



# A Review of the Operational and Contract Administration Implications of Schedule Response

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## *Abstract*

The nature of an owner's response to a schedule submittal depends on the degree to which the owner desires to review and make use of the submitted information. Potential responses of received, reviewed, or approved are defined, the implications of each explored, and the requirements for making such a response are identified. Response methods of state transportation agencies have been reviewed to determine which methods are currently being used, along with pertinent literature to identify previously recommended responses. The purpose of this document is to present the results of this review and recommend to VDOT which response method should be employed.

# A Review of the Operational and Contract Administration Implications of Schedule Response

A construction contract that includes a requirement for the contractor to prepare and submit a progress schedule to the owner necessitates that the owner respond in some manner. The nature of this response depends on the degree to which the owner desires to review and make use of the submitted information. An owner may choose to indicate that the schedule has been received, reviewed, or approved.

- **Receiving** a schedule is to simply acknowledge receipt of the schedule.
- **Reviewing** a schedule is to review and approve only for conformance to the contractual scheduling requirements.
- **Approving** a schedule is to review and approve for conformance to the scheduling requirements and reasonableness of the plan reflected by the schedule.

The response methods of state transportation agencies have been reviewed to determine which methods are currently being used, along with pertinent literature to identify previously recommended responses. The purpose of this document is to present the results of this review and recommend to VDOT which response method should be employed. Questions frequently asked regarding the implications of responses to schedule submittals and the answers thereto are provided in the attached Table 3.

## ***Possible Schedule Responses***

To adequately evaluate response options, it is necessary to clearly understand what is and is not implied by each response. These implications determine the criteria for which a schedule may be rejected, which is to say that the schedule requirements have not been satisfied. The statement made by an owner regarding their intended use of the schedule and their commitment to the project team also varies with the response to a schedule submittal.

### **Receive**

A schedule returned as **received** indicates only that receipt is acknowledged. It does not afford the owner an opportunity to evaluate and comment on the schedule relative to any contractual requirements and does not indicate that the schedule reflects submittal requirements. Penalties may be contractually imposed if the schedule is not submitted, but the schedule requirements are satisfied once submission is made. The owner sends the message that the schedule will not be used as a project management tool, but rather held for later use during the claims process if necessary.

### **Review**

A schedule returned as **reviewed** indicates receipt of the schedule and it has been reviewed for conformance with the contract documents. It signifies that, in the opinion of the reviewer, the schedule meets the requirements for form and format, completion date, and any other contractual schedule constraints. It does not indicate that the durations or sequence of activities have been reviewed, the schedule is feasible, any

indicated resources are adequate, or any responsibility for performance of the work is removed from the contractor.

The owner may reject a schedule that does not reflect the contractual schedule requirements and contractually impose penalties until it does. However, a schedule that meets the form and format requirements and reflects contractual schedule requirements (e.g. milestone, utility, or MOT requirements) must be accepted without an opportunity for the owner to take exception to the reasonableness of the timing or duration of activities for which they are responsible. By choosing to review a schedule, the owner sends the message that the schedule will be used at the time of submission to measure the contractor's understanding of the project, during construction to assess the performance of the contractor, and will be held for later use during the claims process if necessary.

### **Approve**

A schedule returned as **approved** indicates receipt of the schedule and that it has been reviewed for conformance to the contract, responsibility of the work plan, and timing and duration of owner activities. It signifies that, in the opinion of the reviewer, the schedule meets the requirements for form and format, completion date, and any other contractual schedule constraints, the work plan appears responsible, and the owner is agreeable to their actions as described in the schedule. Schedule approval does not indicate the durations or sequence of activities for which the owner is not responsible are valid, any indicated resources are adequate, or any responsibility for performance of the work is removed from the contractor.

The schedule requirements are satisfied when the schedule reflects all contractual schedule requirements and includes reasonable timing or duration of owner activities. Otherwise, the owner may reject the schedule, provide comments in those regards, and contractually impose penalties until it does. By choosing to approve a schedule the owner makes affirmative statements regarding use of the schedule as a management tool, commitment to the project team, and commitment to non-interference.

