

DEPARTMENT OF TRANSPORTATION

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October 15, 2003

08-Riv-215,60,91-60.7/70.6, 22.0/18.5, 32.7/34.7

08-334844

ACNHI-215-1(219)92N

ACNH-X065(080)N

Addendum No. 4

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in RIVERSIDE COUNTY, IN RIVERSIDE AND MORENO VALLEY ON ROUTE 215 FROM 0.4 KM NORTH OF EUCALYPTUS AVENUE OVERCROSSING TO COLUMBIA AVENUE OVERCROSSING, ON ROUTE 60 FROM 0.6 KM EAST OF DAY STREET UNDERCROSSING TO 0.4 KM WEST OF MAIN STREET OVERCROSSING, ON ROUTE 91 FROM 0.3 KM SOUTH OF UNIVERSITY AVENUE UNDERCROSSING TO 0.1 KM NORTH OF SPRUCE STREET OVERCROSSING.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on November 20, 2003.

This addendum is being issued to revise the Project Plans, the Notice to Contractors and Special Provisions, and the Proposal and Contract.

Project Plan Sheets 1096 and 1733 are revised. Half-sized copies of the revised sheets are attached for substitution for the like-numbered sheets.

In the "NOTICE TO CONTRACTORS," the tenth and eleventh paragraphs are replaced with the following paragraph:

"To the extent feasible and at the discretion of the Department, completed "Bidder Inquiry" forms submitted for consideration will be investigated, and responses will be posted on the Internet at the following website:

http://www.dot.ca.gov/hq/esc/oe/project_status/bid_inq.html"

In the "NOTICE TO CONTRACTORS," the thirteenth paragraph is revised as follows:

"Cross sections will be made available on CD-ROM in .dgn format at the Pre-Bid inquiry desk of the Department of Transportation, District 8, 655 Second Street, San Bernardino, CA 92402."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the first sentence of the second paragraph is revised as follows:

"The work at Iowa Avenue Overcrossing and Linden Street Overcrossing shall be prosecuted simultaneously, with full traffic closures of Iowa Avenue and Linden Street Overcrossings, as first priority."

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In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraph is added after the fourteenth paragraph:

"The Environmental Restoration work as defined elsewhere in these special provisions shall begin immediately following the completion of grading and drainage work within those specified areas."

In the Special Provisions, Section 10-1.09, "PROGRESS SCHEDULE (CRITICAL PATH METHOD)," is revised as attached.

In the Special Provisions, Section 10-1.111, "RIGHT OF WAY OBSTRUCTIONS," is revised as attached.

In the Special Provisions, Section 10-1.15, "MAINTAINING TRAFFIC," is revised as attached.

In the Special Provisions, Section 10-1.182, "PORTABLE CHANGEABLE MESSAGE SIGN," is revised as attached.

In the Special Provisions, Section 10-1.2911, "ENVIRONMENTAL RESTORATION," is added as attached.

In the Special Provisions, Section 10-1.35, "ASPHALT CONCRETE," the following paragraph is added after the first paragraph:

"All asphalt concrete (Type A) for temporary pavement shall conform to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications. Section 11-1, "Quality Control/Quality Assurance," of these special provisions shall not apply to asphalt concrete (Type A) used for temporary pavements."

In the Special Provisions, Section 10-1.56, "CERAMIC TILE," is deleted.

In the Special Provisions, Section 10-2.04, "HIGHWAY PLANTING," the subsection "PLANT ESTABLISHMENT WORK," is revised as attached.

In the Special Provisions, Section 10-3.381, "MODEL 500 CHANGEABLE MESSAGE SIGN SYSTEM," is added as attached.

In the Special Provisions, Section 10-3.60, "PAYMENT," the eleventh paragraph is revised as follows:

"The contract lump sum price paid for Changeable Message Sign System shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work, involved in Changeable Message Sign System, including system testing, furnishing and installing the changeable message sign structure, complete in place, including foundation, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer."

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In the Proposal and Contract, the Engineer's Estimate Item 118 is revised, and Item 348 is added as attached.

To Proposal and Contract book holders:

Replace pages 8 and 20 of the Engineer's Estimate in the Proposal with the attached revised pages 8 and 20 of the Engineer's Estimate. The revised Engineer's Estimate is to be used in the bid.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it. A copy of this addendum and the modified wage rates are available for the contractor's use on the Internet Site:

http://www.dot.ca.gov/hq/esc/oe/weekly_ads/addendum_page.html

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY:

REBECCA D. HARNAGEL, Chief
Office of Plans, Specifications & Estimates
Office Engineer

Attachments

10-1.09 PROGRESS SCHEDULE (CRITICAL PATH METHOD)

The Contractor shall submit to the Engineer practicable critical path method (CPM) progress schedules in conformance with these special provisions. Whenever the term "schedule" is used in this section it shall mean CPM progress schedule.

Attention is directed to "Payments" of Section 5 of these special provisions.

The provisions in Section 8-1.04, "Progress Schedule," of the Standard Specifications shall not apply.

DEFINITIONS

The following definitions shall apply to this section:

- A. **ACTIVITY.**—A task, event or other project element on a schedule that contributes to completing the project. Activities have a description, start date, finish date, duration and one or more logic ties.
- B. **BASELINE SCHEDULE.**—The initial schedule representing the Contractor's work plan on the first working day of the project.
- C. **CONTRACT COMPLETION DATE.**—The current extended date for completion of the contract shown on the weekly statement of working days furnished by the Engineer in conformance with the provisions in Section 8-1.06, "Time of Completion," of the Standard Specifications.
- D. **CRITICAL PATH.**—The longest continuous chain of activities for the project that has the least amount of total float of all chains. In general, a delay on the critical path will extend the scheduled completion date.
- E. **CRITICAL PATH METHOD (CPM).**—A network based planning technique using activity durations and the relationships between activities to mathematically calculate a schedule for the entire project.
- F. **DATA DATE.**—The day after the date through which a schedule is current. Everything occurring earlier than the data date is "as-built" and everything on or after the data date is "planned."
- G. **EARLY COMPLETION TIME.**—The difference in time between an early scheduled completion date and the contract completion date.
- H. **FLOAT.**—The difference between the earliest and latest allowable start or finish times for an activity.
- I. **MILESTONE.**—An event activity that has zero duration and is typically used to represent the beginning or end of a certain stage of the project.
- J. **NARRATIVE REPORT.**—A document submitted with each schedule that discusses topics related to project progress and scheduling.
- K. **NEAR CRITICAL PATH.**—A chain of activities with total float exceeding that of the critical path but having no more than 10 working days of total float.
- L. **SCHEDULED COMPLETION DATE.**—The planned project finish date shown on the current accepted schedule.
- M. **STATE OWNED FLOAT ACTIVITY.**—The activity documenting time saved on the critical path by actions of the State. It is the last activity prior to the scheduled completion date.
- N. **TIME IMPACT ANALYSIS.**—A schedule and narrative report developed specifically to demonstrate what effect a proposed change or delay has on the current scheduled completion date.
- O. **TOTAL FLOAT.**—The amount of time that an activity or chain of activities can be delayed before extending the scheduled completion date.
- P. **UPDATE SCHEDULE.**—A current schedule developed from the baseline or subsequent schedule through regular monthly review to incorporate as-built progress and any planned changes.

GENERAL REQUIREMENTS

The Contractor shall submit to the Engineer baseline, monthly update and final update schedules, each consistent in all respects with the time and order of work requirements of the contract. The project work shall be executed in the sequence indicated on the current accepted schedule.

Schedules shall show the order in which the Contractor proposes to carry out the work with logical links between time-scaled work activities, and calculations made using the critical path method to determine the controlling operation or operations. The Contractor is responsible for assuring that all activity sequences are logical and that each schedule shows a coordinated plan for complete performance of the work.

The Contractor shall produce schedules using computer software and shall furnish compatible software for the Engineer's exclusive possession and use. The Contractor shall furnish network diagrams, narrative reports, tabular reports and schedule data as parts of each schedule submittal.

Schedules shall include, but not be limited to, activities that show the following that are applicable to the project:

- A. Project characteristics, salient features, or interfaces, including those with outside entities, that could affect time of completion.
- B. Project start date, scheduled completion date and other milestones.
- C. Work performed by the Contractor, subcontractors and suppliers.
- D. Submittal development, delivery, review and approval, including those from the Contractor, subcontractors and suppliers.
- E. Procurement, delivery, installation and testing of materials, plants and equipment.
- F. Testing and settlement periods.
- G. Utility notification and relocation.
- H. Erection and removal of falsework and shoring.
- I. Major traffic stage switches.
- J. Finishing roadway and final cleanup.
- K. State-owned float as the predecessor activity to the scheduled completion date.

Schedules shall have not less than 500 and not more than 1500 activities, unless otherwise authorized by the Engineer. The number of activities shall be sufficient to assure adequate planning of the project, to permit monitoring and evaluation of progress, and to do an analysis of time impacts.

Schedule activities shall include the following:

- A. A clear and legible description.
- B. Start and finish dates.
- C. A duration of not less than one working day, except for event activities, and not more than 20 working days, unless otherwise authorized by the Engineer.
- D. At least one predecessor and one successor activity, except for project start and finish milestones.
- E. Required constraints.
- F. Codes for responsibility, stage, work shifts, location and contract pay item numbers.

The Contractor may show early completion time on any schedule provided that the requirements of the contract are met. Early completion time shall be considered a resource for the exclusive use of the Contractor. The Contractor may increase early completion time by improving production, reallocating resources to be more efficient, performing sequential activities concurrently or by completing activities earlier than planned. The Contractor may also submit for approval a cost reduction incentive proposal in conformance with the provisions in Section 5-1.14, "Cost Reduction Incentive," of the Standard Specifications that will reduce time of construction.

The Contractor may show a scheduled completion date that is later than the contract completion date on an update schedule, after the baseline schedule is accepted. The Contractor shall provide an explanation for a late scheduled completion date in the narrative report that is included with the schedule.

State-owned float shall be considered a resource for the exclusive use of the State. The Engineer may accrue State-owned float by the early completion of review of any type of required submittal when it saves time on the critical path. The Contractor shall prepare a time impact analysis, when requested by the Engineer, to determine the effect of the action in conformance with the provisions in "Time Impact Analysis" specified herein. The Engineer will document State-owned float by directing the Contractor to update the State-owned float activity on the next update schedule. The Contractor shall include a log of the action on the State-owned float activity and include a discussion of the action in the narrative report. The Engineer may use State-owned float to mitigate past, present or future State delays by offsetting potential time extensions for contract change orders.

The Engineer may adjust contract working days for ordered changes that affect the scheduled completion date, in conformance with the provisions in Section 4-1.03, "Changes," of the Standard Specifications. The Contractor shall prepare a time impact analysis to determine the effect of the change in conformance with the provisions in "Time Impact Analysis" specified herein, and shall include the impacts acceptable to the Engineer in the next update schedule. Changes that do not affect the controlling operation on the critical path will not be considered as the basis for a time adjustment. Changes that do affect the controlling operation on the critical path will be considered by the Engineer in decreasing time or granting an extension of time for completion of the contract. Time extensions will only be granted if the total float is absorbed and the scheduled completion date is delayed one or more working days because of the ordered change.

The Engineer's review and acceptance of schedules shall not waive any contract requirements and shall not relieve the Contractor of any obligation thereunder or responsibility for submitting complete and accurate information. Schedules that are rejected shall be corrected by the Contractor and resubmitted to the Engineer within 5 working days of notification by the Engineer, at which time a new review period of one week will begin.

