

## EARLY COMPLETION SCHEDULES: A FORM OF CONTINGENCY BIDDING – REVISITED<sup>1</sup>

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**ABSTRACT:** The original version of this article was published in 1985, some thirty years ago, under a slightly different title.<sup>3</sup> The purpose of the original article was to set forth the background concerning the issue of a contractor's right to complete work early and to examine the contractor's right to seek an equitable adjustment should their early completion be delayed. The purpose of this article is to remind readers of the background concerning "early completion delays" and to provide a brief overview of ways owners can defend against claims oriented early completion schedules.

### Introduction

Everyone associated with the construction industry understands, or should thoroughly understand, that on a construction site "time is money". However, all too few project owners, design professionals and construction managers seem to understand that a contractor is able to bank time through the use of an early completion schedule. Should

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<sup>3</sup> "Early Completion Schedules: The Newest Form of Contingency Bidding", Strategem, Vol. 2, Issue 2, June, 1985.

the contractor prepare and submit an early completion schedule they have, in effect, created a time related contingency for themselves. At the same time, a truly claims conscious contractor is able to create a form of liability for the owner.

In times past there was sufficient profitability and little administrative flexibility, at least on many public work contracts, that contractors simply bid all public contracts with a contingency<sup>4</sup> price percentage included in the bid price. However, there has been an increased use of risk sharing contracts on public works projects such as the standard contract documents issued by the American Institute of Architects<sup>5</sup>, ConsensusDocs<sup>6</sup>, the Construction Management Association of America<sup>7</sup>, the Design Build Institute of America<sup>8</sup>, and the Engineers Joint Contract Documents Committee<sup>9</sup>. This form of contract combined with increasing competition and decreased profitability sharply reduces the contractor's ability to include a large contingency in their bid. To submit a bid with a large contingency is to take a substantial risk of being the second, third or higher bidder.

Accordingly, contractors have developed new and more sophisticated mechanisms of creating contingencies for themselves without risking their ability to be the low, responsive and responsible bidder. One of these methods is the preparation and submittal of an early completion schedule to the owner for their approval or acceptance.

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<sup>4</sup> "Contingency" – An amount added to an estimate to allow for items, conditions, or events for which the state, occurrence, or effect is uncertain and that experience shows will likely result, in aggregate, in additional costs. Typically estimated using statistical analysis or judgment based on past asset or project experience. (AACE International Recommended Practice 10S-90, Cost Engineering Terminology, Rev. January 14, 2014.)

<sup>5</sup> AIA Document A201, General Conditions of the Contract for Construction, 2007.

<sup>6</sup> ConsensusDocs 200, Standard Agreement and General Conditions Between Owner and Constructor, 2011.

<sup>7</sup> CMAA Document CMAR-1, Standard Form of Agreement Between Owner and Construction Manager, 2004.

<sup>8</sup> DBIA Document No. 525, Standard Form Agreement Between Owner and Design-Builder – Lump Sum, 1998.

<sup>9</sup> EJCDC C-700, Standard General Conditions of the Construction Contract, 2007.



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## Contractor's Right to Complete Work Early

The early completion schedule capitalizes on the contractor's "right to finish early". The right to complete the project early stems from a Federal case dating back to the early 1960's, *Metropolitan Paving Company v. United States*<sup>10</sup>. *Metropolitan* clearly established, in Federal case law, the contractor's right to complete their work early. While the contractor, in this case, did not recover the amount claimed, the Court ruled that:

"While it is true that there is not an 'obligation' or 'duty' of defendant [the government] to aid a contractor to complete prior to the completion date, from this it does not follow that defendant may hinder and prevent the contractor's early completion without incurring liability. It would seem to make little difference whether or not the parties contemplated an early completion, or even whether or not the contractor contemplated an early completion. Where the defendant is guilty of 'deliberate harassment and dilatory tactics' and a contractor suffers damages as a result of such, we think the defendant is liable."

*Metropolitan* addressed, possibly for the first time, the question of whether an owner hires the contractor for a specific period of time – say 730 calendar days. The Court determined, basically, that the owner hires the contractor to construct the project, safely, meeting all requirements of the plans and specifications, for a fixed cost, not to exceed the time of performance specified in the contract (as adjusted by change orders or contract modifications).