### ***Requirements for Response***

The schedule submittal response made by an owner determines the requirements that must be satisfied for the response to be appropriate and meaningful. The requirements are mapped to the possible responses in Table 1. Regardless of the response, it is necessary for the owner to provide clear and definitive submittal requirements. It is necessary to prescribe the scheduling method to be employed, level of detail to be depicted, format of the graphical schedule presentation, specific data to be included in schedule reports, and the requirements and procedures for updating the schedule during construction. Without clearly defined submittals, the schedule provided may not contain sufficient information or be in a format that is useful to the project team. Recommendations for schedule submittals have been made by the Partnership under separate cover. Five scheduling categories are recommended to provide an appropriate schedule tool for projects of varying size and complexity. The recommended submittals are organized to provide for controlling project start-up, establishing a baseline, and maintaining the schedule during construction. The schedule components required for each are described.

To respond that a schedule has been reviewed, an owner must be able to evaluate the schedule relative to the format and technical requirements. Approving a schedule requires the owner to be able to evaluate the reasonableness or feasibility of a schedule. It is important that the review process, regardless of the extent, be uniform and viewed as non-arbitrary. Developing benchmark standards against which submittals can be compared is a means of objectifying the process. Standards have been developed as part of the Partnership's mentor-based training program for reviewing Category I, II, and III baseline schedule submittals. Standards are also expected to be developed for reviewing schedule update submittals.

**Table 1: Requirements for Schedule Submittal Response**

|   | Receive | Review | Approve |
|---|---------|--------|---------|
| Clearly defined submittal requirements  | ✓       | ✓      | ✓       |
| Ability to review schedules for conformance with form and format requirements |         | ✓      | ✓       |
| Ability to review schedules for conformance with technical requirements       |         | ✓      | ✓       |
| Ability to review schedules for reasonableness                                |         |        | ✓       |

### ***Review of State Agency Response Methods***

The response methods employed by 46 state transportation agencies were reviewed to determine which of the three aforementioned responses were currently being issued. The methods used by Arkansas, Oklahoma, and Wisconsin were not readily available and the current methods used by Virginia were not included. The methods were generally available from the Prosecution and Progress section of the general conditions, although the methods used by California, South Carolina, and South Dakota were determined from available special provisions pertaining to construction schedules. The results are summarized in Table 2 and presented graphically as Figure 1.

The agency methods were categorized based on:

- **Receive** – contract provisions indicated a schedule submittal was required, but gave no indication that it would be evaluated in any manner
- **Review** – contract provisions indicated a schedule submittal was required that would be reviewed or approved and it was assumed the review would be only for conformance to the contractual requirements

- **Approve** – contract provisions indicated a schedule submittal was required that would be reviewed or approved and would be evaluated in terms of reasonableness or feasibility

The contractual provisions of seven agencies indicate that schedules are received, with six stating that the contractor will “submit” a schedule. The seventh receiving agency, Michigan DOT, specifies only that work is to be performed in accordance with a progress schedule. It is likely reasonable to assume that the schedule would be provided to the agency. New Hampshire DOT clearly states that the submitted schedule is “for documentation”. Form and format requirements are generally limited, but not entirely absent, from the provisions requiring schedule submission.

The provisions of the remaining 39 agencies indicate that submission of a construction schedule is required and will receive some form of review or approval. Of those agencies, 19 indicate that the schedule will be reviewed or approved, but no further information regarding the meaning or limitation of approval is provided. Statements are often included to affirm that contractual requirements are in no way altered by approval and to disclaim approval of particular schedule aspects, commonly validity and reasonableness. Nine agencies made clear statements that schedule approval does not waive any contract requirements. Twelve agencies indicated that approval does not imply endorsement, justification, or validity. Four agencies specifically disclaimed approval of schedule feasibility or reasonableness.

