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Title: Construction Contract Administration & Claims Resolution

by

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Presenter's Title: Business Development

Presenter's Office: H.R.Gray & Associates, Inc.

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Construction Contract Administration & Claims Resolution

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H.R.Gray & Associates, Inc. was established in 1979 as a construction claims consultant and project management advisor for the construction industry. H.R.Gray has since evolved into a program management and construction management firm that continues to advise owners on construction claims and their resolution. H.R.Gray provides full service project management that includes: program management, project planning, scheduling and cost estimating, construction management, owner's representative services, ADA consulting and construction claims analysis and resolution. We are headquartered in Columbus, Ohio with offices in Akron, Ohio and Lexington, Kentucky. At H.R.Gray, we emphasize the importance of preconstruction planning and the development of effective contract documents that are clear and consistent. Our experience has shown that the use of these tools greatly increases the likelihood of having a project be done on time and on budget.

In the course of managing projects or being called in to resolve claims, H.R.Gray has found that certain key elements are usually found in successful projects that end up with a minimum of change orders and no claims. My associate, Tom Kucera, will discuss some of those elements that we have found result in these successful projects. Projects that meet an owner's expectations for cost, quality and timeliness.

As municipal attorneys, you are generally involved in construction contracts at three junctures: adjusting the content of construction contracts; responding to questions about the advertising or bidding process; and defending the municipality against contractors' claims. There are three main areas I would like to address today: Key Contract Provisions, Project Administration, and Claim Resolution.

A. Key Contract Provisions

By assuring that construction contracts contain certain key provisions, it is our experience that change orders and claims can be controlled and minimized. There are five such provisions:

1. Bid Schedules, Contractor Schedules and Schedule Specifications

Time is money – especially in construction delay claims. Yet most construction contracts ignore this relationship. Most contracts have pages of clauses about controlling cost and changing the contract amount but have only one sentence or one clause about controlling time. Contracts need to be expanded to control time as well as cost.

When issued for bid, the contract documents should include a schedule that shows: 1) when the work is expected to start, 2) at least two internal milestones and 3) when the project is expected to finish.

Internal milestones are check points that allow whoever is administering the contract to see if the project is on schedule. Milestone dates should be attached to completion of some definable part of the work. The longer the duration of the total project, the more internal milestones need to be defined and stated in the bid documents. As municipal attorneys, you need to check for these schedules and ask those people developing the projects what check points – milestones – they are including.

The contract should also require the contractor to develop and submit to the project's administrator his detailed plan – his schedule – showing how he will organize and complete his work so as to meet the milestone dates in the bid documents. He should breakdown the elements of work he needs to do to finish the project, just like he is required to breakdown his contract amount for billings. In other words, he should produce a schedule for the work. In fact, the best situation is where the breakdown of the contract amount and the breakdown of work elements -- the schedule -- mirror each other.

To receive meaningful schedules from the contractor, the contract documents need to set minimum standards for the schedule itself. These standards are usually set forth in a specification section found in Division I of the Project Manual. We have included, in the printed materials, an example of a scheduling specification that we recommend as the minimum requirements for a contractor's schedule.

2. Daily Reports

It is also important to document the contractor's daily activity. Typically, contractors keep daily logs for their own use. Therefore, adding a requirement to the municipality's construction contract for the contractor to provide a daily report is seldom a burden on a contractor. These reports become a contemporaneous record that often assists in dispute resolution or in calculating costs for disputed work. If the time is taken to compare the work

recorded the daily report with the contractor's schedule, that analysis can tell the project's administrator if the project is on schedule.

The contract provision for such daily reports should require that report to include, but not necessarily be limited to: 1) high and low temperature, 2) precipitation, 3) number of workers for each trade, 4) subcontractors on site and the number of their workers, 5) material delivered and 6) descriptions, by area of the project, of the work being performed during the day of the report. These reports should be submitted to the owner on a weekly basis.

