PERSONNEL QUALIFICATIONS



Steven S. Michael | Senior Specialist



EDUCATION

■ College of Lake County

PRACTICE AREAS

- Inspection and Rehabilitation of Structures
- Instrumentation and Field Testing
- Nondestructive Testing
- Structural Instrumentation

REGISTRATIONS

- AWS Welder Certification, all positions
- Commercial Driver's License in IL

CONTACT

smichael@wje.com 847.272.7400 www.wje.com

EXPERIENCE

Since joining WJE in 1985, Steven Michael has worked on a variety of projects associated with instrumentation, welding, and steel repairs. He has developed practical skills in the installation of strain gages and strain gage instrumentation, as well as other field and laboratory measurement equipment. Mr. Michael has used these skills in a variety of projects, including the load testing of buildings and bridges.

His laboratory experience includes serving as lead technician for the fabrication and operation of an earthquake motion simulator used to test full-scale utility and building connections for a California medical center building addition.

In addition, Mr. Michael's training and experience as a welder has involved him in numerous projects requiring structural fabrication using steel, stainless steel, and aluminum base metals. His welding skills include the shielded metal arc (stick), gas metal arc (MIG), and flux core welding processes as well as oxyacetylene and plasma cutting.

REPRESENTATIVE PROJECTS

Inspection and Rehabilitation of Structures

- Central Avenue Bridge Stickney, IL: Inspection of fatigue sensitive details
- Chicago Skyway Bridge IL: Field verification of as-built truss member dimensions for rehabilitation project
- Elm Tree Road Pedestrian Bridge Lake Forest, IL: Special construction services for structural rehabilitation
- Gavin Elementary School Ingleside, IL:
 Repair and strengthening of steel roof trusses
- I-80 Bridge over the Missouri River Omaha,
 NE: Weld-peening retrofit to upgrade lateral gusset plate weld terminations
- I-280 Maumee River Crossing Toledo, OH: Implementation of structural modifications to gantry support assembly
- I-435 Bridge over the Missouri River Kansas City: Retrofitting of fatigue-sensitive details
- I-480 Bridge over the Missouri River Omaha, NE: Retrofitting of fatigue sensitive lateral gusset plate connections

 Retail Buildings – Various Locations, U.S.: Inspection of plate-connected wood trusses

Instrumentation and Field Testing

- CNIC Railroad Bridge over I-57 Cairo, IL:
 Strain and displacement monitoring
- I-435 over the Missouri River Kansas City: Strain and displacement monitoring
- I-480 over the Missouri River Omaha, NE: Strain and displacement monitoring
- Juniper Canyon Bridge over the Columbia River - Umatilla, OR: Strain and displacement monitoring
- Mississippi River Bridge Muscatine, IA:
 Strain monitoring under live load

Nondestructive Testing

- Congress Parkway Bascule Bridges Chicago,
 IL: Ultrasonic and visual inspection of bridge trunnions
- Mundelein Seminary Boat House -Mundelein, IL: Concrete delamination survey
- Metropolitan Water Reclamation District of Chicago - Hodgkins, IL: Ultrasonic testing of steel pressure piping
- Oak Forest Hospital Oak Forest, IL: Ultrasonic testing of steel pressure piping and valve assemblies
- Overhead Sign and Light Pole Inspection Various Locations: More than two hundred property locations of national retail chain

