O'CONNELL & LAWRENCE, INC.

oclinc.com

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MODELING & DEMONSTRATIVE EXHIBITS

Making Complex Conditions Clear, Tangible, and Understandable

O'Connell & Lawrence, Inc. develops demonstrative exhibits, physical models, and immersive digital visualizations that transform complex engineering, construction, and forensic information into clear and compelling visual evidence.

Making Technical Information Accessible

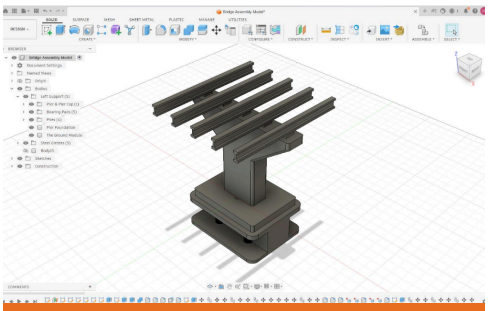
By integrating advanced 3D printing, reality capture, digital modeling, and interactive visualization, we help clients communicate technical conditions, design intent, construction sequencing, and forensic findings to audiences with varying levels of technical expertise.

Engineering and construction disputes often involve dense drawings, technical specifications, complicated site conditions, and events that occurred over months or years. These issues can be difficult to understand through testimony, photographs, or two-dimensional plans alone. O'Connell & Lawrence creates visual tools that allow decision makers to see the condition, understand the relationship between project elements, and recognize the significance of key differences.

Our demonstrative exhibits can illustrate conditions before and after an event, compare compliant and noncompliant work, show correct and incorrect installation methods, recreate construction sequences, or demonstrate how a design or field condition contributed to a failure, delay, or dispute. Physical models allow users to examine a project or component from multiple perspectives, while digital visualizations can reveal hidden elements, isolate specific systems, and present complex information in a controlled and understandable sequence. These tools support attorneys, experts, contractors, owners, and design professionals — and each exhibit is developed to support the underlying technical analysis and communicate the facts accurately, objectively, and effectively.

Representative Applications

- Recreate buildings, structures, infrastructure systems, and construction sites.
- Illustrate planned, actual, and corrected conditions.
- Compare design requirements with installed work.
- Demonstrate construction means, methods, and sequencing.
- Explain engineering failures, defects, and differing site conditions.
- Show the location and interaction of structural, civil, mechanical, electrical, and architectural components.
- Visualize schedule impacts and the physical progression of work.
- Present accident scenes, access constraints, equipment movements, and lines of sight.
- Support constructability reviews, design development, and preconstruction planning.
- Communicate proposed projects to owners, agencies, communities, and other stakeholders.



3D-PRINTED BRIDGE SUBSTRUCTURE MODEL

MSE WALL SYSTEM — SECTIONED ASSEMBLY

PANAMA LOCK CHAMBER — AS-BUILT MODEL

From Data to Demonstrative — Our Process

1

Capture & Investigate

Reality capture, site data, drawings, specifications, and project records.

2

Analyze & Model

Digital modeling and forensic analysis of conditions, sequences, and relationships.

3

Fabricate & Visualize

3D printing, animation, and interactive visualization of the key facts.

4

Present

Exhibits ready for trial, mediation, settlement, and stakeholder presentations.

Client Benefits

Visual tools that improve understanding, strengthen communication, and support better decisions.

Improved understanding.
Complex technical issues become easier to comprehend when decision makers can see and interact with the relevant conditions.

Clearer expert communication.
Physical and digital exhibits help experts explain their opinions without relying solely on technical terminology, drawings, or lengthy verbal descriptions.

More persuasive presentations.
Well-developed visuals focus attention on the most important facts and help audiences understand why a condition, difference, or sequence matters.

Effective comparisons.
Side-by-side, layered, or interchangeable models clearly illustrate differences between planned and actual work, correct and incorrect construction, or pre- and post-event conditions.

Stronger collaboration.
Models provide a common visual reference for attorneys, experts, clients, contractors, designers, and decision makers.

Early issue identification.
During planning and design, modeling can reveal spatial conflicts, access limitations, constructability concerns, and coordination issues before construction begins.

Greater presentation flexibility.
Exhibits can be produced as physical models, digital animations, interactive environments, scaled components, sectioned assemblies, or a coordinated combination of formats.

See the Condition.
Understand the Relationship.
Recognize Why It Matters.

Markets Served & Client Types

MARKETS SERVED

- Buildings and vertical construction
- Transportation and roadway infrastructure
- Bridges and structural systems
- Water and wastewater facilities
- Utilities and underground infrastructure
- Industrial and manufacturing facilities
- Energy and power projects
- Marine and waterfront construction
- Site development and civil works
- Residential and commercial development
- Public facilities and institutional projects
- Construction accidents and property damage matters

CLIENT TYPES

- Law firms and trial counsel
- Construction and engineering experts
- Contractors and construction managers
- Project owners and developers
- Architects and engineers
- Insurance carriers and claims professionals
- Government agencies and public authorities
- Sureties and financial stakeholders
- Mediators, arbitrators, and dispute resolution teams
- Corporate legal and risk management departments

Whether supporting a complex dispute, explaining a forensic conclusion, evaluating a design, or presenting a proposed project, we create visual tools that make technical information accessible, credible, and actionable.

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