

## SECTION 7 - PROSECUTION OF THE WORK

### TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
7-1 BEGINNING OF WORK.....	2
7-2 AMOUNT OF WORK UNDER CONSTRUCTION.....	2
7-3 PRECONSTRUCTION CONFERENCE AND PROGRESS MEETINGS.....	2
7-4 WORK TO BE PROSECUTED WITH ADEQUATE SUPERVISION, LABOR FORCE, EQUIPMENT AND METHODS .....	2
7-4.01 Superintendence .....	7.1
7-4.02 Labor .....	3
7-4.03 Equipment and Methods .....	3
7-5 SCHEDULES.....	7.2
7-5.01 CPM Schedule – Minor Projects.....	7.3
7-5.02 CPM Schedule – Major Projects.....	7.3
7-5.03 Four-Week Rolling Schedule .....	7.4
7-5.04 Float.....	7.4
7-5.05 Schedule Acceptance.....	7.5
7-6 UNUSUAL SITE CONDITIONS.....	7.5
7-7 PURSUANCE OF WORK DURING INCLEMENT WEATHER.....	7
7-8 PEAK HOURS, HOURS OF DARKNESS, HOLIDAYS, AND WEEKENDS .....	7
7-8.01 Allowable Times and Hours of Work.....	7
7-8.02 Off-Period Work .....	7.6
7-8.03 Emergency Repairs.....	7.7
7-8.04 Revocation of Permission For Off-Period Work .....	8
7-8.05 Working Shifts.....	8
7-8.06 Lane and Road Closures During November/December Holiday Season.....	8
7-9 TEMPORARY FACILITIES AND SERVICES .....	7.7
7-10 PROTECTION OF WORK, PERSONS AND PROPERTY.....	7.8
7-11 NOT USED .....	9
7-12 DELAYS .....	9
7-12.01 Avoidable Delays.....	9
7-12.02 Unavoidable Delays.....	7.8
7-12.03 Time Impact Analysis.....	7.9
7-13 NOTICE OF DELAYS .....	7.10
7-14 CARELESS DESTRUCTION OF STAKES AND MARKS NO CAUSE FOR DELAY.....	11
7-15 TIME OF COMPLETION.....	11
7-16 EXTENSION OF TIME NOT A WAIVER .....	11
7-17 INCLEMENT WEATHER AND CONTRACT TIME .....	7.10
7-18 EXTENSION OF TIME.....	7.11
7-19 SUBSTANTIAL COMPLETION .....	7.11
7-20 CLEANING UP .....	7.11
7-21 FINAL INSPECTION, FIELD ACCEPTANCE, AND NOTICE OF COMPLETION.....	7.12
7-21.01 Final Inspection.....	7.12
7-21.02 Field Acceptance .....	7.12
7-21.03 Notice of Completion.....	7.12
7-22 FINAL ACCEPTANCE .....	7.12

## **SECTION 7 - PROSECUTION OF THE WORK**

### **7-1 BEGINNING OF WORK**

No work can take place prior to receipt by the Agency of the executed Contract (as defined in Section 3-7, "Execution of Contract") and approval of the prescribed bonds and insurance. After the Agency signs the Contract and receives and approves the bonds and insurance, the Agency will issue a Notice to Proceed (NTP) which constitutes authorization to begin the Work. The NTP will state the date on which the counting of Contract Time will commence and the Contract completion date. The counting of Contract Time will begin no later than 30 Calendar Days from the time the Contractor receives the Contract forms for execution.

### **7-2 AMOUNT OF WORK UNDER CONSTRUCTION**

The Contractor must not have more work under construction than can be prosecuted properly with regard to the rights of the public. The Agency has the right to direct the Contractor's operations or schedule to ensure compliance with this requirement.

### **7-3 PRECONSTRUCTION CONFERENCE AND PROGRESS MEETINGS**

Prior to beginning work, a preconstruction conference will be held to review the Work. The Contractor must attend this preconstruction conference and must invite Subcontractors and others necessary to ensure all topics are adequately covered. Topics discussed will include mobilization, access, temporary facilities, utilities, subcontractors, schedules, procedures, correspondence, progress payments, payroll records, Storm Water Pollution Prevention Plans (SWPPP), coordination, safety, after-hour contacts for Contractor and Agency personnel, quality control/quality assurance, personnel assignments, and other appropriate topics.