3. Notice and Notification of Claims

The heart of construction disputes and claims are always about unexpected or changed conditions. These typically arise from four sources:

a. Unexpected weather conditions – to wet and/or too cold;
b. A condition that is physically hidden from view;
c. Work the design professional omitted on the drawings;
d. Work the contractor overlooked in his bid.

The contract must require that Notice is given as soon as the unexpected condition is encountered. The contract must be specific about who is to be sent the Notice and how quickly it is to be sent. The object of the Notice is to focus attention on the unexpected condition so the parties can agree on how to handle the condition. Is more time required? Is more money involved? Are both time and money involved?

4. Dispute Resolution Clauses

The parties do not always agree that the condition encountered is unexpected. Therefore, the contract needs to include provisions establishing who is to review disputed work and the time table for such reviews. Clauses that set up the Owner, Architect, Engineer or Construction Manager as the final reviewer whose "decision is final" <u>are seldom effective</u>.

Instead, dispute resolution clauses should require the parties to select, at the start of the project, a mutually agreeable individual, or group of three individuals, who will review disputes that cannot be settled by a principal for the contractor and the supervisor for the municipality's project manager. Prior to submitting a dispute to this individual or group of individuals, the contract provision should require a meeting that includes a representative from the municipal attorney's office, a principal for the contractor and a principal for the municipality. Usually the approach of "kicking the dispute to a higher level" results in resolution. The contract provision should include a time table for passing a dispute "up the ladder." Finally, the contract should state that, if the dispute is not settled after review by these

parties, then the contractor shall submit his dispute (which is now a claim) to the court with appropriate jurisdiction, which should be named in the contract provision.

5. Provisions to Audit the Contractor's Financial Records

Some disputes, however, are of the nature that the parties cannot agree and litigation is the final course. This requires an accurate determination of costs involved, which are best determined by an actual audit of the contractor's financial records to determine if cost impacts he is claiming have actually been suffered. Therefore, the construction contract should include a provision allowing the municipality to have an audit performed on all of the contractor's, and his subcontractor's, records pertaining to the project. Such contract clauses need to address "trade secrets" and how these will be kept confidential.

B. Contract Administration

Many times, it is the immediate administration of the contract that contributes to or detracts from the success of a construction project.

Depending on the individual municipality, the person doing the day-to-day project administration may come from several sources. He might be an employee of the municipality. He might by an employee of the Architect or Engineer, whose contract scope includes contract administration. He might be employed by a firm, independent of the Architect or Engineer, who is providing construction management or owner's representative services.

Whatever the arrangement, the most important issue for the project's administrator is the timeliness of his responses to submittals, requests for information, letters of notice, bulletins, change orders, etc. In other words, he must respond quickly to the day-to-day correspondence and issues on the project. Timely processing of pay applications is usually critical to the contractors on the project. Late payment lead to unrest and can affect the quality of supervision and work. One of the project administrator's duties is to expedite the other parties contributing to the project, including other departments of the municipality and the design professional[1] to assure their timely response on issues and/or approvals.

The administrator's next most important function is daily documentation of his observations of activity on the project. He should be filling out a daily report similar to the one required of the contractors on the job. Although this may seem a duplication of tasks, the administrator's daily

[1]The administrator must even expedite his own company, if he is working for the design professional whose scope includes contract administration.

observations have a different perspective and often fill in lapses in reporting by the contractors. It also helps the administrator monitor job progress so he can better compare it with the contractor's plan and schedule. Is the contractor achieving what he planned to do? If not, it may be time to draft a letter to the contractor documenting the need to pick up the pace.

Lastly, the administrator needs to review, accept and monitor the contractor's time schedule and schedule of values. His review of, and acceptance of, the contractor's schedule should make sure that the contractor has complied with the specification for the technical aspects of scheduling. As time passes, the administrator needs to make sure that the contractor is properly updating the schedule for actual progress. Schedules are not fixed documents. Project progress ebbs and flows. The schedule is the yardstick for measuring whether the original plan for building the project is actually working. If the administrator's analysis of progress is otherwise, he needs to document that to the contractor and then work with the contractor to get back on track.