Of the 39 agencies evaluating schedules, three indicated that feasibility or reasonableness would be considered. Two agencies, Indiana DOT and Minnesota DOT, specifically stated that approval indicates “concurrence in the reasonableness and feasibility” of the schedule. These same agencies also clearly state that approval “in no way justifies” the schedule.



**Figure 1: Graphical Summary of Schedule Response Methods**

**Table 2: Summary of Contract Language Regarding Schedule Submittal Response**

| State       | Section           | Contract Language   | Category | No Changes to Contractual Requirements | Disclaim Approval of Schedule Validity/Accuracy | Disclaim Approval of Reasonableness |
|-------------|-------------------|---|----------|--|---|-------------------------------------|
| Alabama     | 108.03            | The Engineer's approval of the aforementioned Schedule of Operations does not waive any contract requirements.  | Review   | ✓                                      |   |                                     |
| Alaska      | 108-1.03          | A progress schedule, in a format acceptable to the Engineer...  | Review   |  |   |                                     |
| Arizona     | 108.04            | It is the Resident Engineer's responsibility to review and accept the schedule.<br>The intent of the Resident Engineer's review is primarily to look at the sequencing of the work to determine if the Contractor has considered:<br><ul style="list-style-type: none"> <li>• all the contract requirements, such as shop drawing reviews, traffic restrictions, access limitations, time constraints, etc.;</li> <li>• any unusual site conditions;</li> <li>• any regulatory impediments from local, county, state, or federal agencies;</li> <li>• interface requirements with other Contractors;</li> <li>• construction method limitations specifically described in the Project Plans and Special Provisions; and</li> <li>• any other unusual contract constraints.</li> </ul> | Approve  |  |   |                                     |
| California  | Special Provision | The Engineer's review and acceptance of schedules shall not waive any contract requirements and shall not relieve the Contractor of any obligation thereunder or responsibility for submitting complete and accurate information.   | Review   | ✓                                      |   |                                     |
| Colorado    | 108.03            | Acceptance of the Contractor's Schedule by the Engineer is not to be construed as relieving the Contractor of obligation to complete the contract work within the contract time allowed for the portion of the work or the entire Contract, or granting, rejecting or in any other way acting on the Contractor's request for extension of contract time, or claims for additional compensation.  | Review   | ✓                                      |   |                                     |
| Connecticut | 1.08.03           | ...in the progress schedule which it has submitted to the Department...   | Receive  |  |   |                                     |
| Delaware    | 108.04            | The Contractor shall submit a progress schedule to the Engineer for review.   | Review   |  |   |                                     |
| Florida     | 8-3.2             | By acceptance of the schedule, the Engineer does not endorse or otherwise certify the validity or accuracy of the activity durations or sequencing of activities. The Engineer will use the accepted schedule as the baseline against which to measure the progress.  | Review   |  | ✓   |                                     |
| Georgia     | 108.03            | Approval of the Progress Schedule shall not be construed to imply approval of any particular method or sequence of construction or to relieve the Contractor of providing sufficient materials, equipment, and labor to guarantee the completion of the Project in accordance with the Plans, Specifications, and Special Provisions within the time set forth in the Proposal.   | Review   |  | ✓   |                                     |