Progress meetings, as stipulated in the Special Provisions or as required by the Agency, will be conducted throughout the duration of the Contract. The purpose of these meetings is to inform, discuss, and resolve issues related to the Work; the Contractor or the Contractor's agent must attend. Topics discussed include, but are not limited to, progress, schedules, safety, SWPPP, Requests for Information, Change Orders, Field Instructions, field coordination, submittals, quality control/quality assurance, testing, startup, safety, and other topics related to the Work.

### **7-4 WORK TO BE PROSECUTED WITH ADEQUATE SUPERVISION, LABOR FORCE, EQUIPMENT AND METHODS**

The Contractor must prosecute the Work under the Contract with the materials, tools, machinery, apparatus, and labor necessary to complete the Work described, shown, or reasonably implied under the Contract, or as directed by the Agency, within the Contract Time.

#### **7-4.01 Superintendence**

The Contractor must assign a competent superintendent to the Work who has complete authority to represent and act for the Contractor. The superintendent must be capable of reading and understanding the Contract and must receive and follow all instructions given by the Agency.

If the Contractor or the Contractor's superintendent is not present, orders given by the Agency must be received and obeyed by the foreman or other representative who has charge of

the particular work in reference to which the orders are given, or the Agency can stop the work until the Contractor or the Contractor's superintendent arrives.

#### **7-4.02 Labor**

Workers, laborers, or mechanics skilled in each class of work must accomplish every part of the Work.

#### **7-4.03 Equipment and Methods**

Only equipment and methods suitable to produce the quality required by the Contract are permitted to operate on the Work. Except as specified in Section 5-7, "Contractor's Equipment," of these Specifications, equipment must be that used in general practice for the work undertaken. If any part of the Contractor's plant, equipment, or methods of executing the Work is unsafe, inefficient, or inadequate to ensure the required quality or rate of progress, the Agency can order the Contractor to modify the Contractor's equipment, facilities, or methods. The Contractor must promptly comply with the orders at the Contractor's expense. The Contractor's compliance with the orders or failure of the Agency to issue the orders does not relieve the Contractor of the obligation to secure the degree of safety, quality of the Work, and rate of progress required by the Contract. The Contractor is responsible for the safety, adequacy, and efficiency of his plant, equipment, and methods.

### **7-5 SCHEDULES**

The Contractor must submit a schedule in accordance with this Section that illustrates the Contractor's plans for carrying out the Work.

The Contractor must carry out the various elements of the Work concurrently, as is practicable, and must not defer construction of any portion of the Work in favor of any other portion, without the express written approval of the Agency.

Notwithstanding the submission of a baseline schedule, any monthly schedule update or proposed revised schedule, the Contractor is governed by the direction of the Agency if, in the judgment of the Agency, it becomes necessary to accelerate the Work or any part thereof, or cease work at any particular point and concentrate the Contractor's forces at another site location(s), with the intent of preventing delays.

If no separate item is provided in the Bid Form, payment for schedules must be included in payments for mobilization. If no bid item for mobilization is included in the Bid Form, conformance with the schedule specification sections and time impact analysis section is incidental to and included in the various bid items, and no additional payment will be made.

Because the Agency places a high value on the importance and use of project scheduling information as a management tool in achieving the completion of the Work as planned, the Agency will deduct 10 percent of the monthly Progress Payment, but not more than \$25,000, for failure by the Contractor to submit the baseline or monthly schedule updates, as required by these specifications. Deductions also apply to any failure to submit schedule data as required by these Specifications. These deductions are cumulative and will be made for each and every month that the Contractor fails to provide the required information. The monthly updated schedule and narrative must be accurate, reflect actual events on the project, and meet all requirements of these specifications. If the Contractor does not provide an acceptable baseline schedule, monthly update, required data, or correct a deficiency within 10 Working Days of the Agency's request the deduction will become permanent via a deductive change order.

#### **7-5.01 CPM Schedule – Minor Projects**

Unless otherwise approved by the Agency a Critical Path Method (CPM) schedule must be submitted for Minor Projects. Minor Projects are defined as Projects with an original contract value less than \$5 million.

Unless otherwise agreed to in writing by the Agency, the latest version of MS Project or Primavera P6 must be used. The Contractor must submit three copies, plus an electronic copy, of a complete baseline schedule at the preconstruction conference (see Section 7-3, "Preconstruction Conference and Progress Meetings," of these Specifications). The baseline schedule must show all major portions of the Work, the estimated dates on which the Contractor shall start each portion of the Work, and the contemplated dates for completing each portion of the Work, or the approximate percentage of the Work or portions of the Work scheduled for completion at any time, and/or the planned duration for each portion of the Work identified on the schedule.