Errors or omissions on schedules shall not relieve the Contractor from finishing all work within the time limit specified for completion of the contract. If, after a schedule has been accepted by the Engineer, either the Contractor or the Engineer discover that any aspect of the schedule has an error or omission, it shall be corrected by the Contractor on the next update schedule.

COMPUTER SOFTWARE AND HARDWARE

The Contractor shall provide computer software and hardware as described in this section. The Contractor shall submit to the Engineer for approval a description of proposed software and hardware before delivery. The software shall be the current version of Primavera Project Planner (P3) for Windows, or equal. If software other than P3 is proposed, it shall be capable of generating files that can be imported into P3.

The Contractor shall provide a computer system for the State's exclusive possession and use for CPM progress schedules. The minimum computer system to be furnished shall be complete with keyboard, mouse, monitor and plotter. The system shall also conform to the following requirements:

1. Latest available Intel Pentium, latest available Motorola RISC processor, or equivalent.
2. Latest computer operating system software compatible with the selected processor and scheduling software as provided by the Contractor.
3. Minimum of 1(one) gigabytes of random access memory (RAM).
4. Internal drives, including: minimum 120 (one hundred twenty) gigabyte hard disk drive, a 1.44 megabyte 3.5 inch floppy disk drive, minimum 4x DVD+RW drive, and a minimum 16x DVD drive.
5. Internal fax/modem, 56 Kbps or latest speed and software version of U.S. Robotics, 3COM, or equivalent.
6. A 18-inch minimum, color monitor capable of at least 1280 x 1024 pixels.
7. A color-ink-jet-type, E-size plotter with a minimum 16 MB RAM, capable of 1200 x 600 dots per inch; or equivalent, compatible with the selected system capable of plotting, in color, fully legible time-scaled logic diagrams, network diagrams, and bar charts. The plotter shall have the capability of being networked with a minimum of five computers.
8. A color-ink-jet-type, B-size printer compatible with the selected system capable of printing fully legible, time-scaled charts, network diagrams and reports.
9. A manual parallel cable switching device with connecting cables, allowing the user to alternate printing between the plotters.
10. CPM software and upgrades, as they become available, shall be compatible with the hardware provided, shall be the latest version of Primavera Project Planner(P3) for Windows, or equal, and shall be able to create files that can easily be imported into the latest version of Primavera.
11. General software and upgrades, as they become available, shall be the latest versions of Microsoft Office Professional and McAfee VirusScan virus protection. The general software and general software upgrades shall be compatible with the hardware provided.

The computer hardware and software furnished by the Contractor shall be compatible with that used for the production of the CPM progress schedule required by the specifications, including original instruction manuals and other documentation normally provided with the CPM and general software. Before delivery and setup of the computer system, the Contractor shall submit to the Engineer for approval a detailed list of the computer hardware and software that the Contractor proposes to furnish.

The Contractor shall furnish, install, set up, maintain and repair the computer system ready-for-use, and provide plotter supplies as necessary during the course of the project at a location determined by the Engineer. The first submittal of the baseline schedule will not be considered complete until the hardware and software are installed and ready for use with the submitted baseline schedule. The Contractor shall instruct and assist the Engineer in the use of the hardware and software. Within 20 working days of contract approval, the Contractor shall provide a commercial 16-hour training session for 3 Department employees in the use of the software at a location acceptable to the Engineer. It is recommended that the Contractor also send at least 2 employees to the same training session to facilitate development of similar knowledge and skills in the use of the software. Hardware repairs shall be made within 48 hours of notification by the Engineer, or replacement equipment shall be furnished and installed by the Contractor until repairs have been completed.

Computer hardware furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract if no claims involving contract progress are pending. If contract claims involving contract progress are pending, computer hardware shall not be removed until the final estimate has been submitted to the Contractor.

The furnished schedule software shall become the property of the State and will not be returned to the Contractor. The State will compensate the Contractor in conformance with the provisions in Section 4-1.03, "Extra Work," of the Standard Specifications for replacement of software which is damaged, lost or stolen after delivery to the Engineer.

NETWORK DIAGRAMS, REPORTS AND DATA

The Contractor shall include the following for each schedule submittal:

- A. Two sets of originally plotted, time-scaled network diagrams.
- B. Two copies of a narrative report.
- C. Two copies of each of 3 sorts of the CPM software-generated tabular reports.
- D. One 1.44-megabyte 90 mm (3.5 inch) floppy diskette containing the schedule data.

The time-scaled network diagrams shall conform to the following:

- A. Show a continuous flow of information from left to right.
- B. Be based on early start and early finish dates of activities.
- C. Clearly show the primary paths of criticality using graphical presentation.
- D. Be prepared on E-size sheets, 860 mm x 1120 mm (34 inch x 44 inch).
- E. Include a title block and a timeline on each page.

The narrative report shall be organized in the following sequence with all applicable documents included:

- A. Contractor's transmittal letter.
- B. Work completed during the period.
- C. Identification of unusual conditions or restrictions regarding labor, equipment or material; including multiple shifts, 6-day work weeks, specified overtime or work at times other than regular days or hours.
- D. Description of the current critical path.
- E. Changes to the critical path and scheduled completion date since the last schedule submittal.
- F. Description of problem areas.
- G. Current and anticipated delays:
 - 1. Cause of delay.
 - 2. Impact of delay on other activities, milestones and completion dates.
 - 3. Corrective action and schedule adjustments to correct the delay.

H. Pending items and status thereof:

1. Permits
2. Change orders
3. Time adjustments
4. Non-compliance notices

I. Reasons for an early or late scheduled completion date in comparison to the contract completion date.

Tabular reports shall be software-generated and provide information for each activity included in the project schedule. Three different reports shall be sorted by (1) activity number, (2) early start and (3) total float. Tabular reports shall be 215 mm x 280 mm (8 1/2 inch x 11 inch) in size and shall include, as a minimum, the following applicable information:

- A. Data date
- B. Activity number and description
- C. Predecessor and successor activity numbers and descriptions
- D. Activity codes
- E. Scheduled, or actual and remaining durations (work days) for each activity
- F. Earliest start (calendar) date
- G. Earliest finish (calendar) date
- H. Actual start (calendar) date
- I. Actual finish (calendar) date
- J. Latest start (calendar) date
- K. Latest finish (calendar) date
- L. Free float (work days)
- M. Total float (work days)
- N. Percentage of activity complete and remaining duration for incomplete activities.
- O. Lags
- P. Required constraints
- Q.

Schedule submittals will only be considered complete when all documents and data have been provided as described above.

PRE-CONSTRUCTION SCHEDULING CONFERENCE

The Contractor shall schedule and the Engineer will conduct a pre-construction scheduling conference with the Contractor's project manager and construction scheduler within 10 working days of the approval of the contract. At this meeting the Engineer will review the requirements of this section of the special provisions with the Contractor.

The Contractor shall submit a general time-scaled logic diagram displaying the major activities and sequence of planned operations and shall be prepared to discuss the proposed work plan and schedule methodology that comply with the requirements of these special provisions. If the Contractor proposes deviations to the construction staging of the project, then the general time-scaled logic diagram shall also display the deviations and resulting time impacts. The Contractor shall be prepared to discuss the proposal.

At this meeting, the Contractor shall additionally submit the alphanumeric coding structure and the activity identification system for labeling the work activities. To easily identify relationships, each activity description shall indicate its associated scope or location of work by including such terms as quantity of material, type of work, bridge number, station to station location, side of highway (such as left, right, northbound, southbound), lane number, shoulder, ramp name, ramp line descriptor or mainline.

The Engineer will review the logic diagram, coding structure, and activity identification system, and provide any required baseline schedule changes to the Contractor for implementation.

BASELINE SCHEDULE

Beginning the week following the pre-construction scheduling conference, the Contractor shall meet with the Engineer weekly until the baseline schedule is accepted by the Engineer to discuss schedule development and resolve schedule issues.

The Contractor shall submit to the Engineer a baseline schedule within 20 working days of approval of the contract. The Contractor shall allow 3 weeks for the Engineer's review after the baseline schedule and all support data are submitted. In addition, the baseline schedule submittal will not be considered complete until the computer software is delivered and installed for use in review of the schedule.

The baseline schedule shall include the entire scope of work and how the Contractor plans to complete all work contemplated. The baseline schedule shall show the activities that define the critical path. Multiple critical paths and near-critical paths shall be kept to a minimum. A total of not more than 50 percent of the baseline schedule activities shall be critical or near critical, unless otherwise authorized by the Engineer.

The baseline schedule shall not extend beyond the number of working days specified in these special provisions. The baseline schedule shall have a data date of the first working day of the contract and not include any completed work to date. The baseline schedule shall not attribute negative float or negative lag to any activity.

If the Contractor submits an early completion baseline schedule that shows contract completion in less than 85 percent of the working days specified in these special provisions, the baseline schedule shall be supplemented with resource allocations for every task activity and include time-scaled resource histograms. The resource allocations shall be shown to a level of detail that facilitates report generation based on labor crafts and equipment classes for the Contractor and subcontractors. The Contractor shall use average composite crews to display the labor loading of on-site construction activities. The Contractor shall optimize and level labor to reflect a reasonable plan for accomplishing the work of the contract and to assure that resources are not duplicated in concurrent activities. The time-scaled resource histograms shall show labor crafts and equipment classes to be utilized on the contract. The Engineer may review the baseline schedule activity resource allocations using Means Productivity Standards or equivalent to determine if the schedule is practicable.

UPDATE SCHEDULE

The Contractor shall submit an update schedule and meet with the Engineer to review contract progress, on or before the first day of each month, beginning one month after the baseline schedule is accepted. The Contractor shall allow 2 weeks for the Engineer's review after the update schedule and all support data are submitted, except that the review period shall not start until the previous month's required schedule is accepted. Update schedules that are not accepted or rejected within the review period will be considered accepted by the Engineer.

The update schedule shall have a data date of the twenty-first day of the month or other date established by the Engineer. The update schedule shall show the status of work actually completed to date and the work yet to be performed as planned. Actual activity start dates, percent complete and finish dates shall be shown as applicable. Durations for work that has been completed shall be shown on the update schedule as the work actually occurred, including Engineer submittal review and Contractor resubmittal times.

The Contractor may include modifications such as adding or deleting activities or changing activity constraints, durations or logic that do not (1) alter the critical path(s) or near critical path(s) or (2) extend the scheduled completion date compared to that shown on the current accepted schedule. The Contractor shall state in writing the reasons for any changes to planned work. If any proposed changes in planned work will result in (1) or (2) above, then the Contractor shall submit a time impact analysis as described herein.

DESIGN SEQUENCING

The dates specified in Section 1, "Specifications and Plans," of these special provisions, on which the Contractor will be provided the complete design of each project sequence, shall be shown as milestone in the baseline schedule, and in subsequent updated and revised schedules.

At the completion of the design for each project sequence, the schedule shall be updated showing the actual date the final plans, specifications and estimate of quantities for that sequence, were provided to the Contractor.

A revised schedule submittal shall be required for review and approval 15 working days after receipt of the final plans, specifications and estimates of quantities for each sequence 2 and sequence 3.

LIMITATION OF PAYMENTS

The baseline and subsequent updated schedules shall show the anticipated progress payments to be made to the Contractor and the limits of payments specified in "Limitation of Payments" of these special provisions, with the date the Contractor anticipates reaching the limits and the dates specified being shown as milestones.