## Delayed Early Completion Claims

Having established the contractor's right to complete work early *Metropolitan* also, in effect, created the delayed early completion or early completion delay claim. The Court

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<sup>10</sup> 183 Ct. Cl. 420, 325 F.2s 241, 1963.

did so by adopting a theory somewhat akin to the act of prevention or act of hindrance theory common in UK construction law.<sup>11</sup> That is, should an owner action hinder the contractor's work and prevent the contractor from completing the work early, then the owner is liable for the resulting damages.

Following *Metropolitan*, Federal courts and Boards of Contract Appeals proceeded to allow contractors to recover delay damages even though they completed projects on time or even early – that is prior to the adjusted contract completion date. The Courts and Boards did so using the theory that the contractor could have completed their work even earlier but for the actions of the owner.<sup>12</sup> Likewise, some State courts have reached a similar conclusion.

Thus, in construction litigation, the principle has been firmly established that if the owner or their representative hinders or prevents the contractor from completing work on their schedule and the early completion schedule was both feasible and obtainable, then the delay to the early completion schedule is both excusable and compensable. This is true regardless whether the contractor completed the project ahead of, on or after the adjusted contract completion date.

### **What is an Early Completion Schedule?**

In the simplest terms, an early completion schedule is a construction schedule demonstrating the contractor's plan and intent to complete the work earlier than required by the contract. Almost all contracts require that the contractors commence work upon issuance of the Notice to Proceed ("NTP") and work continuously in order to achieve substantial or mechanical completion of the work no later than a certain number of calendar or work days after issuance of the NTP.

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<sup>11</sup> See *Delay and Disruption – Employers Delay and the right to Liquidate Damages*, Daniel Atkinson, Atkinson Law, <http://www.atkinson-law.com/library/articles>.

<sup>12</sup> See *Gardner Displays Co. v. US*, 171 Ct. Cl. 497, 346 F.2d585, 1965; *C.W. Schmid v US*, 173 Ct. Cl. 302, 351 F.2d 651, 1965.



When an early completion schedule is employed on a project, schedule submittals will show that the contractor intends to complete the project some period of time prior to the specified project duration, as adjusted by change orders. There are two basic types of early completion schedules. An as-planned or baseline early completion schedule may be submitted based on the contractor's plan put together during the bid. Or, a schedule update showing early completion may be submitted if scheduled activities have completed earlier than planned thus shortening the duration of the remaining work on the project.

Contrary to popular rumor, not all early completion schedules are claims traps for owners. Some are entirely legitimate and some are caused by owners themselves. In many contracts, owners and their design professionals perform no prebid schedule analysis of the project and thus the time of completion stated in the bidding documents may be based on a "guesstimate". In cases like this it is likely that the guesstimate of the time necessary to complete the work is conservative and is likely to be longer than needed. A bidder may recognize this during the bid period and plan, and estimate costs, to perform the work in a more reasonable period of time.

In other cases, a bidder may become the low bidder by gambling on better production rates than normal, thus allowing the bidder to reduce their bid costs due to a shorter time on the project which reduces their direct costs plus their overhead costs. In both cases, the baseline early completion schedules are legitimate. Additionally, it should be noted, that in both cases owners have already captured the cost benefit of the as-bid early completion at the time of bidding in the form of a reduced bid price.

In yet another situation, a contractor may bid the full time of performance shown in the bidding documents but produce a baseline early completion schedule in order to create a "schedule contingency" by creating a plan to complete early. In cases such as this, the prime contractor is likely to be using the early completion schedule to drive their subcontractors, vendors and suppliers to earlier dates in order to provide a time



contingency in the event something goes wrong on the project during the performance of the work that is inexcusable to the contractor.

On the other hand, not all early completion schedules are legitimate schedules. Some early completion schedules are purely claims oriented schedules. In cases such as this, typically the contractor did not submit a bid based on early completion nor did they have a plan to complete the work early. That is, the contractor had no plan to achieve the production rates necessary to accomplish the stated early completion. Likewise, they are unlikely to have a plan to employ the necessary craft labor to support the submitted early completion date. Rather, the contractor creates an early completion baseline schedule such that their chances of alleging delay and delay impacts are significantly increased. In such situations, the contractor's ability to recover increased change order costs as well as their ability to file delay claims are greatly enhanced, to the detriment of the owner.