Unless agreed to by the Agency, monthly schedule updates must be submitted to the Agency with each Progress Payment request and when requested by the Agency. The data dates must be the 20th day of each month. The Contractor must submit three copies plus an electronic copy.

Upon the occurrence of an event that impacts the project completion date (Time Impact), the Contractor must submit a separate Time Impact Analysis (TIA) per Section 7-12.03 of these Specifications for all delays for which it will be seeking a time extension. The Contractor must not incorporate any delays or change activities into a monthly schedule update without Agency review and approval of a submitted TIA. Upon review and acceptance by the Agency, the proposed TIA must be incorporated into the next monthly schedule update.

A revised or updated schedule must be submitted within 10 Working Days of an Agency request.

The Contractor must carry out the various elements of the Work concurrently, as is practicable, and must not defer construction of any portion of the Work in favor of any other portion, without the express written approval of the Agency.

#### **7-5.02 CPM Schedule – Major Projects**

All Major Projects shall require a Critical Path Method (CPM) Schedule. Major Projects are defined as Projects with an original contract value exceeding 5 million dollars. Major Projects require the Contractor to submit a Baseline CPM schedule within 30 Calendar Days of receipt of the executed Contract. The latest version of Primavera P6 software must be used. The CPM network diagram must be time-scaled and include printouts showing the mathematical analysis of the CPM network diagram. Activities must include, but not be limited to, construction activities, procurement activities, submittal review & approval, cure times, and any other activities by the Contractor, the Agency, or any other entity that could impact the Work. Submittal and procurement activities must include falsework drawings, post tensioning drawings, test procedures, mix designs, long time lead items, etc. The following information must be shown for each activity:

1. Unique number(s) for each activity.
2. Activity description.
3. Activity relationships and dependencies (logic).
4. Activity duration not to exceed 10 Working Days, except for preconstruction and/or other activities as authorized by the Agency.
5. Early start, early finish, late start, late finish dates (calendar date, i.e. day, month, year).
6. Total float, free float.
7. For completed activities: actual start dates, actual finish dates, duration, and logic.
8. Interim milestone dates and completion dates.

9. Detailed list of work contained within each activity.
10. Cost loading for each item of work for lump sum contracts, which will be the “Schedule of Values” and the basis for monthly progress payments.

All activity calendars must be in Working Days. No more than 50 percent of construction schedule activities can be shown as critical or near critical. Near critical is defined as the longest path plus 15 Working Days total float. The Critical Path must be clearly shown and based upon the longest path through the network logic of necessarily related predecessor and successor activities. All activities must have a minimum of one predecessor and one successor. Schedule activity constraints cannot be used unless authorized by the Agency.

The Contractor must submit three full-size paper copies, an electronic .pdf of the paper copies, and an electronic copy of the P6 file for each CPM schedule. Schedule Updates to the CPM schedule must be submitted with each monthly Progress Payment request, when Contract events are changed, or within 10 Working Days of an Agency request for an interim update. The data date for Monthly Schedule Updates must be the 20th day of each month. The Contractor’s Progress Payment request for Lump Sum Contracts (schedules that are Cost Loaded) must be generated from and correspond to the Monthly Schedule Update. A narrative describing the general status of the Work and addressing any problem areas or delays must be submitted with each revision or update, with impacts on critical path items of work highlighted. A corrective course of action must also be included when problem areas or delays are encountered.

Upon the occurrence of an event that impacts the project completion date (Time Impact), the Contractor must submit a separate Time Impact Analysis (TIA) per Section 7-12.03 of these Specifications for all delays for which it will be seeking a time extension. The Contractor must not incorporate any delays or change activities into a monthly schedule update without Agency review and approval of a submitted TIA. Upon review and acceptance by the Agency, the proposed TIA must be incorporated into the next monthly schedule update.

A resource leveled/constrained schedule will not be accepted for the determination of critical path impacts. Any schedule, or schedule data of any kind, submitted with resource leveling will not be accepted.

#### **7-5.03 Four-Week Rolling Schedule**

A four-week rolling schedule must be provided by the Contractor at each weekly progress meeting. The schedule must provide an accurate representation of the work performed the previous week and work planned for the current week and subsequent 2 weeks.