After the proceeds of the bond sales become available, the schedule shall be updated showing the actual dates funds became available, anticipated progress payments, and the milestones relative to the next limit of funds.

TIME IMPACT ANALYSIS

The Contractor shall submit a written time impact analysis (TIA) to the Engineer with each request for adjustment of contract time, or when the Contractor or Engineer consider that an approved or anticipated change may impact the critical path or contract progress.

The TIA shall illustrate the impacts of each change or delay on the current scheduled completion date or internal milestone, as appropriate. The analysis shall use the accepted schedule that has a data date closest to and prior to the event. If the Engineer determines that the accepted schedule used does not appropriately represent the conditions prior to the event, the accepted schedule shall be updated to the day before the event being analyzed. The TIA shall include an impact schedule developed from incorporating the event into the accepted schedule by adding or deleting activities, or by changing durations or logic of existing activities. If the impact schedule shows that incorporating the event modifies the critical path and scheduled completion date of the accepted schedule, the difference between scheduled completion dates of the two schedules shall be equal to the adjustment of contract time. The Engineer may construct and utilize an appropriate project schedule or other recognized method to determine adjustments in contract time until the Contractor provides the TIA.

The Contractor shall submit a TIA in duplicate within 15 working days of receiving a written request for a TIA from the Engineer. The Contractor shall allow the Engineer 2 weeks after receipt to approve or reject the submitted TIA. All approved TIA schedule changes shall be shown on the next update schedule.

If a TIA submitted by the Contractor is rejected by the Engineer, the Contractor shall meet with the Engineer to discuss and resolve issues related to the TIA. If agreement is not reached, the Contractor will be allowed 15 days from the meeting with the Engineer to give notice in conformance with the provisions in Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications. The Contractor shall only show actual as-built work, not unapproved changes related to the TIA, in subsequent update schedules. If agreement is reached at a later date, approved TIA schedule changes shall be shown on the next update schedule. The Engineer will withhold remaining payment on the schedule contract item if a TIA is requested by the Engineer and not submitted by the Contractor within 15 working days. The schedule item payment will resume on the next estimate after the requested TIA is submitted. No other contract payment will be retained regarding TIA submittals.

FINAL UPDATE SCHEDULE

The Contractor shall submit a final update, as-built schedule with actual start and finish dates for the activities, within 30 days after completion of contract work. The Contractor shall provide a written certificate with this submittal signed by the Contractor's project manager and an officer of the company stating, "To my knowledge and belief, the enclosed final update schedule reflects the actual start and finish dates of the actual activities for the project contained herein." An officer of the company may delegate in writing the authority to sign the certificate to a responsible manager.

RETENTION

The Department will retain an amount equal to 25 percent of the estimated value of the work performed during each estimate period in which the Contractor fails to submit an acceptable schedule conforming to the requirements of these special provisions as determined by the Engineer. Schedule retentions will be released for payment on the next monthly estimate for partial payment following the date that acceptable schedules are submitted to the Engineer or as otherwise specified herein. Upon completion of all contract work and submittal of the final update schedule and certification, any remaining retained funds associated with this section, "Progress Schedule (Critical Path Method)", will be released for payment. Retentions held in conformance with this section shall be in addition to other retentions provided for in the contract. No interest will be due the Contractor on retention amounts.

PAYMENT

Progress schedule (critical path method) will be paid for at a lump sum price. The contract lump sum price paid for progress schedule (critical path method) shall include full compensation for furnishing all labor, material, tools, equipment, and incidentals, including computer software, and for doing all the work involved in preparing, furnishing, and updating schedules, and instructing and assisting the Engineer in the use of computer software, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payments for the progress schedule (critical path method) contract item will be made progressively as follows:

- A. A total of 25 percent of the item amount or a total of 25 percent of the amount listed for progress schedule (critical path method) in "Payments" of Section 5 of these special provisions, whichever is less, will be paid upon achieving all of the following:
 1. Completion of 5 percent of all contract item work.
 2. Acceptance of all schedules and TIAs required to the time when 5 percent of all contract item work is complete.
 3. Delivery of schedule software to the Engineer.
 4. Completion of required schedule software training.
- B. A total of 50 percent of the item amount or a total of 50 percent of the amount listed for progress schedule (critical path method) in "Payments" of Section 5 of these special provisions, whichever is less, will be paid upon completion of 25 percent of all contract item work and acceptance of all schedules and TIAs required to the time when 25 percent of all contract item work is complete.
- C. A total of 75 percent of the item amount or a total of 75 percent of the amount listed for progress schedule (critical path method) in "Payments" of Section 5 of these special provisions, whichever is less, will be paid upon completion of 50 percent of all contract item work and acceptance of all schedules and TIAs required to the time when 50 percent of all contract item work is complete.
- D. A total of 100 percent of the item amount or a total of 100 percent of the amount listed for progress schedule (critical path method) in "Payments" of Section 5 of these special provisions, whichever is less, will be paid upon completion of all contract item work, acceptance of all schedules and TIAs required to the time when all contract item work is complete, and submittal of the certified final update schedule.

If the Contractor fails to complete any of the work or provide any of the schedules required by this section, the Engineer shall make an adjustment in compensation in conformance with the provisions in Section 4-1.03C, "Changes in Character of Work," of the Standard Specifications for the work not performed. Adjustments in compensation for schedules will not be made for any increased or decreased work ordered by the Engineer in furnishing schedules.

10-1.111 RIGHT OF WAY OBSTRUCTIONS

Attention is directed to the occupied improvements located within the right of way at:

Route 215, from approximately 36 meters left of Station 4+14 to approximately 36 meters left of Station 4+73.

Route 91, from approximately 268 meters right of Station 137+12 to approximately 267 meters right of Station 137+63.

Route 91, from approximately 232 meters right of Station 137+47 to approximately 358 meters right of Station 138+82.

Route 215, from approximately 43 meters right of Station 12+59 to approximately 186 meters right of Station 15+44.

Route 215, from approximately 151 meters right of Station 12+15 to approximately 55 meters right of Station 12+60.

Route 215, from approximately 121 meters right of Station 218+92 to approximately 100 meters right of Station 219+61.

Route 91, from approximately 36 meters left of Station 130+25 to approximately 52 meters left of Station 131+40.

Route 215, from approximately 194 meters right of Station 15+39 to approximately 192 meters right of Station 15+54.

Route 91, from approximately 33 meters right of Station 136+12 to approximately 98 meters right of Station 136+57.

Route 91, from approximately 57 meters left of Station 132+63 to approximately 50 meters left of Station 133+06.

Route 215, from approximately 37 meters left of Station 8+30 to approximately 60 meters left of Station 9+81.

It is anticipated that these improvements will be vacated and removed by February 2, 2004.

Attention is directed to the occupied improvements located within the right of way at:

Route 215, from approximately 36 meters left of Station 5+74 to approximately 36 meters left of Station 6+04.

Route 215, from approximately 36 meters left of Station 4+72 to approximately 36 meters left of Station 5+39.

Route 215, from approximately 38 meters left of Station 3+14 to approximately 42 meters left of Station 3+93.

Route 215, from approximately 36 meters left of Station 7+63 to approximately 36 meters left of Station 8+07.

Route 215, from approximately 58 meters right of Station 25+96 to approximately 68 meters right of Station 26+11.

Route 215, from approximately 15 meters left of Station 206+41 to approximately 23 meters left of Station 206+56.

Route 215, from approximately 38 meters right of Station 206+36 to approximately 38 meters right of Station 206+52.

Route 215, from approximately 2 meters left of Station 206+40 to approximately 27 meters right of Station 206+53.

Route 215, from approximately 41 meters right of Station 217+93 to approximately 91 meters right of Station 218+82.

It is anticipated that these improvements will be vacated and removed by March 31, 2004.

Attention is directed to the occupied improvements located within the right of way at:

Route 91, from approximately 29 meters right of Station 133+72 to approximately 53 meters right of Station 134+42.

Route 215, from approximately 51 meters right of Station 201+67 to approximately 60 meters right of Station 204+25.

Route 215, from approximately 51 meters right of Station 200+63 to approximately 82 meters right of Station 201+85.

Route 215, from approximately 52 meters right of Station 202+89 to approximately 140 meters right of Station 204+95.

Route 215, from approximately 45 meters right of Station 199+18 to approximately 47 meters right of Station 199+69.

Route 215, from approximately 33 meters left of Station 199+50 to approximately 58 meters left of Station 199+98.

Route 215, from approximately 313 meters right of Station 199+75 to approximately 339 meters right of Station 200+43.

Route 91, from approximately 362 meters right of Station 137+58 to approximately 350 meters right of Station 137+98.

Route 91, from approximately 391 meters right of Station 137+70 to approximately 368 meters right of Station 138+05.

It is anticipated that these improvements will be vacated and removed by April 1, 2004.

Attention is directed to the occupied improvements located within the right of way at:

Route 91, from approximately 57 meters right of Station 135+06 to approximately 123 meters right of Station 136+36.

It is anticipated that these improvements will be vacated and removed by April 30, 2004.

Attention is directed to the occupied improvements located within the right of way at:

Route 91, from approximately 36 meters left of Station 138+10 to approximately 85 meters left of Station 138+95.

Route 91, from approximately 50 meters left of Station 133+06 to approximately 40 meters left of Station 134+30.

Route 215, from approximately 60 meters left of Station 218+25 to approximately 57 meters left of Station 220+09.

It is anticipated that these improvements will be vacated and removed by May 28, 2004.

Attention is directed to the occupied improvements located within the right of way at:

Route 91, from approximately 38 meters left of Station 136+00 to approximately 32 meters left of Station 136+75.

It is anticipated that these improvements will be vacated and removed by October 15, 2004.

The Contractor shall take no action that will result in unnecessary inconvenience, disproportionate injury or any action coercive in nature to the occupants of these improvements who have not yet moved from the improvements.

In the event that the improvements mentioned above are not removed by the date specified and, in the opinion of the Engineer, the Contractor's operations are delayed or interfered with by reason of the improvements not being removed by the date specified, the State will compensate the Contractor for the delays to the extent provided in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

10-1.15 MAINTAINING TRAFFIC

Attention is directed to Sections 7-1.08, "Public Convenience," 7-1.09, "Public Safety," and 12, "Construction Area Traffic Control Devices," of the Standard Specifications and to the provisions in "Public Safety" of these special provisions and these special provisions. Nothing in these special provisions shall be construed as relieving the Contractor from the responsibilities specified in Section 7-1.09.

Attention is directed to "Railroad Relations and Insurance" of these special provisions for temporary clearances.

Lane closures shall conform to the provisions in section "Traffic Control System for Lane Closure" of these special provisions.

Driving access to residents and businesses on Sycamore Canyon Boulevard, Rivercrest Drive, Roberta Street, Kansas Avenue, La Cadena West Drive, and La Cadena Drive shall be maintained at all times throughout the construction duration.

Closures of West Campus Drive and Canyon Crest Drive as shown on the stage construction plans shall be between June 18, 2004 to September 14, 2004. The scheduled closure shall be restricted only to the following construction limits:

- A) At Campus Drive: From Sta 18+72.9 to Sta 20+85
- B) At Canyon Crest Drive: From Sta 18+75 to Sta 21+13.6

A contingency plan shall be provided by the Contractor to the Engineer to open one (1) lane in each direction of traffic for both the West Campus Drive and Canyon Crest Drive in case construction will not be completed after September 14, 2004. This plan shall be submitted and approved by the Engineer 30 days prior to this date.

