



# Why Claims Occur – The Red Flags

**Richard J. Long, P.E.**

Copyright © 2017 Long International, Inc.



**LONG INTERNATIONAL**



## Why Claims Occur – The Red Flags

Richard J. Long, P.E.

### Table of Contents

<b>1. INTRODUCTION .....</b>	<b>1</b>
<b>2. CHARACTERISTICS OF A HIGHLY IMPACTED PROJECT .....</b>	<b>4</b>
<b>3. EFFECT ON PROJECT COSTS .....</b>	<b>6</b>
<b>4. SITUATIONS CAUSING COSTLY CLAIMS .....</b>	<b>7</b>
<b>4.1 CONTRACTOR PRACTICES THAT CAUSE CLAIMS .....</b>	<b>7</b>
4.1.1 Inadequate Site Investigation Before Bidding.....	7
4.1.2 Unbalanced Bidding Resulting from Manipulating Unit Prices and Front-End Loading Progress Payment Weighting Factors .....	8
4.1.3 Bidding Below Costs and Over Optimism .....	8
4.1.4 Poor Planning and Use of Wrong Equipment .....	8
4.1.5 Inadequate Cost and Schedule Control Systems .....	8
4.1.6 Failure to Follow Authorized Procedures .....	9
4.1.7 Refusal to Proceed with Directed Work Pending a Contract Modification Despite Contract Clauses Giving the Owner the Right to Make a Unilateral Change .....	9
4.1.8 Performing Defective Work.....	9
4.1.9 Slow Mobilization.....	9
4.1.10 Failure to Allocate Resources .....	9
4.1.11 Brokering the Work and Passing All Problems to the Subcontractors Without Adequate Coordination .....	10
<b>4.2 OWNER PRACTICES THAT CAUSE CLAIMS .....</b>	<b>10</b>
4.2.1 Competitive Bidding .....	10
4.2.2 Fixed-Priced or Lump-Sum Contracts .....	10
4.2.3 Unit Price Contracts.....	11
4.2.4 Contract Language that Inappropriately Shifts Risks to the Contractor.....	11
4.2.5 Failure to Grant Time Extensions for Excusable Delays .....	11
4.2.6 Major Changes in the Plans and Specifications During Construction.....	11
4.2.7 Mishandling of Minor Change Orders .....	12
4.2.8 Unrealistic Schedules and Underestimated Costs .....	12
4.2.9 Failure to Obtain Adequate Funding.....	13
4.2.10 Inadequate and Ambiguous Scope Definition in the Bid Documents .....	13
4.2.11 Inadequate Time Provided for Bid Preparation.....	13
4.2.12 Excessively Narrow Interpretation of the Plans and Specifications.....	14
4.2.13 Owner-Furnished Materials .....	14
4.2.14 Incomplete and Defective Plans and Specifications.....	14
4.2.15 Delays to Project Award .....	14
4.2.16 Failure to Give Adequate and Timely Access to the Work Site.....	15
4.2.17 Interfering with Work on the Job Site.....	15



## Why Claims Occur – The Red Flags

Richard J. Long, P.E.

### Table of Contents (continued)

4.2.18	Letting Other Contracts in the Same Area .....	15
4.2.19	Failure to Recognize Legitimate Change Order Requests .....	15
4.2.20	Delaying Decisions .....	16
4.2.21	Delayed Approval of Submissions, Shop Drawings or Materials .....	16
4.2.22	Overzealous Inspections and Rejection of the Contractor's Work .....	16
4.2.23	Inadequate Project Management Controls .....	16
4.2.24	Refusal to Accept Materials or Equipment that Meet Specifications .....	16
4.2.25	Bidding the Project Construction with an Incomplete Design .....	17
4.2.26	Assignment of Inexperienced Staff to Oversee the Contractor's Performance .....	17
4.2.27	Unanticipated Site Conditions .....	17
4.2.28	Contract Requirements for Socioeconomic Objectives .....	17
4.2.29	Unclear Definition of Mechanical Completion .....	17
<b>4.3</b>	<b>CAUSES ASSOCIATED WITH THE CONTRACT DOCUMENTS .....</b>	<b>18</b>
4.3.1	Exculpatory Clauses .....	18
4.3.2	Mandatory Advance Notice of Claims .....	18
4.3.3	Finality of Field Engineer's Decisions without Review or with a Possible Conflict of Interest .....	19
4.3.4	"Differing Site Conditions" Clauses .....	19
4.3.5	Lack of Periodic and Independent Review of Documents Before the Bid .....	19
4.3.6	Use of Nonstandard and Conflicting Forms .....	19
4.3.7	Omissions of Clauses Needed for Effective Contract Management .....	19
<b>4.4</b>	<b>CAUSES ASSOCIATED WITH CONTRACT AWARDS .....</b>	<b>20</b>
4.4.1	Diversity of Contract Award Rules .....	20
4.4.2	Treatment of Bid Mistakes .....	20
<b>4.5</b>	<b>CAUSES ASSOCIATED WITH CONTRACT ADMINISTRATION .....</b>	<b>20</b>
4.5.1	Lack of Timely and Effective Management Response .....	20
4.5.2	Lack of Coordination of Contracting Agency Responsibilities .....	20
4.5.3	Inadequate Delegation of Authority .....	21
4.5.4	Unreasonable Contract Interpretation .....	21
4.5.5	Inadequate Documentation of Performance .....	21
<b>4.6</b>	<b>CAUSES ASSOCIATED WITH CLAIM SETTLEMENT PROCEDURES AND PRACTICES .....</b>	<b>21</b>
4.6.1	No Written Procedures and Process .....	21
4.6.2	Discouragement of Project-Level Settlements .....	22
<b>5.</b>	<b>THE COURT'S VIEW OF CONTRACT INTERPRETATION .....</b>	<b>23</b>

## **Why Claims Occur – The Red Flags**

### **1. INTRODUCTION**

Construction projects have invented their own version of opposites: the contractor and the owner. At some early stage in the game, often before the contract is seven days old, the two sides have identified their lack of common interest. Battle lines are drawn and the war begins. Everybody knows what the war is about; the contractor wants to maximize profit and the owner wants to minimize cost. Rules of warfare are drawn up and are called contract terms and conditions and specifications. Attorneys, accountants, claims consultants, arbitrators, judges and juries are employed to identify the winner. In scholarly circles, this form of warfare is identified as the adversary relationship. This clearly states that the relationship is not one of trust.

In practical terms, the project atmosphere has gone bad. The contractor's key personnel spend most of their time fighting with the owner's project representatives. To insure the widest possible dispersion of this bad atmosphere, the owner's inspectors fight with the contractor's foremen. With all of these problems occurring, management of the project goes by default to the hourly worker.