The schedule may be provided in a bar chart form with information derived from and consistent with the current project schedule. The rolling schedule must include activity ID number, activity description, and start and finish dates (both scheduled and actual), total float, and any other information requested by the Agency. Each activity must be coded to note activities on the critical path and activities that are behind schedule.

#### **7-5.04 Float**

Float in any activity, milestone completion date, and/or Contract completion date is owned by the Project and is a resource available to both the Agency and the Contractor. Neither the Agency nor the Contractor owns the float time.

Unless otherwise provided, float is synonymous with total float. Total float is the period of time measured by the number of Working or Calendar Days (as specified in the Contract) each non-critical path activity can be delayed before it and its succeeding activities become part of the critical path. If a non-critical path activity is delayed beyond its float period, then that activity becomes part of the critical path and controls the end date of the work. Thus, delay of a non-critical path activity beyond its float period will cause delay to the project itself.

Acceptance of a Baseline Schedule, Monthly Schedule Update(s), or Revised Schedule that is based on less time than the maximum time allowed for milestone or Contract Completion does not change any Contract duration, nor does it serve as a waiver of either the Contractor's or Agency's right to utilize the full amount of time specified in the Contract. Liability for delay of the Contract Completion Date rests with the party actually causing delay to the Contract Completion Date. For example, if Party A uses some, but not all, of the float time, and Party B later uses the remainder of the float time as well as additional time beyond the float time, Party B is liable for the costs associated with the time that represents a delay to the project's completion date. Party A would not be responsible for any costs, since it did not consume all of the float time and additional float time remained, and the Project or milestone completion date was unaffected.

Should the Contractor submit any schedule reflecting a forecasted Project completion date earlier than the Contract Completion Date, the difference must be shown on a schedule activity titled "Project Float." Should the Contractor not show this time as Project Float, a Contract Change Order will be issued adjusting the Contract Completion Date to the new forecasted Project completion date.

The Contractor must not use any method to sequester float for its exclusive use.

Sequestration of float is a basis for schedule rejection.

#### **7-5.05 Schedule Acceptance**

The Agency will review the baseline schedule, monthly schedule updates or proposed schedule revisions, and any other schedule related data, for conformance to the Contract within 15 Working Days of receipt. All schedule related submittals must be resubmitted within 10 Working Days of receiving Agency comments. Agency review and acceptance of any baseline schedule, update, revision, or any other schedule-related data does not relieve the Contractor of responsibility for the feasibility of the schedule, completion of any omitted work scope, or requirements for accomplishments of milestones and completion within Contract Time. The Agency review and acceptance does not warrant or acknowledge the reasonableness of the schedule's logic, durations, labor estimates, or equipment productivity.

#### **7-6 UNUSUAL SITE CONDITIONS**

In accordance with Public Contract Code Section 7104, the Contractor must promptly, and before the following conditions are disturbed, notify the Agency, in writing, of any:

1. Material that the Contractor believes may be hazardous waste, as defined in Health and Safety Code Section 25117, which is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
2. Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids.
3. Unknown physical conditions at the site of any unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

The Contractor must follow up the prompt written notification with written documentation of the unusual site condition within 5 Working Days. The Agency will investigate the condition and arrange for any modification to the condition it deems appropriate, or issue a Contract Change Order per Section 9, "Changes and Claims," of these Specifications, if it finds that the conditions do materially differ or involve hazardous waste.

## **7-7 PURSUANCE OF WORK DURING INCLEMENT WEATHER**

During inclement or unsuitable weather or other unfavorable conditions, the Contractor must pursue only those portions of the Work that will not be damaged by the weather or unfavorable conditions. When the weather or unfavorable conditions creates hazardous travel or working conditions, as determined by the Agency, the Contractor can be directed to stop that portion of the Work in accordance with Section 5-21, “Temporary Suspension or Delay of Work,” of these Specifications, until the weather clears, or the conditions are no longer unfavorable.

The Contractor must keep roads safe and inspect and maintain stormwater pollution prevention and erosion control devices during inclement weather or unfavorable conditions. Lane and road closures might not be allowed if the Agency determines that the traffic controls will create unnecessary risk to the traveling public, the Contractor, and/or Agency employees.

