discussion of legal issues of interest to structural engineers

Contracts

By David J. Hatem, PC and David H. Corkum

A contract is nothing more than an agreement between two parties to either perform some task or refrain from performing some act that the party otherwise has a right to do in exchange for some type of consideration, usually money. The black letter law definition of a contract is "a promise or set of promises, the breach of which, the law gives a remedy or the performance of which the law recognizes as a duty." The contract need not be reduced to writing in order for the law to find it enforceable. A contract can be as simple as one sentence, "I promise to buy your 1997 Mercury Sable for \$1,500 on March 13, 2009." Or it can run on for hundreds of pages, expressing the terms and conditions under which the promises will be performed and the consideration exchanged. In determining whether a valid contract exists, a court will ask the following three questions:

- 1) Was there mutual assent between the parties?
- Was there consideration or some substitute therefore given in exchange for the promise?
- 3) Are there any valid defenses to the creation of the contract?

If the answers are yes, yes, and no, then the court will enforce all provisions of that contract that do not run afoul of the law.

In a capitalist, common law society such as the United States, contracts form the very



foundation of commerce. As such, the law is said to favor the formation of contracts and disfavor their dissolution. Moreover, as long as the contract's provisions are legal, remain within the outer bounds of unconscionability, and do not counteract some generally recognized public policy goal, the courts will respect the bargain made by the parties as memorialized in the contract. The court's deference to the terms and conditions of a contract is particularly acute for those parties it considers sophisticated, such as an engineering firm.

A structural engineer providing services in the design and construction industry needs a working familiarity with two broad types of contracts. The first is the contract that engages the engineer to perform its design related services. As counsel for design professionals, we like to use the term "agreement" rather than contract when referring to these documents. We reserve the term "contract" for the second category; the contract between the owner and the builder that constructs the project. The significance of this second type of contract to engineers is that the construction contractor's understanding of your role on the project is contained in this document.

Critically important to the success of a constructed project is the precision with which the various contractual relationships dovetail, and thus define the roles and responsibilities of the participating parties. This contractual architecture is primarily the responsibility of the project owner, which enters into agreements with its primary design professionals and into construction contracts with its general contractors. In an ideal world, the owner will decide to adopt one of the standard form families of documents such as those promulgated by the American Institute of Architects ("AIA") or the Engineers Joint Contract Documents Committee ("EJCDC"). The relative merits of these and other families of contract documents can be debated indefinitely. Our point is simply that, by deciding to keep all documents within one family, the chances of a miscommunication or misunderstanding related to the relative roles and responsibilities of the project participants is minimized. Definitions and administrative procedures that are found in the general contractor's contract, and passed on through subcontract to its specialty subcontractor and that specialty subcontractor's delegated design professional, will be the same as the definitions and procedures in the prime architect's agreement which it passes along through its sub agreement with its structural engineer. Not only does this "nesting" of agreements facilitate the execution and administration of the project, but the general familiarity with the terms and conditions that have been tried and tested and, more importantly, the legal interpretations of those terms and conditions results in a level of confidence and consistency

QuakeWrap[™]

ADVANTAGES:

- High tensile strength
- Lightweight
- · Conforms to all shapes
- Full cure in 24 hours
- Ease of installation
- Non-toxic
- No odor
- Waterproof

APPLICATIONS:

- Concrete
- MasonrySteel
- Wood
- Underwater Piles
- Blast Protection

QuakeWrap[™] Stronger Than Steel[™]





WALLS

COLUMNS/PILES

BEAMS/SLABS

Pioneered since the 1980s by QuakeWrap President, Professor Mo Ehsani, Fiber Reinforced Polymer (FRP) is applied like wallpaper, reaching 2 to 3 times the strength of steel in 24 hours.

TURNKEY SOLUTIONS:

- Design
- Materials
- Installation

FREE EVALUATION BY A SENIOR STRUCTURAL ENGINEER AND COST ESTIMATES IN 24 HOURS (866) QuakeWrap (866-782-5397) www.QuakeWrap.com in the participant's expectations of each other's role and responsibility.

To the design professional, the agreement's Scope of Services is of primary importance. This section of the agreement defines the duties that the engineer has agreed to undertake. The spectrum of specificity of this descriptive section can run the gambit from a few paragraphs to hundreds of pages. What is important is that the parties to the agreement, be it the owner and lead designer, or lead designer and its structural engineer, understand what services will be provided and how they will be incorporated into the final construction contract documents.

The structural engineer's duty during the construction phase of the project is also an important consideration that should be addressed in the scope of services. Obviously, the review of RFIs, and the review and commenting on submittals including elements of delegated design, are important functions during the construction administration phase of the project. In addition, the structural engineer of record needs to understand and provide scope and budget for its role in performing the requisite site observations, as well as preparing any certificates or affidavits of compliance required by local building codes.

For certain engagements, a clearly articulated limitation on the scope of services can be crucial to mitigating risks. Consider, for example, the structural engineer retained by a constructor on a design-build project. The engineer's first duty is to flesh out the conceptual design and size the various members to a level that the constructor can rely on to estimate its steel costs. The constructor/structural engineer agreement's scope of services should contain a limitation on the use of this interim design document. A clear limitation in the scope of services stating that the design and steel weights provided with this task item are subject to change as the design is finalized and that no allowance has been made for connections, temporary bracing, etc., should serve to preclude claims that the contractor believed it was estimating essentially finished documents and its steel fabrication and erection costs have

The Design Professional's Agreement's payment provision section will be orders of magnitude shorter and simpler but no less important than the Scope of Services section. The Payment provision dictates both the amount of consideration you will receive for performing the Scope of Services, and also the conditions under which you will receive that compensation. Certain conditions are fairly benign; for example, submitting periodic invoices in a form acceptable to the other party and including reasonable supporting information as

back-up. Other provisions, such as pay-whenpaid or pay-if-paid clauses can be devastating to a design professional, putting your fee and possibly your firm at risk for an act or deficiency that is completely beyond your control.