Pedestrian access through construction areas shall be provided at all times during construction of West Campus Drive and Canyon Crest Drive.

During construction of Linden, Iowa, and Blaine Bridge Overcrossings, service trucks and delivery materials and construction equipment to the work site shall not be allowed to pass at 3rd/Blaine Street in the vicinity of John North High School between 6:45 AM-8:15 AM and 2:20 PM-3:15PM Monday through Friday during the months of September through June and between 7:30 AM-8:00 AM and 12:00 PM-12:30 PM Monday through Friday during the months of July and August.

A flagman shall be provided by the Contractor during those hours to direct traffic for vehicles in and out of John North High School during the tying of the new profile to the existing pavement at Blaine Street.

Compensation for furnishing flagman at John North High School will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications. In addition to the provisions set forth in "Public Safety" of these special provisions, whenever work to be performed on the freeway traveled way (except the work of installing, maintaining and removing traffic control devices) is within 1.8 m of the adjacent traffic lane, the adjacent traffic lane shall be closed.

Lane Closure Charts for full freeway closures are to be used during bridge demolition work, false work, mounting overhead signs over the travel-way or under circumstances approved by the Engineer in writing.

No two consecutive ramps/connectors in one direction of travel can be closed unless permitted by the Engineer in writing.

At locations where falsework pavement lighting or pedestrian openings through falsework are designated, falsework lighting shall be installed in conformance with the provisions in Section 86-6.11, "Falsework Lighting," of the Standard Specifications.

Openings shall be provided through bridge falsework for the use of public traffic at each location where falsework is being constructed adjacent to and over the streets or routes listed in the following table. The type, minimum width, height, and number of openings at each location, and the location and maximum spacing of falsework lighting, if required for each opening, shall conform to the requirements in the table. The width of vehicular openings shall be the clear width between temporary railings or other protective work. The spacing shown for falsework pavement lighting is the maximum distance center to center in meters between fixtures.

N215-W91 Connector, Bridge No 56-801G
At Poplar Street off-ramp

	Number	Width	Height
Vehicle Openings	1	7.5	4.6
	Location	Spacing	
Falsework Pavement Lighting	R	7	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

N215-W91 Connector, Bridge No 56-801G
At Spruce Street OC (span 9)

	Number	Width	Height
Vehicle Openings	1	16.4	4.6
Pedestrian Openings	2	1.2	3.0
	Location	Spacing	
Falsework Pavement Lighting	R and L	7 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

N215-W91 Connector, Bridge No 56-801G
At Spruce Street UC (span-25)

	Number	Width	Height
Vehicle Openings	1	19.4	4.6
Pedestrian Openings	2	1.2	3.0
	Location	Spacing	
Falsework Pavement Lighting	R, L, and C	7 meters with C staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

N215-W91 Connector, Bridge No 56-801G
E215-S91 Connector (existing)

	Number	Width	Height
Vehicle Openings	1	8.4	4.6
	Location	Spacing	
Falsework Pavement Lighting	R	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

N215-W91 Connector, Bridge No 56-801G
E215-S91 Connector (proposed)

	Number	Width	Height
Vehicle Openings	1	8.4	4.6
	Location	Spacing	
Falsework Pavement Lighting	R	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

N215-W91 Connector, Bridge No 56-801G
At Route 91

	Number	Width	Height
Vehicle Openings	2	23.3	4.6
	Location	Spacing	
Falsework Pavement Lighting	R, L, and C	12 meters with C staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

N215-W91 Connector, Bridge No 56-801G
At Eastbound 91-Northbound 215 loop

	Number	Width	Height
Vehicle Openings	2	9.4	4.6
	Location	Spacing	
Falsework Pavement Lighting	R and L	12 meters staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

N215-W91 Connector, Bridge No 56-801G
At Route 215

	Number	Width	Height
Vehicle Openings, to Beaumont	1	12.9	4.6
Vehicle Openings to Ontario and College District	1	19.2	4.6
	Location	Spacing	
Falsework Pavement Lighting	R, L, and C	12 meters with C staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

N215-W91 Connector, Bridge No 56-801G
At Westbound 91 – Northbound 215 detour

	Number	Width	Height
Vehicle Openings	1	15.3	4.6
	Location	Spacing	
Falsework Pavement Lighting	R and L	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

N215-W91 Connector, Bridge No 56-801G
At Down Street

	Number	Width	Height
Vehicle Openings	1	12.3	4.6
Pedestrian Openings	1	1.2	3.0
	Location	Spacing	
Falsework Pavement Lighting	R and L	7 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
S-W Connector

	Number	Width	Height
Vehicle Openings	1	7.5 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
S-W Connector & Detour

	Number	Width	Height
Vehicle Openings	1	9.2 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R & L	12 meters staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
Rte 215 to Beaumont & Detour

	Number	Width	Height
Vehicle Openings	1	20 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R & L C	12 meters 12 m staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
Rte 215 to Ontario & Detour

	Number	Width	Height
Vehicle Openings	1	16.1 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R & L C	12 meters 12 m staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
E-W Connector
(North side of loop)

	Number	Width	Height
Vehicle Openings	1	7.2 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
 E-W Connector (Proposed)
 (North side of loop)

	Number	Width	Height
Vehicle Openings	1	9.4 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R & L	12 meters staggered half space	

(Width and Height in meters)
 (R = Right side of traffic. L = Left side of traffic)
 (C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
 E-W Connector
 (South side of loop)

	Number	Width	Height
Vehicle Openings	1	7.2 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R	9 meters	

(Width and Height in meters)
 (R = Right side of traffic. L = Left side of traffic)
 (C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
 E-W Connector (Proposed)
 (South side of loop)

	Number	Width	Height
Vehicle Openings	1	9.4 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R & L	12 meters staggered half space	

(Width and Height in meters)
 (R = Right side of traffic. L = Left side of traffic)
 (C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
Rte 215 to Ontario & Collector Distribution

	Number	Width	Height
Vehicle Openings	1	19.2 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R & L C	12 meters 12 m staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
Rte 215 to Beaumont

	Number	Width	Height
Vehicle Openings	1	12.9 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R & L	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
N-E Connector & Detour

	Number	Width	Height
Vehicle Openings	1	12.5 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R & L	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
N-E Connector

	Number	Width	Height
Vehicle Openings	1	11.7 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R & L	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
Down Street

	Number	Width	Height
Vehicle Openings	1	11.1 m	4.60 m
Pedestrian Openings	1	1.2 m	3.0 m
	Location	Spacing	
Falsework Pavement Lighting	R & L	7 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
Spruce Street Off Ramp

	Number	Width	Height
Vehicle Openings	1	7.5 m	4.6 m
	Location	Spacing	
Falsework Pavement Lighting	R & L	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Southeast Connector (Br. No. 56-0802F)
Spruce Street

	Number	Width	Height
Vehicle Openings	1	14.0	4.6
Pedestrian Openings	2	1.2	3.0
	Location	Spacing	
Falsework Pavement Lighting	R & L C	7 meters staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Separation 60/91/215, Bridge No. 56-0402

	Number	Width	Height
Vehicle Openings	2	18.3	4.6
	Location	Spacing	
Falsework Pavement Lighting	R, L, and C	12 meters with C staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Down Street OH (widen), Bridge No. 56-0398
At Down Street

	Number	Width	Height
Vehicle Openings	1	12.3	4.6
Pedestrian Openings	1	1.2	3
	Location	Spacing	
Falsework Pavement Lighting	R and L	7 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Spruce Street UC (widen), Bridge No. 56-0399
At Spruce Street

	Number	Width	Height
Vehicle Openings	2	8.2	4.6
Pedestrian Openings	2	1.2	3
	Location	Spacing	
Falsework Pavement Lighting	R	7 meters	

(Width and Height in meters)

(R = Right side of traffic. L = Left side of traffic)

(C = Centered overhead)

Chicago Avenue OH (widen), Bridge No. 56-0403
At Chicago Avenue

	Number	Width	Height
Vehicle Openings	2	9.0	4.6
Pedestrian Openings	2	1.2	3
	Location	Spacing	
Falsework Pavement Lighting	R and L	9 meters staggered half space	

(Width and Height in meters)

(R = Right side of traffic. L = Left side of traffic)

(C = Centered overhead)

Blaine St UC, Bridge No. 56-0395
At Route 215

	Number	Width	Height
Vehicle Openings	2	21.9	4.6
	Location	Spacing	
Falsework Pavement Lighting	R, L, C	12 meters with C staggered half space	

(Width and Height in meters)

(R = Right side of traffic. L = Left side of traffic)

(C = Centered overhead)

Iowa Avenue OC, Bridge No. 56-0396
At Route 215

	Number	Width	Height
Vehicle Openings	2	21.9	4.6
	Location	Spacing	
Falsework Pavement Lighting	R, L, C	12 meters with C staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Linden Avenue OC, Bridge No. 56-0397
At Route 215

	Number	Width	Height
Vehicle Openings	2	21.9	4.6
	Location	Spacing	
Falsework Pavement Lighting	R, L, C	12 meters with C staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Martin Luther King Blvd. UC, Bridge No. 56-0803R/L
At Martin Luther King Blvd

	Number	Width	Height
Vehicle Openings	2	9.6	4.6
	Location	Spacing	
Falsework Pavement Lighting	R and L	9 meters staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Box Springs Road OC (Replace)(Br. No. 56-0804)
Northbound Rte 215

	Number	Width	Height
Vehicle Openings	1	10.80 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R and L	12 meters staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Box Springs Road OC (Replace)(Br. No. 56-0804)
Southbound Rte 215

	Number	Width	Height
Vehicle Openings	1	14.40 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R and L	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Day Street Undercrossing (Widen)(Br. No. 56-0477)
Day Street

	Number	Width	Height
Vehicle Openings	1	15.24 m	4.60 m
Pedestrian Openings East Side Only	1	1.5 m	3.0 m
	Location	Spacing	
Falsework Pavement Lighting	R and L C	12 meters 12 m staggered half space	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Eastbound 60 Truck Connector(Br. No. 56-0806G)
"3I" Line

	Number	Width	Height
Vehicle Openings	1	6.40 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Eastbound 60 Truck Connector (Br. No. 56-0806G)
"3FF" Line

	Number	Width	Height
Vehicle Openings	1	11.28 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R and L	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Eastbound 60 Truck Connector (Br. No. 56-0806G)
"D" Line

	Number	Width	Height
Vehicle Openings	1	11.28 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R and L	9 meters	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

Eastbound 60 Truck Connector(Br. No. 56-0806G)
"O" Line

	Number	Width	Height
Vehicle Openings	1	7.62 m	4.60 m
	Location	Spacing	
Falsework Pavement Lighting	R and L	12 meters staggered half space	

(Width and Height in meters)

(R = Right side of traffic. L = Left side of traffic)

(C = Centered overhead)

The exact location of openings will be determined by the Engineer.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders including any section closed to public traffic.

The Contractor shall notify local authorities of the Contractor's intent to begin work at least 10 days before work is begun. The Contractor shall cooperate with local authorities relative to handling traffic through the area and shall make arrangements relative to keeping the working area clear of parked vehicles.

Whenever vehicles or equipment are parked on the shoulder within 1.8 m of a traffic lane, the shoulder area shall be closed as shown on the plans.