The high frequency of contract disputes must be recognized and all reasonable measures undertaken by each party involved in today's engineering and construction projects. Technical complexities, the increasingly contentious nature of the contract environment, tight competitive bids, and owners with tough-minded and sometimes inequitable contractual attitudes have caused the final act of many construction projects to occur in an arbitration hearing or in the courtroom. Legal and expert costs for preparing and defending claims have exacerbated an already high-risk business environment for all of the construction contracting parties.

Construction has always been a risky business; however, today's construction marketplace contains risk elements that go beyond the performance of field operations. These risks relate to outside factors that impinge on the performance of the field work, and thus cause substantial increase in the time and cost of contract performance. These outside factors include:

Contract documents generate adversarial roles and inhibit the development of teamwork.

- Project cost and schedule control systems are often not sufficiently sophisticated or integrated.
- Contract administration often does not recognize the expressed and implied terms of the contract.
- Regulatory control is complex and produces unfavorable economic conditions.
- Environmental considerations produce severe time delays to the commencement and completion of the construction phase of projects.

## **Why Claims Occur – The Red Flags**

- Building codes tend to be out-of-date, inapplicable and not uniform.
- Complex union agreements inhibit resource allocation and optimization.
- Design engineers untrained in construction contract issues often masquerade as construction managers.
- The legal process focuses on blame and inhibits problem solving.
- Sociological and political factors create major project delays.
- Project management systems and procedures are often not state-of-the-art practices.

Although a construction project should be a mutually beneficial endeavor, adversarial relationships that can culminate in disputes are common. Owners and contractors are acutely aware of the significant monetary, labor, and equipment resources that they must commit to a construction project and the adverse effect any increase in these resource commitments would have on their bottom lines. Joint venturing or partnering have been suggested by many industry leaders as a way to lessen this natural economic tension and alleviate disputes. Regardless of the merits of these proposals, the reality of the construction industry is that contractors and owners must be aware of and educated about claims and dispute resolution to protect their significant resource investment.

Many contractors no longer enjoy a trusting relationship that brings repetitive contracts with the same owners. Owners have become more global in their operations and must establish relationships with contractors outside their geographic comfort zone. A handshake meant everything in the distant past. Contract language seemed subordinate to the course of dealings that developed over many years of interaction between owners, engineers, contractors, and subcontractors. The “handshake” atmosphere has been replaced with a very competitive bid arrangement that usually results in an owner meeting a different contractor on each new project. Scar tissue developed from contentious issues on previous projects find their way into tougher terms and conditions. Because the parties are strangers, an adversarial relationship is likely to develop when problems arise.

Parties are enthusiastic and optimistic at the inception of every construction project. They are confident of their capability and commitment to fulfill their respective obligations under the contract documents while they mutually benefit from the project. Unfortunately, this enthusiasm and optimism are often dashed very early in the project and the “honeymoon” is quickly over. Immediately, the contract documents are reviewed with a fervor and intensity previously considered unnecessary and unwarranted. Yet these contract documents define the primary relationship between or among the parties and form the basis, in general, for all claims.

## **Why Claims Occur – The Red Flags**

The possibility of being blindsided by a large claim has caused owners to question basic construction contract terms and conditions and the way they contract for design and build. Owners create exculpatory contract clauses to protect against the reoccurrence of such claims. When their workload is down, contractors take risks by accepting tough contract terms and conditions.

Owners expect more from their engineers, whether in-house or outside design professionals, but insist on lower costs and time to produce “issued for construction” documents. The engineering profession is continuously examining the quality of its product to determine if errors and omissions are increasing because of regression in professionalism or skill, or because of inadequate budgets and time for design work. If errors and omissions are increasing, how can they be better controlled? If they are not increasing, how can they be further reduced?

Professionals who prepare contracts and specifications are subjecting their work to continuous revisions to see if simplifications, exculpatory language, or new concepts are needed. Many defensive contract clauses such as “no damage for delay” and the usual subsurface exculpatory requirements to examine the site and not rely on borings have often failed as a result of improper contract administration or inadequate site investigations by the owner. Specifications are too often a “cut and paste” exercise that does not meet the varying needs of the project. Numerous claims could be avoided by knowledgeable and careful specification writing incorporating knowledge about construction law and claims.

## **Why Claims Occur – The Red Flags**

### **2. CHARACTERISTICS OF A HIGHLY IMPACTED PROJECT**

Owners, engineers, construction managers (CM), and contractors have the best of intentions when they initiate a project. The owner wants a profitable state-of-the-art facility, the engineer desires to create the owner's intent in its design, the CM agrees to manage the quality, safety, cost and schedule objectives of the owner, and the contractor wants to build the facility on time and make a reasonable profit. Then the parties sign a contract and everything changes.

Too many projects are transformed from the best of intentions into highly impacted projects that are out of control and headed for claims and disputes. The characteristics of these projects are all too common:

- A fast-track concept is employed to reduce the time and costs for completing the project.
- The contractor bids on incomplete design documents.
- Many addenda are issued during bid preparation.
- The contract is awarded to the lowest bid contractor but not necessarily the most qualified.
- The contractor issues an inordinately high number of requests for information.
- The owner/engineer issues a blizzard of design changes.
- The owner (or CM) is inadequately staffed to process the multitude of change orders and respond in a timely manner to the numerous requests for information from the contractor.
- The contractor fails to prepare an adequate as-planned CPM schedule to identify the planned sequence and duration of work activities.
- The contractor's cost and schedule control systems are not integrated.
- The contractor does not employ a system to capture the actual cost of changed or impacted work.
- The contractor fails to maintain an accurate and updated progress schedule including identification of changes and causes of delays.
- The contractor requests time extensions that are denied because of inadequate support, failure by the owner to recognize excusable delays, or inflexibility in the project completion date because of regulatory compliance or other constraints.
- The owner employs language in the change orders stating that the price adjustment includes all direct, indirect and impact costs.

## **Why Claims Occur – The Red Flags**

- The contractor signs the first few change orders with the owner's language, but later refuses to sign off its rights to claim impact costs because of the blizzard of changes and delays.
- The project is completed late, the owner has paid a significantly higher price for many changes, and the contractor now has a big delay and impact claim, and the owner withholds payments to cover its liquidated damages.

How are the owner and contractor's damages on a highly impacted project best resolved? The best solution is to avoid the sins of poor project management and contract administration identified above. However, we do not yet live in a perfect world. Until we do, we will continue to face these problems - all too often on a retrospective basis.

## **Why Claims Occur – The Red Flags**

### **3. EFFECT ON PROJECT COSTS**

Large value claims, when asserted successfully, may destroy the viability of a project or make construction more difficult by adding to the disenchantment between the owner and contractor. If a sizable claim is found to be valid, an owner faces serious problems. New financing may be required, later occupancy may be necessary, income from operation of the facility or rent from commercial property may be delayed or lost, and staffs may have to be funded longer than planned to administer the project.