Finally, every managing engineer should be able to pick up any agreement dictating the terms of his or her engagement and immediately find and understand the significance and operation of four important provisions:

- 1) The Standard of Care
- 2) Indemnifications
- 3) Limitation of Liability
- 4) Dispute Resolution

The standard of care, as the name implies, defines the level of perfection with which you will perform your services. Our next column will discuss this concept and the ramifications of accepting a contractual obligation to perform your services to a heightened standard of care. For now, suffice it to say that, from a risk management perspective, this provision is the single most important paragraph in your agreement.

An agreement's indemnification provision serves to shift the risk of loss from one party to the other party. Generally, the indemnification is designed to address the loss associated



with a third party claim such as an injured construction worker or damage to abutting property. An unfair indemnification provision will be drafted very broadly and operate in favor of only one party. A more rational and reasonable provision will operate in both directions, and be more narrowly drafted such that the indemnified party can expect to recover its losses arising out of a third party claim but only up to the level of the indemnifying party's responsibility for that loss. All indemnification provisions must operate within the confines of the statutes, common law, and public policy of the state under whose law the agreement will be interpreted. To the extent an indemnification

provision is contrary to state law, the courts will rewrite it to comply.

A "limitation of liability" clause is also subject to state court scrutiny. In legal effect, this type of provision is more accurately described

"Whether or not your potential client will agree to the inclusion of a Limitation of Liability clause can be a very revealing discussion..."

as a limitation on remedy not liability. Where allowed and enforceable, it represents a powerful tool, particularly on a very small engagement, to balance the risk vs. reward equation. Whether or not your potential client will agree to the inclusion of a Limitation of Liability clause can be a very revealing discussion during the course of your pre-engagement negotiations. A potential client's insistence that you bear unlimited liability for the consequences of missing an element during a brief structural inspection should cause you to think hard about doing business with this entity.

A well drafted agreement will anticipate disputes between the parties, and provide a mechanism for expedient and efficient resolution of those disputes. Nothing will spoil the professional satisfaction of a project more than a festering unresolved dispute between the engineer and its client. We like to see a structured approach, with definitive timelines and exchange of position statements followed by executive level negotiations as a first step. If the negotiations are unsuccessful, then the parties should be required to engage in non-binding mediation, using a mutually agreed upon third party neutral. Our preference is that the final adjudication of the matter be designated as the state court system rather than private arbitration. While it typically takes longer to resolve a matter in a state court than arbitration, this tends to improve the probability that the matter will resolve in mediation. If the mediation is not successful then you will want to have all the protections offered by the rules of civil procedure, and rules of evidence, which are often disregarded or curtailed in arbitration.

Like having money in the bank, there is a certain satisfying feeling of confidence in knowing that your engagement is governed by a sound, well designed contract. For ninety to ninety five percent of your projects, those contracts will be negotiated, executed, and consigned to your files never to be seen again. The effort and thought that goes into the drafting and negotiating, however, will pay off handsomely on those five to ten percent of projects where a dispute arises.

David J. Hatem, PC, is a Founding Partner of the multi-practice law firm, Donovan Hatem LLP. He leads the firm's Professional Practices Group, which represents engineers, architects and construction management professionals. Mr. Hatem can be reached via email at dhatem@donovanhatem.com.

David H. Corkum is a Partner in the Professional Practices Group at Donovan Hatem LLP. He is a construction attorney familiar with the planning, design, and construction of heavy civil and underground construction projects. Mr. Corkum can be reached via email at dcorkum@donovanhatem.com.

FYFE Co. Tyfo° Flbrwrap° Systems

8380 Miralani Drive, Suite A, San Diego, CA 92126 Tel: 858.642.0694 • Fax: 858.444.2982 Email: Info@fvfeco.com

www.fyfeco.com

20 years ago we created the industry... today we set the standard

The Company

Fyfe Company is the pioneer and global leader in FRP strengthening solutions, established in 1988.

The Services

Engineers, Material Scientists, Designers and Technicians are here to help bring more elegant solutions to your structural problems at no obligation.



The Products

TYFO® Fibrwrap® Systems are the most rigorously tested products in the industry. They are compliant with the 2006 IBC (ICC ESR #2103) and have more acceptances than any other supplier.



Structural Strengthening

- FRP Installation
- Seismic Upgrade
- Blast Mitigation
- · Concrete Retrofit
- Specialty Gunite
- · Underwater & Coastal Repairs
- Expansion & Seismic Joints

Pipe Repair

- · Large and Small Diameter
- PCCP, RCP, Steel Structural Repairs
- · Carbon Fiber Structural Liners

Concrete Restoration

- · Epoxy Crack Injection
- Spall Repair
- Corrosion Protection

Advanced Fire Protection

- For TYFO® Fibrwrap® Systems
- For other FRP Systems
- For use over a variety of elements

Over 5,000 strengthening projects have been completed in over 25 countries around the world. Let us know how we might assist in bringing creative solutions to your projects.













4255 E. Airport Drive, Ontario, CA 91761 Tel: 909.390.4363 • Fax: 909.390.7030 Email: info@fibrwrapconstruction.com www.fibrwrapconstruction.com