108 Prosecution and Progress

108.1 Subletting the Contract

108.1.1 General

- (1) Do not sublet, sell, transfer, assign, or otherwise dispose of the contract, a portion of the contract, or a right, title, or interest in the contract without the engineer's written consent. If the engineer consents to the contractor subletting a portion of the contract, the contractor is relieved of no responsibility for the fulfillment of the contract or of no liability under the contract and bond. Do not allow a subcontractor to proceed with work without the engineer's written consent.
- (2) Request permission in writing to sublet a portion of the contract. Regardless of the subcontract tier, request permission in writing to sublet any portion of the contract to a DBE firm, or purchase materials or supplies from a DBE firm. If the engineer requires, submit evidence that the proposed subcontractor is experienced and equipped for the work. The engineer may also require submission of a copy of the proposed subcontract. Submit all subsequent changes in the terms of a subcontract for the engineer's consent.
- (3) If proposing to have a party other than a subcontractor perform work, notify the engineer and submit details of this arrangement in writing. The engineer will determine if that arrangement constitutes subcontracting. The engineer may also require the contractor to file, with the engineer, copies of all other agreements between any parties regarding the performance of work under the contract.

108.1.2 Prime Contractor Participation

(1) Perform at least 30 percent of the original contract amount with the contractor's own organization. The contractor's own organization is defined as workers the contractor employs and pays directly as well as equipment the contractor owns or rents, either with or without operators. Submit documentation according to CMM 260 to indicate what work the contractor's own organization is performing and the dollar value of that work before contract execution as specified in 103.6. Include a detailed computation showing the contractor's share of work calculated as follows:

Contractor's share = P / (C - S)

Where:

- P = Work the prime contractor performs. The prime may include materials the prime purchases and installs or that the prime purchases but others install, and trucking the prime pays for directly. Do not include equipment and associated operators the prime leases to others performing work.
- **C** = Total contract amount.
- S = Specialty work others perform. Work on sanitary sewer systems and water-main systems is specialty work. Specialty work also includes work performed under any bid item in the designated sections or under special provision bid items for similar work as follows:
 - Contractor staking work under 650.
 - Electrical work under <u>651</u> <u>678</u>.
 - Landscaping and erosion control work under 626 632.
 - Traffic control work under 643.
 - Signing work under 633 638 and 532.
 - Pavement marking work under 646 643.
 - Fencing work under 616.

108.2 Start of the Work

(1) For the purpose of determining contract time, the contract starting date is defined as follows:

If the contract provides for starting work not later than 10 calendar days after the date of written notification from the engineer, the contract starting date will be the date construction operations are started or the tenth calendar day following the date of that notification, whichever is earlier.

108.3 Prosecution of the Work

(1) The department will issue a written notification to begin or resume work for all working day, calendar day, and completion date contracts. Do not begin or resume work before receiving the engineer's written notification. Notify the engineer at least 3 business days before starting or resuming work. Notify the engineer at least one business day before changing the schedule of work, such as working on Saturdays, Sundays, and department-specified holidays.

- (2) Give the work the constant attention necessary to promote the progress of the work. Promptly supply the materials, tools, equipment, and incidental items required to perform the work. Employ an ample force of workers and provide a construction plant properly adapted to the work and of sufficient capacity and efficiency to accomplish the work in a safe and skillful manner as provided in the contractor's progress schedule. Maintain all plants in good working order and make provisions for immediate emergency repairs.
- (3) Take precautions necessary to protect the work as specified in 107.14. Include in the contract price the cost for taking precautions and protecting the work. The cost of taking precautions and protecting the work is incidental to the work as specified in 109.2 and 109.6.1.

108.4 Progress Schedules

108.4.1 General

- (1) Submit a bar chart progress schedule as specified in <u>108.4.2</u>. The contractor may alternatively submit one of the following:
 - 1. A linear schedule conveying all the information specified in 108.4.2 for a bar chart.
 - 2. A relationship bar chart (RBC) schedule as specified in 108.4.3.
 - 3. A critical path method (CPM) schedule as specified in 108.4.4.
- (2) If the contract requires, submit an RBC schedule as specified in 108.4.3 or a CPM schedule as specified in 108.4.4, and do not submit a bar chart schedule.
- (3) Plan and execute the work to meet the contract-required interim completion dates and the specified contract time or completion date. The engineer will use the schedule to monitor the progress of the work. The schedule is not part of the contract.

