



## SERVICE PROFILE

# Fire Suppression System Design and Consulting



- Fire protection system design and analysis
- Fire protection system criteria
- Design/build specifications
- Detailed design/construction documents
- Fire suppression condition and code assessment
- Hydraulic design and site-wide water supply modeling
- Deficiency resolution
- Phased upgrade/replacement planning
- Preparing/negotiating variances
- Third-party peer review
- Commissioning and integrated systems testing
- Construction period observation, documentation, and on-site verification
- Loss investigation/expert testimony

Wet-pipe sprinkler systems are one of the most reliable forms of fire protection for buildings, but they can be challenging to design and are not always the best solution. Freezing environments, critical equipment, water-sensitive or hazardous materials, high-challenge storage configurations, and historic structures or contents are just a few examples that present special fire suppression challenges. WJE's fire protection engineers evaluate the specific conditions at each project site to identify the appropriate fire suppression technologies to meet the fire safety objectives.

WJE's fire protection engineers and consultants draw on extensive knowledge of fire hazards, fire suppression systems and agents, and building construction to understand each client's project objectives and meet their needs with custom solutions. Throughout the project life-cycle, WJE collaborates with the design and construction teams and works with the authorities having jurisdiction to provide a reliable and code-compliant design with long-term maintenance needs in mind.

Utilizing state-of-the-art design tools, such as AutoCAD and REVIT/Navisworks, WJE's fire protection engineers and consultants design wet-pipe, dry-pipe, and pre-action sprinkler systems and fire standpipe systems. WJE professionals also design and analyze fire protection water supplies—such as private fire water mains, water storage tanks, and fire pumps—for a variety of buildings and campuses.

WJE staff are experienced in the specification and design of special hazards fire extinguishing systems using clean agents, wet- and dry-chemicals, water-mist, foam-water, and carbon dioxide.