**Table 2: Summary of Contract Language Regarding Schedule Submittal Response (continued)**

| State     | Section   | Contract Language  | Category | No Changes to Contractual Requirements | Disclaim Approval of Schedule Validity/Accuracy | Disclaim Approval of Reasonableness |
|-----------|-----------|--|----------|--|---|-------------------------------------|
| Hawaii    | 108.07.C  | The submittal of, and the Engineer's receipt of any progress schedule shall not be deemed an agreement to modify any terms or conditions of the contract. Nor shall any submittal or receipt imply the Engineer's approval of the schedule's breakdown, its individual elements, any critical path that may be shown nor shall it obligate the Department to make its personnel available outside normal working hours or the working hours established by the Contract in order to accommodate such schedule. The Contractor has the risk of all elements (whether or not shown) of the schedule and its execution. Any acceptance or approval of the schedule shall be for general format only and shall not be deemed an agreement by the Department that the construction means, methods and resources shown on the schedule will result in work that conforms to the contract requirements or that the sequences or durations indicated are feasible. | Review   |  | ✓   | ✓                                   |
| Idaho     | 108.02    | Acceptance of any schedule shall not relieve the Contractor of his responsibilities to ...complete the work within the contract time. The initial schedule will not be accepted unless it satisfies contract milestones, intermediate contract completion dates and the contract completion date and shall show the scheduled completion date and the substantial completion date when applicable.   | Review   | ✓                                      |   |                                     |
| Illinois  | 108.02    | Contractor shall submit to the Engineer a satisfactory progress schedule or critical path schedule...No payment under this contract will be made until a progress schedule has been submitted for approval. Payment may be withheld until a satisfactory schedule has been submitted and approved.   | Review   |  |   |                                     |
| Indiana   | 108.04    | Acceptance of the schedules will in no way justify them, but will simply indicate concurrence in their reasonableness and feasibility on the assumption that every effort shall be made to meet them.  | Approve  |  | ✓   |                                     |
| Iowa      | 1110.02.A | Upon receipt of the CPM progress schedule, the schedule will be reviewed for compliance with the intended work.  | Review   |  |   |                                     |
| Kansas    | 108.03    | The Contractor, when required by the Engineer, shall submit a "Progress Schedule" for review.  | Review   |  |   |                                     |
| Kentucky  | 108.02    | At this conference, submit a progress schedule showing the order in which the work will be carried out.  | Receive  |  |   |                                     |
| Louisiana | 108.03    | Prior to beginning the work the contractor shall submit to the project engineer a Construction Progress Schedule giving a satisfactory schedule of operations that provides for completion of the work within the contract time.   | Review   |  |   |                                     |
| Maine     | 107.4.2   | The Department will review the Schedule of Work and provide comments to the Contractor within 20 days of receipt of the schedule.  | Review   |  |   |                                     |

**Table 2: Summary of Contract Language Regarding Schedule Submittal Response (continued)**

| State         | Section  | Contract Language  | Category | No Changes to Contractual Requirements | Disclaim Approval of Schedule Validity/Accuracy | Disclaim Approval of Reasonableness |
|---------------|----------|--|----------|--|---|-------------------------------------|
| Maryland      | GP-8.04  | Within 30 days after Notice to Proceed, the Contractor shall furnish the procurement officer a "Progress Schedule" showing the proposed order of work and indicating the time required for the completion of the work.<br><br>If, in the opinion of the procurement officer, the Contractor falls significantly behind the approved progress schedule, the Contractor shall take any and all steps necessary to improve his progress.  | Review   |  |   |                                     |
| Massachusetts | 8.02     | The Contractor shall submit, to and for the comments of the Engineer, a schedule of operations within ten days after the mailing of the executed Contract to the Contractor.   | Review   |  |   |                                     |
| Michigan      | 108.02   | the Contractor shall perform the work according to the detailed progress schedule  | Receive  |  |   |                                     |
| Minnesota     | 1803.1   | Approval of the Contractor's progress schedules by the Engineer in no way justifies the schedules, but simply indicates concurrence in their reasonableness and feasibility on the assumption that the Contractor will make every effort required to meet them.  | Approve  |  | ✓   |                                     |
| Mississippi   | 108.03.1 | The Department will furnish the Contractor a progress schedule developed for the determination of contract time which may be used as the contract progress schedule, or the Contractor's own proposed progress schedule may be submitted for approval;   | Review   |  |   |                                     |
| Missouri      | 108.4    | The contractor shall submit a progress schedule to the engineer for review prior to or at the pre-construction conference.<br><br>The review by the engineer of any progress schedule will not constitute a determination that the schedule is reasonable, that following the schedule will result in timely completion, or that deviation will result in a delayed completion.  | Review   |  | ✓   | ✓                                   |
| Montana       | 108.03   | Submit to the Engineer within 5 calendar days of award, 2 copies of an Activities Schedule Chart (ASC) and Written Narrative (WN) that details the time (working days or completion date) involved to complete the major contract items for the duration of the Contract.  | Receive  |  |   |                                     |
| Nebraska      | 108.07   | The Contractor shall develop and submit for approval a progress schedule.  | Review   |  |   |                                     |
| Nevada        | 108.03.a | After being awarded the contract, prepare and submit for acceptance the progress schedules as specified herein showing the order in which the work is proposed to be carried out.<br><br>Do not construe the approval of any schedule submitted to assign responsibility of performance or contingencies to the Department or relieve responsibility to adjust forces, equipment, and work schedules as may be necessary to insure completion of the work within prescribed contract time. | Review   | ✓                                      |   |                                     |