108.4.2 Bar Chart Progress Schedule

108.4.2.1 Initial Bar Chart Progress Schedule

- (1) At least 14 calendar days before the preconstruction meeting, submit to the engineer for review an initial bar chart progress schedule conforming to the following minimum requirements:
 - 1. Include activities that describe essential features of the work and activities that might potentially delay contract completion. Identify activities that are controlling items of work.
 - 2. Identify the contemplated start and completion dates for each activity. Provide a duration, ranging from one to 15 working days, for each activity. Break longer activities into 2 or more activities distinguished by the addition of a location or some other description. Specify the sequencing of all activities.
 - 3. Provide the quantity and the estimated daily production rate for controlling items of work.
 - 4. Include a narrative that lists the work days per week, department-specified holidays, number of shifts per day, and number of hours per shift. For calendar day and completion date contracts, provide the estimated number of adverse weather days for each month consistent with the monthly-anticipated adverse weather days 108.10.2.2 shows.
 - Show completing the work within interim completion dates and the specified contract time or completion date.
- (2) In addition to the required activities, the contractor is encouraged to include other activities such as:
 - 1. The procurement of materials, equipment, articles of special manufacture, concrete curing time, etc.
 - 2. The furnishing of drawings, plans, and other data required in the contract for the engineer's review.
 - 3. The department's inspections of structural steel fabrication, etc.
 - 4. Third-party activities related to the contract.
- (3) Hand drawn schedules are acceptable. If the contractor develops the initial schedule with scheduling software, the contractor is encouraged to provide the engineer a diskette of the schedule and the name of the scheduling software used.
- (4) The engineer and contractor will review the initial schedule at the preconstruction meeting. Within 5 business days after the preconstruction meeting, the engineer will accept the contractor's initial schedule or request additional information. Make the appropriate adjustments and resubmit the revised initial schedule within 5 business days after the engineer's request. If the engineer requests justification for an activity duration, provide information that may include estimated labor, equipment, unit quantities, and production rates used to determine the activity duration.
- (5) The department will only make progress payments for the value of materials, as specified in 109.6.3.2, until the engineer accepts the initial schedule. The engineer accepts the contractor's initial schedule based solely on whether that schedule is complete as specified in 108.4.2.1(1). The engineer's acceptance of the schedule does not modify the contract or validate the schedule.

108.4.2.2 Monthly Progress Meetings and Bar Chart Progress Schedule Updates

(1) The contractor and the engineer will meet monthly to assess progress and jointly add update information to the initial schedule. At a minimum, updates will include the actual start and finish of each activity, percentage complete, and remaining durations of activities started but not yet completed.

108.4.2.3 Engineer's Right to Request Bar Chart Progress Schedule Revisions

(1) The engineer will monitor the progress of the work and may request that the contractor revise the schedule if project completion or interim completion targets are delayed 14 calendar days or more for calendar day or completion date contracts, or 10 working days or more for working day contracts. Submit the revised schedule within 5 business days after the engineer's request.

108.4.2.4 Bar Chart Progress Schedule Documentation for Time Extensions

- (1) Furnish documentation including schedule updates to support requests to extend interim completion dates, the specified contract time, or the completion date.
- (2) If the contractor does not furnish documentation to support the additional time needed to complete work on increased quantities for an excusable delay that affects a controlling item of work, the engineer may extend contract time, rounded to the nearest 1/2 day, as follows:

$TE = OT \times (ATC - OC)/OC$

Where:

TE = Time extension

OT = Original time (original contract time)

OC = Original cost (total bid amount)

ATC = Adjusted total cost (actual cost of all work minus the cost of change order work where contract time was determined)

108.4.2.5 Bar Chart Progress Schedule Measurement and Payment

(1) Include the cost for the schedule in the total bid. The schedule is incidental to the contract.

108.4.3 Relationship Bar Chart Progress Schedule

108.4.3.1 General

(1) If the contract requires, submit a RBC Progress Schedule.

108.4.3.2 Initial RBC Progress Schedule

- (1) At least 14 calendar days before the preconstruction meeting, submit to the engineer for review an initial RBC schedule that meets the following minimum requirements:
 - 1. Include activities that describe essential features of the work and activities that might potentially delay contract completion. Identify activities that are controlling items of work.
 - 2. Identify the contemplated start and completion dates for each activity. Provide a duration, ranging from one to 15 working days, for each activity. Break longer activities into 2 or more activities distinguished by the addition of a location or some other description.
 - 3. Provide a logic diagram that shows the sequence of activities and the scheduling interrelationships among activities. Alternatively, the contractor may identify the activity interrelationships in a tabular listing. Ensure all activity interrelationships are finish to start relationships with no leads or lags. Use only contractual constraints in the schedule logic. The engineer may accept requested exceptions.
 - 4. Provide the quantity and the estimated daily production rate for controlling items of work.
 - 5. Include a narrative that lists the work days per week, department-specified holidays, number of shifts per day, and number of hours per shift. For calendar day and completion date contracts, provide the estimated number of adverse weather days for each month consistent with the monthly-anticipated adverse weather days 108.10.2.2 shows.
 - 6. Show completing the work within interim completion dates and the specified contract time or completion
 - 7. Develop the RBC schedule using computerized scheduling software. Provide the engineer with a paper copy of the information required in items 3 and 5 of 108.4.3.2(1). Submit a diskette of the schedule and identify the software used to prepare that schedule.
- (2) In addition to the required activities, the contractor is encouraged to include other activities such as:
 - 1. The procurement of materials, equipment, articles of special manufacture, concrete curing time, etc.
 - 2. The furnishing of drawings, plans, and other data required in the contract for the engineer's review.
 - 3. The department's inspections of structural steel fabrication, etc.
 - 4. Third-party activities related to the contract.
- (3) The contractor may augment the initial submittal of the RBC schedule by submitting a linear schedule. The linear schedule must be generated from the RBC schedule.

