

Timely Time Extensions:  
The Owner's Duty

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## **Abstract**

Construction contracts specify that an owner will grant time extensions for excusable delays. Courts and contract appeal boards have added an implied obligation requiring the owner to grant time extensions in a timely manner. Failure to issue time extensions for excusable delays distorts CPM schedule update projections and may result in claims for constructive acceleration. It is a strong indication of potential scheduling disputes and subsequent litigation.

Despite the obligation to grant time extensions in a timely manner, owners frequently fail to do so, for various reasons. Lack of expertise in schedule time impact analysis, low confidence in the schedule's accuracy, or a belief that the project will recover on its own (what Samuel Johnson called, "the triumph of hope over experience") can prevent owners from addressing time extensions properly.

This paper will evaluate the reasons owners frequently fail to address time extensions in a timely manner, and provide guidance for the owner's project management team.

## **Introduction**

Construction contracts – or any contracts –include provisions or language to which the parties agree. These provisions are referred to as express provisions because they are precisely outlined in the contract itself. However an owner must remember that courts can supplement the express contract obligations with implied obligations that are not specifically recorded in the contract. Wickwire, Driscoll, et.al. identify four implied obligations relevant to construction scheduling:

1. The duty to schedule and coordinate the work;
2. The duty to not delay, hinder, or interfere with the work;
3. The duty to cooperate; and
4. **The duty to grant reasonable time extensions. [6]**

This paper will address the latter obligation, the duty of an owner to grant reasonable time extensions in a timely manner.

### **The Situation: Delay**

The owner’s interest in a construction project is to receive a quality project delivered on time and within the bid or negotiated price. Owners can choose to put time considerations at the top of their list, demanding that performance be completed within the original contract performance period regardless of changes, delays or other factors. Contractors generally share this goal; extended periods of time on a project are rarely as profitable. Delay is problematic to both parties; owners want their facilities completed and generating revenue (in production or leasable). Contractors incur overhead costs if they have to stay on a job longer than planned, and they may experience material price increases or other escalation costs.

Construction contracts usually contain express provisions obligating the owner to grant a contractor a time extension for certain excusable delays. These are usually referred to as *force majeure* provisions when the delay is caused by factors outside the contractor’s control (fire, flood, unusually severe weather, labor disputes, etc.) Frequently this provision is coupled with a “no damages for delay” clause, limiting the contractor to a time extension only, thereby relieving the owner of an obligation to reimburse the contractor for his extended time on the project as long as the delay is not directly or indirectly caused by the owner through a change order or interference with the contractor’s performance.

Federal contracts usually reference the Federal Acquisition Regulations (FARs) in defining excusable, non-compensable delays:

The Contractor will be allowed time, not money, for excusable delays as defined in FAR 52.249-10 ... [which] include (1) acts of God or of the public enemy; ... (5) fires; (6) floods; (7) epidemics; (8) quarantine restrictions; (9) strikes; (10) freight embargoes; (11) delays in delivery ... and: (12) unusually severe weather.

In each instance, the failure to perform must be beyond the control and without the fault or negligence of the Contractor, and the failure to perform furthermore (1) must be one that the Contractor could not have reasonably anticipated and taken adequate measures to protect against, (2) cannot be overcome by reasonable efforts to reschedule the work, and (3) directly and materially affects the date of final completion of the project. [5]

When a time extension is granted without money, the delay is referred to as a non-compensable delay. A delay resulting from actions by the owner (a change order for example) will typically require reimbursement for the direct costs of the change plus the costs of delay (extended overhead for the Contractor's additional time spent on the project) if the change "materially affects the date of final completion of the project." This type of delay results in a compensable time extension. In the interest of simplification, this paper acknowledges but will not make a further distinction between the types of time extensions, whether compensable or non-compensable, and will address only the implications of not issuing them in a timely manner. The guidance applies in either case.

### **The Temptation: A Passive Approach to Scheduling**

Owners frequently take a passive approach to scheduling once the construction contract has been executed. Owners can believe that as long as they do not actively interfere or issue change orders, they may rely on their contractors, architects and construction managers; their role in the scheduling process is complete. The *force majeure* clauses, the "no damage for delay" clause, and other exculpatory clauses regarding the adequacy of the design documents will protect their financial interests, notwithstanding the fact that a distinction between causes is not always clear and easy to establish. (Was the wall collapse the result of an unforeseen site condition, faulty design, negligent construction, or excessive rain?) [3] The contract documents, almost always drafted by owners or their agents, generally favor owners in their remedies for problems connected with delay. They can impose liquidated damages on the contractor for failing to meet project milestones, while the burden of proof is placed on the contractor to prove that active interference or changes made by the owner caused the project to be late. If both parties to the contract contribute to the delay or cause concurrent delays, the usual finding is that the delays offset or cancel one another. [4] With all

these express provisions of the contract in place protecting the owner's interest, why should an owner be concerned with time extensions during the construction period? Why not just take the attitude, "We can sort all that out during the contract close-out period ..."