**Table 2: Summary of Contract Language Regarding Schedule Submittal Response (continued)**

| State          | Section           | Contract Language   | Category | No Changes to Contractual Requirements | Disclaim Approval of Schedule Validity/Accuracy | Disclaim Approval of Reasonableness |
|----------------|-------------------|---|----------|--|---|-------------------------------------|
| New Hampshire  | 108.03            | The Contractor shall submit a progress schedule to the Engineer for documentation in accordance with 105.02.  | Receive  |  |   |                                     |
| New Jersey     | 108.04.3          | It is not intended that the Engineer, by approving the progress schedule, agrees that it is reasonable in all respects or that following the progress schedule can result in timely completion of the Project. The progress schedule is not a part of the Contract.   | Review   |  |   | ✓                                   |
| New Mexico     | 108.03            | One week before the preconstruction conference or at the preconstruction conference if so approved by the Project Manager, the Contractor shall furnish the Project Manager with a "progress schedule" for the Engineer's approval.   | Review   |  |   |                                     |
| New York       | 108-01 A          | Approval of the progress schedule shall not be construed to imply approval of any particular method or sequence of construction or to relieve the Contractor of providing sufficient materials, equipment, and labor to guarantee the completion of the Project in accordance with the contract proposal, plans and specifications  | Review   |  | ✓   |                                     |
| North Carolina | 108-2             | The Contractor shall prepare and submit for approval by the Engineer a schedule of his proposed working progress on the project in accordance with the instructions and on forms furnished by the Engineer.   | Review   |  |   |                                     |
| North Dakota   | 108.01 B          | The progress schedule shall be submitted to the Department.   | Receive  |  |   |                                     |
| Ohio           | 180.02.B.1        | Prepare and submit a progress schedule, of the type specified in the Contract Documents, to the DCE for review at or before the preconstruction conference. The Engineer will review the schedule and within 14 Calendar Days of receipt, will either accept the schedule or provide the Contractor with comments. Acceptance of the schedule does not revise the Contract Documents. | Review   |  |   |                                     |
| Oregon         | 00180.41          | The Contractor shall submit a Project Work schedule meeting the requirements of this Subsection to the Engineer.  | Receive  |  |   |                                     |
| Pennsylvania   | 108.03(b)         | Acceptance of the Contractor's Schedule or any revision(s) thereto, by the Department, will not constitute the Department's approval of or agreement with the sequence of operations, the durations of activities, the adequacy or propriety of resources, the identity of controlling operations, nor the feasibility or any other characteristics of the Schedule or its revisions. | Review   |  | ✓   | ✓                                   |
| Rhode Island   | 108.03 c          | The project schedule baseline will be submitted to the department and will be returned to the contractor, within ten working days of receipt, to the Contractor marked either "Acceptable" or "Revise and Resubmit."  | Review   |  |   |                                     |
| South Carolina | Special Provision | A Critical Path Method (CPM) Project Schedule and the deliverables identified below will be submitted for review and approval to the Resident Construction Engineer or his designee at the Preconstruction Conference.  | Review   |  |   |                                     |