- (4) The engineer and the contractor will review the initial schedule at the preconstruction meeting. Within 5 business days after the preconstruction meeting, the engineer will accept the contractor's initial schedule or request additional information. Make the appropriate adjustments and resubmit the revised initial schedule within 5 business days after the engineer's request. If the engineer requests justification for an activity duration, provide information that may include estimated labor, equipment, unit quantities, and production rates used to determine the activity duration.
- (5) The department will only make progress payments for the value of materials, as specified in 109.6.3.2, until the engineer accepts the initial schedule. The engineer accepts the contractor's initial schedule based solely on whether that schedule is complete as specified in 108.4.3.2(1). The engineer's acceptance of the schedule does not modify the contract or validate the schedule.

108.4.3.3 Monthly RBC Progress Schedule Updates and Progress Meetings

- (1) Update the schedule monthly to show current progress. At a minimum, ensure that the update includes:
 - 1. The actual start and finish of each activity, percentage complete, and remaining durations of activities started but not yet completed.
 - 2. A narrative report that includes a listing of monthly progress, changes to the controlling items of work from the previous update, sources of delay, potential problems, work planned for the next 30 calendar days, and changes to the RBC schedule. Changes include, but are not limited to, changes in the method and manner of performing the work, changes in the contract, extra work, changes in an activity duration, and changes to relationships between activities.
- (2) For each schedule update, submit a diskette and an updated paper copy meeting the requirements in 108.4.3.2(1).
- (3) Within 5 business days after submitting the monthly update, hold a job-site meeting with the engineer to review the progress of the schedule. At that meeting, the department will confirm the actual start and actual finish dates of completed activities, remaining durations of uncompleted activities, and changes to the controlling items of work.

108.4.3.4 Engineer's Right to Request RBC Progress Schedule Revisions

- (1) Between monthly updates, the engineer will monitor the progress of the work and may request that the contractor revise the schedule for one or more of the following reasons:
 - 1. The project completion or interim completion targets are delayed 14 calendar days or more for calendar day or completion date contracts, or 10 working days or more for working day contracts.
 - 2. The engineer determines the progress of the work differs significantly from the current schedule.
 - 3. A change order requires the addition, deletion, or revision of activities that causes a change in the contractor's work sequence or the method and manner of performing the work.
- (2) Submit the revised schedule within 5 business days after the engineer's request.
- (3) Within 5 business days after submitting the revised schedule, hold a job-site meeting to review the schedule revisions. At the meeting, the engineer will accept the contractor's schedule or request additional information. Make the appropriate adjustments and resubmit the newly revised schedule.

108.4.3.5 RBC Progress Schedule Documentation for Time Extensions

(1) Furnish documentation, including schedule updates, to support requests to extend interim completion dates, the specified contract time, or completion date.

108.4.3.6 RBC Progress Schedule Measurement

(1) The department will measure one RBC Progress Schedule for the contract acceptably completed.

108.4.3.7 RBC Progress Schedule Payment

(1) The department will pay for the measured quantity at the contract unit price under the following bid item:

ITEM NUMBERDESCRIPTIONUNIT108.4300RBC Progress ScheduleEACH

- (2) Payment is full compensation for all work required under this bid item. The department will pay the contract amount in 3 payments as follows:
 - 1. The department will make the first payment, equal to 50 percent of the amount bid for this bid item, after the department accepts the initial schedule.
 - The department will make the second payment, equal to 25 percent of the amount bid for this bid item, when the contractor completes work representing 40 percent of the total contract price, excluding the price for this bid item.

3. The department will make the third payment, equal to 25 percent of the amount bid for this bid item, when the contractor completes work representing 80 percent of the total contract price, excluding the price for this bid item.

108.4.4 Critical Path Method Progress Schedule

108.4.4.1 General

(1) If the contract requires, submit a CPM Progress Schedule.

108.4.4.2 Initial Work Plan

- (1) At least 14 calendar days before the preconstruction meeting, submit an initial work plan conforming to, as a minimum, the following requirements:
 - 1. Include a detailed bar chart schedule, meeting the requirements of 108.4.2.1(1), for the first 60 calendar days of work. Ensure that all activities have durations of one to of 15 working days, unless the engineer accepts requested exceptions. Show additional activities that require department review or approval.
 - 2. Include a summary bar chart schedule for the balance of the project. Summary activities may be greater than 15 working days.
 - 3. Ensure the bar chart schedules show completing the work within the interim completion dates and specified contract time or completion date.
- (2) The engineer and the contractor will review the initial work plan at the preconstruction meeting. Within 5 business days after the preconstruction meeting, the engineer will accept the contractor's initial work plan or request additional information. The engineer will use the detailed bar chart schedule to monitor the progress of the work until accepting the initial CPM schedule.
- (3) Maintain and submit on a bi-weekly basis an updated version of the detailed bar chart schedule until the department accepts the initial CPM schedule. Ensure that each schedule update includes the actual start and finish of each activity, percentage complete, and the remaining durations of activities started but not yet completed.