### **The Obligation: Timely Time Extensions**

When a contract contains express provisions to grant time extensions, whether compensable or non-compensable, courts and boards of contract appeals have added an implied obligation requiring the owner to grant time extensions in a timely manner. This recognizes that a time extension does not benefit or provide relief to the contractor from the impact of delay unless the additional time can be incorporated into the project schedule. [6] If a time extension is not granted immediately upon determination of the extent of the delay, several things will happen:

1. The current schedule status update that is not revised to reflect the extended contract duration will likely show the contractor to be behind schedule.
2. The CPM schedule will not accurately reflect the remaining period of performance; it will also not reflect the scope of the remaining work (if new work related to a change order has not been incorporated.)
3. The contractor cannot coordinate the remaining work with an inaccurate, distorted CPM schedule. Control is lost when a change (either increased scope or reduced time or both) has occurred without incorporating the effects of that change into the project schedule.
4. As time passes, the actual job status at the time of the delay, the reasons behind the delay and the actual impact of the delay become more difficult to determine after the fact. Negotiating an equitable adjustment is made harder when the parties have to rely on memory and incomplete documentation rather than contemporary facts on the ground and personnel still involved in the project.

An owner's failure to issue a time extension or failure to issue an extension in a timely manner may result in a constructive acceleration claim. Courts have held that the contractor is "constructively accelerated" when an owner demands performance within the original or adjusted schedule, even though the contractor is entitled to a time extension. [6] While the facts of each case may differ, an owner who waits until substantial completion to "settle all the time issues" has opened himself to a potential liability for compensable costs of acceleration.

### **The Danger: Constructive Acceleration**

We can clearly understand that in a situation where the owner prepares and issues the construction schedule, that owner has taken on the risk and the responsibility that the schedule is one that can be achieved, and that it is not "impossible" or "impractical because of extreme and unreasonable

difficulty.” [3] (This is infrequent.) An owner who establishes the due date for project completion takes on a risk that the date might be “impossible” to meet, although this risk is small because the contractor, by bidding the project, has essentially made a promise of performance. While “Schedule Impossibility” is a risk that can arise at the baseline, it is much more likely to arise from a situation where the original project schedule has been delayed such that the remaining work cannot be completed within the remaining period without changes to approach, sequencing, staffing levels or other things that were not contemplated by the contractor when he submitted his original bid. These increased costs – the costs necessary to complete the remaining work within the remaining time – are the damages (the “quantum”) in a claim of acceleration by a contractor against an owner.

Directed acceleration occurs when an owner directs a contractor to complete all or a certain portion of the work prior to the contract completion date or reduces the contractor’s allotted time for completion. A fundamental principle of construction law is that the contractor is entitled to the entire contract time, plus justifiable time extensions, to perform and complete the contract work. When an owner reduces the allotted time by forcing the contractor to finish the job prior to the completion date, the owner has accelerated the contractor and is responsible for any increased costs incurred by the contractor in expediting their performance. (A contractor who voluntarily accelerates for its own benefit is not entitled to additional compensation.)

Constructive acceleration is not as obvious because it does not require an explicit directive from the owner. It occurs when the contractor is forced by the owner to complete the work in less time than the schedule (based on the contract performance period) establishes. The most common situation is where the schedule has been reduced (impacted) because of an excusable delay, but the contractor has not been granted a time extension for that delay. If a contractor is ordered to complete the remaining contract work in a shorter period than that to which he is entitled, the contractor is forced to accelerate the remaining work. Constructive acceleration occurs when it can reasonably be construed as a mandate from the owner that the project must be completed within the original (unextended) project period. “Time is of the essence” contract clauses and/or the threat of liquidated damages for late completion have been used as the basis for constructive acceleration claims. The owner can be held responsible for the increased costs incurred by the contractor in expediting his performance.