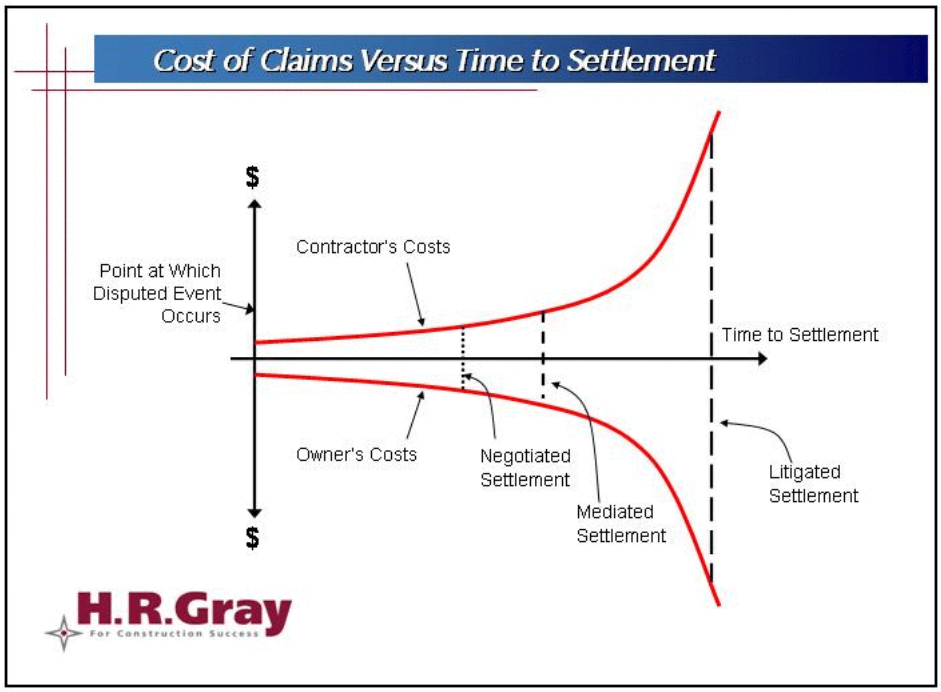
C. Claim Resolution

Although it is H.R.Gray's experience that implementing the preceding contract provisions and oversight tasks significantly reduces disputes and change orders, it may not eliminate them. Therefore, the construction contract should contain provisions specifying the format to be used when submitting a claim for compensation, be it for time, for money or for both. Most construction contracts already contain this language. If not, the clauses in the American Institute of Architects (AIA) or the Engineer's Joint Contract Documents Committee (EJCDC) form of General Conditions of Contract are usually adequate.

A contractor's claim needs to present some entitlement for compensation derived from their contract with the municipality and not just present estimates for the amounts for damages. H.R.Gray's experience is that most contractors' claims are voluminous on cost figures but sparse on the contractual reasons why they are due the quoted costs. Entitlement means a discussion of what the contractor believes the contract documents required and how he bid that work versus the present conditions and how those conditions differ or could not have been anticipated. In addition, the contractor needs to identify the cause for the change in conditions. For instance, if weather conditions are the issue, the contractor must present historical averages and show how the current weather differs from those averages.

Once entitlement is established and agreed to, the cost of damages becomes more of an accounting exercise. For that, the owner should not hesitate to invoke the right to audit the contractor's financial records for the project to see what costs the contractor actually incurred. It is not unheard of for contractors to inflate claimed amounts in hopes the final settlement will cover most of their actual costs.