108.4.4.3 Initial CPM Progress Schedule

- (1) Within 30 calendar days after the notice to proceed, submit to the engineer for review an initial CPM schedule, beginning at the start of work date and conforming to the following minimum requirements:
 - 1. Include activities that describe essential features of the work and activities that might potentially delay contract completion. Identify activities that are controlling items of work.
 - 2. Identify the contemplated start and completion dates for each activity. Provide a duration, ranging from one to 15 working days, for each activity. Break longer activities into 2 or more activities distinguished by the addition of a location or some other description.
 - 3. Provide a logic diagram having a maximum of 50 activities for each 11 in. by 17 in. sheet. Ensure that each sheet includes title, match data for diagram correlation, and a key to identify all components used in the diagram. Show the sequence of activities and the scheduling interrelationships among activities. Ensure all activity interrelationships are finish to start relationships with no leads or lags. Use only contractual constraints in the schedule logic. The engineer may accept requested exceptions.
 - 4. Provide the quantity and the estimated daily production rate for controlling items of work.
 - 5. Include a narrative that lists the work days per week, department-specified holidays, number of shifts per day, and number of hours per shift. For calendar day and completion date contracts, provide the estimated number of adverse weather days for each month consistent with the monthly-anticipated adverse weather days 108.10.2.2 shows.
 - 6. Provide tabular sorts by:
 - Activity Identification/Early Start.
 - Total Float.
 - Predecessor/Successor.
 - Responsibility/Early Start.
 - Area/Early Start.
 - 7. Provide 60-day look-ahead bar charts by early start.
 - 8. Show completing the work within interim completion dates and the specified contract time or completion date.
 - 9. Develop the CPM schedule using computerized scheduling software. Provide the engineer with a paper copy of the information required in items 3, 5, 6, and 7 of 108.4.4.3(1). Submit a diskette of the schedule and identify the software used to prepare that schedule.
- (2) In addition to the required activities, the contractor is encouraged to include other activities such as:
 - 1. The procurement of materials, equipment, articles of special manufacture, concrete curing time, etc.
 - 2. The furnishing of drawings, plans, and other data required in the contract for the engineer's review.

- 3. The department's inspections of structural steel fabrication, etc.
- 4. Third-party activities related to the contract.
- (3) Float is defined as the time between the date when an activity can start, the early start, and the date when an activity must start, the late start. The department and the contractor agree that float is a shared commodity, and is not for the exclusive use or financial benefit of either party. Either party has the full use of the float until it is depleted.
- (4) The contractor may augment the initial submittal of the CPM schedule by submitting a linear schedule. The linear schedule must be generated from the CPM schedule.
- (5) Attend a meeting to review the schedule. The engineer will schedule the meeting within 10 business days after receiving the contractor's initial CPM schedule submittal. Within 5 business days after the meeting, the engineer will accept the contractor's initial CPM schedule or request additional information. Make the appropriate adjustments and resubmit the revised initial CPM schedule within 10 business days after the engineer's request. If the engineer requests justification for an activity duration, provide information that may include estimated labor, equipment, unit quantities, and production rates used to determine the activity duration.
- (6) The department will only make progress payments for the value of materials, as specified in <u>109.6.3.2</u>, until the contractor has submitted the initial CPM schedule. The department will retain 10 percent of each estimate until the department accepts the initial CPM schedule.
- (7) The engineer accepts the contractor's initial CPM schedule based solely on whether that schedule is complete as specified in 108.4.4.3(1). The engineer's acceptance of the schedule does not modify the contract or validate the schedule.

108.4.4.4 Monthly CPM Progress Schedule Updates and Progress Meetings

- (1) Update the schedule monthly to show current progress. At a minimum, ensure that the update includes:
 - The actual start and finish of each activity, percentage complete, and remaining durations of activities started but not yet completed.
 - 2. A narrative report that includes a listing of monthly progress, changes to the controlling items of work from the previous update, sources of delay, potential problems, work planned for the next 30 calendar days, and changes to the CPM schedule. Changes include, but are not limited to, changes in the method and manner of performing the work, changes in the contract, extra work, changes in an activity duration, and changes to relationships between activities.
- (2) For each schedule update, submit a diskette and an updated paper copy of the following:
 - 1. Tabular sorts by:
 - Activity Identification/Early Start.
 - Total Float.
 - 2. If applicable, an updated logic diagram as the engineer requires.
 - 3. If augmenting the CPM schedule with a linear schedule, provide an update of the linear schedule.
- (3) Within 5 business days after submitting the monthly update, hold a job-site meeting with the engineer to review the progress of the schedule. At that meeting, the department will confirm the actual start and actual finish dates of completed activities, remaining durations of uncompleted activities, changes to the controlling items of work, and the logic changes.

108.4.4.5 Engineer's Right to Request CPM Progress Schedule Revisions

- (1) Between monthly updates, the engineer will monitor the progress of the work and may request that the contractor revise the schedule for one or more of the following reasons:
 - 1. The project completion or interim completion targets are delayed 14 calendar days or more for calendar day or completion date contracts, or 10 working days or more for working day contracts.
 - 2. The engineer determines the progress of the work differs significantly from the current schedule.
 - 3. A change order requires the addition, deletion, or revision of activities that causes a change in the contractor's work sequence or the method and manner of performing the work.
- (2) Submit the revised schedule within 10 business days after the engineer's request.
- (3) Within 5 business days after submitting the revised schedule, hold a job-site meeting to review the schedule revisions. At the meeting, the engineer will accept the contractor's schedule or request additional information. Make the appropriate adjustments and resubmit the newly revised schedule.

108.4.4.6 CPM Progress Schedule Documentation for Time Extensions

(1) Furnish documentation, including schedule updates, to support requests to extend interim completion dates, the specified contract time, or completion date.

