

**HOW TO AVOID  
CONSTRUCTION CLAIMS, AND  
WHAT TO DO ABOUT THEM  
IF THEY OCCUR**

*by*

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Thank you for attending this session of the National Association of County Engineers Annual Meeting and allowing me to present my thoughts to you on the subject of construction contract disputes and claims: how to avoid them, and what to do about them if they occur.

Before I begin, I would like to tell you a little bit about myself and the firm I work for, Hill International. Let me start with the firm. Founded in 1976 as a construction claims consultant, Hill International, Inc. is a multi-disciplined management consulting firm which has developed a national reputation for its innovative approach to resolving and preventing construction cost and schedule overruns, and for the successful management of construction and environmental projects from preconstruction services to construction management, litigation support, and expert witness testimony.

In addition to Claims Analysis and Claims Resolution services, Hill also provides Claims Avoidance training, Bid Document reviews, Program and Project Management services, Construction Management services and Project Management Oversight services.

Hill's staff includes engineers, architects, attorneys, construction schedulers, accountants, cost engineers, contract administrators, inspectors, and construction management specialists. Hill's main office is in Willingboro, New Jersey, with other full service offices in Washington, DC, Los Angeles, California, and Abu Dhabi, UAE.

I have been with the firm slightly over 11 years. My background is as a Civil Engineer, with Bachelors and Masters degrees in Civil Engineering from Villanova University. I also have an MBA and I am a licensed Professional Engineer in New York, New Jersey, and Pennsylvania. Previous to my employment with Hill International, I worked for 7 years as a Resident Engineer on field construction projects for the City of Philadelphia. I am currently a Senior Vice President of Hill, responsible for all of the firm's projects in the Transportation Sector. I have spoken frequently on the subjects of claims avoidance and claims resolution, both in seminars offered to the general public as well as internal sessions for some of Hill's major clients, such as General Electric, Asea Brown Boveri, the New Jersey Turnpike Authority, and the City of Philadelphia.

I hope that this brief introduction gives you a better idea as to who I am and who Hill International is, so that you can better understand the perspective from which I present my ideas and tips on preventing and resolving construction claims.

## Claims – A Historical Perspective

In order to understand the current construction claims climate, a brief historical perspective is needed. In the early 1980's, case law which developed as a result of court decisions in several major construction cases (i.e. Chantilly, Blake, Pittman) effectively established a new avenue for claims by contractors: the impact of changes and delays on unchanged work. This has resulted in the now common practice of contractors reserving their rights rather than agreeing to bilateral settlements on a timely basis. In some parts of the world, especially in Europe and the Middle East, delay and/or disruption claims based upon the number of change orders or scope of changes has become a favored approach for asserting global claims when settlement attempts for change orders fail.

As a result, participants in the construction arena are now faced with two divergent positions. First is the owner's right to issue unilateral change orders under the terms of the contract. Second is the contractor's right under the impact cost theory to reserve his rights for delay and impact costs.

Incidents of construction claims have increased significantly since the mid-70's and have resulted in a litigious attitude on the part of all of the participants in the construction process. Many, if not most, of the major claims today are based on schedule, delay, impact, disruption or acceleration theories. In addition, there is an increased reliance on the so-called global claim. As a result, the issue of scheduling, planned versus actual performance, the identification of cause, and assigning responsibility for deviations will continue to be key issues for successfully resolving claims.

To be successful in the timely resolution of disputes, it is going to take more than the use of the so-called partnering concept and ADR procedures. It is going to require better planning, better management, an attitude of mutual trust and cooperation, and the use of pro-active claims avoidance techniques. It is also important that the parties be prepared with adequate project control systems, procedures and techniques in place and working so that the elements of proof are captured, documented, exchanged by the parties, and convincing to an adversary when necessary.

## Documentation and Timely Response

In the past when I have had the opportunity to speak to contractor's groups or individual firms that are involved in construction on the provider side, such as contractors, equipment suppliers and vendors, I tell them that there is no substitute for what I will call aggressive contract administration on their part. What this means is having a thorough understanding of the terms and conditions of the contract and of the day-to-day events and issues on the project. When events, circumstances, or conditions differ from that called for in the contract, or when the contractor is being asked to perform work that is different than specified, he should promptly notify the owner and document what is being done. The two key words I often use to these groups are "notification" and "documentation". The purpose of notice of requirements are:

- *Permit the owner to make its own determination as to the character and scope of the problem*
- *Permit the owner to determine the course of action to be taken in coping with the problems encountered*
- *Permit the owner to exercise control over cost and effort expended in resolving the problem(s)*
- *Insure that both parties have a record of the dates and facts which initiated the claim situation*
- *Permit resolution of the situation while the facts and circumstances are still fresh.*

To a group made up primarily of owners and their engineers I would say that one of the two key words remains the same, which is "documentation". For the other key word, notification, substitute "timely response".