In H.R.Gray's opinion, one of the keys to minimizing the cost to settle a claim is issuing timely, reasonable responses that rely documented facts. Rejecting claims based on technicalities in the contract documents are seldom upheld and only waste time and harden positions. The following graph demonstrates the cost to both the owner and the contractor of postponing or delaying the settlement of a dispute. The important point is that there are costs to pursue claims to both parties, not just the owner. Many contractors try to avoid these expenses by throwing together a bunch of cost data and calling it a claim. The owner's response in rejecting such documents should be to meet with the contractor and use this unwillingness to put money into his claim as a lever to negotiate a settlement.



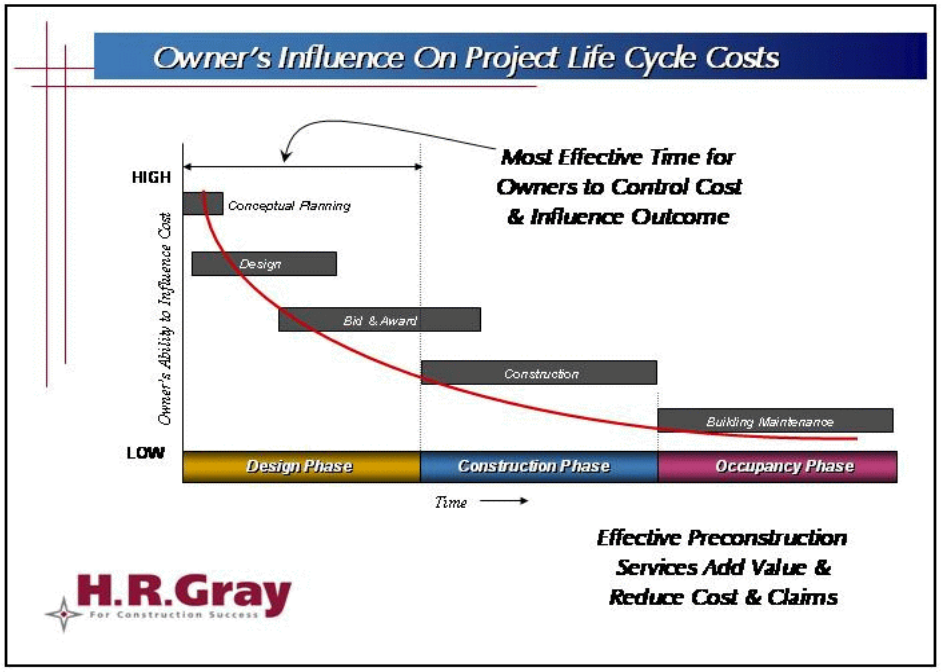
D. The Bottom Line

The "take home concept" for this presentation is that, as a municipal attorney, there are two points in a construction project where you can contribute to the success of that project.

The first point is at the beginning of the project by incorporating provisions into the contract that will assist the contract's administrator in controlling the project's schedule and documenting the project's history. The second point is at the end of the project by insisting on quick responses to any disputed issues or claims. The tendency is for a public sector owner to try to "wait out" the contractor. In H.R.Gray's experience this ultimately drives up the cost of settlement, hardens positions and is looked on negatively by an arbitrator or court.

In closing, there are design professionals, who are your Architect or Engineers, who are knowledgeable in translating ideas and desires into drawings and specifications. This is their expertise. There are also construction professionals, who are not contractors, who are knowledgeable in preconstruction planning, scheduling development, cost estimating, contract administration and claims avoidance. Their expertise is in the dynamics of the construction process.

As the chart below illustrates, it is during project development that your municipality has the greatest control over a project's final cost and success. The earlier a municipality can involve a construction professional to assist their design professional in developing a project, the more successful that municipality's project can be. The measure of success being fewer, lower cost, change orders, no claims at the end of the project and projects that are completed on time.



H.R.Gray's years in project management and claims resolution have shown us that the four most effective tools for administering and controlling construction projects are used before the project ever bids:

Clear, consistent contract documents developed using formal constructability reviews.
Detailed preconstruction planning and scheduling.
Accurate preconstruction estimates of total project costs
Timely, reasonable responses to issues during all phases of a project.