## **7-8 PEAK HOURS, HOURS OF DARKNESS, HOLIDAYS, AND WEEKENDS**

### **7-8.01 Allowable Times and Hours of Work**

Unless otherwise noted in the Special Provisions or directed or approved by the Agency, no work can be done between the hours of 6 p.m. and 6:30 a.m., or on Saturdays, Sundays, or Legal Holidays. Unless otherwise noted in the Special Provisions, directed or approved by the Agency, no lane of traffic can be closed to the public during the peak hours of 6:30 a.m. to 8:00

a.m. and 3:30 p.m. to 6:00 p.m., except as necessary for the proper care and protection of work already performed, or in case of an emergency repair as defined below. These exceptions shall be allowed only with the Agency’s written permission.

Unless otherwise noted in the Contract Documents, no lane or road closures will be permitted between the hours of 7:00 a.m. and 9:00 p.m. at the following locations:

- Watt Avenue between Folsom Boulevard and Fair Oaks Boulevard
- Sunrise Boulevard between Folsom Boulevard and Fair Oaks Boulevard
- Hazel Avenue between Folsom Boulevard and Winding Way

Lane or road closures at these locations during the times indicated will only be allowed in emergency situations or with the express written approval of the Director of the Department of Transportation or his/her designee.

Liquidated damages (see Section 8-10, “Liquidated Damages for Delay,” of these Specifications) of \$50 per minute may be assessed to Contractors who fail to comply with the prescribed lane closure hours noted above in the Special Provisions, or as otherwise directed by the Agency. These liquidated damages are based on the estimated Agency costs to enforce the Contract restrictions for allowable times and hours of work.

### **7-8.02 Off-Period Work**

A written request to work between 6 p.m. and 6:30 a.m., or on Saturdays, Sundays, or legal holidays, or to close a lane of traffic during peak hours, must be submitted at least 2 Working Days in advance of the intended work. The Agency will evaluate the Contractor's request to determine if there is a benefit to the Agency, or a nuisance or a hazard to the public, the Project, or the area surrounding the site, and if the Contractor should pay Agency overtime costs related to the off-period work. The Agency can place conditions on approval of off-period work based on this analysis.

### **7-8.03 Emergency Repairs**

An emergency repair is a repair to the Work (including traffic controls, barricades, or temporary signs) required as a result of an unforeseen event that poses a danger to the public or jeopardizes the integrity of the Work, whether completed or not. The Contractor may be allowed to close a lane of traffic, or work at night, or on Saturdays, Sundays, or Legal Holidays for an emergency repair. The Contractor must notify the Agency within 1 hour of dispatch of the Contractor's repair crews and give their name, an emergency contact number, the location of the emergency repair, and a tentative completion date and time. The Contractor must notify the Agency when the emergency repair is completed and the road is clear, or, if an extension of time is required, the Contractor must provide a revised tentative completion date and time.

### **7-8.04 Revocation of Permission for Off-Period Work**

The Agency can revoke permission for off-period work if the Contractor endangers the public, an employee, or themselves by violating a safety and health regulation, or fails to maintain an adequate work force and equipment for reasonable prosecution and inspection of the Work.

### **7-8.05 Working Shifts**

Two- or three-shift operations may be established as a regular procedure by the Contractor upon written permission from the Agency. If the multiple shift operations create or occur during off-period work as defined in Section 7-8.02, "Off-Period Work," of these Specifications, the requirements stated in Section 7-8.02 apply. Permission for off-period work can be revoked if the Contractor fails to comply with applicable safety and health regulations, fails to maintain adequate force and equipment for reasonable prosecution and inspection of the Work, or fails to provide sufficient artificial light to permit the Work to be carried out safely and appropriately and to permit proper inspection.

### **7-8.06 Lane and Road Closures During November/December Holiday Season**

Except as provided in the Special Provisions or approved by the Agency, construction will be suspended, and no activities that interfere with public traffic can be conducted on designated streets during the holiday season (defined as the 4-day Thanksgiving weekend and December 8 through January 1, also referred to as the "Holiday Moratorium"). A current map showing streets subject to the Holiday Moratorium is available from the Department of Transportation Right-of-Way Management Section at 4100 Traffic Way, Sacramento, CA 95827 or on the Internet at <http://www.sacdot.com/Documents/TrafficControlTemplates1010.pdf>.

All existing pits, excavations, trenches, and openings in the road surface must be backfilled and paved to produce a level and smooth surface. All barricades and barriers must be removed from all traffic lanes, unless authorized by the Agency as long-term traffic controls. Only emergency repairs as defined in Section 7-8.03, "Emergency Repairs," of these Specifications will be permitted during the holiday season. Unless otherwise stipulated in the Special Provisions, the holiday season as described above is accounted for in the original contract duration, and Contract Time will continue to be counted during this suspension period. The baseline and progress schedules must include this suspension period if applicable.