Most owners include contingency funds in their project budgets to cover the cost of claims. These contingencies are normally established at the start of a project to preclude the need for special funding actions later. The contingency funds, however, are usually limited and seldom are large enough to handle claims, which can equal one-third or more of the base cost of the project. In a recent refinery upgrade project having a \$42 million contract value, the engineering, procurement, and construction (EPC) contractor filed a \$45 million claim. Resolution of this claim took over three years and the expenditure of nearly \$10 million in combined legal and expert costs by the combatants.

If a project experiences unknown and unfunded cost increases, emergency actions may be required, such as a temporary halt to construction, robbing unspent funds from other budgeted projects, requesting special appropriations, financing by a new tax or bond issue, or additional borrowing.

Almost any of these solutions create serious problems for the owner, as well as the contractor, because lost time costs money. Nonreceipt of payments resulting from incurred costs not envisioned in the contract price may result in the contractor's financial capability becoming dangerously unstable, his being unable to pay his subcontractors or suppliers, and loss of bonding capacity. Subcontractors, in turn, may default and the project may collapse due to a lack of resources and money.

## **Why Claims Occur – The Red Flags**

### **4. SITUATIONS CAUSING COSTLY CLAIMS**

In a perfect world, the owner never changes his mind, the engineer never alters his drawings, the contractor never malperforms, the resident engineer's decisions are perfect, and Mother Nature behaves herself. That perfect world does not exist.

In the real world, with geometric precision, the forces of owner, engineer, contractor, and Mother Nature combine to make change. The owner changes his mind. The engineer changes his drawings. The contractor fails to manage his job. Mother Nature then changes what the others have missed.

The contractor who proudly boasts, "I've never had a claim," is a vanishing breed. To insure survival to today's construction market, the contractor has learned to understand his rights and the techniques of survival when a claim arises. The owner too must ensure profitability of his project by defending unsupportable claims by a "low ball" contractor who intends to recover his bid errors by change order requests or end of project impact claims.

Depending on which party is assessing and determining the causes for claim generation, the perspectives cover a broad range. Voluminous claims are not foolproof indications that a compensable claim exists. It is frequently necessary to examine the project history in detail before intelligent judgments can be made on the validity of the claim.

When claim experience is evaluated with a view to identifying features of the contract, performance of the work, contract administration and management processes, and disputes resolution procedures that are associated with claims and, therefore, may be of critical importance in claim prevention, the following are regarded as major factors:

#### **4.1 *CONTRACTOR PRACTICES THAT CAUSE CLAIMS***

##### **4.1.1 Inadequate Site Investigation Before Bidding**

Contractors often venture into new geographic areas to broaden their opportunities. Too often, the contractor will bid work without performing an adequate site investigation into areas such as availability of qualified labor, labor productivity, weather patterns, underground conditions, and other competing projects in the area that would compete for the available labor. As a result of not doing their homework adequately, contractors may then take every opportunity to prepare change order requests or file claims to make up for their bid errors.

## **Why Claims Occur – The Red Flags**

### **4.1.2 Unbalanced Bidding Resulting from Manipulating Unit Prices and Front-End Loading Progress Payment Weighting Factors**

Contractors often gamble by proposing high unit prices on types of work where they anticipate significant growth from the owner's bid quantities and lower prices on types of work where they feel that they need to be competitive. If these tactics prove to be ill advised, or if the contractor guesses incorrectly on which units will grow, the contractor may not be recovering its actual costs. In addition, contractors will try to get ahead on the cash flow curve by putting higher progress payment weighting factors (than could be justified on a balanced cost basis) on work performed early in the project to the detriment of work performed later in the project. Another approach may be submitting a higher percentage completion estimate in its pay requests for easier work, such as installing straight run pipe, and then experiencing lower productivity and higher unit costs for valve stations or small bore pipe installations that are more difficult to install.

### **4.1.3 Bidding Below Costs and Over Optimism**

This practice would be considered a deliberate underbid, presumably justified to break into a new geographic market or new line of work. After the euphoria of winning the job disappears and the reality of losing big money on the project sinks in, contractors may be persuaded to seek every opportunity to submit requests for change orders or file claims.

### **4.1.4 Poor Planning and Use of Wrong Equipment**

The means and methods contemplated by the contractor's estimators to achieve the productivities anticipated by their bids are often not implemented in the field because inadequate planning is performed prior to mobilizing to the site. When lower than anticipated productivities are experienced, contractors will be on extra alert to identify claim opportunities.

### **4.1.5 Inadequate Cost and Schedule Control Systems**

These problems are associated with imperfect management planning and control. Possible explanations for why estimated costs for project activities are so inaccurate when compared to actual costs, and why planned schedules experience significant delay, include lack of integrated costs and schedule control systems, poor definition of work activities, improper control of schedules and cost segregation, and inaccurate cost allocation methods.

## **Why Claims Occur – The Red Flags**

### **4.1.6 Failure to Follow Authorized Procedures**

The owner's specifications often require more expensive and time-consuming procedures for performing the work than recognized by the contractor when preparing its bid. When the owner rejects the contractor's work method and insists on the specified procedures, the contractor may attempt to file a claim.

### **4.1.7 Refusal to Proceed with Directed Work Pending a Contract Modification Despite Contract Clauses Giving the Owner the Right to Make a Unilateral Change**

Owners often disagree with the contractor's price for performing changed work, but still want the work performed. To overcome this problem, contract provisions are often included to give the owner the right to make a unilateral change. If the contractor is experiencing cash flow problems or potential delays in completing the work, it may choose to play hardball with respect to forcing the owner to formalize the change and agree to its price and time extension request before performing the changed work. When the work is eventually performed, the actual cost may be much higher than it would have been had the work been performed when the change was identified. These situations are ripe for claims.

### **4.1.8 Performing Defective Work**

Owners may need to withhold progress payments from contractors that have performed defective work. The delay to the project completion caused by the time required to correct these defects may also justify the owner's liquidated damages claims.

### **4.1.9 Slow Mobilization**

Many contractors do not perform sufficient planning in advance to effectively mobilize for the project. After contract award, the owner informs the contractor that the site is available and ready for mobilization to begin. In a design-build or EPC contract, the start of construction is often optimistically planned to occur earlier than when the approved for construction drawings are actually completed, and equipment and materials are procured and delivered. Also, contractors may not move on to a site in an efficient or timely manner because of insufficient planning regarding the equipment and labor needs that are required.

### **4.1.10 Failure to Allocate Resources**

Earning a profit is essential to any contractor's strategy. How does a contractor make a profit? Managing a project with the least amount of people and equipment on site, and completing the project as quickly as possible normally earn profit. The more men and equipment situated on site—the more cash outflow is required. Managing limited amounts of manpower and equipment

## **Why Claims Occur – The Red Flags**

efficiently and cost-effectively is easier said than done, especially if a contractor is dealing with several projects at once.