Let me start with documentation. Whether your goal is to avoid a claim or successfully resolve it in your favor at a later date, there is no substitute for thorough documentation of project events as they occur. Basic kinds of documentation include:

- *Daily Logs*
- *Correspondence*
- *Photographs*
- *Cost Reports*
- *Internal Correspondence*
- *Payment Records*
- *Material Delivery & Receiving Records*
- *Telephone Conversation Logs*
- *Cost Flow Schedules*
- *Job Cost Accounts Records*
- *Change Orders Requested, Pending & Approved*
- *Time Records*
- *Video Tapes*
- *Minutes of Meetings*
- *Shop Drawing Logs*
- *Equipment Utilization Records*
- *Schedules*
- *Periodic Status & Progress Reports*
- *Labor & Productivity Costs*
- *Bid Work Sheets*
- *Production & Job Cost Summaries*
- *Requests for Information*

If properly prepared, these contemporaneously maintained documents will no doubt tell the real story, or at least the story in the eyes of the person maintaining the documents, as events unfold. Of course, the contractor's documentation can differ, because his individual interpretation of project events can often times be different from the engineer, the inspector, or the clerk of the works.

But clear, contemporaneous documentation is by far the best defense; the best way to prevent a minor field dispute from escalating into a large dollar claim which may result in litigation, arbitration, or some other unpleasantness.

The other key word or phrase is "timely response". A smart contractor is not only going to document everything it does, but it will also promptly notify the owner or its engineer in writing when it believes that it is entitled to additional compensation or additional time to perform the work. An effective tool often employed by contractors for this purpose is an RFI (request for information). A typical RFI poses a question or comment, is dated, and contains a response block to be filled out by the recipient and returned to the sender. I have seen many claims where there was no single issue that could result in a protracted dispute, but where the contractor produced 500 or more RFI's to convince a trier of fact that its operations were rendered inefficient and unproductive because it constantly had to stop work, ask questions, and seek direction or interpretation of the contract plans and specifications. This is typical of the "reservation of rights" claims based on the alleged impact of multiple changes on unchanged work.

Timely response means a lot of things. If a contractor is faced with a changed condition, promptly evaluate it and respond. If the contractor is entitled to additional time, grant a time extension or acknowledge the fact that you want the contractor to accelerate to make up for the time. If the

contractor is entitled to additional compensation for a change or a differing site condition or for extra work added by the owner, promptly acknowledge it, prepare and process the change order, and promptly pay the contractor. Timely response also means promptly dealing with contractor's requests for payment, either by making the payment, immediately raising questions where necessary, or promptly rejecting requests for payment or adjusting them when you believe payment is not due for all or a portion of the work. As simple as these things sound I am sure you wouldn't be surprised at the number of times and the number of projects where this seemingly common sense approach is not followed.

Timely response also means timely monitoring and responding to the contractor's schedule submittals and the contractor's adherence to the schedule. If your agency requires that a contractor use network scheduling techniques such as CPM or precedence diagramming methods, i.e. Primavera or Open Plan, then once the contractor submits its schedule you owe it to him to promptly review and comment on it. To the extent that the contractor does not meet the schedule, periodic reminders should be sent to the contractor. For example, each week the contractor can be sent a letter pointing out the schedule activities which were supposed to start during the period but which did not, and the contract activities which were supposed to complete during the period but did not. As a project owner you can also insist that the contractor submit a schedule narrative explaining progress against the schedule and any deviations or schedule changes that it intends to make during each reporting period. The schedule narrative has become a convenient place for contractors to point out delays and interferences allegedly beyond their control which affect the contractor's progress. These also should be dealt with promptly. To the extent that they appear to be accurate, demand that the contractor submit its claim and justification in a timely manner in accordance with the contract documents. If the statements are inaccurate, promptly point these out and document them either in a letter or in minutes of a schedule review meeting.