## Six Reasons Owners Delay Decisions

In light of the risk of constructive acceleration, why would owners delay issuing time extensions, especially for non-compensable delays? Wickwire, Driscoll, et.al. identify six reasons why decisions on time extension requests may be delayed (*emphasis added*):

1. A *lack of expertise or experience in project scheduling* on the part of the owner or architect. This can result in fear of prejudicing the owner's interests by mistakenly granting an extension of time when one may not be due – particularly during the early stages of the project, when a time extension may not appear absolutely necessary.
2. A *lack of confidence in the accuracy of the most recent schedule* revision submitted by the contractor. This is often based on the recognition by the owner or architect that neither the owner nor the contractor is committed to, or relies on, the progress schedule to execute the work.
3. The assertion of unreasonable and perhaps unjustified requests for time extensions by a *contractor who "cries wolf"* too often.
4. The existence of *other pending claims* or time extension requests that may be affected by the decision.
5. An agreement or verbal understanding (often subsequently forgotten or misinterpreted by one of the parties) that the contractor's *request for a time extension will be deferred* until the resolution of other unresolved issues of greater significance between the parties.
6. An unrealistic belief on the part of the owner or architect that the *threat of liquidated damages* will prompt the contractor to bring the project back on schedule. [6]

Driscoll and Wickwire recommend that owners be cognizant of these issues, and they emphasize their point by stating that "failure to address time extensions in a timely and diligent manner is a strong indication that scheduling disputes and litigation (and potential liability) may arise." Owners who find themselves in such situations may need guidance and encouragement to overcome their reluctance.

## Guidance for Owners

This paper will address the six reasons listed above, giving guidance to owners who might find their project team delaying the issuance of time extensions. We presume a scenario where the project specifications require that the schedule is prepared and maintained by the general contractor (or coordinated in a multi-prime project), submitted to the owner as a baseline (zero progress status) and that regular schedule progress updates are required.

1) **LACK OF EXPERTISE IN SCHEDULING.** If the owner lacks experience or expertise in scheduling, a simplistic, “obtain additional assistance” is insufficient (and appears self-serving.) The key is to determine when outside scheduling expertise can be of greatest benefit to the project. Two points stand out:

a. **REVIEW THE BASELINE SCHEDULE.** The most important time for an owner to carefully address the project schedule is when the baseline is submitted. Whether an owner formally “approves” it or not, the baseline schedule will be the standard against which all progress and delays are measured, both during the construction period and afterwards. Owners must never fail to respond to a baseline schedule submittal. Sometimes owners fear that any response will be construed as acceptance of the schedule, along with corresponding responsibility they do not wish to take on. However, owners must remember that courts tend to impose implied schedule obligations on the owner, regardless of the owner’s silence. [6] If the owner’s project team lacks expertise in scheduling, an outside consultant should be called in to review the baseline. Although a thorough, professional review of a baseline schedule should be more detailed than the list below, all owners must satisfy themselves, at a minimum, that:

- i. The baseline critical path is reasonable.
- ii. The resources (clearly identified or implied) are identified, at least for the critical path logic sequence.
- iii. The schedule is complete, covering the entire contract scope
- iv. The timing, phasing, sequence and work flow are reasonable and meet the contract milestones (both intermediate/turnover and completion.)
- v. Excessive constraints, negative float, early project completion and other examples of bad scheduling practice are flagged.

The baseline review should be documented clearly via written report, either prepared by the project team or a consultant, and the comments returned to the contractor, and his responses recorded either in letter form or in the minutes of schedule review/progress meeting(s). Even if a contractor refuses to make revisions to the schedule, the owner has documented his concerns and established a contemporary position regarding the adequacy of the project schedule.

b. **REVIEW REQUEST(S) FOR TIME EXTENSION.** Clearly if the owner’s project team is not up to the task of evaluating a request, or multiple requests for time extensions, outside assistance should be sought. Recognizing that the owner is required to address time extensions in a timely manner, and knowing that it is much easier to obtain and confirm schedule information when the information is current (you might be able to observe project status by looking out the

construction trailer window), should be incentive enough to obtain necessary assistance. AACE Recommended Practices states,

“The longer the period between the delay and the approval of the time extension, the less useful and valid the time impact analysis (TIA) becomes. Because ‘time’ is the issue being negotiated, the value obtained from a timely resolution of this contractual adjustment is greatly diminished by delay in preparation and/or approval of the TIA.” [2]

An owner who has previously experienced the costs of litigation support and claim evaluation after the fact will see the great value in addressing delay and potential claim situations on a contemporary basis.