### **The Advantages of a Claims Oriented Early Completion Schedule**

The advantages of creating and submitting a one sided schedule document not based on an as-bid early completion are several. On a project where the contractor has submitted an early completion schedule, they may assert the legal ability to seek recovery of impact or delay damages, by alleging owner caused delays or owner interference even though they complete the project on time or ahead of the contracted completion date. Likewise, the contractor will be more likely to try to demonstrate delay associated with each change order because the schedule is set up such that there is little or no float in the project schedule. Further, the contractor is less likely to incur liquidated or actual damages in the event they complete the work late or beyond the adjusted contract completion date because of the increased probability of demonstrating owner caused delay.

Let's examine how a truly claims oriented contractor sets up an early completion schedule. Following are the normal means of constructing an early completion schedule.



- The contractor may shorten the duration of all schedule activities to minimal times. They will not shorten activity durations such that they are obviously erroneous or unsupportable thus giving the owner a reason to reject or challenge the schedule submittal. Rather, the schedule will look extremely optimistic with respect to productivity rates, weather conditions, learning curves, etc. It must be recognized that to be a low bidder on a hard dollar bid project bidders have to be optimistic to get the job in the first place. But, the truly claims oriented contractor will overstate selected production rates (especially where those rates are dependent upon such things as soil conditions, rock quality, groundwater conditions, etc.) so as to get the owner to “buy into” such production rates and thus clearly establish the “legitimacy” of the productivity rates indicated in the early completion schedule and of the schedule itself.
- The contractor may understate or schedule owner and design professional activities in the most optimistic possible fashion. For example, the schedule may show delivery of owner furnished contractor installed (“OFCI”) equipment or materials much earlier than actually needed. Or, they may schedule shop drawing and other submittal review and response times for 5 days. The schedule may show owner or design professional inspections activities such that inspectors are given little advance notice of the need for such inspection or are required to inspect the work on weekends or holidays in order to maintain the schedule. The contractor may schedule an extremely short period of time for the start up or commissioning time for the project, for example, by planning on only one day to drain or fill basins, scheduling only one or two days of full operation prior to transfer of custody and control of the project to the owner. The contractor may also include no time for punchlist activities. The object of this type of scheduling is to get the owner and the design professional to agree with the assumptions included in the schedule, to their detriment. If this happens, situations are likely to arise where the contractor can allege and demonstrate schedule delay.



- The contractor may ignore or fail to include schedule or logic constraints imposed by the contract in hopes that the owner or their representatives will fail to notice this discrepancy when reviewing the baseline early completion schedule. Later during the project, when such discrepancies surface and become obvious and the owner or their representatives demand compliance with the contract language, the contractor is likely to assert that acceptance of the schedule absent such constraints effectively waived the requirements of the contract.
- The contractor may fail to incorporate realistic material and equipment procurement times for the project and try later to convince the owner that the owner is somehow liable for the failure of the suppliers or vendors to deliver these items when scheduled. This sort of claims scenario becomes more probable when there is OFCI equipment or materials involved in the project.
- The contractor may incorporate logic ties in the schedule that artificially move up the start of certain activities in order to shorten the overall duration of the critical path.
- The contractor may schedule parallel critical activities (effectively creating parallel critical paths during certain portions of the schedule) rather than scheduling such activities sequentially solely in order to shorten the schedule's critical path. This may be either be a legitimate attempt to display manpower loading or may be scheduling gamesmanship.
- Finally, the contractor may attempt to sequester float within the schedule by lengthening (or padding) activity durations on the schedule so as to make them critical activities when they really are not critical.

### **How Can an Owner Avoid Claims Oriented Early Completion Schedules?**

The next issue to be addressed is what actions can owners and their project representatives take to protect owners against claims games based on claims oriented





early completion schedules? How can owners avoid claims loaded early completion schedules and mitigate damages if such a schedule is in use on the project? Like so many other things involved in construction almost nothing can be done to prevent such a situation unless the owner and their design professional plan for it during design and address it in the contract documents. The following are some ideas on how to prevent an illegitimate early completion schedule from becoming the accepted or approved project schedule.