**Table 2: Summary of Contract Language Regarding Schedule Submittal Response (continued)**

| State         | Section           | Contract Language   | Category | No Changes to Contractual Requirements | Disclaim Approval of Schedule Validity/Accuracy | Disclaim Approval of Reasonableness |
|---------------|-------------------|---|----------|--|---|-------------------------------------|
| South Dakota  | Special Provision | The Contractor shall submit to the Engineer a schedule of work for approval.<br><br>The approval of the schedule by the Engineer in no way attests to the validity of the assumptions, logic constraints, dependency relationships, resource allocations, manpower and equipment, or any other aspect of the proposed schedule. The Contractor is and shall remain solely responsible for the planning and execution of work in order to meet project milestones or contract completion dates.  | Review   | ✓                                      | ✓   |                                     |
| Tennessee     | 108.03            | If for any reason, construction gets out of step with the plan of operations or CPM if required, the Contractor shall offer for approval new scheduling that will assure timely completion.   | Review   |  |   |                                     |
| Texas         | 8.2               | Schedules are subject to review and acceptance.   | Review   |  |   |                                     |
| Utah          | 00555-1.6 C       | Within 14 calendar days of the Notice of Award, submit a baseline construction schedule in a Critical Path Method (CPM) format for the Engineer's review and acceptance.<br><br>Acceptance of the baseline construction schedule by the Engineer does not imply approval of any particular construction methods or relieve the Contractor from its responsibility to provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the contract documents.<br><br>Acceptance of the baseline construction schedule by the Engineer does not attest to the validity of assumptions, activities, relationships, sequences, resource allocations, or any other aspect of the baseline construction schedule. Within the contractual constraints, the Contractor is solely responsible for the planning and execution of the work. | Review   | ✓                                      | ✓   |                                     |
| Vermont       | 108.03            | The Contractor shall submit, to and for the approval of the Engineer, a CPM progress schedule within ten calendar days after the award of the Contract.   | Review   |  |   |                                     |
| Washington    | 1-08.3            | The Engineer's approval of any schedule shall not transfer any of the Contractor's responsibilities to the Contracting Agency. The Contractor alone shall remain responsible for adjusting forces, equipment, and work schedules to ensure completion of the work within the time(s) specified in the contract.   | Review   | ✓                                      |   |                                     |
| West Virginia | 108.3.1           | The Division's review of the Schedule does not represent approval of the Contractor's estimate of resources (labor, material and equipment), method of operation, or production rates.  | Review   |  | ✓   |                                     |
| Wyoming       | 108.3.2.1         | Acceptance does not modify the contract or constitute endorsement or validation by the engineer of the contractor's logic, activity durations, or assumptions in creating the schedule.   | Review   | ✓                                      | ✓   |                                     |

## **Literature Review**

Kagan<sup>1</sup> defines shop drawings as vehicles that convert the line drawings of the engineer to specific hardware. The “drawings” are information submitted by the contractor to communicate their understanding and intentions to the engineer or owner. For an engineered system, the information may be in the form of manufacturers’ catalog cuts describing the product or material the contractor intends to use or may be detailed drawings depicting how the contractor intends to build or install a system.

Designers have changed the meaning of shop drawing “approval” over time in an effort to limit any resulting liability. The typical disclaimer attached to approval is that a general review has been performed and the submitted information meets the intent of the design, but no warranty for performance of the product is expressed for implied.

A construction schedule is in many aspects a shop drawing submitted to the owner to communicate the contractor’s intentions for performing the work. Much like a catalog cut, the schedule can be reviewed to determine whether the plan conforms to the contractual requirements. Rather than material or structural requirements, the schedule must meet form and format requirements and reflect the contractual requirements relating to the timing and sequence of construction. These timing and sequence requirements are commonly in the form of, but need not be limited to, milestone dates (intermediate or completion), maintenance of traffic (MOT) constraints, environmental restrictions, or utility disruption restrictions.