An Example Scheduling Specification
is found
on the following pages

SECTION 01310

CPM CONSTRUCTION SCHEDULE

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to Work of This Section.

B. General Conditions, Article 3, Contractor's Construction Schedule

C. Specification Sections 01011, 01020, 01030, 01320.

1.02 SUMMARY

A. This Section provides the minimum requirements for the Construction Schedule required by General Conditions Article 3.10

B. This Section addresses definitions and the minimum standards that the Construction Schedule must meet to be considered acceptable to the Owner and Architect.

1.03 GENERAL REQUIREMENTS

A. The purpose of the Construction Schedule is to allow the General Contractor, with the assistance of the other prime contractors and his subcontractors, to prepare a plan to which all parties agree for the construction of the project within the Contractual Start and End Dates.

B. The approved Construction Schedule also serves as a means of measuring the progress of the work, evaluating payment applications and making corrections to workforce levels or project approach to cause the project to finish by the Contractual End Date.

C. The approved Construction Schedule also serves as a means for the General Contractor to coordinate and evaluate the work of his subcontractors and the other Prime Contractors. The General Contractor is required to include and involve all Contractors and subcontractors in the development and updating of the Construction Schedule.

D. The Masonry, Plumbing, HVAC, Electrical and Fire Protection Contractors are required to provide, in a timely manner, sufficient information, in the proper formats, to the General Contractor and assist him in developing, maintaining and updating the Construction Schedule.

1.04 SUBMITTALS

A. GENERAL REQUIREMENTS

1. Submittals should conform to the requirements Specification Section 01300 in addition to any requirements of this Section.

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2. The General Contractor is to prepare and distribute a preliminary schedule within 30 calendar days of Notice to Proceed. The Masonry, Plumbing, HVAC, Electrical and Fire Protection Contractors are to return information to the General Contractor within 30 calendar days after receiving the General Contractor's preliminary schedule.

3. The General Contractor is to submit to the Architect an "initial" Construction Schedule that has been agreed to by all the Contractors within 75 days of Notice to Proceed.

4. All bar chart or network diagrams are to be submitted on paper no less than 11" by 17" with the time scale set such that Notice to Proceed date and the Contract Completion date appear on the same sheet. The orientation of the diagram on the sheet (landscape or portrait) is to provide the best clarity while minimizing the number of sheets. Bar charts or network diagrams are to include for each activity shown:
   (a) Activity Identifier
   (b) Activity Description (this maybe on the bar or in the tabular listing but not in both places).
   (c) Original Duration
   (d) Remaining Duration
   (e) Percent Complete
   (f) Early Start Date (Late Start Date is optional)
   (g) Early Finish Date (Late Finish Date is optional)
   (h) Total Float
   (i) Designation of the contractor responsible for this activity's work
   (j) Clear Designation by Color of the Critical Path Activities

5. All Construction Schedule submittals of tabular schedule reports are to be on 8½" by 11" paper, in portrait orientation and are to include the following information:
   (a) Activity Identifier
   (b) Activity Description
   (c) Original Duration
   (d) Early Start Date (Late Start Date is optional)
   (e) Early Finish Date (Late Finish Date is optional)
   (f) Total Float
   (g) Designation of the contractor responsible for this activity's work.

6. All Construction Schedule submittals are to include copies of the schedules in electronic format stored on 3½" diskette(s)n formatted for use by Windows 95 or 98.

B. INITIAL CONSTRUCTION SCHEDULE SUBMITTAL

1. The initial Construction Schedule submittal is to include no less than three (3) copies a written narrative that discusses the Contractors' preliminary approach to constructing the project. The narrative is to be similar to the one provided in Section 01320. It is to address significant assumptions made in developing the schedule as well as significant milestones, events, coordination issues, etc.

2. The initial Construction Schedule submittal is to include no less than three (3) 11" by 17", color copies; and two (2) 8½" by 11", black and white copies of a bar chart with the activities sorted by early start.