- Owners and their design professionals should perform some prebid construction scheduling in order to estimate a realistic time of performance for the project. If neither the owner nor the design professional have the expertise to perform such a task then a construction manager or scheduling consultant ought to be retained to perform this work. A time of performance in the bidding documents based on a well thought out schedule will help prevent unrealistic early completion schedules. Such a schedule should lead to a reasonable time of performance being included in the contract rather than a guesstimate which can mislead bidders. Such an effort increases the chances of detecting a claims loaded early completion schedule since owners and their design professionals will have a good grasp of the time needed to deliver the project
- As part of the prebid scheduling effort, owners and design professionals should review the applicability of including contractually imposed interim milestone dates for the successful delivery of the project. Such milestone dates may help impose proper construction sequencing on the performance of the work thus decreasing the chances of a claims loaded early completion schedule. Additionally, thought ought to be given to the imposition of contractual constraints or sequencing should the project be complex enough to warrant these. This may be true on rehabilitation projects within facilities that must be kept operational during construction or on projects where owners want to take partial beneficial occupancy of pieces of the work prior to project completion. Owners and design professionals can do much to influence proper project planning of the part of the contractor by clearly setting forth



in the contract those activities which must be completed before other activities or those sequences of work that much be followed in order to perform the work successfully.

- Another area of self-protection all too frequently overlooked in contracts concerns the time required for review and response to contractor submittals and shop drawings. Contract documents ought to include a clause that sets forth the amount of time the owner has to review and respond. The contract ought to include a requirement that all submittals and submittal reviews be included in the project schedule to allow for proper planning of the submittal, procurement, delivery and installation cycle. Such clear contract requirements should prevent situations where the contractor's early completion schedule is based, in part, on 3 day turnaround time for all submittals and then files claims when the design professional takes longer.
- On projects where the owner opts to utilize OFCI equipment and/or materials contractual language ought to be included to stipulate either the earliest date the OFCI items will be available or a schedule window for each piece of OFCI equipment or material which establishes both the earliest and the latest date for availability. The prevents the contractor from scheduling OFCI items at unreasonably early dates and then alleging constructive suspension of work, delay, delay impacts, and/or extra work due to the need to perform work arounds due to late delivery of OFCI equipment.
- The Scheduling Specification ought to include a "Joint Ownership of Project Float" clause that specifies all float including the period of time between the contractor's planned early completion and the contractual completion date is project float that belongs to neither the owner nor the contractor but is a jointly owned expiring resource to be consumed on a first come, first served basis. While it is fairly common in U.S. court cases that even in the absence of a joint ownership clause Courts, Boards and arbitration panels are likely to rule in the manner. However, a clearly worded



clause in the contract prevents the need to resort to legal action to determine who owns the float.

- The Schedule Specification also ought to include a “Non-Sequestering of Float” clause. Such a clause should prevent schedule gamesmanship where the duration of various schedule activities are artificially lengthened in order to consume most of the float in the schedule in order to establish an artificial critical path or a single critical path with multiple subcritical paths<sup>13</sup>. Realistically, it is difficult to determine when a schedule submittal is based on a good deal of sequestered float. However, if such a clause is in the Scheduling Specification then the owner has the authority to reject such a schedule submittal.
- The contract may also include a provision within the Delay Clause that provides that the contractor is not entitled to a time extension or any delay damages until all project float is consumed and the schedule’s completion date exceeds the adjusted contract completion date. Such a provision is a limited form of a “No Damages for Delay” clause and should only be included in the contract after consultation with an experienced construction attorney. The clause should be clearly worded so that bidders do not conclude that this is owner owned float and thus add a large contingency to their bids. Additionally, if such a provision is included in the contract owners and their attorneys need to coordinate this clause with the Delay, the Changes, the Differing Site Condition and the Suspension of Work clauses to prevent a conflict between this provision and the equitable adjustment clauses thus leading to an ambiguity concerning the recovery delay damages.
- In order to prevent contractors from scheduling an unrealistically short commissioning and start up time language should be included in the contract documents clearly defining when the project will be considered “substantially

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<sup>13</sup> For the purposes of this article a “subcritical path” is any path with less than one reporting period of float (i.e., 20 working days or 30 calendar days, as appropriate).



complete” or “mechanically complete”, specifying clearly what activities must be accomplished during the commissioning process. During the prebid scheduling effort mentioned earlier, senior operational staff should be included in order to help prepare an estimate of how long it will take to successfully commission and start up the project and what activities are necessary to accomplish this. Few contracts clearly define concepts like operational testing, testing sequences, substantial or mechanical completion, etc. This lack of definition leaves the contractor free to imagine and schedule their own concept of project start up, creating a fertile area for claims that should be carefully guarded against.