108.4.4.7 CPM Progress Schedule Measurement

(1) The department will measure one CPM Progress Schedule for the contract acceptably completed.

108.4.4.8 CPM Progress Schedule Payment

(1) The department will pay for the measured quantity at the contract unit price under the following bid item:

ITEM NUMBERDESCRIPTIONUNIT108.4400CPM Progress ScheduleEACH

- (2) Payment is full compensation for all work required under this bid item. The department will pay the contract amount in 3 payments as follows:
 - 1. The department will make the first payment, equal to 50 percent of the amount bid for this bid item, after the department accepts the initial schedule.
 - 2. The department will make the second payment, equal to 25 percent of the amount bid for this bid item, when the contractor completes work representing 40 percent of the total contract price, excluding the price for this bid item.
 - 3. The department will make the third payment, equal to 25 percent of the amount bid for this bid item, when the contractor completes work representing 80 percent of the total contract price, excluding the price for this bid item.

108.5 Limiting Operations

(1) Limit operations to prevent undue inconvenience to the traveling public. If the engineer concludes that the extent of the contractor's work zone unnecessarily inconveniences the public, the engineer will require the contractor to finish sections in progress before allowing the contractor to start work on additional sections.

108.6 Character of Workers

- (1) Provide personnel necessary to supervise and complete all contract work as specified. Ensure workers have the experience and skills necessary to perform assigned work.
- (2) Remove from the project all personnel performing in an unskilled manner or who are intemperate or disorderly. If the engineer concludes that personnel are performing in an unskilled manner or are intemperate or disorderly, the engineer may direct the contractor, in writing, to remove them from the project. Do not allow removed personnel to return to the project without the engineer's written consent.
- (3) The engineer may suspend the work in writing, withhold progress payments due the contractor, or both for the following reasons:
 - 1. The contractor does not furnish suitable and sufficient personnel to perform the work.
 - 2. The contractor does not remove personnel from the project as specified in 108.6(2).

108.7 Methods and Equipment

108.7.1 General

- (1) Use equipment of the capacity and mechanical condition necessary to perform work conforming to the contract. Ensure that the equipment does not harm the roadway, pavement, structures, adjacent property, other highways, workers, or the public. Use equipment conforming to the specific contract requirements for individual bid items or classes of work.
- (2) If the contractor does not provide adequate equipment, properly maintained, the engineer may:
 - 1. Order the contractor to remove the equipment.
 - 2. Suspend specific operations until the contractor provides adequate equipment.
 - 3. Determine that the contractor is in default of the contract.
- (3) Equip each unit of motorized construction equipment with a muffler constructed to the equipment manufacturer's specifications. The contractor may substitute other mufflers producing equivalent results. Maintain mufflers and exhaust systems in good operating condition, free from leaks and holes.

108.7.2 Moving Heavy Loads

(1) For all vehicles operated on completed subgrade, base, or pavement that will remain a permanent part of the project, do not exceed the legal loading defined in Wisconsin statutes for Class A highways without the engineer's written permission. For structures, do not exceed that legal loading without written permission whether or not the structure will remain a permanent part of the project. Adhering to these requirements, or allowed variations, does not relieve the contractor of liability for damage caused by those operations.

108.7.3 Loads on Structures

- (1) Demonstrate that all loads on structures within the project limits throughout the duration of the contract do not exceed the structural capacity of the structure. If the engineer directs, submit stamped and signed copies of analyses and associated calculations performed by a professional engineer registered in the state of Wisconsin to the engineer and to BOS. Do not begin construction operations or move a heavy load across a structure without the engineer's written authorization.
- (2) If a PE's analysis is required, determine capacity at the operating load level using the same AASHTO specification the structure was rated under. Include materials, equipment, and other construction or vehicular loads in the analyses. If under public traffic, also include the Wisconsin standard permit vehicle (Wis-SPV) as shown in chapter 45 of the department's bridge manual. The structure must be capable of carrying a Wis-SPV load equal to or greater than 100,000 pounds in addition to construction loads. The engineer's written authorization must be accompanied by a copy of the analysis stamped accepted by department's bureau of structures before proceeding.
- (3) Except as required to accommodate public traffic or to complete the deck pour, do not operate heavy equipment or impose vehicular live loads on lanes adjacent to freshly placed concrete decks until it develops sufficient strength to open it to service under 502.3.10.1.

108.8 Substituting Equipment, Methods, and Materials

- (1) Use the equipment, methods, or materials specified in the contract unless the engineer authorizes substitutes. If the contract does not specify equipment, methods, or materials, the contractor may use those the contractor demonstrates, to the engineer's satisfaction, to produce conforming work.
- (2) Obtain the engineer's authorization before substituting for equipment, methods, or materials specified in the contract. Submit a written request to the engineer describing the equipment, methods, or materials proposed and the reasons for the change. The engineer's authorization of a substitution does not relieve the contractor of the obligation to produce work conforming to the contract as specified in 105.3.1.
- (3) If after use of substituted equipment, methods, or materials, the engineer finds the work nonconforming, the contractor shall complete the remaining work with the specified equipment, methods, or materials. The nonconforming work is subject to the provisions of 105.3.2.
- (4) The department will pay for a substitute made under 108.8 at the contract price for the original work. The department will not extend contract time for a substitute made under 108.8, except for time resulting from a cost reduction incentive as provided in 104.10.