On 2-lane, 2-way roadways, whenever vehicles or equipment are parked on the shoulder within 1.8 m of a traffic lane, the shoulder area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 7.5 m intervals to a point not less than 7.5 m past the last vehicle or piece of equipment. A minimum of 9 cones or portable delineators shall be used for the taper. A C23 (Road Work Ahead) or C24 (Shoulder Work Ahead) sign shall be mounted on a portable sign stand with flags. The sign shall be placed where designated by the Engineer.

No two consecutive entrance ramps or two consecutive exit ramps in the same direction of travel shall be closed concurrently.

Advance special message signs shall be placed 10 days in advance of the ramp closure. The contractor shall notify the engineer not less than 5 calendar days prior to installing the advance ramp closure warning signs.

Lanes and ramps shall be closed only during the hours shown on the charts and "Table Z" included in this section "Maintaining Traffic." Except work required under Sections 7-1.08 and 7-1.09, work that interferes with public traffic shall be performed only during the hours shown for lane closures.

No lane closures, shoulder closures, or other traffic restrictions will be allowed on special day(s) as shown on "Table Z".

Designated legal holidays are as shown on "Table Z".

Minor deviations from the requirements of this section concerning hours of work which do not significantly change the cost of the work may be permitted upon the written request of the Contractor, if in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved the deviations in writing. All other modifications will be made by contract change order.

Chart No. 1 Multilane Lane Requirements																									
Location: Riv 60 KP 18.5-19.8 (EB)															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1	1	2																	2	2	2
Fridays	1	1	1	1	1	2																		2	2
Saturdays	1	1	1	1	1	1	2	2															2	2	2
Sundays	1	1	1	1	1	1	1	2	2														2	2	2

Legend:

1	One lane open in direction of travel
2	Two adjacent lanes open in direction of travel
	No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 2 Multilane Lane Requirements																									
Location: Riv 60 KP 18.5-19.8 (WB)															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1	2																		2	2	1
Fridays	1	1	1	1	2																		2	2	1
Saturdays	1	1	1	1	1	2	2	2															2	2	2
Sundays	1	1	1	1	1	1	2	2	2														2	2	1

Legend:

1	One lane open in direction of travel
2	Two adjacent lanes open in direction of travel
	No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 3 Ramp Lane Requirements																									
Location: Riv 60 KP 18.5-19.8 (EB)															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	X	X	X	X	X	X																	X	X	X
Fridays	X	X	X	X	X	X																		X	X
Saturdays	X	X	X	X	X	X	X	X															X	X	X
Sundays	X	X	X	X	X	X	X	X	X														X	X	X

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 4 Ramp Lane Requirements																									
Location: Riv 60 KP 18.5-19.8 (WB)															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	X	X	X	X	X																		X	X	X
Fridays	X	X	X	X	X																		X	X	X
Saturdays	X	X	X	X	X	X	X	X															X	X	X
Sundays	X	X	X	X	X	X	X	X	X														X	X	X

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 5 Multilane Lane Requirements																									
Location: Riv 91 KP 32.6-34.8 (EB)												EA: 334844													
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Wednesdays	1	1	1	1	1	2																		2	1
Thursdays through Fridays	1	1	1	1	1	2																			2
Saturdays	1	1	1	1	1	1	2																		2
Sundays	1	1	1	1	1	1	1	2	2															2	1

Legend:

1	One lane open in direction of travel
2	Two adjacent lanes open in direction of travel
	No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 6 Multilane Lane Requirements																										
Location: Riv 91 KP 32.6-34.8 (WB)												EA: 334844														
FROM HOUR TO HOUR	a.m.											p.m.														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	1	1	1	1	2																			2	2	1
Fridays	1	1	1	1	2																				2	2
Saturdays	1	1	1	1	1	1	2																		2	2
Sundays	1	1	1	1	1	1	1	2	2															2	2	1

Legend:

1	One lane open in direction of travel
2	Two adjacent lanes open in direction of travel
	No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 7 Ramp Lane Requirements																									
Location: Riv 91 KP 32.6-34.8 (EB)												EA: 334844													
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Wednesdays	X	X	X	X	X	X																		X	X
Thursdays through Fridays	X	X	X	X	X	X																			X
Saturdays	X	X	X	X	X	X	X																		X
Sundays	X	X	X	X	X	X	X	X	X															X	X

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 8 Ramp Lane Requirements																										
Location: Riv 91 KP 32.6-34.8 (WB)												EA: 334844														
FROM HOUR TO HOUR	a.m.											p.m.														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	X	X	X	X	X																			X	X	X
Fridays	X	X	X	X	X																				X	X
Saturdays	X	X	X	X	X	X	X																		X	X
Sundays	X	X	X	X	X	X	X	X	X															X	X	X

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 9 Multilane Lane Requirements																									
Location: Riv 215 KP 68.9-71 (NB)												EA: 334844													
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1	1	2																	2	2	1
Fridays	1	1	1	1	1	2																	3	2	2
Saturdays	1	1	1	1	1	1	2	2																2	2
Sundays	1	1	1	1	1	1	1	2	2														2	2	1

Legend:

1	One lane open in direction of travel
2	Two adjacent lanes open in direction of travel
3	Three adjacent lanes open in direction of travel
	No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 10 Multilane Lane Requirements																									
Location: Riv 215 KP 68.9-71 (SB)												EA: 334844													
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1	2																		2	2	1
Fridays	1	1	1	1	2																		2	2	2
Saturdays	1	1	1	1	1	1	2	2																2	2
Sundays	1	1	1	1	1	1	1	2	2														2	2	1

Legend:

1	One lane open in direction of travel
2	Two adjacent lanes open in direction of travel
	No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 11 Ramp Lane Requirements																										
Location: Riv 215 KP 68.9-71 (NB) Spruce & Columbia Ave.															EA: 334844											
FROM HOUR TO HOUR	a.m.											p.m.														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	X	X	X	X	X	X																		X	X	X
Fridays	X	X	X	X	X	X																		X	X	X
Saturdays	X	X	X	X	X	X	X	X																X	X	
Sundays	X	X	X	X	X	X	X	X	X															X	X	X

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 12 Ramp Lane Requirements																										
Location: Riv 215 KP 68.9-71 (SB) Spruce St.															EA: 334844											
FROM HOUR TO HOUR	a.m.											p.m.														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	X	X	X	X	X																			X	X	X
Fridays	X	X	X	X	X																			X	X	X
Saturdays	X	X	X	X	X	X	X	X																X	X	
Sundays	X	X	X	X	X	X	X	X	X															X	X	X

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 13 Connector Lane Requirements																									
Location: Riv 60/91/215 connectors (all directions)															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	C	C	C	C																					C
Fridays	C	C	C	C																					C
Saturdays	C	C	C	C	C																				
Sundays	C	C	C	C	C	C																			C

Legend:

C Connector may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 14 Multilane Lane Requirements																														
Location: Riv 215 KP 63.5-68.9 (SB)															EA: 334844															
FROM HOUR TO HOUR	a.m.											p.m.																		
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12					
Mondays through Thursdays	1	1	1	1	1	3																			3	3	2	2		
Fridays	1	1	1	1	1	3																					3	3	2	
Saturdays	1	1	1	1	1	2	3	3	3																		3	3	3	
Sundays	1	1	1	1	1	1	2	2	2	3	3																3	3	3	2

Legend:

1 One lane open in direction of travel

2 Two adjacent lanes open in direction of travel

3 Three adjacent lanes open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

**Chart No. 15
Multilane Lane Requirements**

Location: Riv 215 KP 63.5-68.9 (NB) EA: 334844

FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1	3																3	3	2	2	1
Fridays	1	1	1	1	3																	3	2	2	2
Saturdays	1	1	1	1	1	2	2	3	3													3	3	3	2
Sundays	1	1	1	1	1	1	2	2	3	3	3												3	2	2

Legend:

- One lane open in direction of travel
- Two adjacent lanes open in direction of travel
- Three adjacent lanes open in direction of travel
- No lane closure allowed

Remarks:

1. Closures may not be allowed during certain upcoming special events.
2. The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. The length of each closure shall not exceed 3 kilometers.
4. **In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

**Chart No. 16
Ramp Lane Requirements**

Location: Riv 215 KP 63.3-68.9(SB) Central & El Cerrito, Martin Luther King, University & Blaine EA: 334844

FROM HOUR TO HOUR	a.m.											p.m.														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	X	X	X	X	X	X																X	X	X	X	
Fridays	X	X	X	X	X	X																	X	X	X	
Saturdays	X	X	X	X	X	X	X	X	X														X	X	X	
Sundays	X	X	X	X	X	X	X	X	X	X	X												X	X	X	X

Legend:

- Ramp may be closed
- No work that interferes with public traffic will be allowed

Remarks:

1. Closures may not be allowed during certain upcoming special events.
2. The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. No two consecutive (on or off) ramps to be closed in each direction simultaneously.
4. In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 17 Ramp Lane Requirements																									
Location: Riv 215 KP 63.3-68.9(NB) Central & El Cerrito, Martin Luther King, University & Blaine EA: 334844																									
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	X	X	X	X	X																X	X	X	X	X
Fridays	X	X	X	X	X																	X	X	X	X
Saturdays	X	X	X	X	X	X	X	X	X												X	X	X	X	
Sundays	X	X	X	X	X	X	X	X	X	X	X											X	X	X	

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 18 Multilane Lane Requirements																								
Location: Riv 215 KP 62.3-63.5 (SB) Central Ave. to Box Springs OH EA: 334844																								
FROM HOUR TO HOUR	a.m.											p.m.												
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Mondays through Thursdays	1	1	1	1	1	2																		2
Fridays	1	1	1	1	1																			
Saturdays	1	1	1	1	1	2	2																	
Sundays	1	1	1	1	1	1	2	2																2

Legend:

1 One lane open in direction of travel

2 Two adjacent lanes open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 19 Multilane Lane Requirements																									
Location: Riv 215 KP 62.3-63.5 (NB) Central Ave. to Box Springs OH															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1																			2	2	1
Fridays	1	1	1	1																				2	2
Saturdays	1	1	1	1	1	2	2																		2
Sundays	1	1	1	1	1	1	2	2																	2

Legend:

One lane open in direction of travel

Two adjacent lanes open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 20 Ramp Lane Requirements																									
Location: Riv 215 KP 60.2-63.3 (SB) Box Spring Rd. & Eucalyptus Ave.															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	X	X	X	X	X	X																			X
Fridays	X	X	X	X	X																				
Saturdays	X	X	X	X	X	X	X																		
Sundays	X	X	X	X	X	X	X	X																	X

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges**, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 21 Ramp Lane Requirements																									
Location: Riv 215 KP 60.2-63.3 (NB) Box Spring Rd. & Eucalyptus Ave.															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	X	X	X	X																			X	X	X
Fridays	X	X	X	X																			X	X	
Saturdays	X	X	X	X	X	X	X																		X
Sundays	X	X	X	X	X	X	X	X																	X

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 22 Connector Lane Requirements																									
Location: Riv 215 (SB) to Riv 60 (EB) east Junction															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1	1	1																			1
Fridays	1	1	1	1	1																				
Saturdays	1	1	1	1	1	1	1																		
Sundays	1	1	1	1	1	1	1	1																	1

Legend:

1 A minimum of one paved ramp lane, not less than 3.3m wide, shall be open for use by public traffic

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 23 Connector Lane Requirements																									
Location: Riv 215 (SB) to 215 (SB) East Junction															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1	1	1																			1
Fridays	1	1	1	1	1																				
Saturdays	1	1	1	1	1	1	1																		
Sundays	1	1	1	1	1	1	1	1																	1