### Prevention and Resolution

What else can we do to avoid changes or unresolved matters from escalating into disputes and claims? What else can we do to resolve such matters in the unfortunate event that they become claims and you find yourself before a judge or an arbitration panel? The balance of this paper will focus on pointers or guidelines that you can use to effectively and aggressively administer your contracts to prevent claims, and to analyze and resolve them satisfactorily if they occur.

Before presenting these guidelines, we should first review the kinds of things that commonly lead to claims and disputes. Typical claims for which owners are responsible include the following:

- *Late issuance of notice to proceed.*
- *Delayed access to site.*
- *Delayed work of preceding contractor.*
- *Late approval of shop drawings and samples.*
- *Failure to timely approve submissions.*
- *Failure to approve reasonable substitutions.*
- *Delay in answer to field questions and field variances.*
- *Owner directed changes.*

- *Directed changes in the planned method of construction.*
- *Changed Conditions Variations in estimated quantities.*
- *Disruption or interference by other contractors under the direction of the owner.*
- *Schedule changes Directing manning levels.*
- *Delayed payment to contractor.*

### **Delay Claims**

The most common claims against owners are claims for increased compensation due to delay. Be on the lookout for the following key words used by the contractor in correspondence, meetings, etc.:

- *Late approvals*
- *Licensing and permit problems*
- *Disruption, owner inaction*
- *Bad weather*
- *Late deliveries, no access*
- *Interference*
- *Discrepancies in plans and specs*

Know and watch out for the kinds of increased cost impacts that are typically associated with delay claims, such as:

- *Extended job supervision and field overhead*
- *Extended equipment costs*
- *Extended home office overhead*
- *Finance costs*
- *Idle labor and equipment*
- *Wage and material escalation*
- *Labor inefficiency*
- *Reduced job opportunities (lost profits)*

### **Acceleration Claims**

Another common claim theory is acceleration. Look out for these key words:

- *Overtime*
- *Schedule Change*
- *Speed Up*
- *Early Completion*
- *Excusable Delay*
- *Extra Shift*
- *Slow Down*
- *Longer Work Day/Week*
- *Denial of Time Extension*
- *Work Efficiency*

### **Constructive Acceleration Claims**

A particularly disturbing claim is one for "constructive acceleration". A constructive acceleration claim is one where a contractor contends that it was entitled to a time extension which was not granted, and as a result the contractor was forced to accelerate its work in order to meet the owner's completion date. While the owner has not directed the contractor to accelerate, the contractor

contends that the owner's action or inactions have the same effect, such as failure to grant an otherwise valid time extension, or implying that the work must be completed by a certain date regardless of any delays which may have occurred. The essential elements of a claim for constructive acceleration are the following:

- *Valid excusable delay exists*
- *A timely request for a time extension has been presented by the Contractor.*
- *The owner has failed or refused to grant the request.*
- *The owner has acted in a manner which reasonably can be construed as requiring the contractor to complete on a schedule which has not been properly extended.*
- *The contractor actually expends effort to accelerate performance. Additional costs are incurred by the contractor as a result of the acceleration.*

Cost impacts typically associated with acceleration claims are:

- *Overtime*
  - *Direct Premium Costs*
  - *Inefficiency*
- *Inefficiency of overall operations*
- *Cost of expedited vendor delivery*
- *Additional supervision and overhead*
- *Reduction of equipment rental costs, wage escalation*

### Constructive Changes

A third common claim theory is "constructive changes". Constructive changes are changes that the contractor alleges are the result of some action or inaction on the part of the owner which are not readily acknowledged by the owner to be contract changes. Key words to be on the lookout for are:

- *Unwritten request*
- *Additional work/services*
- *Overly rigid inspections*
- *Incorrect interpretation of plans and specifications*
- *Defective plans and specifications*
- *Interference*
- *Change in method or sequence of work*

## Tips for Preventing Claims

The following points are presented to aid you in effectively managing your projects and preventing construction claims. You will note that many of these items relate to the project schedule. The reason for this emphasis is because, as stated above, the most common claims against owners are delay claims.