- 2) **LACK OF CONFIDENCE IN THE SCHEDULE’S ACCURACY.** It is not uncommon for baseline schedules and updates to be submitted as contract requirements while not actually being used in the field as the “working schedule” for the project. Owners need to remember that the schedule will be given great *gravitas* by a court or other trier of fact (after-the-fact.) Forensic claims consultants (specializing in construction delay claims) will emphasize that even a flawed baseline project schedule is the best contemporary documentation of the contractor’s original intentions to complete the project. As long as the baseline data can be considered functionally reasonable and usable – if it is possible to build the project in the manner indicated in the schedule and be in compliance with the contract – the forensic analyst should not make any subjective changes to improve it or make it more reasonable. [1] The owner is protected by documenting his concerns during all reviews of the project schedule, via letters, reports or progress meeting minutes, in order to establish his contemporary position for the record. This should be considered a “defense” against a flawed schedule, but it does not justify a lack of action in evaluating time extension requests. Since a flawed schedule can be used on a forensic basis by claims consultants, it can and should be used on a contemporary basis to evaluate and quantify a time extension request. An owner must not use a “flawed schedule” as an excuse for not settling time extension requests on a timely basis.
- 3) **THE CONTRACTOR WHO “CRIES WOLF.”** Frequent and perhaps unjustified requests for time extensions must still be reviewed and the reasons for rejection spelled out and documented on a contemporary basis. Owners should remember that many provisions of project specifications are written to protect owners; the contractor who is trying to protect himself may feel obligated to “paper the project” in order to preserve his rights while still facing an unknown future. Contract notice provisions obligate a contractor to document all delays and potential claims, usually within a fixed time period, or otherwise lose his right to receive compensation.

- 4) **OTHER PENDING CLAIMS OR REQUESTS.** This is a situation where an outside consultant may be of great benefit. Delay claims do not take place in a vacuum; other considerations can frequently be present. If the owner's project team lacks expertise, an outside consultant who is experienced in evaluating and parsing concurrent delay, pacing requests, productivity losses and constructive acceleration claims should be consulted. Multiple and possibly concurrent delays (with differing responsibility, owner or contractor) can take time to sort out, but the best time to address these is on a contemporary basis, not after the fact. The documents are at the top of the pile, the memories are fresh, and the need to sort out the situation and regain project control for the remainder of the project is paramount.
- 5) **DEFER RESOLUTION UNTIL PROJECT CLOSE-OUT.** This is a strong temptation for both owner and the contractor alike. The project is underway, something is causing delays, and the all too frequent attitude can be expressed, "get the job done and sort out the paperwork later." A project team who is "fighting fires" is frequently unwilling to do more than try and protect their rights; the result can be that the contemporary project documentation consists of assertions and unsubstantiated statements because no one has taken the time to sort out the issues and entitlements. The owner must remember that constructive acceleration is a potential liability. If a contractor can document that they were entitled to a time extension they did not receive and were forced to complete the project in less time than the contract allowed, he is entitled to recover the costs of acceleration.
- 6) **UNREALISTIC BELIEF IN RECOVERY.** What Samuel Johnson called, "the triumph of hope over experience" can prevent owners (and contractors) from addressing time extensions promptly. The specific delay situation under review may not be the only significant factor involved. Consider a schedule progress update reporting total float of -15 work days (using a five day per week calendar.) The conventional interpretation would be that the project is going to be completed three weeks late. But imagine that this project is in its third month of an 18 month performance period, and that the first three progress updates of the schedule reported status of -5 work days, then -10 work days, and now -15 work days negative float. The trend is that this project is losing 5 work days per month, and at that rate the project will finish eighteen weeks late! Why should we assume that the current status projection is correct, implicitly assuming that everything from now forward will be completed according to the schedule? This contradicts the history and trend of the project to date. [7] In order to maintain (or regain) control over a project, the delays experienced to date must be evaluated; if adjustments are needed in the project schedule, the earlier they are made, the greater likelihood of success.

## **Case Study No. 1 – Buy-Back Time and Sequence Changes Flawed Baseline Schedule**

There are two types of logical restraints in a CPM schedule, a “hard” restraint where there is a physical restriction governing the sequence (an elevated slab cannot be poured until the metal deck is in place), and a “soft” or preferential restraint where the schedule shows painting on the second floor before painting on the third floor although both areas are available. Contractors frequently assign preferential logic ties reflecting resource (crew) limitations. A single painting crew is scheduled to finish the second floor before proceeding to the third floor because there is only one crew planned. Two crews could work on two floors concurrently since both areas are available. CPM software does not distinguish between these types of restraints; an activity sequence scheduled with resource restrictions built into the network logic can reflect reduced float and even extend the critical path as the result.