## **7-9 TEMPORARY FACILITIES AND SERVICES**

Unless specified otherwise in the Special Provisions, the Contractor is responsible for providing and maintaining necessary material storage facilities, utilities, field offices, temporary roads, fences, security, etc. for prosecuting the Work. The Contractor must not connect to, or draw construction water from, fire hydrants without written approval from the utility owner and the Agency.

## **7-10 PROTECTION OF WORK, PERSONS AND PROPERTY**

The Contractor must protect the Work and materials from damage until completion and acceptance of the Work unless the Contractor has been granted relief from maintenance and protection responsibilities for a completed element(s) of the Work. The completed element(s) of the Work must have been completed in their entirety consistent with all applicable Contract requirements. Neither the Agency nor its agents assume responsibility for collecting funds from any person or persons that damage the Contractor's work unless the work element has been granted relief from maintenance and protection responsibilities. If relieved by the Agency, the Contractor shall not be required to perform further work on that element(s) and shall no longer be responsible for damage to a relieved work element, including damage caused by the public or the elements, except for that caused by the Contractor's own activities or negligence.

The Contractor must store materials and equipment in accordance with manufacturers' recommendations and erect temporary structures to protect them from damage.

The Contractor must furnish guards, fences, warning signs, walks, and lights, and must take all necessary precautions to prevent damage or injury to persons or property.

## **7-11 NOT USED**

## **7-12 DELAYS**

The Contractor must provide notification to the Agency for delays in accordance with Section 7-13, "Notice of Delays," of these Specifications.

### **7-12.01 Avoidable Delays**

The Contractor will not receive time extensions or compensation for avoidable delays.

Avoidable delays include, but are not limited to, the following:

1. Delays that affect only a portion of the work but do not prevent or delay the prosecution of controlling items of work nor the completion of the whole Work within the Contract Time.
2. Delays associated with the reasonable interference of other contractors employed by the Agency that do not necessarily prevent or delay the prosecution of controlling items of work or the completion of the whole Work within the Contract Time.
3. Delays associated with loss of time resulting from the necessity of submitting plans for Agency approval or from Agency surveys, measurements, inspections, and testing.
4. Delays that could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or Subcontractors.
5. Restriction of or impacts to the Contractor's operations due to actions of the Sacramento Metropolitan Air Quality Management District, the State Water Resources Control Board, the Regional Water Quality Control Board, or any federal, state, or local jurisdictional agency.

### **7-12.02 Unavoidable Delays**

The Contractor will be granted an extension of Contract time for delays that are determined to be beyond the control of the Contractor, and that impact a controlling item of work at the time the delay was encountered, and that could not be prevented by the exercise of care, prudence, foresight, and diligence. Unavoidable delays include Agency acts, acts of God or of the public enemy, fire, floods, epidemics, and strikes. Material shortages and delays in utility company relocations may be classified as unavoidable if the Contractor produces satisfactory evidence of acting in a timely manner.

1. The Contractor will not receive additional compensation due to inclement or unsuitable weather or conditions resulting therefrom, acts of God or of the public enemy, fire, floods, epidemics, strikes, material or labor shortages, or utility relocations.
2. The Contractor may be entitled to additional compensation for unavoidable delays that the Agency determined resulted from an Agency act or the discovery of cultural resources as specified in Section 10-12, "Archeological and Cultural Resources," of these Specifications, except as provided below:
  - a. Compensation for unavoidable delays will not be granted when the Contractor could have reasonably anticipated the delay.
  - b. When there are 2 or more concurrent delays and at least 1 is non-compensable, no compensation other than time extension will be provided.
  - c. Compensation for unavoidable delays will be granted only if the unavoidable delay affects controlling operations that would prevent completion of the Work.

#### **7-12.03 Time Impact Analysis**

If the Contractor requests a time extension due to unavoidable delays, the Contractor must provide a Time Impact Analysis (TIA) that supports the requested time within 10 Working Days of when the Contractor knows, or should have known, of the delay. The TIA must comply with the following:

1. Describe the impacts of each unavoidable delay on the current scheduled Contract Completion Date or interim milestone.
2. Use the accepted baseline or monthly schedule that has a data date closest to and before the event. If the Agency determines that the schedule used does not appropriately represent the conditions before the event, the Contractor must update the schedule to the day before the event being analyzed.
3. Include an impact schedule (fragnet) developed from incorporating the event into the accepted schedule by adding or deleting activities. If the impact schedule shows that incorporating the event modifies the critical path and Contract Completion Date of the accepted schedule, the difference between scheduled completion dates of the 2 schedules must be equal to the adjustment of Contract time.
4. Provide a narrative describing the chronology of events, changes to the schedule, and how the Contractor met the Contract requirements for providing notice and requesting time.
5. Address concurrent delays in the same time period for which the TIA is submitted.