108.9 Contract Time for Working Day, Calendar Day, and Completion Date Contracts 108.9.1 General

- (1) Complete all or any portion of the project called for in the contract within the time or times for completion of the contract. All time limits in the contract are crucial elements of the contract.
- (2) The proposal will specify the time for completion as a specific number of working days, calendar days, or as a given completion date.

108.9.2 Assessing Time Charges for Working Day Contracts

- (1) For working day contracts, contract time is the number of working days specified for completion. Beginning with the start of work specified in 108.2, the engineer will assess working days for all days except:
 - 1. Days excluded in 108.9.2(4).
 - 2. Days if one or more of the following prevent the contractor from working on the controlling item:
 - 2.1 Earthquakes and other cataclysmic phenomena of nature the contractor cannot foresee and avoid.
 - 2.2 Weather conditions.
 - 2.3 Job conditions caused by weather.
 - 2.4 Non-compensable delays as specified in Items 2 through 7 of 108.10.2.1(3).
 - 2.5 Compensable delays as specified in Items 2 through 5 of 108.10.3(2).
- (2) The engineer will assess working days based on the number of hours the contractor is able to work on the controlling item with full and normal efficiency. The engineer will assess working days as follows:
 - 1. Contractor can work less than 4 hours; no working day.
 - 2. Contractor can work from 4 to less than 8 hours; 1/2 working day.
 - 3. Contractor can work 8 hours or more; full working day.
- (3) The engineer will assess working days if the contractor is not performing work on the controlling item of work, and that non-performance is due to delays the contractor can foresee, control, or prevent.

- (4) The engineer will not assess working days on:
 - 1. Saturdays, Sundays, and department-specified holidays.
 - 2. Engineer-ordered suspensions for reasons other than contractor negligence or non-compliance including winter suspensions before November 16 or after March 31.
 - 3. Contract-identified, non-work days during the construction season.
 - 4. Days from November 16 through March 31.
- (5) The engineer will continue to assess working days after November 15 if the contractor has not completed the work to the stage the contract requires to be completed by November 16.
- (6) If the engineer determines the contractor shall not work during the period from November 16 through March 31, the contractor is not entitled to claim for a delay, time extension, or other related damages.
- (7) The engineer will prepare a weekly statement showing days charged for the preceding week and days remaining on the contract. The engineer will make this statement available to the contractor in a mutually agreeable location within 5 business days after the week covered in the statement. If the contractor disagrees with the time assessed, the contractor may give notice as specified in 104.3.

108.9.3 Contract Time for Calendar Day Contracts

(1) For calendar day contracts, contract time is the number of calendar days specified for completion, including Saturdays, Sundays, and department-specified holidays, counted from the starting date specified in 108.2. Contract time includes contract-identified non-work days during the construction season, but excludes contract-identified winter suspension periods.

108.9.4 Contract Time for Completion Date Contracts

(1) For completion date contracts, contract time begins with the start of work as specified in <u>108.2</u> and concludes on the specified completion date. Complete the contract on or before that date.

108.10 Determining Contract Time Extensions and Payment for Excusable Delays 108.10.1 General

- (1) The department may extend contract time by change order. The department will only extend contract time if an excusable delay affects the controlling item of work. Excusable delays are unforeseen and unanticipated delays not resulting from the contractor's fault or negligence. Provide documentation and schedule updates to support requested time extensions as specified:
 - 1. In 108.4.2.4 for bar chart progress schedules.
 - 2. In 108.4.3.5 for RBC progress schedules.
 - 3. In 108.4.4.6 for CPM progress schedules.
- (2) The department may choose not to consider time extensions for delays unless the contractor notifies the engineer as specified in 104.3 and updates the schedule. The engineer will evaluate the facts, pay adjustment, and time extension for the delay. The engineer's findings are final and conclusive.

108.10.2 Excusable, Non-Compensable Delays

108.10.2.1 General

108.10.2.1 Revise to add reference, in paragraph (1), to the list of non-compensable delays in (3).

- (1) Non-compensable delays, 108.10.2.1(3), are excusable delays not the contractor's or the department's fault. The engineer will not pay for the delay costs listed in 109.4.7 for non-compensable delays.
- (2) For non-compensable delays under calendar day and completion date contracts, the engineer will extend contract time if the conditions specified in 108.10.1 are met. The department will relieve the contractor from associated liquidated damages, as specified in 108.11, if the engineer extends time under 108.10.1.
- (3) The following are non-compensable delays:
 - 1. Delays due to earthquakes, other cataclysmic phenomena of nature the contractor cannot foresee and avoid, severe weather or job conditions caused by recent weather as specified in 108.10.2.2.
 - Extraordinary delays in material deliveries the contractor or their suppliers cannot foresee and forestall resulting from strikes, lockouts, freight embargoes, industry-wide shortages, governmental acts, or sudden disasters.
 - 3. Delays due to acts of the government, a political subdivision other than the department, or the public enemy.
 - 4. Delays from fires or epidemics.
 - 5. Delays from strikes beyond the contractor's power to settle not caused by improper acts or omissions of the contractor, their subcontractors, or their suppliers.

- 6. Delays caused by non-completion of work by utilities or other third parties, if the contract does not specify a number of days or a completion date for that utility or third-party work.
- 7. Altered quantities as specified in 109.3.

