftop screen wall
- Stewart Building - Adrian, MI: Investigation, analysis and design documentation for masonry wall and parapet construction
- Versatube Corporation - Troy, MI: Field investigation, assessment and analysis of HSS steel members during arbitration

Instrumentation/Monitoring/Load Testing

- JSP South Building Repairs - Detroit, MI: Load testing of facade access rooftop anchorages to verify compliance with MIOSHA regulations
- Beaumont GP Parking Renovation - Grosse Pointe, MI: Traffic coating adhesion testing in accordance with ASTM standards

- Village Plaza - Dearborn, MI: Performance of sprayed fire-resistive material (SFRM) bond testing in accordance with ASTM standards and Michigan Building Code

Repair and Rehabilitation

- Concordia University Concrete Staircase - Ann Arbor, MI: Development of connection design and construction drawings for the attachment of concrete stair structure to existing masonry wall
- Beaumont GP Parking Renovation - Grosse Pointe, MI: Double-tee concrete beam parking structure; assessment of damaged concrete elements by sounding and nondestructive methods

Failure/Damage Investigations

- Versatube Corporation - Troy, MI: Fire loss at manufacturing plant; assessment of damage to steel structural elements
- 1115 N. Linden Porch Collapse - Flint, MI: Review of concrete masonry foundation wall collapse; code review and lateral earth pressures requirements

Facade Assessment

- MGM Grand Detroit Hotel and Casino - MI: Condition assessment of existing facade precast concrete construction for owner and to satisfy the City of Detroit facade ordinance
- Kahn Building - Detroit, MI: Condition assessment of existing facade limestone panel construction for owner and to satisfy the City of Detroit facade ordinance
- Marquette Building - Detroit, MI: Assistance with construction period quality control services during restoration of facade terra cotta, brick masonry, limestone, and steel lintel construction