3. The initial Construction Schedule submittal is to include no less than three (3) copies of tabular schedule reports listing all the project activities, sorted by early start and grouped by Prime Contractor.

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4. The Construction Schedule submittal is to include no less than three (3) copies on 8½" by 11" paper, of a bar chart, sorted by early start, showing only the critical path activities.

5. Updates or resubmittals of the Construction Schedule for approval are to be per the preceding.

C. UPDATES

1. The Construction Schedule Update submittal is to include three (3) copies of a narrative report that provides:
   (a) A description of the general status of the Work
   (b) Any outstanding issues that affect the schedule
   (c) Any activities added to the schedule with an explanation for their addition
   (d) Any activities deleted from the schedule with an explanation for their deletion
   (e) Any changes to worker hours or budgeted costs with an explanation
   (f) Any recovery measures being taken

2. The Construction Schedule Update submittal is to include no less than three (3) copies of tabular schedule reports listing all the project activities, sorted by early start that include the following information:
   (a) Activity Description
   (b) Original Duration
   (c) Remaining Duration
   (d) Percent Complete
   (e) Total Float
   (f) Planned Early Start Date (based on the initial Construction Schedule)
   (g) Planned Early Finish Date (based on the initial Construction Schedule)
   (h) Current Early Start Date
   (i) Current Early Finish Date
   (j) The difference in days between the planned early finish date and the current early finish date
   (k) Total Budgeted Cost
   (l) Current earned value based on the percent complete.

3. The Construction Schedule Update is to include 3½" diskettes containing the initial Construction Schedule (or an approved target schedule) and the current, updated Construction Schedule.

4. The Contractor is to cooperate with the Owner and the Architect in producing schedule reports to help the Architect analyze project progress and current status and is to be prepared to response to reasonable requests for additional information or to provide information sorted in a different manner.

1.05 NON-COMPLIANCE

A. The Architect may refuse to recommend the whole or part of any progress payment if, in the opinion of the Architect, the Contractor's failure, refusal or neglect to provide the required schedule information precludes a proper evaluation of whether or not the Contractor is prosecuting the Work with the diligence that will ensure its completion by the Contract Completion Date.

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B. All Construction Schedule submittals are subject to review and approval by the Owner, the Owners Representative and Architect. The Owner retains the right to withhold progress payment until the Contractor submits a Construction Schedule or Construction Schedule updates that have been approved by all Contractors and the Architect.

C. The Owner retains the right to withhold individually progress payments for the Masonry, Plumbing, HVAC, Electrical and Fire Protection Contractors for failing to provide Construction Schedule or Construction Schedule update information to the General Contractor.

PART 2 EXECUTION

2.01 USE OF CRITICAL PATH METHOD (CPM)

A. In developing the Construction Schedule, the Contractor is to adhere to established technical standards for CPM scheduling using a computerized, precedence-diagram method. The Contractor is to provide baseline and status data using both hard copy and disk (electronic) format as specified in this section.

B. The Construction Schedule is to have no constrained activities except the Notice to Proceed start and the Project Complete finish dates. Internal dates are to be controlled by logic and activity duration only.

C. The Critical Path is as defined in current literature on CPM scheduling and is further defined to be activities having a total float of three (3) days or less.

D. The use of lead-lag relationships is to be minimized. Activities that might normally be “tied” using a lead-lag relationship are to be broken into two activities. For example, electrical rough-in can start 10 days after interior studs are started. These two activities might be “tied” using a start-to-start relationship. Instead the interior stud activity is to be broken into two activities such as: “Install Enough Interior Studs To Start Electrical Rough-In” that is 10 day in duration ties to “Start Electrical Rough-In” and another activity such as “Complete Interior Studs.” Lead-lag relationships are defined as: start-to-start, finish-to-start, finish-to-finish, etc.