What frequently happens is that a contractor either does not have the right mix of people or lacks the right equipment on a particular project. This happens because these limited resources are being utilized on other projects. Labor and equipment availability is an important consideration to take into account when preparing to bid on various types of construction projects. The project starts off slower than the early start dates, and acceleration and higher peak labor requirements are later needed to make up for these early resource availability delays.

### **4.1.11 Brokering the Work and Passing All Problems to the Subcontractors Without Adequate Coordination**

General contractors or large EPC contractors often subcontract all of the work but fail to adequately schedule and coordinate the work of the various trades. The general contractor or EPC contractor then points to the clause that it inserts in its subcontracts stating that the subcontractor must coordinate and cooperate with the other trade subcontractors. These problems often result in claims by the subcontractors who are impacted by the main contractor's failure to perform its coordination duties.

## **4.2 *OWNER PRACTICES THAT CAUSE CLAIMS***

### **4.2.1 Competitive Bidding**

Competitive bidding is the procurement practice in which the contractor who leaves the most money out of his estimate, usually as contingencies, gets the job. The lowest bidder is also the one faced with the highest danger of loss if contingencies, i.e., risks, are encountered. Only the very naive owner is unaware of how much time is spent by the low-bid contractor in search of ways to cut losses by seeking additional funds through changes. While competitive bidding is often a sound procurement practice, the owner must recognize that a bid that is significantly below the other bidders is a claim waiting to happen.

### **4.2.2 Fixed-Priced or Lump-Sum Contracts**

Each adjustment to the time or price of the contract requires a turning of the administrative machinery. All too often it becomes a contest; the contractor looks for ways to get more and the owner looks for means to give less. The contest becomes confrontation and the dispute is formed. Allegations of scope change and defective and deficient contract drawings and specifications are at the core of claims on these types of contracts.

## **Why Claims Occur – The Red Flags**

### **4.2.3 Unit Price Contracts**

Owners often go out for bid seeking unit prices for performance of an incompletely defined scope of work. Justification for this pricing strategy is to reduce the overall execution time for the project, i.e., a fast-track schedule. However, disputes often erupt as the engineered quantities are defined during the detailed design phase, and these engineered quantities are significantly more or less than the owner originally estimated. Claims for delay and the loss of productivity costs of significantly higher levels of required manpower that result from higher quantities than originally estimated, or underabsorbed overhead for lower quantities than originally estimated, are encountered when significant discrepancies occur between the original and final quantities.

### **4.2.4 Contract Language that Inappropriately Shifts Risks to the Contractor**

The ideal contract is a balanced document that respects the rights of both parties and thoughtfully allocates each category of risk to the party who is in the best position to manage that risk. In the real world, the owner-drafted contract tends to lean sharply in the owner's favor through the use of exculpatory language. While it may give the owner some degree of added protection, it also leads to higher bid prices and expensive arbitration hearing or courtroom battles.

### **4.2.5 Failure to Grant Time Extensions for Excusable Delays**

Once upon a time, folks did not fuss much about time extensions. When the contractor finished 100 days late, the owner granted a 100-day extension – a simple transaction. It worked because contractors thought “claims” was a dirty word and owners did not have to use liquidated damages as a weapon. Today, most contractors think of “claims” as a proper noun. They also know the definition of constructive acceleration: the owner's denial or failure to act on an allowable request for more time. Today, most owners have learned – some the hard way – that requests for time extension should not be stored in the filing cabinet. Each request demands analysis and timely response.

### **4.2.6 Major Changes in the Plans and Specifications During Construction**

The owner is ultimately responsible for defining the scope of a project during the conceptual phase of the project; the scope will probably change quite frequently without causing any undue hardship. However, changes that occur during the construction phase or even detailed design phase inevitably make life difficult for the construction contractor. Scope changes result from a number of situations, such as owner preferences, design reviews, constructibility issues, safety requirements, hazardous operations reviews, and operations and maintenance concerns.

## **Why Claims Occur – The Red Flags**

### **4.2.7 Mishandling of Minor Change Orders**

The tranquility that follows contract award does not last long before the inevitable changes begin: the owner wants alloy pipe instead of carbon steel because chlorides are found in the feedstock; the engineer wants to move vessels higher in the structure to obtain more head on the pumps below because of higher pressure drop in the system; the contractor wants to use a less costly concrete batch plant instead of buying concrete from the local supplier, but the permits did not provide for a batch plant; and Mother Nature brings a 200-year flood. Change is the necessary ingredient. Without it, disputes are rare events. To minimize the risk of dispute, the owner should administer changes with three objectives in mind. First, try to obtain an up-front agreement (forward pricing) on time and cost. Second, try to include complete accord and satisfaction in the change order agreement. Third, don't let unresolved changes accumulate.

For example, the contractor wants to save a million dollars by building the concrete batch plant. The engineer blames the contractor because the local supplier wanted a higher price for delivered concrete than the contractor included in its bid. The contractor blames the owner for its reluctance to amend its permitting documents. The insolvable dispute ensues. What should the contractor and owner do? Reserve courtroom space and head for high ground? Hardly. Complex disputes can be untangled and resolved, but it demands prompt and decisive actions by the owner and the contractor.

Several guidelines are recommended. First, ignoring the problem will not make it go away. Second, each involved party should provide detailed documentation with respect to the basis of their positions. Third, try to ignore natural biases as the facts are examined. Owners lean instinctively towards their own team, but the leaning is not helpful when the contractor has the winning argument. Fourth, look with vigor for ways to mitigate damages. Fifth, be prepared to compromise as new facts emerge. The owner may not be persuaded to file an amended permit until the contractor shows that the dust emissions from the batch plant will be less than the dust created by the concrete truck traffic. Sixth, don't let unresolved disputes accumulate. Their gathering weight can have a deadly effect: they absorb staff time, poison relationships, drain the contractor's cash reserves, and steadily harden until they are an unresolvable mass.

### **4.2.8 Unrealistic Schedules and Underestimated Costs**

Whenever time schedules and/or project costs are based on optimistic predictions of labor productivity, availability of skilled labor, good weather, quantities based on an incomplete design, etc., the project will be burdened with missed milestone dates, cost overruns, and even low morale among project personnel. Sufficient time must be allocated in the planning stage of a project to accurately estimate time and cost requirements.

## **Why Claims Occur – The Red Flags**

### **4.2.9 Failure to Obtain Adequate Funding**

Adequate funding for construction projects is more difficult when money is tight. Financial institutions are often averse to adequately fund small to medium-size construction projects. Stringent guidelines are now enforced in the lending of money to construction owners. The banking industry is becoming much more selective in the kinds of projects in which they are willing to invest. The construction contractor has to be concerned about whether the owner is going to be able to reimburse or pay progress payments in a timely manner. By far the most common cause of contractor bankruptcy is not failure to earn a profit over the long term, but because they did not get paid in a timely manner. Most contractors go bankrupt because they cannot meet short-term obligations, resulting from not being able to manage their current obligations.