While similar in some aspects, the schedule submittal differs from a typical shop drawing in that the information changes as the project progresses and may include requirements that the owner is expected to fulfill. The changing information is typically managed by requiring that updated information be submitted periodically. This effectively makes each submission a “shop drawing” to be reviewed separately, but in light of information from previous schedule submittals.

Bartholomew<sup>2</sup> notes that all contracts include an implied warranty that neither party shall act or fail to act in a manner that interferes with the ability of the other party to perform the contract work. The information contained in the schedule submittal related to the expectations of the owner, and the timing thereof, provides the owner some basis for managing that risk.

Wickwire et al.<sup>3</sup> recommend that a construction owner adopt a formal schedule approval process because it affords the owner an opportunity to:

- assess the reasonableness of the contractor’s plan
- coordinate between contracts
- insure owner-related functions are properly incorporated
- comment on overly aggressive or erroneous schedules

Approval effectively establishes the validity of the schedule and results in a “rebuttable presumption of correctness”, which means the schedule is presumed reasonable unless otherwise proven. The owner is

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<sup>1</sup> Kagan, H. A. “How Designers Can Avoid Construction Claims”. *Journal of Professional Issues in Engineering*, ASCE, 111(3), 1985.

<sup>2</sup> Bartholomew, S. H. Construction Contracting: Business and Legal Principles. Columbus: Prentice Hall, 1998.

<sup>3</sup> Wickwire, J. W. et al. Construction Scheduling: Preparation, Liability, and Claims. 2<sup>nd</sup> ed. New York: Aspen, 2003.

essentially bound to the approved schedule and is expected to meet obligations and perform tasks accordingly. The owner is encouraging joint participation and use of the schedule by both parties as a management tool.

A reluctance to approve a schedule may be the result of fearing that the response may be later used to justify a claim. By withholding approval, an owner may believe the reasonableness of the schedule can be questioned at a later time. However, courts have imposed implied obligations regarding the schedule despite silence on the part of the owner. Bramble and Callahan<sup>4</sup> note that formal acceptance is not required for acceptance by a court to prove a delay.

Wickwire et al. state that “refusal to approve a schedule is an unwise course” because it deprives the owner of the ability to reject unreasonable plans, exposes the owner to potential claims for early completion, and denies the parties a baseline from which to evaluate delays. They go on to recommend that liability assumed as a result of schedule approval be minimized by:

- carefully reviewing any time frames for owner-related functions
- including cautionary contract language indicating that the contractor remains the party responsible for development and execution of the means, methods, and timing of performance reflected in the project plan

## **Conclusion**

It is recommended that a construction owner approve schedule submittals to make a clear and affirmative statement regarding the value of the schedule to the project team. Schedules should be approved for both conformance to contract requirements and the reasonableness of the plan it reflects. Review standards should be employed to ensure a uniform and non-arbitrary approval process. Exculpatory language should be incorporated into the contract to ensure that risk and responsibility is not transferred to the owner as a result of schedule approval.

A formal schedule approval process allows the owner to better manage the risk associated with an implied warranty for non-interference. By including reasonableness in the schedule approval criteria, the owner may comment on the reasonableness of the plan as a whole and may require the schedule to reflect comments regarding the reasonableness of the timing and duration of activities for which the owner is responsible. Schedule approve, as defined herein:

- provides the parties with an agreed upon baseline for delay analysis
- allows the owner to coordinate between multiple contracts
- encourages joint participation in the project, joint responsibility for the schedule, and use of the schedule as a management tool

Reviewing a schedule provides only for the schedule to be reviewed and approved relative to the contractual requirements. This response can not be recommended because it places the owner at a less than optimal position to manage risks and does not encourage either party to use the schedule as a management tool.

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<sup>4</sup> Bramble, B. and Callahan, M. Construction Delay Claims. New York: Wiley, 1987.