E. Calendars are to be based on a five-day, work week and activity durations are to be in working days. Calendars are to include any recognized holidays that will shorten a five working-day week.

F. Any activity durations that are based on other than a single shift operation are to be clearly and individually identified with an appropriate explanation of how those multi-shift activities relate to the other schedule activities.

G. The Construction Schedule is to clearly show the sequence and interdependence of activities and is to specifically show:

1. Procurement, fabrication, delivery, installation and testing of major material items such as structural steel, roofing, exterior wall systems, interior wall systems, electrical distribution, plumbing piping, lighting systems, fire protection systems, HVAC ductwork, HVAC air handling units, HVAC boiler, HVAC fans and so on.

2. Submittals for and the Architect’s review of materials affecting the critical path or that are particularly significant to the Contractors.

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3. Acquisition of all permits needed to begin or complete the Work, including permits the Owner must obtain and permits the Plumbing, HVAC, Electrical and Fire Protection Contractors must obtain.

4. Interfaces and dependencies among the project Contractors, including significant subcontractors such as the steel erector, etc.

5. Activities for the coordination of above ceiling plumbing, electrical, HVAC, fire protection and lighting are to be shown.

6. Activities or phases of the work requiring Owner provided materials or Owner decisions.

7. Inspections that are to be performed by the Owner or Architect.

8. Separate punchlist development and punchlist correction activities are to be included.

   (a) There are to be separate development and correction activities for the General Contractor, the Masonry, Plumbing, HVAC, Electrical and Fire Protection Contractors which reflect the contractual requirement for the Contractors to punchlist their own work before submitting it to the Architect for inspection. These activities are to be precedents to the Architect's punchlist.
   (b) There are to be separate development and correction activities for above ceiling punchlists by the Contractors and the Architect that are precedent to installing ceiling tiles.
   (c) Activities for development and correction of Architect's final punchlist are to be included and are to be precedent to Contract Completion.

9. Life safety and code related inspections or testing such as elevator tests, plumbing tests, wall closure inspections, etc. are to be included.

10. There are to be separate final cleanup activities for the General Contractor, the Masonry, Plumbing, HVAC, Electrical and Fire Protection Contractors.

11. Special resources such as lifts, cranes, etc. that require extended mobilizations or demobilizations or that require special utilities such as water supply, temporary electric, water disposal, etc.

2.02 LEVEL OF DETAIL REQUIRED

A. The level of detail to be provided is similar to the detail in the schedule presented in Section 01320.

B. There is to be at least one activity for each item listed on the Contractors' contract cost breakdown. All activities shown are to be assigned a budgeted cost amount, except those activities pertaining to the Owner and Architect.

C. Activity durations are to be no more than 20 working days.

D. No activity shall involve more than one trade or specialty subcontractor. There is to be at least one activity for every subcontractor performing work on the project.

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E. An activity coding system is to be developed that allows the activities to be sorted or selected based on various criteria. Those criteria are to include, but are not limited to:

1. The building floor on which the work is being performed.

2. The Project Member who is responsible for performing the work defined by the activity. “Project Member” includes the Owner, Architect, Contractors and subcontractors.

3. The Field Work Order or Change Order number that added or revised the activity.

4. A code field to be marked if the activity is new or revised. (This code field can be combined with the Field Work Order/Change Order field)

F. Activities are to be defined in such a way that they can be cost and resource loaded.

2.03 CONSTRAINTS AND MILESTONES

A. The Contractors are to include in the Construction Schedule any milestones specified by Section 01320 or that they feel are significant to the overall coordination of the project.

B. The Construction Schedule is to have no constrained activities except the Notice to Proceed start and the Project Complete finish dates. Internal dates are to be controlled by logic and activity duration only.

C. Any constraints applied to the schedule must be brought to the Architect’s attention in the initial schedule’s narrative or in the schedule update narrative. Any applied constraint must be approved by the Architect.