### **4.2.10 Inadequate and Ambiguous Scope Definition in the Bid Documents**

This has a far-reaching effect because a project's scope must be defined in enough detail for comprehensive scheduling, estimating, and resource allocation to be reasonably accomplished. Whenever the owner is unwilling to make a concerted effort to define the construction project in the early stages, or charges ahead using a fast-track concept without adequate contingency, problems will undoubtedly occur throughout the entire project life cycle.

### **4.2.11 Inadequate Time Provided for Bid Preparation**

Owners are always under economic, market, environmental, political and other pressures to start and complete a new capital project or a modification to an existing facility. As a result of these pressures, owners may hastily prepare incomplete bid packages and then request fixed price or unit price bids by a date that does not provide the contractor with an adequate time period to investigate the site conditions, thoroughly read and understand the owner's specifications, prepare its design, verify the accuracy of the owner's quantities, secure quotations for equipment and materials, prepare an adequate project schedule, and estimate its costs for performing the work. When this occurs, the contractor can either choose not to bid, add significant contingencies to its estimate to cover the risks and hope that its bid is still within the owner's budget, or bid competitively in spite of the risks and hope that if it wins the bid, it can recover any unanticipated costs through change orders and/or claims.

## **Why Claims Occur – The Red Flags**

### **4.2.12 Excessively Narrow Interpretation of the Plans and Specifications**

Plans and specifications are often susceptible to different but reasonable interpretations, particularly if they are unclear or ambiguous. To be competitive, contractors are always seeking reasonable ways to reduce their costs and win bids. If the contractor's interpretations are reasonable, and the owner rejects the contractor's equipment and/or material submittals or construction means or methods because its intent was different, claims may be the only recourse available to the contractor, particularly if the owner's interpretations are very costly.

### **4.2.13 Owner-Furnished Materials**

Owners typically want to procure and furnish their own equipment for unique projects, such as chemical plants and refineries, educational facilities, hospitals and research facilities, because of favorable purchasing agreements with vendors or the special needs associated with such projects. Most owners fail to understand that contractors have specific materials management plans for the project – a plan for when that material will be installed and where it's going to be stored once it arrives at the site. Most owners have the mistaken notion that whenever owner-supplied material arrives on the site, the contractor can efficiently store or install the materials. The sequence of delivery of bulk material items such as structural steel, large bore piping, and piping supports is extremely important to the contractor's efficiency. Owners and contractors must thoroughly coordinate and schedule the delivery of these items if the owner elects to perform the procurement function. Contractors usually have installation schedules that they plan to follow, and this type of misunderstanding leads to significant material management problems.

### **4.2.14 Incomplete and Defective Plans and Specifications**

There have been few instances where an engineering design was so complete that a project could be built to the exact specifications and drawings as contained in the original design documents. There are always going to be errors or omissions in the design documents that will result in some modifications to the originally planned construction process.

### **4.2.15 Delays to Project Award**

Often as a result of delays in securing funding approvals or permits to commence the contract work or design completion delays by the owner's engineers, owners may delay project awards beyond the dates stated in the bid documents. It is not uncommon, however, for owners, after clearing such roadblocks to their projects, to still insist that the contractor complete the project by the original bid completion schedule and at the same price. Contractors must then evaluate the tradeoff of lower time-related costs because of the shorter time frame to complete the project and the potentially increased costs because of higher manloading, overtime, shift work, or other acceleration efforts to complete the same scope in a shorter time frame. If the contractor prepared a man-loaded CPM schedule during the preparation of its bid, it could evaluate the

## **Why Claims Occur – The Red Flags**

effect of such acceleration before agreeing to the same completion date despite the contract award delay. If the contractor did not prepare a CPM schedule during its bid preparation, it may have to take the risk that it could still meet the completion date. If the contractor accepts the project award at its original bid price, and its increased costs to complete the project on time significantly outweigh the savings in time-related costs, a contractor may submit a claim to recover its increased costs.

### **4.2.16 Failure to Give Adequate and Timely Access to the Work Site**

When an owner does not provide the contractor with adequate access to the work site to complete its work in the timeframe and in unobstructed conditions that were anticipated in its bid, the contractor may file a delay and loss of productivity claim for the resulting increased labor costs resulting from the access problems.

### **4.2.17 Interfering with Work on the Job Site**

Owners invite claims by inappropriately directing the contractor's work, performing concurrent operations, or actively interfering with the contractor's least cost performance.

### **4.2.18 Letting Other Contracts in the Same Area**

A contractor depends on the availability of qualified craft labor in adequate numbers to perform the project work in the quality, time frame, and productivity rates anticipated by its bid. When the owner disrupts this labor supply by letting other projects in the area without prior notice of such plans at the time of the subject project bid, contractors may submit claims for increased costs of importing labor from outside the geographic proximity of the project, paying higher wages to attract more labor, paying overtime premiums to attract more labor, or incurring decreased productivity for less experienced workers.

### **4.2.19 Failure to Recognize Legitimate Change Order Requests**

The owner's conduct during construction is a critical factor. Disputes will flourish if the owner elects to stonewall all requests for additional time and money. Even the most contentious of contractors will come forth with some well-founded requests that should be handled with equity and dispatch. The owner's positive response to reasonable requests can set the tone for the subsequent relationship of the parties.

Rather than flatly denying all requests, the best approach is a balanced one: pay the reasonable requests and save denials for the spurious. It is not a guaranteed solution, but it is the best policy that the owner can adopt.

## **Why Claims Occur – The Red Flags**

### **4.2.20 Delaying Decisions**

Late decisions that delay the performance of the contractor's work are invitations for claims. Examples of this problem are decisions on pending change orders that drag on well beyond the contractor's ability to complete the work efficiently and without delaying the project, and decisions to approve a time extension or require the contractor to accelerate the work.

### **4.2.21 Delayed Approval of Submissions, Shop Drawings or Materials**

These types of delays can often affect activities on the critical path of the project schedule and cause delay claims. The contract should state the turnaround time that is available to the owner to perform these tasks. In addition, the contractor should always state in its transmittals the date when it needs a response.

### **4.2.22 Overzealous Inspections and Rejection of the Contractor's Work**

Holding the contractor to higher than specified standards for performing the work can cause delay claims and claims for increased costs for correcting the work to the inspector's unreasonable standards.

### **4.2.23 Inadequate Project Management Controls**

Project management control areas that cause the greatest concern include lack of meaningful cost and schedule control information because the contract does not require detailed cost and schedule information to be provided by the contractor; project decisions that are not made in a timely manner or not promptly implemented; confusion regarding the apparent authority and responsibility of project personnel; and, an apparent lack of integrated planning.