The contractor for a high school rehabilitation/addition submitted a baseline schedule which the owner considered flawed. There were logical restraints between demolition activities in various areas which appeared preferential on the part of the contractor; there were no physical restrictions on demolishing multiple areas concurrently. Worse, the masonry installation (critical path) was scheduled with logic restraints between floors and areas which had no relationship with each other nor any physical requirement which restricted work availability. The schedule showed eight activities for CMU installation, each with 25 work days duration, in logical series, meaning that the masonry subcontractor was scheduled to be on the job for 200 work days (almost ten months.) The explanation was that the contractor had scheduled the masonry work using only a single crew (resource restriction) rather than allowing for concurrent installation in different areas or floors. The owner was concerned that the contractor had submitted a schedule with reduced float on the critical path, allowing the contractor to “buy-back” time to overcome delays (of their own) while establishing a critical path which would justify a time extension for owner-caused delays. The owner, in their comments on the project baseline, acknowledged that the contractor was permitted to schedule the masonry work using the resource restrictions of a single crew, but warned them that any computation of delay impact to the project’s critical path must take into account this preferential logic, and that any time impact analysis and calculation must re-sequence the work to reflect actual crew installation sequences.

During demolition, asbestos was discovered, and the project required remediation in the early stages, delaying completion of demolition by twenty work days. The contractor submitted a twenty work-

day time extension request based on impact to the critical path (the late completion of demolition impacting the start of masonry work) and an overall project completion impact (through the masonry sequence and onward.) Since the owner was familiar with the basis for the schedule's critical path and had put the contractor on notice in writing that delay impact must be justified through actual performance, the schedule was adjusted to reflect a second masonry crew (concurrent work in two areas) and the schedule "recovered" its original completion date. The "impact cost" of the asbestos remediation change order was settled as the cost of a second masonry scaffold rental to support a second crew, and the project was completed on time.

**Case Study No 2 – Impact Assessment and Concurrent Delay  
Flawed Baseline Schedule  
Flawed Time Impact Analysis**

A contractor for a new high school construction project submitted a time impact analysis supporting a claim for extended overhead due to the addition of support steel for the auditorium operable partitions (a design omission.) The schedule sequence of the impact (beginning with late delivery of the re-designed steel supports) ran through a new activity for completion of a drywall soffit, followed by tape and finish activities for the entire auditorium. The owner's project team had never approved the project schedule, believing it to be flawed. They also contended that the contractor had experienced other delays (their own fault) which were concurrent but not addressed in the contractor's time impact analysis. This author was sent the schedule and time impact documentation by e-mail; (I was many states away and never visited the project site.) I reviewed the schedule information and recommended that the project team evaluate the (very limited) amount of painting of the soffits at the operable partitions that remained to be completed by the time the wall support steel was installed. I noted my belief that this should not delay the entire tape/finish/paint/grid sequence for the upper portion of the auditorium, nor the installation of acoustic clouds, seating, and carpet tile in the lower portion of the auditorium, all of which was implied by the time impact schedule fragment submitted by the contractor. The project team at the site was able to observe the work in progress and confirm that the proposed impact sequence did not reflect the actual ongoing performance in the auditorium. They were able to settle the change order equitably without a time extension in large part because the work was in progress and the actual sequence of installation could easily be observed by both the contractor and the owner's representatives. This author, who in the past has had to painstakingly recreate schedule information from daily reports and field logs, was convinced of the great value of negotiating time impacts on a contemporary basis. Even though the schedule was believed "flawed" by the owner, and the submitted time impact request "fragment" was

not accurate, an equitable adjustment was reached quickly and simply because both parties had easy access to accurate, current information without relying on memory and (incomplete or inconsistent) project documentation.

## **Conclusion**

We have observed that a time extension does not benefit or provide relief to a contractor unless the additional time can be incorporated into the project schedule and the remaining work coordinated and controlled. If an owner fails to issue a time extension in a timely manner, the schedule completion projections will be distorted and unreliable. If the remaining work cannot be completed within the remaining (unextended) time period, the contractor must change approach, sequencing, manpower levels, or make other adjustments to resources and equipment that were not contemplated in the original bid. A claim of constructive acceleration, even if the owner does not issue an explicit directive to accelerate, may hold the owner liable for the increased costs incurred by the contractor in expediting his performance.