### *During Design and Bidding Phases:*

1. Read and understand the contract documents. Be aware of special contract clauses used to limit liability such as no damage for delay, notice of delay, indemnity and hold harmless, disclaimers, exculpatory, and waiver of all claims. Consult your attorney for advice as may be necessary.
2. Become thoroughly familiar with the project delivery system being used, the roles and responsibilities of all parties involved, the proposed schedule requirements, and the scope and timing of the work being contracted.
3. Determine who should have the overall responsibility for schedule and coordination, schedule enforcement, payments, changes, approvals, etc.; and make sure that the contract accurately reflects your desires.
4. Carefully prepare scheduling specifications that communicate what you want and what you expect of the contractor. If any ambiguities exist, issue a clarification in writing.
5. Require prime contractors to involve their subcontractors in schedule development and implementation.
6. Preserve a set of the original plans as bid. If different, retain a "clean" set of plans and specifications which are made part of the construction contract documents.
7. Train staff to recognize the salient features of constructive changes. Establish procedures for identification, notices, documentation and timely resolution.

### During Construction Phase:

1. Establish and require contractors to furnish a reasonable breakdown of their bids to determine what is included and what is excluded. Lay the foundation for establishing a schedule of values, timely payments and the necessary elements for a good budget and cost control system.
2. Timely review and approve contractor prepared schedules. Document in writing, the schedule approval process, and make sure that the approved schedule reflects the understanding of both parties on how the contractor intends to perform the contracted work.
3. If an owner disapproves a contractor's schedule, he should do so without delay and in writing, outlining his objections and the requirements for resubmission by the contractor.
4. Joint schedule updating at least monthly is strongly encouraged. The schedule specification should include clear procedures for periodic updating process. Each update should reflect

as-built conditions just as a set of plans and specifications are supposed to be kept up to date to reflect as-built conditions in the field.

5. Periodically evaluate your record keeping system and ensure that all elements of contract administration and actual performance are being preserved. The need for good, accurate records cannot be overemphasized. Such records are the principal source of evidence for verifying that the parties have conformed with the contract documents; and for timely negotiations of variation orders, resolution of disputes, and proving or defending against time delays and damage claims.
6. Require your field supervision to maintain a personal diary and to prepare or have prepared daily reports. Reports should accurately document actual performance, problems encountered, written and/or oral directives received, field conditions encountered, visitors, etc. Facts only – avoid editorial comments and self criticism.
7. Require your field staff to record at least one or two weather observations each day covering the amount of rain or snow, temperature extremes, any significant wind conditions, and the effect weather conditions had on job progress and cost.
8. Labor and equipment records should be kept daily showing labor by craft, type and number; the construction equipment being used at the site, hours operated, hours idle, work performed, and any repairs waiting to be made.
9. Keep a transaction register for all shop drawings and material samples showing scheduled dates for submission, actual submission, time allowed for approval, actual duration of approval, and the dates of any resubmissions or rejections involved.
10. Establish procedures for control of requests for information (RFI's).
11. When a specific delay occurs, initiate accounting procedures which require the identification, isolation and recording of delay generated costs involved. Particular attention should be given to documenting standby or idle labor and equipment. In addition, document what instructions were given or actions taken or not taken, to mitigate the situation.
12. Prepare time impact analyses for all change orders suspected of involving delay and/or impact. Each impact analysis should describe the delay and present the facts relating to it, determine liability, the net time impact and the relationship of the delay to any other delays, particularly those that are concurrent or off-setting. Keep a master ledger of time impacts reflecting the chronological influence of delays encountered to date.
13. Keep a log of all change orders from initiation to final settlement. Require contractors to support and justify time extension requests in their change order cost proposals. Correlate all impacts with the base schedule and adjustments thereof. Make sure that the issue of time is addressed in all change orders.
14. Before a directive to accelerate a contractor is issued, steps should be taken to confirm that all requests for time extensions and possible excusable delay have been considered and the contractor is behind a properly adjusted schedule at the time he is directed to accelerate.