- Owners may want to consider including a provision in the Scheduling Specification allowing the owner to move the contract completion date forward to meet the early completion date contained in the contractor’s early completion baseline schedule. This sort of clause is useful in two respects. First, it is a defense against claims oriented early completion schedules. That is, if a contractor does not truly have a plan to complete the work of the project early but simply creates a claims oriented schedule to set a trap for the owner, they will be at risk of having to perform to this schedule if this clause is included in the contract and followed through by the owner. Such a risk may be sufficient to keep contractors from preparing and submitting a claims oriented early completion schedule. Second, it is a way to “re-establish parity” between the owner and the contractor. Provided that owner reviews and concludes that they can accept the proposed early completion schedule, and this clause is included in the contract, then the owner should issue a change order modifying the time of performance of the contract to match the proposed early completion date. At a minimum, this action restores the status quo between the owner and the contractor as both are working off a schedule with the same contract completion date. Additionally, such an action means that the owner’s liquidated damages and the contractor’s delay damages start at the same point.
- Owners should have or retain staff that have the expertise to perform a thorough, in depth review of all contractor schedule submittals, especially those submittals



indicating an early completion. Such reviews should include analysis of schedule logic, activity durations, the number and types of activities on the critical path, schedule constraints, calendars, etc.

- Owners and their project representatives must establish, implement and maintain on a daily basis a thorough project activity documentation system. Such a system should document and record when all schedule activities start and complete, noting crew sizes and equipment on an activity basis, annotating daily diary entries with schedule activity numbers, quantities installed, deliveries, overall production etc. While this recommendation will not prevent submittal of claims oriented early completion schedules, it will help develop an irrefutable record of when schedule activities actually occurred and who bears responsibility for these various activities.
- Finally, owners and their project representatives should invest the necessary time and money in training their staff in the fundamentals of critical path scheduling and construction claims. It is not necessary that all field personnel become scheduling or claims experts, but potential problems may be avoided if field staff is knowledgeable of and alert to potential claim situations and scheduling games.

## Conclusion

As noted earlier in this article, not all early completion schedules are claims traps for owners. Many are entirely legitimate construction schedules in situations where owners have already reaped the benefit of the contractor's optimism through lower bids. These schedules must be reviewed carefully and cautiously. If an in-depth review concludes that the early completion schedule is legitimate, then the schedule ought to be accepted as the contractor's plan for the project. Unreasonable refusal to accept such early completion schedules may lead to contractors creating, maintaining and running the



project off a “ghost schedule”<sup>14</sup>, not the schedule submitted on a routine basis to the owner.<sup>15</sup>

On the other hand, as the profitability of many construction contracts declines and competition increases, owners are beginning to see more games played with schedules, including early completion schedules<sup>16</sup>. Owners need to guard against the imposition of claims oriented early completion schedules which attempt to create numerous situations for the contractor to file claims and leave the owner little opportunity to defend.

Prebid scheduling and planning and forethought concerning early completion schedules, including consideration of the recommendations set forth in this article, can do much to prevent the creation and imposition of claims oriented early completion schedules. Further, these recommendations will allow owners to develop some defenses against such scheduling tactics.

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<sup>14</sup> See Scott A. Biesler and James G. Zack, Jr., Ghost Schedules – What, Why & What’s the Risk?, Navigant Construction Forum™, Boulder, CO, March, 2015.

<sup>15</sup> It is noted that contractors are not required to advise owners of their intent to complete work early. See *Jackson Construction Co., Inc. v. The United States*, 62 Fed. Cl. 84; 2004 U.S. Claims.

<sup>16</sup> Amanda Amadon, Emily Federico, Steve Pitaniello & James G. Zack, Jr., Construction Scheduling Games Revised & Updated, Navigant Construction Forum™, May 2014.