If the Agency accepts the TIA, the Agency will grant a time extension, and the fragnet then must be included in subsequent monthly schedule updates. If the Agency rejects the TIA, the Contractor must not include the delays in subsequent schedule updates. All TIA related resubmittals must be returned to the Agency within 10 Working Days of receiving Agency review comments.

Inclusion of any delay events not accepted by the Agency is grounds for rejection of schedule updates. Failure by the Contractor to provide notice and request time in compliance with all contract requirements waives the Contractor's right to a time extension and will result in the Contractor being responsible for all costs to mitigate said delay.

### **7-13 NOTICE OF DELAYS**

The Contractor must immediately notify the Agency in writing if the Contractor foresees a delay in the prosecution of the Work or immediately upon the occurrence of an unavoidable delay, but in no event shall the written notice be provided to the Agency later than 2 Working Days after the occurrence of the unavoidable delay. The Contractor must state the probability of the delay occurring and its cause, so the Agency can take steps to prevent the occurrence or continuance of the delay and determine whether the delay is avoidable or unavoidable, its duration, and the extent.

The Agency will assume that delays were avoidable unless the Agency was notified as indicated above and, through its investigation, found them unavoidable. No consideration for additional time or compensation will be given for a delay not called to the Agency's attention at the time of its occurrence.

The Agency reserves the right to direct the Contractor to work overtime on base contract work to mitigate the effect of an unavoidable delay or when it is determined to be in the best interest of the Agency, the public, or the Project. If the Contractor is so directed by the Agency, the Agency will compensate the Contractor, via Contract Change Order, the premium portion of the overtime without markup. Markups for Change Work are not applicable to these premium portion costs and will not be paid.

### **7-14 CARELESS DESTRUCTION OF STAKES AND MARKS NO CAUSE FOR DELAY**

If the Contractor or Subcontractors destroy Agency-placed stakes and marks causing a delay in the Work, the Contractor has no claim for damages or time extensions. See also Section 5-9, "Surveys," of these Specifications.

### **7-15 TIME OF COMPLETION**

Time is of the essence on Agency contracts. The Contractor must complete all of the Work called for under the Contract within the Contract Time set forth in the Special Provisions.

The Agency will furnish the Contractor a weekly statement showing the number of days charged to the Contract for the preceding week, the number of days of time extensions approved or under consideration, the number of days originally specified for the completion of the Contract, and the extended date for completion. The extended date for completion is the revised Contract Completion Date. The Contractor will be allowed 15 Calendar Days from the issuance of the weekly statement to file a written protest stating how the Contractor's estimate of Contract days charged to the Contract differs from the Agency's. If no protest is received, it will be deemed by the Agency that the Contractor has accepted the statement as being correct.

### **7-16 EXTENSION OF TIME NOT A WAIVER**

Time extensions granted for unavoidable delays or for the execution of extra or additional work are not waivers of the Agency's rights under the Contract.

### **7-17 INCLEMENT WEATHER AND CONTRACT TIME**

A contract day on a Working Day contract will not be charged if, in the opinion of the Agency, inclement or unsuitable weather or its effects prevents working on the current controlling operation for at least 50 percent of the scheduled work shift with at least 50 percent of the scheduled labor and equipment due. A current controlling operation is any feature of the Work (e.g., an operation or activity including settlement, curing periods, and submittal activities) that if delayed or prolonged will delay the Contract Completion Date.

**7-18 EXTENSION OF TIME**

The Contractor will be allowed a time extension to complete the Work equal to the sum of all unavoidable delays, as determined in accordance with Section 7-12.02, “Unavoidable Delays,” of these Specifications, plus adjustments in Contract Time due to Contract Change Orders, as outlined in Section 9-12, “Time Extensions for Changes,” of these Specifications. During the time extension, the Contractor will not be charged for extra engineering and inspection or liquidated damages. Requests for a time extension must be submitted in writing to the Agency within 10 Working Days of when the Contractor knew, or should have known, of the event that is the reason for the request for time extension. All requests for time must be submitted before the expiration of the Contract Time. Any failure by the Contractor to provide notice or request a time extension, in compliance with all related contract provisions, is an irrevocable waiver of the Contractor’s right to a time extension resulting in the Contractor being responsible for all costs to mitigate the delay.