Legend:

1 A minimum of one paved ramp lane, not less than 3.3m wide, shall be open for use by public traffic

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 24 Connector Lane Requirements																									
Location: Riv 215 (NB) to 215 (NB) east Junction															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1	1																			1	1
Fridays	1	1	1	1	1																			1	1
Saturdays	1	1	1	1	1	1	1																		1
Sundays	1	1	1	1	1	1	1	1																	1

Legend:

1 A minimum of one paved ramp lane, not less than 3.3m wide, shall be open for use by public traffic

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 25 Connector Lane Requirements																									
Location: Riv 60 (WB) to 215 (NB) east Junction															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	1	1	1	1																				1	1
Fridays	1	1	1	1																				1	1
Saturdays	1	1	1	1	1	1	1																		1
Sundays	1	1	1	1	1	1	1	1																	1

Legend:

1 A minimum of one paved ramp lane, not less than 3.3m wide, shall be open for use by public traffic

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 26 Multilane Lane Requirements																										
Location: Riv 60 KP 19.8-23 (EB)															EA: 334844											
FROM HOUR TO HOUR	a.m.											p.m.														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	1	1	1	1	1																			2	2	1
Fridays	1	1	1	1	1																				2	2
Saturdays	1	1	1	1	1	1	2																	2	2	2
Sundays	1	1	1	1	1	1	1	2	2															2	2	1

Legend:

1 One lane open in direction of travel

2 Two adjacent lanes open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 27 Multilane Lane Requirements																								
Location: Riv 60 KP 19.8-23 (WB)												EA: 334844												
FROM HOUR TO HOUR	a.m.											p.m.												
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Mondays through Thursdays	1	1	1	1	2																2	2	2	1
Fridays	1	1	1	1	2																2	2	2	1
Saturdays	1	1	1	1	1	2	2															2	2	2
Sundays	1	1	1	1	1	1	1	2	2													2	2	1

Legend:

One lane open in direction of travel

Two adjacent lanes open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.

Chart No. 28 Ramp Lane Requirements																									
Location: Riv 60 KP 21.4-23 (EB) Day Street & Fredrick												EA: 334844													
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	X	X	X	X	X																		X	X	X
Fridays	X	X	X	X	X																			X	X
Saturdays	X	X	X	X	X	X	X																X	X	X
Sundays	X	X	X	X	X	X	X	X	X														X	X	X

Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges**, only one onramp (and only in one direction) will be closed at any time period.

**Chart No. 29
Ramp Lane Requirements**

Location: Riv 60 KP 21.4-23 (WB) Day Street & Fredrick EA: 334844

FROM HOUR TO HOUR	a.m.											p.m.														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	X	X	X	X	X																		X	X	X	X
Fridays	X	X	X	X	X																		X	X	X	X
Saturdays	X	X	X	X	X	X	X																X	X	X	
Sundays	X	X	X	X	X	X	X	X	X														X	X	X	

Legend:
 Ramp may be closed
 No work that interferes with public traffic will be allowed

Remarks:
1. Closures may not be allowed during certain upcoming special events.
2. The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. No two consecutive (on or off) ramps to be closed in each direction simultaneously.
4. In interchanges, only one onramp (and only in one direction) will be closed at any time period.

**Chart No. 30
Connector Lane Requirements**

Location: Riv 215 (NB) to 215 (NB) EA: 334844

FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	C	C	C	C	C																		C	C	C
Fridays	C	C	C	C	C																				C
Saturdays	C	C	C	C	C	C	C																		
Sundays	C	C	C	C	C	C	C	C																	

Legend:
 Connector may be closed
 No work that interferes with public traffic will be allowed

Remarks:
1. Closures may not be allowed during certain upcoming special events.
2. The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
3. No two consecutive (on or off) ramps to be closed in each direction simultaneously.
4. In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 31 Connector Lane Requirements																									
Location: Riv 60 (EB) to 91 (WB)															EA: 334844										
FROM HOUR TO HOUR	a.m.												p.m.												
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	C	C	C	C	C																		C	C	C
Fridays	C	C	C	C	C																				C
Saturdays	C	C	C	C	C	C	C																		
Sundays	C	C	C	C	C	C	C	C																	

Legend:

C Connector may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 32 Multilane Lane Requirements (City Street)																									
Location: Box Spring St. at Riv 215 (both directions)															EA: 334844										
FROM HOUR TO HOUR	a.m.												p.m.												
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays													1	1	1	1	1	1							
Fridays													1	1	1	1	1	1							
Saturdays													1	1	1	1	1	1							
Sundays													1	1	1	1	1	1							

Legend:

1 One lane open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 33 Two-Lane Conventional Lane Requirements (city street)																								
Location: Sycamore Canyon Blvd. (Reversible control)												EA: 334844												
FROM HOUR TO HOUR	a.m.												p.m.											
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Mondays through Thursdays												R	R	R	R	R	R	R						
Fridays												R	R	R	R	R	R	R						
Saturdays												R	R	R	R	R	R	R						
Sundays												R	R	R	R	R	R	R						

Legend:

R A minimum of one paved traffic lane, not less than 3.3 m wide, shall be open for use by public traffic. (Reversing Control).

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 34 Multilane Lane Requirements (City Street)																								
Location: Spruce St. at Riv 91 & 215 (both directions)												EA: 334844												
FROM HOUR TO HOUR	a.m.												p.m.											
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Mondays through Thursdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Fridays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Saturdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Sundays	1	1	1	1	1					1	1	1	1	1	1							1	1	1

Legend:

1 One lane open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 35 Multilane Lane Requirements (City Street)																								
Location: Blaine St. (both directions)															EA: 334844									
FROM HOUR TO HOUR	a.m.												p.m.											
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Mondays through Thursdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Fridays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Saturdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Sundays	1	1	1	1	1					1	1	1	1	1	1							1	1	1

Legend:

1 One lane open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 36 Multilane Lane Requirements (City Street)																								
Location: University Ave. at Riv 215 (both directions)															EA: 334844									
FROM HOUR TO HOUR	a.m.												p.m.											
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Mondays through Thursdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Fridays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Saturdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Sundays	1	1	1	1	1					1	1	1	1	1	1							1	1	1

Legend:

1 One lane open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 37 Multilane Lane Requirements (City Street)																								
Location: Iowa St. (both directions)												EA: 334844												
FROM HOUR TO HOUR	a.m.												p.m.											
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Mondays through Thursdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Fridays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Saturdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Sundays	1	1	1	1	1					1	1	1	1	1	1							1	1	1

Legend:

1 One lane open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 38 Multilane Lane Requirements (City Street)																								
Location: Linden Ave. (both directions)												EA: 334844												
FROM HOUR TO HOUR	a.m.												p.m.											
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Mondays through Thursdays													1	1	1	1	1	1						
Fridays													1	1	1	1	1	1						
Saturdays													1	1	1	1	1	1						
Sundays													1	1	1	1	1	1						

Legend:

1 One lane open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 39 Multilane Lane Requirements (City Street)																								
Location: Central Ave. at Riv 215 (both directions)															EA: 334844									
FROM HOUR TO HOUR	a.m.												p.m.											
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
Mondays through Thursdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Fridays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Saturdays	1	1	1	1	1					1	1	1	1	1	1							1	1	1
Sundays	1	1	1	1	1					1	1	1	1	1	1							1	1	1

Legend:

1 One lane open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 40 Multilane Lane Requirements (Full directional closures for false work & or demolition)																									
Location: Riv 60/91/215 (All locations on freeways or local streets)															EA: 334844										
FROM HOUR TO HOUR	a.m.												p.m.												
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	F	F	F	F	F																		F	F	F
Fridays	F	F	F	F	F																				F
Saturdays	F	F	F	F	F	F	F																		
Sundays	F	F	F	F	F	F	F	F																	

Legend:

F No lane open in direction of travel

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- The length of each closure shall not exceed 3 kilometers.
- In the same direction**, consecutive closures shall be not less than 2 kilometers apart and lanes shall be closed on the same side of the roadbed.
- For connector closures refer to the corresponding connector chart.
- Multiple local street closures require written approval of the Resident Engineer.

Chart No. 41																									
Two-Lane Conventional Lane Requirements (City St.)																									
Location: Riv 215 at Down St. (Reversible control)															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays												R	R	R	R	R	R	R							
Fridays												R	R	R	R	R	R	R							
Saturdays												R	R	R	R	R	R	R							
Sundays												R	R	R	R	R	R	R							

Legend:

R A minimum of one paved traffic lane, not less than 3.3 m wide, shall be open for use by public traffic. (Reversing Control).

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 42																									
Multilane Lane Requirements (City Street)																									
Location: Chicago Ave. at Riv 215 (both directions)															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays													1	1	1	1	1	1							
Fridays													1	1	1	1	1	1							
Saturdays													1	1	1	1	1	1							
Sundays													1	1	1	1	1	1							

Legend:

1 One lane open in direction of travel

No lane closure allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- Length of closure shall be within the vicinity of the construction zone.

Chart No. 43 Connector Lane Requirements																										
Location: Riv 60 (WB) KP 19.803 to 215 (SB)															EA: 334844											
FROM HOUR TO HOUR	a.m.											p.m.														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	C	C	C	C	C																			C	C	C
Fridays	C	C	C	C	C																					C
Saturdays	C	C	C	C	C	C	C																			
Sundays	C	C	C	C	C	C	C	C																		

Legend:

C Connector may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 44 Connector Lane Requirements																										
Location: Riv 215 (SB) KP 61.85 to 215 (SB)															EA: 334844											
FROM HOUR TO HOUR	a.m.											p.m.														
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Mondays through Thursdays	C	C	C	C	C																			C	C	C
Fridays	C	C	C	C	C																					C
Saturdays	C	C	C	C	C	C	C																			
Sundays	C	C	C	C	C	C	C	C																		

Legend:

C Connector may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 45 Connector Lane Requirements																									
Location: Riv 215 (NB) KP 38.157 to 215 (NB)															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	C	C	C	C	C																		C	C	C
Fridays	C	C	C	C	C																				C
Saturdays	C	C	C	C	C	C	C																		
Sundays	C	C	C	C	C	C	C	C																	

Legend:

Connector may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 46 Connector Lane Requirements																									
Location: Riv 215 (NB) KP 61.43 to 60 (EB)															EA: 334844										
FROM HOUR TO HOUR	a.m.											p.m.													
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	C	C	C	C	C																		C	C	C
Fridays	C	C	C	C	C																				C
Saturdays	C	C	C	C	C	C	C																		
Sundays	C	C	C	C	C	C	C	C																	

Legend:

Connector may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 47 Connector Lane Requirements																									
Location: Riv 91(EB) to 215 (SB)												EA: 334844													
FROM HOUR TO HOUR	a.m.												p.m.												
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	C	C	C	C	C																		C	C	C
Fridays	C	C	C	C	C																				C
Saturdays	C	C	C	C	C	C	C																		
Sundays	C	C	C	C	C	C	C	C																	

Legend:

Connector may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Chart No. 48 Connector Lane Requirements																									
Location: Riv 215(SB) to 60 (WB)												EA: 334844													
FROM HOUR TO HOUR	a.m.												p.m.												
	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Mondays through Thursdays	C	C	C	C	C																		C	C	C
Fridays	C	C	C	C	C																				C
Saturdays	C	C	C	C	C	C	C																		
Sundays	C	C	C	C	C	C	C	C																	

Legend:

Connector may be closed

No work that interferes with public traffic will be allowed

Remarks:

- Closures may not be allowed during certain upcoming special events.
- The closure starts with the first cone down and ends with the last cone picked up. No closure sign (S) shall be exposed to traffic more than 30 minutes before or after a closure, except as otherwise indicated in the special provisions.
- No two consecutive (on or off) ramps to be closed in each direction simultaneously.
- In interchanges, only one onramp (and only in one direction) will be closed at any time period.