In our guidance we have recommended that owners make every effort to review and respond to the contractor's baseline schedule submission, satisfying themselves that a set of minimum requirements have been met, document their concerns, and establish their contemporary position regarding the adequacy of the schedule. In order to address time extension requests in a timely manner, or in the event there are multiple and possibly concurrent delays, the owner should obtain outside scheduling assistance if necessary to supplement the capabilities of their project team. Through two case studies, we have provided examples showing that flawed schedules and/or flawed time impact requests should not prevent owners and contractors from addressing and settling time extension requests, adjusting the project schedule, and maintaining or regaining control over the remaining work. The best time to address, negotiate and settle time extension requests is on a contemporary basis, not after the fact. When project documents are readily available (not filed away) and the parties are actively involved in the project with access to accurate, current information, resolution of these issues is in the owner's and contractor's best interest so that the remaining portion of the project can be successfully completed.

## Bibliography

- | <u>No.</u> | <u>Description</u>  |
|------------|---|
| 1          | AACE International Recommended Practice No. 29R-03<br>2007<br>SVP 2.1 – Baseline Schedule Validation<br><b>Forensic Schedule Analysis</b><br>AACE International, Morgantown, West Virginia, USA   |
| 2          | AACE International Recommended Practice No. 52R-06<br>2006<br>Overview – Time Impact Analysis<br><b>Time Impact Analysis – As Applied in Construction</b><br>AACE International, Morgantown, West Virginia, USA   |
| 3          | O’Brien, James J.<br>1976<br>Chapter 1 – Types of Delay<br>Chapter 4 – Exculpatory Clauses<br>Chapter 7 – Schedule Impossibility<br><b>Construction Delay: Responsibilities, Risks, and Litigation</b><br>Cahners Books International, Boston, Massachusetts, USA |
| 4          | O’Brien, James J. and Plotnick, Frederic L.<br>1999<br>Chapter 25 – Responsibility for Delay<br><b>CPM in Construction Management</b><br>Fifth Edition<br>The McGraw-Hill Companies, Inc., USA  |
| 5          | US Department of State, Construction and Commissioning Branch<br>2008<br><i>Part One Contract Provisions</i><br><b>Section F – Deliveries and Performance</b><br><b>F.8 Excusable Delays</b><br>X-Ref: FAR 52.249-10, Default<br>Overseas Building Operations     |
| 6          | Wickwire, Jon M., Driscoll, Thomas J. et.al.<br>2010<br>Chapter 5— <i>Rights and Obligations in Scheduling</i><br><b>Construction Scheduling: Preparation, Liability and Claims</b><br>Third Edition<br>Aspen Publishers, Frederick, Maryland, USA                |
| 7          | Woolf, Murray B.<br>2007<br>Introduction - Retrospective CPM Usage Methodology<br><b>Faster Construction Projects with CPM Scheduling</b><br>The McGraw-Hill Companies, Inc., USA   |

# Timely Time Extensions: The Owner's Duty

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## TCM - Cost Engineering on My Mind

John Orr, PSP  
Senior Scheduling Engineer  
URS Corporation

# Biography: John Orr, PSP



- **Degree:**
  - BS Chemical Engineering
  - BA Biology
- **University:**
  - *Bucknell University*  "Ray Bucknell"
- **Years of Experience:**
  - 29+ years, beginning in the olden days when scheduling was still performed using IBM punch cards ...
- **Professional Field:**
  - Construction Management, including scheduling, cost control, value engineering, project administration and claims analysis.
- **Something you do not know about me:**
  - I was on-site working on the USAID Annex to the US Embassy in Tbilisi, Georgia three weeks before the Russians invaded during the summer of 2008.