**7-19 SUBSTANTIAL COMPLETION**

When the Contractor considers the entire Work, or a specific portion of the Work, substantially complete, the Contractor must certify in writing to the Agency that the Work is substantially complete and request that the Agency grant substantial completion. Within 5 Working Days, the Agency and the Contractor must inspect the Work to determine the status of completion. If the Agency does not consider the entire Work, or a specific portion of the Work, substantially complete, the Agency will notify the Contractor in writing, giving the Agency’s reasons. If the Agency considers the entire Work, or a specific portion of the Work, substantially complete, the Agency will grant, in writing, substantial completion. The counting of time for liquidated damages will cease for the entire Work, or a specific portion of the Work, on the date substantial completion is granted, but substantial completion does not bind the Agency to final acceptance or relieve the Contractor of the responsibility for completing or correcting work. Unless otherwise specified in the Special Provisions, the entire Work, or a specific portion of the Work, will be considered substantially complete when all work depicted on the plans and required by the Contract Documents has been performed, and the Work can be used for its intended purpose. Only minor corrective work will be considered as punch list work. The Agency will provide within 10 Working Days of granting substantial completion or when a major component or interim milestone of the Project is completed, a list of all known deficiencies or corrections. to be completed or corrected (punch list) before Field Acceptance. The Contractor must provide the level of effort and resources necessary to complete the punch list within 30 Calendar Days. Unless otherwise agreed to by the Agency, the Agency is authorized to perform the work if the Contractor fails to complete the punch list within 30 Calendar Days. Costs incurred by the Agency to correct defects or deficiencies, including loss of use, inspection and administrative costs, will be deducted from the final project payment via a deductive change order.

**7-20 CLEANING UP**

Throughout the construction period, the Contractor must keep the site of the Work in a presentable condition, dispose of surplus materials, keep roadways reasonably clear of dirt and debris, keep sidewalks and other pedestrian areas clear of dirt, loose gravel, debris and tripping hazards, clean out drainage ditches and structures, and repair fences or other property damaged during the progress of the Work, to the satisfaction of the Agency. The Contractor must also keep the work site cleaned of all rubbish, excess material, and equipment. All portions of the work must be left in a neat and orderly condition prior to requesting final inspection. Surplus material must be disposed of in accordance with Section 18-7, “Surplus Material Disposal,” of these Specifications.

The final inspection will not be made until final cleanup has been accomplished.

## **7-21 FINAL INSPECTION, FIELD ACCEPTANCE, AND NOTICE OF COMPLETION**

### **7-21.01 Final Inspection**

The Contractor must notify the Agency in writing of the completion of the punch list per Section 7-19, "Substantial Completion," of these Specifications, and the Agency will promptly inspect the Work following such notification. The Contractor or the Contractor's representative must be present at the final inspection. The Contractor will be notified in writing within 10 Working Days of all known defects and/or deficiencies. The Contractor must provide the level of effort and resources necessary, as determined by the Agency, to repair the defects or deficiencies within 30 Calendar Days of the Agency's notification to the Contractor. When notified by the Contractor that correction of the defective and/or deficient work is complete, the Agency will again inspect the Work to ascertain that the corrections have been made in accordance with the Contract. The Agency is authorized to perform the work if the Contractor fails to repair the defects or deficiencies as required. Costs incurred by the Agency to correct defects or deficiencies, including loss of use, and inspection and administration costs, will be deducted from the final project payment via a deductive change order.

### **7-21.02 Field Acceptance**

The Agency will issue a field acceptance letter and will recommend to the Board final acceptance of the Work, if it finds all corrections acceptable. Field acceptance by the Agency starts the warranty periods but does not bind the Board to final acceptance or relieve the Contractor from the responsibility of completing or correcting work.

### **7-21.03 Notice of Completion**

The Notice of Completion will be filed within 15 Calendar Days of Field Acceptance.

## **7-22 FINAL ACCEPTANCE**

Upon final completion of the Work, including training, acceptance of M&O manuals, Record Drawings, requested reports from SB 1383, and all required reports, the Agency will recommend to the Board that it accept the Work as complete. (See Section 8-11, "Final Estimate and Payment," of these Specifications.)