Table "Z"

District 8 Lane Closure Restrictions For Designated Legal Holidays												
If Holiday falls on	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon
Friday		H/SD										
	x	xx	xx	xx	x							
Saturday			H/SD									
	x	xx	xx	xx	x							
Sunday				H/SD								
Monday		x	xx	xx	xx							
					H/SD							
Tuesday						H/SD						
					x	xx						
Wednesday							H/SD					
						x	xx					
Thursday								H/SD				
							x	xx	xx	xx	xx	x

H = Designated Legal Holiday
 January 1st, Third Monday in February, Last Monday in May, July 4th, First Monday in September,
 November 11th, Thanksgiving Day, December 25th

SD = Special Day/Event
Days: Include Martin Luther King Day, Lincoln's Birthday, Cesar Chavez, Columbus Day and
 December 26th through December 31st. **No closure** is allowed on these days.

Events: See District 8 Special Events List

Refer to Lane Closure Charts in the Special Provisions (if applicable)

x **Preceding the designated Holiday**, the full width of the traveled way shall be open for use by public traffic **after 6 am**

x **Following the designated Holiday**, the full width of the traveled way shall be open for use by public traffic **until 6 pm**

xx The full width of the traveled way shall be open for use by public traffic at **all times**.
No lane closures will be allowed.

District 8 Special Events List

No work that encroaches onto the traveled way of the affected Routes shall be allowed from 3 hours before to 2 hours following special events listed below unless otherwise permitted by the District Traffic Manager

Venue/Special Event	Affected Routes	Route Impact	Route Limits	Presently Identified Event Dates†	Website	Contact #
Glen Helen Blockbuster Pavilion	215 15	*** **	University Pkwy to I-15/215 connector I-60 to Devore Road	Various events May-Oct yearly See web site	www.avalonconcerts.com	909-886-8742
Route 66 Rendezvous	215	**	Mill St. to 5 th St	Sept 19-22,2002	www.route-66.org	909-889-3980
California Speedway	10 15 210 66 60	*** *** *** *** ***	LA I-57 to SBD I-215 I-15/215 split in Devore to SR-91 Haven to Sierra Haven to Cherry I-15 to County Line	3/23-24,2002 4/6-7,2002 4/27-28,2002 6/21-23,2002 11/02-3,2002	www.californiaspeedway.com	909-429-5000
Temecula Balloon and Wine Festival	15	**	SR-79 (Winchester Rd.) and Rancho California	6/8-10,2002	www.ci.riverside.ca.us/lining/annualevents.htm or www.ci.temecula.ca.us	909-694-6411 or 909-676-5090
Bob Hope/Chrysler Classic	10	**	Palm Springs off ramp at SR-111	1/27-2/2,2003	www.bhcc.com	760-346-6329
Dinah Shore/Nabisco Classic	10	**	Palm Springs off ramp at SR-111	3/25-31,2002	www.nabiscochampionship.com	760-324-4546

† The dates and days of events change yearly. Contact numbers and websites have been provided so exact dates can be verified.

** Designates-Moderate Impact (20 minute delay or less)

*** Designates-High Impact (30 minute delay or less)

Pedestrian access facilities shall be provided through construction areas within the right of way as shown on the plans and as specified herein. Pedestrian walkways shall be surfaced with asphalt concrete, portland cement concrete or timber. The surface shall be skid resistant and free of irregularities. Hand railings shall be provided on each side of pedestrian walkways as necessary to protect pedestrian traffic from hazards due to construction operations or adjacent vehicular traffic. Protective overhead covering shall be provided as necessary to insure protection from falling objects and drip from overhead structures.

In addition to the required openings through falsework, pedestrian facilities shall be provided during pile driving, footing, wall, and other bridge construction operations. At least one walkway shall be available at all times. If the Contractor's operations require the closure of one walkway, then another walkway shall be provided nearby, off the traveled roadway.

Railings shall be constructed of wood, S4S, and shall be painted white. Railings and walkways shall be maintained in good condition. Walkways shall be kept clear of obstructions.

Full compensation for providing pedestrian facilities shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

Precast concrete members shall not be cast, assembled or stored within the right of way of Route 215 or within the median or within 6 meters of the edge of public traveled way. During work on the members, no workers, equipment or materials shall occupy any area within 1.2 m of the edge of the existing pavement except as permitted during lane closures.

Erection of precast girders over Route 91, 215 for Separation 60/91/215, Bridge No. 56-0402 shall be undertaken on one span at a time. During precast girder erection, public traffic in the lanes over which girders are being placed shall be routed around the work area under the adjacent span over Route 91, 215 or Route 215 by means of a local detour as shown on the plans.

Erection of precast girders over Third Street, Chicago Avenue, Down Street, Canyon Crest Drive, Central Avenue, and University Avenue shall be undertaken on one span at a time. During girder erection, public traffic in the lanes over which girders are being placed shall be stopped for periods of time not to exceed 30 minutes. Following each time traffic is stopped, the accumulated traffic shall pass through the work before another closure is made.

Erection and removal of falsework at locations where falsework openings are required shall be undertaken one location at a time. During falsework erection and removal, public traffic in the lanes over which falsework is being erected or removed shall be routed around the work area on adjacent streets or where 2 falsework openings are called for at one location, the public traffic may be routed through the work and through the opening for the opposing lanes of traffic by means of a local detour as shown on the plans. Erection shall include all adjustments or removal of falsework components prior to concrete placement that contribute to the horizontal stability of the falsework system. Removal shall include lowering falsework, blowing sand from sand jacks, turning screws on screw jacks, and removing wedges.

During pile installation or column installation work at SE Connector (Bridge No. 56-0802F), NW Connector (Bridge No. 56-0801G) and EB 60 Connector (Bridge No. 56-0477R), public traffic in the lanes adjacent to which a pile or column is being installed shall be routed around the work area by means of a local detour as shown on the plans. Pile installation or column installation work shall include, but not be limited to, the installation of permanent steel casing, installation and removal of temporary steel casing, installation of pile reinforcing steel cages, installation of column reinforcing steel cages, erection and removal of column formwork, adequately securing cages and formwork into place, and any other pile or column construction activity that may impede or affect safe passage of public traffic.

During bridge removal work at Box Springs Road Overcrossing (Replace)(Bridge No. 56-0804), public traffic in the lanes over which bridge removal is taking place shall be routed around the work area by means of a local detour as shown on the plans.

Local detours shall be not less than 3 m in width, adjacent to the median side of the opposing traffic lanes, and shall not encroach on the lanes.

Rerouting traffic during erection or removal of falsework, pile installation or column installation work, and bridge removal work shall be undertaken in conformance with the provisions in "Maintaining Traffic" of these Special Provisions for the period necessary for erecting or removing falsework, installing piles or columns, or removing a bridge.

Regardless of the construction procedure, methods and equipment selected, the Contractor shall have necessary materials and equipment on the site to erect or remove the falsework or to remove a bridge in any one span or over any one opening, and to install a pile or column, prior to detouring public traffic, and shall erect or remove the falsework, remove a bridge, or install a pile or column in an expeditious manner in order that inconvenience to public traffic will be at a minimum.

10-1.182 PORTABLE CHANGEABLE MESSAGE SIGN

Portable changeable message signs shall be furnished, placed, operated, and maintained at those locations shown on the plans or where designated by the Engineer in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and these special provisions.

Attention is directed to "Maintaining Traffic" of these special provisions regarding the use of the portable changeable message signs.

The Contractor shall provide access for the Engineer to the project's portable changeable message signs for the purpose of altering messages during emergencies.

All portable changeable message signs shall be maintained at the job site and available for use throughout the life of the contract.

"The contract unit price paid for portable changeable message sign shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in furnishing, placing, maintaining, repairing, replacing, changing messages daily and multiple daily setup and take down as requested by the Engineer, transporting from location to location, and removing portable changeable message signs, as specified in these special provisions and as directed by the Engineer."

10-1.2911 ENVIRONMENTAL RESTORATION

This work shall consist of excavating, stockpiling, removing from stockpiles, spreading, and compacting duff, obtaining, transporting and planting willow cuttings, installing plant (Group A), temporary irrigation system, and shall occur within the project limits from:

approximately 291 meters right of station 39+87 centerline Rte 215 to approximately 56 meters right of station 45+79 centerline Rte 215,

approximately 54 meters left of station 56+24 centerline Rte 215 to approximately 135 meters left of station 59+54 centerline Rte 215, and

approximately 79 meters right of station 14+76 centerline Rte 215 to approximately 219 meters right of station 16+12 centerline Rte 215.

DUFF

Duff shall consist of a mixture of existing decomposed, chopped, broken or chipped plant material, leaves, grasses, weeds, and other plant material excavated. Existing shrubs and other small plants excluding poison oak shall be incorporated into the duff by discing, or by other methods which will break or chop the material into particles not greater than 150 mm in greatest dimension

When duff is to be excavated to a specified depth, duff may consist of plant material and soil. Rocks in excess of 150 mm in greatest dimension shall be removed from the excavated duff.

Trash and objectionable material shall be removed from duff excavation sites prior to duff excavation. The trash and objectionable material shall be removed and disposed of outside the highway right of way in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Duff shall be obtained by excavating the top 300 mm of existing material from areas-designated in these special provisions. Duff shall be stockpiled along the top of proposed excavation slopes and along the toe of proposed embankment slopes. When duff cannot be stockpiled outside the slope lines as specified herein, excavated duff material may be stockpiled at other locations when designated by the Engineer.

Upon completion of the grading operations for the excavation and embankment slopes and other areas to receive duff, the duff shall be spread on the areas designated to receive duff except rock slope protection areas. Duff shall be placed to a uniform depth of not less than 50 mm and not greater than 300 mm and shall be compacted or stabilized in a manner that retains the material in place on the slopes. Duff shall not be compacted or stabilized to the degree that the duff is not maintained as a viable growing medium.

Duff shall be placed on designated excavation and embankment slopes prior to applying erosion control materials, willow cuttings and plant (group A). Erosion control materials shall be furnished and applied as specified in these special provisions.

PRUNE EXISTING PLANTS

Existing plants, as determined by the Engineer, shall be pruned. Pruning of the existing plants except as otherwise provided in these special provisions, will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

WILLOW CUTTINGS (PLANT GROUP W)

Willow cuttings shall not be planted before October 15 and after March 15 and not until the soil is moist to a minimum depth of 200 mm, unless otherwise permitted, in writing, by the Engineer.

Prior to planting, an area 600 mm in diameter shall be cleared of weed growth at each proposed plant (willow cutting) location. Pesticides shall not be used for weed control within the 600-mm diameter area.

The Contractor shall notify the Engineer, in writing, at least 10 working days prior to gathering willow cuttings. The cuttings shall be taken from adjacent areas designated by the Engineer.

Willow cuttings shall be taken at random from healthy, vigorous plants. No more than 50 percent of the plants in a designated area shall be cut. No more than 25 percent of each individual plant shall be cut. Cuts shall be made with sharp, clean tools.