### **4.2.24 Refusal to Accept Materials or Equipment that Meet Specifications**

This problem often occurs over the interpretation of "or equal" specifications, where the contractor proposes equipment or materials that the contractor believes meets the owner's specifications and requirements, but the owner insists on a specific manufacturer or model that is usually more costly than the contractor's submittal. If the owner wants a specific item, he should specify the exact item and not include "or equal" language in the specifications.

## **Why Claims Occur – The Red Flags**

### **4.2.25 Bidding the Project Construction with an Incomplete Design**

In its eagerness to get a construction contractor started in the field, theoretically to complete the project sooner, the owner will issue its bidding documents prior to the completion of “ready for construction” documents. Contractor’s usually only bid on what they see in the documents and are reluctant to add contingencies for unknowns because such bids may not be competitive. Completing the design often brings claims for changes and associated delays that, in the long term, extend the project duration and increase its costs.

### **4.2.26 Assignment of Inexperienced Staff to Oversee the Contractor’s Performance**

Many Owners undertake projects with inexperienced and inadequate staff to appropriately administer the contract in a timely manner. Such problems often lead to delays waiting for the owner’s approval of submittals, changes, or responses to Requests for Information (RFI). Alternatively, the Owner could retain construction management, contract administration, or project controls personnel to augment its staff, but this option may not be implemented because of budget constraints. The result of this problem is usually delay, disruption, and claims by the contractor for increased costs.

### **4.2.27 Unanticipated Site Conditions**

Owners often do not undertake adequate underground investigations to determine the type of soil, bedrock, existence and depth of water, contamination of soil, and other subsurface conditions to provide the contractor with adequate information to prepare its bid. The naive owner will put disclaimers in its bidding documents in an attempt to put the risk on the contractor. The result of finding these “differing site conditions” are delays and claims for increased costs.

### **4.2.28 Contract Requirements for Socioeconomic Objectives**

Public or government owners will often place requirements in their contracts for achieving certain hiring objectives, such as minority percentages or local hire percentages. If the number and skill level of the available labor is inadequate to meet these objectives, the project may be delayed and the contractor may attempt to recover any increased costs it has incurred because of an “impossibility of performance” situation.

### **4.2.29 Unclear Definition of Mechanical Completion**

Owners typically designate the Mechanical Completion Date, or the Substantial Completion Date as the key completion milestone in the contract. When these dates have occurred, the owner can begin to start-up the facility or begin to move in and partially occupy the building. Also, this date is usually the date from which liquidated damages are measured. Final Completion is the

## **Why Claims Occur – The Red Flags**

last milestone before the contractor can completely demobilize. Often, the contractor is merely completing punchlist work or certain miscellaneous work that was not necessary for Mechanical or Substantial Completion. Disputes often erupt at the end of the project if the owner's contract definition of Mechanical Completion or Substantial Completion is unclear. The contractor knows what it has to do for Final Completion, but each owner's requirement for Mechanical Completion or Substantial Completion may be different. For example, are as-built drawings, hydrotest packages, operating manuals, and loop check documentation required for Mechanical Completion or Substantial Completion? If the owner requires these items before it will agree to the contractor's declaration of Mechanical Completion or Substantial Completion, but the contractor was planning to submit these after it declared Mechanical Completion or Substantial Completion, a dispute may occur over liquidated damages.

### ***4.3 CAUSES ASSOCIATED WITH THE CONTRACT DOCUMENTS***

#### **4.3.1 Exculpatory Clauses**

Such clauses are an attempt to shift the risks from the drafter of the contract to the other party. However, if one party cannot control such risks and, therefore, incurs increased costs, his only means of recovery may be a claim. A prudent contractor will include contingencies in its bid price for these risks. An example is a "no damage for delay" clause.

#### **4.3.2 Mandatory Advance Notice of Claims**

Owners, construction managers, or prime contractors will often insert notice clauses in their contracts requiring the other party to provide immediate notice of events giving rise to a claim. While these warning signs may be helpful in the mitigation of increased costs and time of performance, it may not always be possible to identify the existence of such problems within a few days of the potential claim-causing event. Even more difficult is the requirement to accurately price the costs associated with claim causing events, particularly when impact ripples throughout the project. If forced to prematurely quantify the price for a change, the contractor will include high levels of contingency or impact costs in its change order prices. The owner's unfair rejection of changes because of high costs or lack of notice will certainly create a claim situation.

## **Why Claims Occur – The Red Flags**

### **4.3.3 Finality of Field Engineer’s Decisions without Review or with a Possible Conflict of Interest**

The design engineer that is assigned to coordinate with the contractor’s personnel often reviews requests for change orders. Legitimate changes are often denied because in accepting such changes, the designer may be admitting liability for errors and omissions. The innocent contractor may have no choice but to file a claim.

### **4.3.4 “Differing Site Conditions” Clauses**

The intent of most differing site conditions clauses is to allow a contractor to recover its increased costs for “differing site conditions” not identified in the contract documents, and thereby allow the owner to receive lower bids without contingencies for unknowns. Inappropriately-worded clauses, which attempt to put the burden on the contractor for such unknowns, will usually result in a claim in that the contract will seek fairness from the owner or the trier of fact if an amicable settlement is not achieved.

### **4.3.5 Lack of Periodic and Independent Review of Documents Before the Bid**

An independent review of the contract documents for ambiguities, conflicts, potential constructibility problems, and design and specification errors is always a wise investment for an owner cautious about claims.

### **4.3.6 Use of Nonstandard and Conflicting Forms**

An unsophisticated owner may attempt to assemble its contract documents, reporting forms, and other technical requirements without assuring that such documents are well coordinated, free from conflicts, and unambiguous. When claims result from such problems, the results are usually in favor of the party who did not prepare the documents.

### **4.3.7 Omissions of Clauses Needed for Effective Contract Management**

Properly-worded contract clauses defining the requirements for as-planned schedules and schedule updates, progress payments based on a balanced schedule of values and a procedure for measuring the completion percentage, handling of differing site conditions, adjustments for variations in quantities, change order pricing and direction to proceed with changes in the event that no agreement is reached on price, acceleration for contractor-caused delays, ownership of float, analysis of delays, turnaround time for submittals and RFIs, and procedures for the resolution of disputes are vital to the proper management of a contract. Absent such clauses, the parties will often act in an inappropriate and costly manner, creating a project environment ripe for claims.

## **Why Claims Occur – The Red Flags**

### ***4.4 CAUSES ASSOCIATED WITH CONTRACT AWARDS***

#### **4.4.1 Diversity of Contract Award Rules**

On public jobs, government agency rules may vary widely as to award of the contract in the event of bid problems such as:

- The low bidder may not meet the minority or local labor percentage requirements.
- The low bidder may have included qualifications or exceptions in its bid that are controversial.
- Conflicts of interest.