# Introduction



- **Construction Contract Obligations**
  - **Express Provisions**
  - **Implied Obligations**

## **Four Implied Obligations relevant to construction scheduling:**

1. The duty to schedule and coordinate the work;
2. The duty to not delay, hinder, or interfere with the work;
3. The duty to cooperate;
4. **The duty to grant reasonable time extensions**

Taken from Wickwire, Driscoll, et.al.  
*Construction Scheduling: Preparation, Liability and Claims*  
Chapter 5 - Rights and Obligations in Scheduling



# The Situation: Delay

- **When in the Course of project events, it becomes necessary ... to read your contract in greater detail**

## **1. Express Provisions relating to time extensions**

### **Excusable delays**

Caused by factors outside the contractor's control

*Force majeure*

Coupled with "No Damage for Delay" clause = non-compensable

### **Compensable delays**

Change orders

Requires reimbursement for direct costs plus costs of delay

## **2. Implied Obligation for time extensions**

**Require the owner to grant time extensions in a timely manner**



# The Temptation: A Passive Approach



- **Why Must We Address Time Extensions Now?**
  - Senior Management doesn't want to hear about delay
  - We don't like confrontation/arguments about cause
  - The Contractor doesn't want to sign off and relinquish rights
  - The contract provisions protect the Owner's interest as long as the design is good and we don't issue too many change orders
  - We are all too busy getting the job done. Paperwork later.
  - The project might recover on its own (*"The triumph of hope over experience."*)
  - The Contractor might be manipulating the schedule – didn't we used to have float?
  - We don't really trust the schedule – is it really a critical path delay?
- **Why Can't We Just Wait Until the End of the Project to Settle All the Time Extensions?**



# The Obligation: Timely Time Extensions



- **What Happens if The Owner Doesn't Grant a Time Extension?**
  1. **The current schedule status update will likely show the project behind schedule;**
  2. **The CPM schedule will not accurately reflect the remaining period of performance;**
  3. **The contractor cannot coordinate the work remaining with the period remaining;**
  4. **Control is lost when either increased scope (change order) or reduced time, or both, are not reflected in the schedule;**
  5. **Documentation and analysis becomes more difficult and costly the more time passes from the delay event**
- **... And just what is “Constructive Acceleration” anyway?**

# The Danger: Constructive Acceleration



- **The Contractor is entitled to the entire contract time**
- **Contract time is reduced if:**
  1. **The Owner directs the Contractor to finish early, or;**
  2. **An excusable delay has shortened the schedule**

**In either instance, the remaining work must now be completed in less time than the contract allows.**
- **A directive to finish early (in less time than the contract allows) is called Directed Acceleration**
- **If the Contractor has not been granted a time extension for an excusable delay, the schedule has effectively been shortened. The remaining work must now be completed in less time than the contract allows. All the elements of acceleration are present ...**



- **Constructive Acceleration occurs when all the elements of acceleration are present except for a direct order to accelerate**
- **Constructive Acceleration occurs when it can reasonably be construed as a mandate from the owner that the project must be completed within the original time frame:**
  1. **“Time is of the essence” contract clauses, and/or**
  2. **Threats of liquidated damages for late completion**

**Have been used as the basis for constructive acceleration claims**
- **The owner can be held responsible for increased costs incurred by the contractor in expediting performance**



# Six Reasons Owners Delay Decisions

- **Six Reasons Why Decisions on Time Extensions are Delayed**
  1. **The Owner's lack of expertise or experience in project scheduling;**
  2. **A lack of confidence in the accuracy of the most recent schedule;**
  3. **A Contractor who "cries wolf" too often;**
  4. **Other pending claims that might be affected by the decision;**
  5. **An agreement or understanding that time extension requests will be deferred;**
  6. **An unrealistic belief that the threat of liquidated damages will prompt the contractor to bring the project back on schedule.**

Taken from Wickwire, Driscoll, et.al.  
*Construction Scheduling: Preparation, Liability and Claims*  
Chapter 5 - Rights and Obligations in Scheduling



# Guidance for Owners



## Lack of Expertise in Scheduling

**When can outside scheduling expertise be of greatest benefit?**

### 1. Baseline Schedule Review

- Whether formally “approved” or not the baseline is the standard
- Courts will impose implied schedule obligations regardless of silence
- Minimum standards for Baseline Review:
  - i. The Critical Path is reasonable
  - ii. Resources are identified, at least for the critical path sequence
  - iii. The schedule is complete
  - iv. Timing, phasing, sequencing and work flow meet contract milestones
  - v. Excessive constraints, negative float, early project completion

### 2. Review Requests for Time Extension

- Bring in outside expertise as extension of owner’s PM staff
- Address delay and potential claim situations on contemporary basis

## Lack of Confidence in the Schedule's Accuracy

- Owners are concerned if:
  1. The schedule is not being used in the field as the working schedule, it was only submitted as a contract requirement;
  2. Errors have been identified but not corrected.