2.04 OUT OF SEQUENCE PROGRESS

A. Activities that start before its predecessors have completed are considered to be out-of-sequence.

B. All out-of-sequence activities must be corrected by adjusting the schedule logic, changing durations and/or adding new activities. Out-of-sequence activities can remain only by the specific approval of the Architect.

2.05 NEGATIVE LAG RELATIONSHIPS

A. Lead-lag relationships are to be minimized as noted in the preceding.

B. Lead-lag relationships, when used, cannot have a negative value.

2.06 DEFINITION OF, AND CONDITIONS RELATING TO “FLOAT” IN THE CONSTRUCTION SCHEDULE

A. “Float” is defined as the amount of time between the early start date and the late start date (or the early finish date and late finish date) of any activity in the Construction Schedule. “Total Float” is defined as the amount of time any given activity or path of activities may be delayed before it will affect the project completion date.

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B. Float is an expiring resource available to the Owner and the Contractor to accommodate changes in the Work, however originated; or, to mitigate the effect of events that are not within the control of a Project Member (see definition in this Section) that may delay performance or completion of some part of the Project.

C. Float is not time for the exclusive use or benefit of either the Owner or the Contractor but is to be used in the best interest of completing the Project by the Contract Completion Date.

D. Pursuant to the float sharing requirements of this Section, the use of float suppression techniques such as: preferential or logic sequencing (crew movement, equipment usage, etc.); special lead/lag restraints; extended activity durations; imposed dates; and the like are expressly prohibited.

E. Early Completion.

1. An early completion schedule is one that anticipates completion of the Project before the Contract Completion Date established the Notice to Proceed, that is, the entire Project has a positive total float.

2. Since float is not for the exclusive use or benefit of either party, the Contractor cannot claim delay if the early completion date is not met due to actions by the Owner, Architect, or the Contractors unless all of the positive total float is used up such that the Work finishes after the Contract Completion. Should the schedule indicate that total float is changing from a positive to a negative value, the Contractor is to make whatever notices are required by the General Conditions.

2.07 REVIEW, UPDATES AND REVISIONS

A. The Construction Schedule is to be updated to show the actual starts, actual finishes, remaining durations and percentages of completion as required by the General Conditions.

B. The Construction Schedule is not be revised to include additional activities, to delete activities, to change the logical relationships between activities or make any other changes during an update. Only actual progress, actual workforce, actual start and finish dates, estimates of remaining durations for started activities (or estimates of activity completion) are to be included in a Construction Schedule update.

C. If according to the current Construction Schedule update, the Project is twenty or more days behind schedule or the schedule contains twenty or more days of negative float (considering all granted time extensions), the Contractor shall submit a COPY of the Construction Schedule revised to show a practical plan for completion the Work by the Contract Completion date. The revised plan is to be reflected by changed network logic, activity durations, new activities, deleting activities that is agreed to by all the Contractors (as signified by the Contractors' written agreement to the revised Construction Schedule). Each revision to the current Construction Schedule must be explained in a narrative provided with the revised Construction Schedule.

D. The Owner and Architect will review the Contractors' revised plan and provide comments. The Contractor is to incorporate or resolve all such comments to the satisfaction of the Owner, and Architect. At that time, the revised Construction Schedule will supercede the current Construction Schedule and be used as the basis for progress evaluations. Until a satisfactorily revised Construction Schedule is approved by the Architect, the Owner may withhold progress payments to the Contractors.

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2.08 APPROVED CHANGES

A. Approved changes are to be incorporated into the Construction Schedule by adjusting logic, durations, or adding activities.

B. The budgeted cost of approved changes is to be included by revising current budgeted amounts assigned to existing activities or assigning the cost to new activities. Worker hours are to be adjusted as well.

C. Any such revised schedule developed per the above must be reviewed by the scheduling consultant engaged under Section 01020 and the consultant must provide a written statement of his review and certify that the revisions do not compromise the integrity of the schedule. The cost of this review is to be included in the change order amount.

END OF SECTION

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