Low bid contractors whose bids are rejected because of such conditions may file claims against owners, tying up the project for months.

#### **4.4.2 Treatment of Bid Mistakes**

Claims over bid mistakes are common. The contractor will claim that such arithmetic mistakes were not errors in judgment and should not allow the owner to gain an unfair price for the work.

### ***4.5 CAUSES ASSOCIATED WITH CONTRACT ADMINISTRATION***

#### **4.5.1 Lack of Timely and Effective Management Response**

Personnel charged with the responsibility of responding to the contractor's requests for change orders, time extensions, and legitimate requests for equitable adjustments to their contract amounts must perform their duties in a timely manner. A deaf ear to the contractor's repeated inquiries to the status of the processing of these issues can leave a contractor no choice but to take the issue to a higher level, file a claim, or file an arbitration demand or a lawsuit.

#### **4.5.2 Lack of Coordination of Contracting Agency Responsibilities**

When dealing with government agencies, contractors often become frustrated with a lack of coordination responsibility between the various departments involved in the project. An unresolved issue can become a hot potato between various agency departments, neither of which may want to deal with the problem. To get someone's attention, the contractor may have to file a claim, arbitration demand, or lawsuit. These alternatives could be avoided if clear responsibilities were identified in the contract documents and coordination procedures for the project.

## **Why Claims Occur – The Red Flags**

### **4.5.3 Inadequate Delegation of Authority**

Most owners delegate authority to the field personnel for approval of change orders up to a certain dollar amount. The specific amount is usually a function of the size of the project or the funding mechanism available to deal with payment of the project costs. When the owner's field personnel have no authority to deal with cost issues, and contractor's requests for increases in their contract amount require approval of a Board or some other bureaucracy, which may meet very infrequently and who may not understand the realities of construction, the project environment is ripe for disputes and claims.

### **4.5.4 Unreasonable Contract Interpretation**

If the contract language is subject to more than one reasonable interpretation, a contractor's interpretation may often differ from that of the owner. If the owner unreasonably rejects the contractor's interpretation, or if the contractor's interpretation is unreasonable, a claim situation may develop to resolve these differences.

### **4.5.5 Inadequate Documentation of Performance**

Owners and contractors must document the issues, costs, schedule details, and events that affect the project performance. Absent requirements or internal procedures to record and maintain this documentation, the facts that are necessary to resolve the claims and disputes that develop during the execution of the project are not available except in the heads of the personnel. An accurate recollection issues by project personnel of the facts surrounding complex projects is unlikely. Claims will develop to resolve whose version of the facts is the most persuasive.

## **4.6 *CAUSES ASSOCIATED WITH CLAIM SETTLEMENT PROCEDURES AND PRACTICES***

### **4.6.1 No Written Procedures and Process**

When disputes develop that cannot be resolved at the project level, a mechanism should be identified in the contract documents to take the dispute to a higher level of resolution. Often, the contract documents identify forms of alternate dispute resolution, such as meetings of executive management of the parties, mediation, dispute review boards, or project neutrals, as a necessary step before binding processes such as arbitration or litigation. While these intermediate processes are often helpful and cost effective in terms of resolving the claims or disputes that develop, the contract documents should also refer to the agreed upon procedures that the parties must follow while engaging these dispute resolution methods. Of particular importance in these procedures are the following:

## **Why Claims Occur – The Red Flags**

- The format and contents of the contractor's claim, including the identification of schedule analysis methods and cost documentation.
- Whether discovery of information and documents will be permitted.
- Time frames for moving through the process.
- Finality of the decisions.

### **4.6.2 Discouragement of Project-Level Settlements**

Owners and contractors who encourage the field personnel to resolve the disputes at the project level and discourage the bumping up of problems to the head office are less likely to have claims and disputes requiring third party resolution.

## **Why Claims Occur – The Red Flags**

### **5. THE COURT’S VIEW OF CONTRACT INTERPRETATION**

In view of the claim causing problems discussed earlier, the need for a contractor to file a lawsuit may be for his very survival. Over the years, many landmark cases have evolved new avenues and bases for contractor recovery, some of which are as follows:

“But if the contractor is bound to build according to plans and specifications prepared by the owner, the contractor will not be responsible for the consequences of defects in the plans and specifications. This responsibility of the owner is not overcome by the usual clauses requiring builders to visit the site, to check the plans, and to inform themselves of the requirements of the work....”<sup>1</sup>

“... It is, however, an implied provision of every contract, whether it be one between individuals or between an individual and the government, that neither party to the contract will do anything to prevent performance thereof by the other party, or that will hinder or delay him in its performance.”<sup>2</sup>

“Contractors are businessmen usually pressed for time and consciously seeking to underbid competitors. Consequently, they estimate only those costs that they feel the contract terms will permit the government to insist upon in the way of performance. They are not expected to ferret out hidden ambiguities or errors in the bid documents and are protected if they innocently construe in their own favor an ambiguity equally susceptible to another construction or overlook an error.”<sup>3</sup>

“Merely because the highway and bridge construction contract was complete and the job accepted well before the contract completion date did not preclude the contractor’s recovery for increased costs due to delay where, absent delays caused by the state, the contract could have been completed earlier and substantial sums of money saved by contractor.”<sup>4</sup>

“Ascertainment of damages is not an exact science and it is not essential that the amount of damages be ascertainable with absolute exactness or mathematical precision; it is enough if the evidence adduced is sufficient to enable a court or jury to make a fair and reasonable approximation.”<sup>5</sup>

“Contracting authority has the duty to invoke its contractual rights to compel cooperation among contractors. Where the transit authority limited the exercise of

---

<sup>1</sup> *United States v. Spearin*, 248 U.S. 132 (1918).

<sup>2</sup> *George A. Fuller Co. v. United States*, 69 F. Supp. 409 (108 Ct. Cl. 1947);

<sup>3</sup> *Bromley Contracting Company*, ASBCA 14884, 16045 72-1 BCA ¶ 9252 (1972).

<sup>4</sup> *Grow Constr. Co. v. State*, 391 N.Y.S.2d 726, 729 (App. Div. 1977);

<sup>5</sup> *Metropolitan Sewerage Comm’n v. R.W. Constr.*, 78 Wis.2d 451, 255 N.W.2d 293-302 (1977).

## **Why Claims Occur – The Red Flags**

its supervisory authority to arranging an unsuccessful conference between adjoining contractors to resolve the problem of water overflowing from the job site of the first contractor onto the job site of the second contractor when it had a duty to compel cooperation, resulted in a break of contractual duty owed to the second contractor.”<sup>6</sup>

While the owner has the most at risk in terms of money and in terms of the urgency of prompt and on-time completion of the project, he also has – from the beginning – the greatest opportunity to control how the project is conducted and to provide appropriate organization and methods for preventing disputes from arising and for solving disputes promptly as they do arise in order to minimize their effect on the project as a whole. This opportunity cannot be emphasized too strongly. If the owner pays careful attention to this, there is no question but that he stands to have a more efficient and, therefore, less costly project and that he will substantially diminish the risk of costly litigation or arbitration after the project is completed.