**Owners must not use these concerns as an excuse for lack of action in evaluating time extension requests**
- Courts will give the schedule great *gravitas* after the fact
- A flawed baseline project schedule is still the best contemporary documentation of contractor intentions
- If the “flawed schedule” can be used on a forensic basis by claims consultants, it can and should be used on a contemporary basis to evaluate and quantify time extension requests



## **The Contractor who “Cries Wolf” by asserting unreasonable or unjustified requests too often**

- **The requests must still be reviewed and the reasons for rejection documented**
- **Many provisions of the contract documents are written to protect owners; the contractor may feel obligated to “paper the project” in order to preserve their rights**
- **Contract “timely notice” provisions obligate a contractor to document all delays and potential claims within a fixed time period or otherwise lose the right to receive compensation**

## Other Pending Claims or Time Extension Requests

- **Multiple and possibly concurrent delay situations require expertise in evaluating:**

- 1. Concurrent Delay**
- 2. Establishing Responsibility for Delay**
- 3. Ownership of Float**
- 4. Pacing**
- 5. Productivity Loss**
- 6. Schedule Impossibility**
- 7. Acceleration**
- 8. Cumulative Impact(s)**
- 9. Limitations to “No Damage for Delay” clauses**

**The best time to address is on a contemporary basis**

- **Goal: To sort out the situation and regain project control for the remainder of the project**



## Defer Resolution Until Project Close-out

- A great temptation for both owner and contractor alike
- The common attitude is “get the job done and sort out the paperwork later.”
- Project documentation is focused on protecting rights:
  - **Assertions**
  - **Unsubstantiated statements**
  - **Finger-pointing**
- No effort is made to sort out issues and entitlements
- With poor contemporary documentation, the costs for research and analysis after the fact is greatly increased
- Potential liability for constructive acceleration claim

## Unrealistic Belief in Recovery

- The immediate delay issue may not be the only significant factor. Interpret the following:
  - ❑ Schedule progress update #3 with negative float (-15) work days.  
**Would you conclude that this project is going to be completed three weeks late?**
- Consider the same project and interpret:
  - ❑ Progress update #1 with negative float (-5) work days
  - ❑ Progress update #2 with negative float (-10) work days
  - ❑ Progress update #3 with negative float (-15) work days  
**Would you still conclude that this project will be completed three weeks late?**
- Trend: This project is losing 5 work days per month – an eighteen-month project would finish 18 weeks late!

# Case Studies

## Case Study No. 1

- **Buy-Back Time and Sequence Changes**
  - Preferential logic reflecting resource (crew) limitations
  - Results in reduced float and can extend the critical path
  - Contractor can revise later to “recover” their own delays
- **Flawed Baseline Schedule**
  - Owner noted the logic errors in baseline review
  - Critical path not corrected/changed; no re-submittal of baseline
  - Baseline schedule never approved
- **Asbestos remediation delayed completion of demolition**
- **Contractor submitted time extension request based on impact to critical path**
- **“Impact cost” settled as cost of second masonry scaffold (to support second crew)**



## Case Study No. 2

- **Concurrent Delay**
  - **Design Omission** – addition of support steel to partitions
  - **Contractor experiencing other delays; their own fault**
- **Flawed Baseline Schedule**
  - **Owner never approved the baseline schedule**
- **Flawed Time Impact Analysis by Contractor**
  - **Time extension request only identified owner-caused delays**
  - **Impact sequence did not reflect actual performance**
- **Site project team could the observe work in progress**
- **Equitable adjustment reached quickly because both parties had access to accurate, current information**
- **Confirmed the great value in negotiating time impacts on a contemporary basis**

# Conclusions

## Top Ten Good Reasons to Issue Time Extensions Timely

- **A Time Extension does not benefit the contractor unless the additional time allows the remaining work to be controlled**
- **Timely Time Extensions mean:**
  1. **Issues are dealt with immediately with minimal misunderstandings**
  2. **Research is easier with documents current and readily understood**
  3. **Personnel are available who are actively involved in the project**
  4. **Subcontractor participation for problem identification and resolution**
  5. **Recovery and mitigation of delay is possible; schedule adjustments can be made and achieved**
  6. **Remainder of the project can be accurately scheduled and controlled**
  7. **Win-win outcome is still possible**
  8. **Scheduler is not tempted to “force” on-time projected completion**
  9. **Costs for documentation and analysis are much higher after the fact**

**And the number one reason to resolve on a contemporary basis:**

  10. **Experienced schedulers are still less expensive than attorneys!**

Any Questions?