An approved schedule, even if only approved for conformance to the contract, results in a baseline that may later be used for delay analysis. It also carries with it a rebuttable presumption of correctness and an obligation of the parties involved to fulfill the requirements of the schedule. By not providing for the reasonableness of schedules to be evaluated, the owner forfeits an opportunity to take exception to the reasonableness of the timing or duration of activities for which they are responsible and puts itself in a less than optimal position to manage the risk of interfering with the contractor's performance of the work. The review response does not send the message that the schedule should be used to manage the project, but rather that it will be used to assess the performance of the contractor during construction and during the claims process if necessary.

Receiving provides only for acknowledgement of receipt of a schedule submittal. This response can not be recommended because it:

- denies an owner an opportunity to reject an unreasonable schedule
- exposes the owner to potential unreasonable claims for early completion
- denies the parties an agreed upon baseline for use in delay analysis
- does not encourage the development of a reasonable schedule
- does not encourage either party to use the schedule as a management tool

A list was compiled of common questions regarding the implications of schedule responses, in terms of schedule use, limitations to requirements imposed by the owner, and allocation of responsibilities. The questions and answers thereto are provided in the attached Table 3.

**Table 3: Schedule Response Frequently Asked Questions**

| Question  | If the schedule is reviewed for conformance with contract documents  | If the schedule is reviewed for conformance and feasibility  |
|---|--|--|
| Can the schedule be used to demonstrate planning and confirm that the Contractor has a plan that meets the contractual requirements?  | <u>Yes</u>   | <u>Yes</u>   |
| Can the Owner make comments regarding the reasonableness of the Contractor's planned means and methods, sequence, timing, and production of the work and is it necessary for the Contractor to respond? | <u>No</u><br>The Owner may make such comments, but provided the schedule demonstrates compliance with the contract, the Contractor has no obligation to respond.   | <u>Yes</u><br>The Contractor is obligated to provide the Owner the information necessary to fully understand the schedule prior to approval.                                     |
| Can the schedule be used as a basis for measuring progress and, if necessary, ordering corrective action?   | <u>Maybe</u><br>The schedule can likely be used to measure progress, but not for ordering corrective action.   | <u>Yes</u>   |
| Can the schedule be used as a baseline for quantifying the impact of contract changes, Owner actions, and Contractor actions?   | <u>No</u><br>The schedule can not be used for delay analysis unless agreed upon by all parties involved.   | <u>Yes</u>   |
| Can the schedule be used as a mechanism to clarify and communicate the necessary Owner actions?   | <u>Yes</u><br>However, the Owner denies themselves control over the timing of the necessary actions and plays down their commitment an implied warranty of non-inference.  | <u>Yes</u><br>The Owner retains the right to not approve unreasonable timing of necessary actions and confirms and builds commitment to an implied warranty of non-interference. |
| Can the schedule become a tool for team building, communication, and shared commitment within the project team?   | <u>No</u><br>An unwillingness to fully agree is an affirmative statement of non-commitment   | <u>Yes</u><br>Approval is an affirmative statement by the Owner of commitment to the project team.   |
| Can the schedule become a management tool for positive communication and action?  | <u>No</u><br>The schedule is perceived as a club reserved for use, if necessary, in the claims process.  | <u>Yes</u><br>The schedule is a tool shared by and used jointly by the project team.   |
| Does the Owner promote continuous use and maintenance of the schedule as a means to take corrective action and achieve project goals?   | <u>No</u><br>Owner promotes submission of the schedule, which is a single event.   | <u>Yes</u><br>Schedule maintenance is promoted through the project team sharing and using the schedule.  |
| Is the Owner responsible for the impacts of Owner caused delays?  | <u>Yes</u><br>The existence of an approved schedule does not alter Owner responsibilities. However, review without approval gives the impression of limited liability and commitment. Approval allows the Owner to manage this liability and makes a clear statement that the Owner is committed to achieving the project goals. | <u>Yes</u>   |
| Is the Owner responsible for the Contractor's means and methods, performance, or achievement?   | <u>No</u><br>Prosecution of the work remains solely the Contractor's responsibility.   | <u>No</u><br>Schedule approval provides the Owner an opportunity to make clear statements that prosecution of the work remains solely the Contractor's responsibility.           |