108.10.2.2 Extension of Contract Time for Severe Weather

(1) The engineer will award a time extension for severe weather on calendar day and completion date contracts. Submit a request for severe weather days if the number of adverse weather days, as defined in 101.3, exceeds the anticipated number of adverse weather days tabulated below.

TOTAL ANTICIPATED ADVERSE WEATHER DAYS FOR EACH CALENDAR MONTH^[2]

Jan: 31 ^[1]	Feb: 28 ^[1]	Mar: 31 ^[1]	April: 5	May: 4	June: 4	July: 3	Aug: 3
Sep: 4	Oct: 5	Nov 1 thru	15: 2	Nov 16 thru 30): 15 ^[1]	Dec: 31 ^[1]	

- Includes an anticipated winter suspension from November 16 through March 31.
- [2] The number of days will be modified in the special provisions for year-round and painting contracts.
- (2) Submit the request to the engineer at the end of the month. Indicate the number of adverse weather days that occurred during that month. Provide progress schedule documentation to show that the controlling item of work was delayed. Show that the delay was beyond the control of the contractor. The engineer will assess the contractor's submittal and indicate how many adverse weather days are confirmed.
- (3) For each calendar month, the engineer will grant a severe weather day for each confirmed adverse weather day that exceeds the number of anticipated adverse weather days 108.10.2.2(1) shows. When the contractor requests severe weather days, the engineer will give the contractor a monthly written statement showing the number of days credited for severe weather. At the end of the project, the engineer will extend time on calendar day and completion date contracts for the cumulative number of severe weather days credited each month.

108.10.3 Excusable Compensable Delays

- (1) Compensable delays are excusable delays due to the department's actions or lack of actions, or determined by judicial proceeding to be the department's sole responsibility. The engineer will grant a time extension for a compensable delay if the conditions specified in 108.10.1 are met.
- (2) The following are compensable delays:
 - 1. A contract change for revised work as specified for extra work under 104.2.2.1, for a differing site condition under 104.2.2.2, or for significant changes in the character of the work under 104.2.2.4.
 - 2. A contract change for an engineer-ordered suspension under 104.2.2.3.
 - 3. The unexpected discovery of human remains, an archaeological find, or historical find consistent with 107.25.
 - 4. The unexpected discovery of a hazardous substance consistent with 107.24.
 - 5. The non-completion of work that utilities or other third parties perform, if the contract specifies a number of days or a completion date for that utility or third-party work. For delays covered under Trans 220 of the Wisconsin administrative code, the engineer will grant a time extension, but the contractor must seek recovery of delay costs from the utility.
- (3) For a compensable delay or a time extension, the department will relieve the contractor from associated liquidated damages under <u>108.11</u>, and will pay the contractor for delay costs determined as follows:
 - 1. Adjust the contract price as specified in 109.4.2 through 109.4.5 for delays under item 1 of 108.10.3(2).
 - 2. Adjust the contract price as specified in 109.4.7 for delays under items 2 through 5 of 108.10.3(2).

108.11 Liquidated Damages

- (1) If the contractor does not complete the work within the contract time or within the extra time allowed under engineer-granted time extensions, the department will assess liquidated damages. The department will deduct a specified sum from payments due the contractor for every calendar day on calendar day contracts and completion date contracts, or for every working day on working day contracts, that the work remains uncompleted.
- (2) This deducted sum is not a penalty but is a fixed, agreed, liquidated damage due the department from the contractor for the added cost of engineering and supervision resulting from the contractor's failure to complete the work within the contract time.
- (3) Unless enhanced in the special provisions, the department will assess the following daily liquidated damages:

LIQUIDATED DAMAGES

ORIGINAL CON	TRACT AMOUNT	DAILY CHARGE		
FROM MORE THAN	TO AND INCLUDING	CALENDAR DAY	WORKING DAY	
\$0	\$250,000	\$945	\$1890	
\$250,000	\$500,000	\$835	\$1670	
\$500,000	\$1,000,000	\$1045	\$2090	
\$1,000,000	\$2,000,000	\$1570	\$3140	
\$2,000,000		\$2185	\$4370	

(4) If the engineer allows the contractor to continue and finish the work or any part of it after the contract time expires, the department waives no rights under the contract.