## Tips for Claims Analysis

If despite all of the above precautions you still receive a claim, analyze the claim using the following outline as a guide:

1. Thoroughly review the claim submittal made by the contractor to understand the factual and legal basis for the claim, the extent of the delay, if any, and the nature of the additional compensation sought.
2. Identify the elements of proof required, and compare them with those submitted by the Contractor. Know your possible defenses in delay situations, which are presented at the end of this section.
3. Document the specification's notice and claims filing requirements and determine compliance by the Contractor.
4. Identify and review available correspondence, reports, memos, and similar documents, to obtain a detailed understanding of the facts. Document facts which can be confirmed, refuted, or are at variance with the Contractor's position. Identify factual proofs that are required to support the Contractor's claims that are not provided by the Contractor.
5. Obtain current schedule information relative to the issue claimed. Compare and analyze planned versus actual performance by the Contractor. Identify any variances and probable cause therefor.
6. Conduct interviews with knowledgeable Owner and Contractor personnel. Obtain and/or prepare written statements where necessary to support factual analyses and conclusions.
7. Construct a chronology of relevant events.
8. Review and analyze performance records such as current schedules, daily reports, photographs, diaries, inspection reports, pay records and comparable documents.
9. Conduct productivity analyses. If the Contractor alleges that the work was performed in a manner, or at a time, or under circumstances, or at a rate, at variance with the contract, conduct an analysis of the Contractor's supporting documentation and verify or refute such claims by collecting and analyzing factual performance records maintained by the Owner.
10. Review and assess any performance of the work alleged by the Contractor to have exceeded, or alleged to have been more difficult than, what is required by the contract.
11. Review and assess Contractor cost estimates and claimed actual costs, if available. Consider the various types of costs claimed and/or damages sought by the Contractor, versus the elements of proof required.
12. Identify questions that remain to be answered by the Contractor and/or the Owner's staff.
13. Identify additional documentation related to the claim issue (i.e., statutes, standards of care) necessary for an assessment and position to be taken on the issue.
14. Summarize strengths and weaknesses of the claim issue(s) from the Owner's viewpoint.
15. Prepare an action plan for follow-up, disposition, and/or resolution of the dispute.

## Defenses to Delay Claims

1. Contractor has not proven delay
  - *Delay justification submitted by the Contractor is incomplete or incorrect*
  - *Claim does not factually support responsibility and cause of claim*
  
2. Contractor was delayed, but not damaged
  - *Delay is absorbed by available float*
  - *Concurrent delay*
  - *Offsetting delay*
  - *Contractor did not incur additional costs*
  
3. Contractor was damaged, but can not recover any cost
  - *Delay was foreseeable*
  - *"No damage for delay clause" in contract*
  - *Waiver of right, sign off of changes, failure to give notice*
  - *Contractor was inefficient*
  - *Non-compensable delay (weather, accidents, Force Majeure)*
  - *Contractor failed to mitigate*
  - *Contractor failed to coordinate*
  - *Contractor failed to submit claim and/or supporting data*
  
4. Contractor was damaged, but compensated (partially or totally)
  - *Overhead absorbed by lump sum work*
  - *Overhead absorbed by T & M work*
  - *Bid contingencies*
  
5. Contractor was damaged, but there are offsets
  - *Backcharges*
  - *Credits*
  - *Allowances*
  
6. Contractor was damaged but others are responsible
  - *Contractor's vendors*
  - *Contractor's suppliers*
  - *Contractor's subcontractors*

## Conclusion

Hopefully, you are now prepared to resolve the claim. Depending upon the dispute resolution terms of the contract, you should be ready to do one or several of the following:

- *Negotiate*
- *Arbitrate*
- *Mediate*
- *Litigate*

This paper's subject stops at this point, but as you can imagine there are many very important issues that also need to be addressed in the resolution phase to insure a successful resolution.

In conclusion, let me point out that the real objectives of both parties should simply be to assure that the Contractor properly and timely performs the work required by the Owner, and that the Owner pays a fair and reasonable price for all work performed, including any changes.

This simple objective is not always simply accomplished; it requires diligence and persistence. Making the contract work while creating and maintaining good lines of communication and good working relationships is not simple or easy — but it is worth the effort.

Always realize that a claim is nothing more than a disputed or unresolved change. If you have properly prepared your documents, properly scoped the work and properly administered the contract, changes should be able to be kept to a minimum. Those that inevitably do occur will be less likely to be disputed or be unresolved if both parties treat each other fairly. However, as is often said, the best defense is a good offense. In the case of construction claims, the offense is a well documented job, properly and fairly administered, with the ability to recognize potential problems and deal with them before they escalate into claims.

I hope that my input here, acquired from my company's 16 years of experience in dealing with construction claims and project management will prove useful to you in your future construction projects. Thank you for your attention.

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This paper was presented at the National Association of County Engineers Annual Convention, San Antonio, Texas, on February 3, 1993.