### PERSONNEL QUALIFICATIONS



# Jaret M. Lynch | Principal and Unit Manager



#### **EDUCATION**

- Rensselaer Polytechnic Institute
  - Bachelor of Science, Civil Engineering, 2000
- University of Illinois at Urbana-Champaign
  - Master of Science, Structural Engineering, 2002

# **PRACTICE AREAS**

- Difficult Access Inspection
- Wood Engineering
- Failure Investigation
- Historic Preservation
- Repair and Rehabilitation Design
- Structural Evaluation
- Testing and Instrumentation

# REGISTRATIONS

Professional Engineer in CT and NY

#### **PROFESSIONAL AFFILIATIONS**

- American Society of Civil Engineers
- Association for Preservation Technology
- Structural Engineers Association of New York
- Timber FrameEngineering Council
- Timber Framer's Guild

# CONTACT

jlynch@wje.com 203.944.9424 www.wje.com

#### **EXPERIENCE**

Jaret Lynch has extensive experience in the structural analysis and repair of historic museums, buildings, and churches. He specializes in masonry and timber structures, timber trusses, timber steeples, and in situ load testing. Mr. Lynch consistently demonstrates strong leadership as a project manager for large, multidisciplinary teams. He is also an active member of WJE's industrial rope access team.

Mr. Lynch chairs the Technical Activities
Committee of the Timber Framer Engineering
Council. He has written extensively on the insitu repair of timber trusses, timber roof
framing systems, and traditional timber joinery.
He is also an active member of the APT
Preservation Engineering Technical Committee
and has served as technical advisor and judge
for the Student Design-Build Competition.

# **REPRESENTATIVE PROJECTS**

## **Difficult Access Inspection**

- New Croton Dam Croton-on-Hudson, NY: Assessment of stone masonry and monitoring of cracks
- Yale University, Harkness Tower New Haven,
   CT: Condition assessment of stone masonry
- New York Public Library, Schwarzman
   Building NY: Condition assessment of marble facade

# **Wood Engineering**

- Yara Americas, Fertilizer Terminal -Contrecoeur, QC: Analysis and in-situ repair of thin shell-wood domes spanning 124 feet
- St. John the Baptist Hoboken, NJ: Analysis and in-situ repair of failed timber scissor trusses spanning 60 feet
- Charter Oak Cultural Center a.k.a. Beth Israel Synagogue (1876) - Hartford, CT: Analysis and in-situ stabilization of timber-framed kingpost trusses with raised bottom chords
- Wheeler-English House (1884) New Haven,
   CT: Analysis and in-situ repair design of decayed roof framing

## **Failure Investigation**

- Bowstring Truss Collapse Tulsa, OK: Cause and origin analysis for failure of wood bowstring trusses spanning 98 feet
- College Street Congregational Church (1863– 1866) - Burlington, VT: Fire damage assessment of Gothic Revival church and timber-framed steeple

#### **Historic Preservation**

- Center Church on the Green (1812–1815) -New Haven, CT: Rehabilitation of 220-foot timber-framed steeple and assessment of 72foot-span timber roof trusses
- Choate Rosemary Hall Wallingford, CT: Assessment and repair of timber-framed roofs of Atwater Cottage (1760) and Atwater Homestead (1774)
- Dey Mansion Washington's Headquarters (c. 1740) - Wayne, NJ: Condition assessment of Georgian manor house and timber-framed
- St. John's Rectory (1843) Washington, CT: Condition assessment and master planning study for Greek Revival timber frame

#### Structural Evaluation

- Major Restaurant Chain U.S.: Inspection, analysis, and repair of roof trusses
- University of New Haven, Harugari Hall (1912)
   West Haven, CT: Analysis and in-situ repair of failed timber roof trusses
- United States Military Academy, Barracks Building 620 (1908) - West Point, NY: Structural evaluation and repair design for timber post and beam structure
- Masonic Temple (1873) Philadelphia, PA:
   Structural analysis of deflected timber trusses supporting an ornate plaster ceiling

# **Testing and Instrumentation**

- Mississippi DOT Various Locations: NBIS bridge inspections and load ratings on selected wood bridges statewide, including resistance drilling, timber pile assessment, and load testing
- Capital Preparatory Magnet School -Hartford, CT: Full-scale load testing of concrete floor joists