108.12 Terminating the Contract for Default

- (1) The engineer, after giving written notice to the contractor and the contractor's surety, may take the prosecution of the work out of the hands of the contractor or the contractor's surety, or both, for one or more breach of the contract the contractor commits, as follows:
 - 1. Failing to begin the work under the contract within the time specified.
 - Failing to perform the work with sufficient workers, equipment, or materials to complete the work within the specified time.
 - 3. Failing to complete the contract within the contract time specified, as extended by the engineer.
 - 4. Performing the work unsuitably, or not obeying an engineer directive to remove and replace or otherwise correct unacceptable work.
 - 5. Discontinuing the prosecution of the work before completion without the engineer's permission.
 - 6. Failing to resume work that the engineer discontinued within a reasonable time after notice to do so.
 - 7. Insolvency or bankruptcy, or committing an act of bankruptcy or insolvency.
 - 8. Allowing a final judgment against the contractor to stand unsatisfied for a period of 48 hours.
 - 9. Making an assignment for the benefit of creditors.
 - 10. Failing to comply with the provisions of the contract relative to hours of labor, wages, equal opportunity, character and classification of workers employed.
 - 11. Failing to acquire or maintain the required insurance.
 - 12. Failing to carry on the work in an acceptable manner.
- (2) The engineer will give the contractor and the contractor's surety written notice specifying the delay, neglect, or default and the action required. If the contractor or the contractor's surety, within a period of 10 calendar days after that notice, fails to proceed satisfactorily in compliance therewith, the department then has full power and authority to take the work out of the hands of the contractor or the contractor's surety, or both; to use all suitable materials and equipment on the project; or to enter into contract, or use other methods that the department requires to complete the work.
- (3) If the department takes over the incomplete work under 108.12, the department will deduct all additional costs and damages and the costs and charges of completing the work under contract from payments due the contractor. If the total of those damages, costs, and charges is less than the sum that would have been payable under the contract if the contractor had completed the work, then the contractor is entitled to receive the difference subject to all claims for liens thereon that may be filed with the department. If that total exceeds the sum that would have been payable under the contract, the department will consider the contractor and the contractor's surety liable, and the contractor and the contractor's surety shall pay to the department the amount of that excess.
- (4) The department will not relieve the contractor and the contractor's surety of the liability for the assessment of liquidated damages under 108.11 because of the contractor's default.
- (5) The rights and remedies of the department are in addition to all other rights and remedies provided by law or under the contract and the bonds.
- (6) If, after the engineer gives notice of default as specified in <u>108.12(1)</u>, it is determined that the contractor was not in default, the rights and obligations of the parties are the same as if the notice of termination had been issued as specified in <u>108.13</u>.
- (7) If a court finds the department's default of the contractor under 108.12 to be legally improper, the department will treat the contract as if the department had terminated the contractor for convenience as specified in 108.13. The department will pay the contractor as specified in 108.13.

108.13 Terminating the Contract for Convenience of the Department

- (1) The department may terminate the contract or any part of the contract for reasons beyond the control of the department or contractor after determining that termination is in the department's or the public interest. Reasons for termination include, but are not limited to, one or more of the following:
 - 1. A national emergency that creates a shortage of materials, labor, or equipment by: reason of war conditions involving the United States; reason of orders of the federal government or its duly authorized agencies; or executive orders with respect to prosecution of war or national defense.
 - 2. Orders from duly constituted authorities relating to energy conservation.
 - 3. An injunction or restraining order obtained by a citizen's action alleging violations of 42 U.S.C. 4331-4332, 23 U.S.C. 138, or public law 91-646.
- (2) The department will deliver to the contractor a termination notice specifying the extent of termination and the effective date.
- (3) Upon receipt of a termination notice, do not proceed with the affected bid items unless directed to do so in that notice. Complete all bid items specified in the termination notice. That work includes punch list items and all work necessary to ensure the safety of the public, to properly secure work already constructed or partially constructed, and to secure the project site. Perform this work, which may include bid items not in the original contract, the contract specifies. The contract is sufficiently complete upon completion and acceptance of all bid items specified in the termination notice, except punch list items. After completion of the punch list items and all contract-required documents, the department will terminate the contract by issuing a final certificate and payment. The department reserves the right to declare in default a contractor who does not carry out the conditions of a termination for convenience.
- (4) If the department orders termination of the contract for convenience, the department will pay for all completed work as of that date at the contract price. The department will pay for partially completed work at agreed prices or by force account methods specified in 109.4.5 provided, however, that payment does not exceed the contract price for the bid item under which the work was performed. The department will pay for work eliminated by the termination only to the extent provided under 109.5. The department will pay for new work, if any, at agreed prices or paid for by force account methods specified in 109.4.5.
- (5) The department may allow the contractor to purchase materials that the department obtained for the work but that have not been incorporated into the work at actual cost delivered to a designated location or otherwise disposed of as mutually agreed.
- (6) The department may, at the department's option, purchase unused materials that the contractor has obtained and that the department has inspected, tested, and accepted, at the points of delivery as the department designates and at a cost shown by receipted bills or other proper evidence.
- (7) If the engineer directs, promptly remove equipment and supplies from the project site or other department property. If the contractor does not remove the equipment and supplies as directed, the engineer may do so at the contractor's expense.
- (8) Within 60 calendar days of the effective termination date, submit claims for additional costs actually incurred. Do not include claims for loss of anticipated profits on work not performed. The contractor may claim one or more of the following:
 - 1. Costs for reasonable idle equipment time or mobilization efforts.
 - 2. Bidding and project investigative costs.
 - 3. Overhead expenses attributable to the terminated project.
 - 4. Subcontractor costs not otherwise paid for.
 - 5. Actual idle labor cost if work is stopped before the termination date.
 - 6. Guaranteed payments for private land usage as part of the original contract.
- (9) Make cost records available to the department to the extent necessary to determine the validity and amount of each item claimed.
- (10) The department will not relieve the contractor of contractual responsibilities for the work completed. The department does not relieve the contractor's surety of its obligations for and concerning a just claim arising from work performed due to a termination of the contract.

108.14 Terminating the Contractor's Responsibility

(1) The contractor's responsibilities are terminated, except as set forth in the contract bond and specified in 107.16, when the department grants final acceptance as specified in 105.11.2.3.