As one judge has commented:

“Except in the middle of a battlefield, nowhere must men coordinate the movement of other men and all materials in the midst of such chaos and with such limited certainty of present facts and future occurrences as in a ...construction project.... Even the most painstaking planning merely turns out to be mere conjecture and accommodation of changes must necessarily be of the rough, quick and ad hoc sort, analogous to ever-changing commands on the battlefield.”<sup>7</sup>

Therefore, the object for the owner will be - from the very beginning of the project - to eliminate, as much as possible, the conjecture and the need to accommodate change on an ad hoc basis, to make sure that all the various elements in the project are coordinated to the best possible extent, and to be sure that when he needs to make decisions in the course of the project, he is able to make them with a full understanding of all the facts and consequences. This can best be done through the use of carefully planned and prepared contract documents, plans, and specifications.

For some projects such as a major facilities expansion program, unique and complex design, scheduling, and construction requirements above a level considered routine may require special attention to the procurement and contracting process. It is at the beginning of the large project before the designer is employed, when the owner can best control procurement procedures and contracts and minimize the potential for claims.

---

<sup>6</sup> *Shea-S&M Ball v. Massman-Kiewit-Early*, 606 F.2d 1245 (D.C. Cir. 1979);

<sup>7</sup> *Blake Construction Co. v. J. C. Coakley Co.*, 431 A.2d 569,575 (D.C. App. 1981).

## **Why Claims Occur – The Red Flags**

### **About the Author**



**Richard J. Long, P.E.**, is Founder and CEO of Long International, Inc. Mr. Long has over 40 years of U.S. and international engineering, construction, and management consulting experience involving construction contract disputes analysis and resolution, arbitration and litigation support and expert testimony, project management, engineering and construction management, cost and schedule control, and process engineering. As an internationally recognized expert in the analysis and resolution of complex construction disputes for over 30 years, Mr. Long has served as the lead expert on over 300 projects having claims ranging in size from US \$100,000 to over US \$2 billion. He has presented and published numerous articles on the subjects of claims analysis, entitlement issues, CPM schedule and damages analyses, and claims prevention. Mr. Long earned a

B.S. in Chemical Engineering from the University of Pittsburgh in 1970 and an M.S. in Chemical and Petroleum Refining Engineering from the Colorado School of Mines in 1974. Mr. Long is based in Littleton, Colorado and can be contacted at [rlong@long-intl.com](mailto:rlong@long-intl.com) and (303) 972-2443.



## Why Claims Occur – The Red Flags

### INDEX

#### A

Access .....	15
Ambiguities .....	23
Approval of Change Order .....	21
Authority .....	21

#### B

Bid .....	7, 8, 10
Bid Error .....	7
Bid Mistakes .....	20
Bid Preparation .....	13
Bid Problems .....	20
Bromley .....	23

#### C

Change Orders .....	8, 12, 16, 19
Changes .....	11
Competitive Bidding .....	10
Concurrent Operations .....	15
Conflict of Interest .....	19
Constructive Acceleration .....	11
Contingency .....	6
Contract .....	11, 18, 20
Contract Administration .....	20
Contract Awards .....	20
Contract Documents .....	18, 19
Contract Interpretation .....	21, 23
Contract Modification .....	9
Coordination .....	10, 20
Coordination Procedure .....	20
Course of Dealing .....	2

#### D

Damages .....	23
Defective Plans and Specifications .....	14
Defective Work .....	9
Delayed Approval .....	16
Delayed Decisions .....	16
Delays to Project Award .....	14
Delegation of Authority .....	21
Differing Site Conditions .....	17–19
Disclaimers .....	17
Discovery .....	22
Dispute Resolution .....	21
Disruption .....	17
Documentation .....	21, 22

#### E

Errors and Omissions .....	19
Exculpatory Clauses .....	11, 18
Excusable Delay .....	11

#### F

Fast-Track .....	4, 13
Fixed-Priced .....	10
Funding .....	6, 13, 14

#### I

Impossibility of Performance .....	17
Inexperienced Staff .....	17
Interpretation .....	14

#### L

Liquidated Damages .....	5, 9, 11, 18
Lump-Sum Contracts .....	10

#### M

Mechanical Completion .....	17
Mobilization .....	9

#### N

No Damage for Delay .....	3, 18
Notice .....	18

#### O

Or Equal Specifications .....	16
Overhead .....	11
Overtime .....	14, 15
Overzealous Inspection .....	16
Owner-Furnished Materials .....	14
Ownership of Float .....	19

#### P

Procedure .....	9, 19, 21
Productivity .....	11, 12, 15
Progress Payments .....	9, 13, 19
Project Management .....	16



## Why Claims Occur – The Red Flags

### INDEX

(continued)

#### R

Refusal to Proceed.....	9
Resources.....	9
RFI.....	17
Risk.....	11, 15, 17, 24

#### S

Schedule Analysis.....	22
Schedule Control.....	8, 16
Schedule Updates.....	19
Scope Definition.....	13
Scope of Work.....	11
Settlement.....	22
Settlement Procedures.....	21
Shop Drawings.....	16
Site Conditions.....	13, 17
Site Investigation.....	3, 7
Socioeconomic Objectives.....	17

Spearin.....	23
Submittals.....	14, 17, 19
Substantial Completion.....	17

#### T

Time Extensions.....	4, 11, 20
----------------------	-----------

#### U

Unbalanced Bidding.....	8
Underbid.....	8
Unilateral Change.....	9
Unit Price.....	8, 11, 13

#### W

Weather.....	7, 12
--------------	-------

### CASES

<i>Blake Construction Co. v. J. C. Coakley Co., 431 A.2d 569,575 (D.C. App. 1981).</i> .....	24
<i>Bromley Contracting Company, ASBCA 14884, 16045 72-1 BCA ¶ 9252 (1972).</i> .....	23
<i>George A. Fuller Co. v. United States, 69 F. Supp. 409 (108 Ct. Cl. 1947).</i> .....	23
<i>Grow Constr. Co. v. State, 391 N.Y.S.2d 726, 729 (App. Div. 1977).</i> .....	23
<i>Metropolitan Sewerage Comm'n v. R.W. Constr., 78 Wis.2d 451, 255 N.W.2d 293-302 (1977).</i> .....	23
<i>Shea-S&amp;M Ball v. Massman-Kiewit-Early, 606 F.2d 1245 (D.C. Cir. 1979).</i> .....	24
<i>United States v. Spearin, 248 U.S. 132 (1918).</i> .....	23