Willow cuttings shall be reasonably straight, 500 mm to 600 mm in length, and 20 mm to 40 mm in diameter at the base of the cutting. The top of each willow cutting shall be cut square above a leaf bud, and the base of each willow cutting shall be cut below a leaf bud at an angle of approximately 45 degrees. Willow cuttings shall have leaves and branches trimmed off flush with the stem. Pruned branches and trimmings shall be spread in the designated willow cutting areas so that no areas are left unsightly.

Willow cuttings shall be planted within 48 hours after cutting and shall be kept wet until planted. Willow cuttings not planted within 48 hours after cutting, or allowed to dry out, shall not be used. Willow cuttings not used shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

A root stimulant shall be applied to the willow cuttings immediately prior to planting. The stimulant shall be applied in conformance with the printed instructions of the root stimulant manufacturer. A copy of the instructions shall be furnished to the Engineer prior to applying the stimulant.

Planting holes shall be made perpendicular to the ground line and shall be formed with a steel bar or excavated by use of an auger, post hole digger or similar tools. Plant holes shall be large enough to receive the willow cuttings in order that the willow cuttings may be planted to the proper depths without damage to the bark. Where rock or other hard material prohibits holes from being excavated as specified, new holes shall be excavated and the abandoned holes backfilled.

If the soil in and around the plant hole is not wet prior to planting, the soil shall be watered and maintained in a wet state until the willow cuttings are planted.

The base of willow cuttings shall be planted from 250 mm to 300 mm deep (approximately one-half the willow cutting's length) and shall have from 3 to 5 bud scars exposed above the plant hole. Cuttings with more than 5 bud scars exposed shall have excess scars removed by pruning. After planting, the plant holes shall be backfilled with excavated material. The excavated material shall be distributed evenly within the hole without clods, lumps or air pockets and compacted without damage to the willow cutting's bark. Compaction shall be adequate to prevent the willow cutting from being easily removed from the soil.

Cuttings shall be watered and maintained in a healthy condition from the time the cuttings are planted until acceptance of the contract. Cuttings that die shall be replaced at the Contractor's expense. The method of planting replacement cuttings shall be as specified in this section for willow cuttings.

PLANTING

Backfill material for plant holes shall be a native soil. Backfill material shall be thoroughly mixed and uniformly distributed throughout the entire depth of the plant hole without clods or lumps.

Commercial fertilizer packets shall be placed in the backfill of each plant at the time of planting, at two packets per plant hole, to within 150 to 200 mm of the soil surface and approximately 25 mm from the roots. When more than one fertilizer packet is required per plant, the packets shall be distributed evenly around the root ball.

Commercial fertilizer (packet) shall be slow or controlled release and shall be in a biodegradable packet form. Each packet shall have a mass of $10 \text{ g} \pm 1 \text{ g}$ and shall have the following guaranteed chemical analysis:

Ingredient	Percentage
Nitrogen	20
Phosphoric Acid	10
Water Soluble Potash	5

One commercial fertilizer packet shall be placed in the backfill of each plant to within 150 to 200 mm of the soil surface and approximately 22 mm from the cutting.

TEMPORARY IRRIGATION SYSTEM

Attention is directed to "Section 20-4.06 WATERING" of the Standard Specifications regarding the Contractor's responsibility to furnish and apply water as required to keep plants in a healthy, growing condition during the life of the contract. Water shall be furnished at the Contractor's expense. At the Contractor's option, water may be applied by a temporary irrigation system of the Contractor's design. Materials for temporary irrigation system shall be of commercial quality.

The Contractor shall submit written plans for the temporary irrigation system to the Engineer for approval not less than 5 days prior to beginning temporary irrigation system work.

Prior to the end of plant establishment period, the temporary irrigation system shall be removed and disposed outside the highway right of way in accordance with the provisions in Section 7-1.13, "Disposal of Materials Outside the Highway Right of Way," of the Standard Specifications.

COST BREAK-DOWN

The Contractor shall furnish the Engineer a cost break-down for the contract lump sum items of Environmental Restoration . Cost break-down tables shall be submitted to the Engineer for approval within 60 working days after the contract has been approved. Cost break-down tables shall be approved, in writing, by the Engineer before any partial payment will be made for the applicable items of Environmental Restoration involved.

Cost break-downs shall be completed and furnished in the format shown in the samples of the cost break-downs included in this section. Line item descriptions of work shown in the samples are the minimum to be submitted. Additional line item descriptions of work may be designated by the Contractor. If the Contractor elects to designate additional line item descriptions of work, the quantity, value and amount for those line items shall be completed in the same manner as for the unit descriptions shown in the samples.

The sum of the amounts for the line items of work listed in the cost break-down table for environmental restoration work shall be equal to the contract lump sum price bid for Environmental Restoration. Overhead and profit, shall be included in each individual line item of work listed in a cost break-down table.

Individual line item values in the approved cost break-down tables will be used to determine partial payments during the progress of the work and as the basis for calculating an adjustment in compensation for the contract lump sum items of Environmental Restoration due to changes in line items of work ordered by the Engineer. When the total of ordered changes to line items of work increases or decreases the price bid by more than 25 percent, the adjustment in compensation will be determined in the same manner specified for increases and decreases in the total pay quantity of an item of work in Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications.

**ENVIRONMENTAL RESTORATION
COST BREAKDOWN**

Contract No. 08-334844

UNIT DESCRIPTION	UNIT	APPROXIMATE QUANTITY	VALUE	AMOUNT
DUFF	HA	2		
PLANT (GROUP W)	EA	1599		
PLANT (GROUP A)	EA	195		
COMMERCIAL FERTILIZER (PACKETS)	EA	1990		
TEMPORARY IRRIGATION SYSTEM	LS	LUMP SUM		

The contract lump sum price paid for environmental restoration, except as otherwise provided, shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in environmental restoration, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

PLANT ESTABLISHMENT WORK

The plant establishment period shall be Type 2 and shall not be less than 125 working days.

Attention is directed to "Relief From Maintenance and Responsibility" in these special provisions regarding relief from maintenance and protection for areas not designated as environmental restoration.

Two applications of commercial fertilizer (granular) shall be applied to trees, shrubs, vines turf (sod) and ground cover areas when directed by the Engineer. Commercial fertilizer shall be applied at the rates shown on the plans and shall be spread with a mechanical spreader wherever possible.

The center to center spacing of replacement plants for unsuitable ground cover plants shall be the original spacing.

Weeds within mulched and ground cover areas and environmental restoration and outside of plant basins shall be controlled by killing.

Vines shall be trained onto fences and walls or through cored holes in walls.

At the option of the Contractor, plants of a larger container size than those originally specified may be used for replacement plants during the first 125 working days of the plant establishment period. The use of plants of a larger container size than those originally specified for replacement plants shall be at the Contractor's expense.

For Environmental Restoration areas replacement plants for Plant (Group A), through the second year of plant establishment period, shall be replaced at a 2:1 ratio with No.1 size container plants of the same species. Replacement willow cuttings, through the second year of the establishment period, shall be replaced at a 2:1 ratio with cuttings of the same species, for the areas as designated in "environmental restoration" of these special provisions.

When ordered by the Engineer, one application of a preemergent pesticide conforming to the provisions in "Pesticides" of these special provisions, shall be applied between 40 and 50 working days prior to completion of the plant establishment period. This work will be paid for as extra work as provided in Section 4-1.03D of the Standard Specifications.

The final inspection shall be performed in conformance with the provisions in Section 5-1.13, "Final Inspection," of the Standard Specifications and shall be completed a minimum of 20 working days before the estimated completion of the contract.

Turf areas shall be mowed in conformance with the provisions in "Turf (Sod)" of these special provisions.

Full compensation for mowing and trimming turf (sod) and disposing of mowed and trimmed material during the plant establishment period shall be considered as included in the contract lump sum price paid for plant establishment work and no additional compensation will be allowed therefor.

Attention is directed to "Environmental Restoration" regarding temporary irrigation system.

10-3.381 MODEL 500 CHANGEABLE MESSAGE SIGN SYSTEM

Model 500 changeable message sign (CMS) systems consist of a Model 500 changeable message sign, a Model 170 controller assembly in a completely wired Type 1 or similar cabinet and the required wiring and auxiliary equipment required to control the CMS shown on the plans and in conformance with these special provisions.

The Model 500 changeable message signs, wiring harness and Model 170 controller assembly including controller unit and completely wired cabinet, but without anchor bolts, will be State-furnished in conformance with the provisions in "Materials" of these special provisions.

Model 500 changeable message sign system components will conform to the requirements in "Specifications for Changeable Message Sign System," issued by the State of California, Department of Transportation, and to the addendums thereto current at the time of project advertising. Model 170 controller assemblies will conform to the requirements in "Traffic Signal Control Equipment Specifications," issued by the State of California, Department of Transportation, and to the addendums thereto current at the time of project advertising.

Attention is directed to "Sign Structures" of these special provisions.

The sign assembly shall be installed on the sign structure. The controller cabinet foundation shall be constructed as shown on the plans for Model 334 cabinets (including furnishing and installing anchor bolts), the controller cabinet shall be installed on the foundation, and the field wiring connections shall be made to the terminal blocks in the sign assembly and in the controller cabinet.

Field conductors No. 12 and smaller shall terminate with spade terminals. Field conductors No. 10 and larger shall terminate in spade or ring terminals.

A listing of field conductor terminations, in each State-furnished changeable message sign and controller cabinet, will be furnished free of charge to the Contractor at the site of the work.

The location of the foundation for each controller cabinet will be determined by the Engineer.

State forces will maintain the sign assemblies. The Contractor's responsibility shall be limited to conformance with the provisions in Section 6-1.02, "State-Furnished Materials," of the Standard Specifications.

ENGINEER'S ESTIMATE

08-334844

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
101	209801	MAINTENANCE VEHICLE PULLOUT	EA	32		
102	220101	FINISHING ROADWAY	LS	LUMP SUM	LUMP SUM	
103	250101	CLASS 1 AGGREGATE SUBBASE	M3	90 400		
104	260201	CLASS 2 AGGREGATE BASE	M3	72 800		
105	260210	AGGREGATE BASE (APPROACH SLAB)	M3	87		
106	280000	LEAN CONCRETE BASE	M3	24 600		
107	290201	ASPHALT TREATED PERMEABLE BASE	M3	550		
108	374002	ASPHALTIC EMULSION (FOG SEAL COAT)	TONN	11		
109	031953	ASPHALT CONCRETE (TYPE A, BOND BREAKER)	TONN	1280		
110	390103	ASPHALT CONCRETE (TYPE B)	TONN	400		
111	390153	ASPHALT CONCRETE (TYPE A)	TONN	203 000		
112	390165	ASPHALT CONCRETE (OPEN GRADED)	TONN	25 300		
113	394002	PLACE ASPHALT CONCRETE (MISCELLANEOUS AREA)	M2	23 300		
114	031954	PLACE ASPHALT CONCRETE DIKE (TYPE A, C, E, F)	M	16 800		
115	397001	ASPHALTIC EMULSION (PAINT BINDER)	TONN	700		
116	401000	CONCRETE PAVEMENT	M3	39 900		
117	401066	CONCRETE PAVEMENT (RAMP TERMINI)	M3	2420		
118	401108	REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)	M3	1200		
119	404092	SEAL PAVEMENT JOINT	M	50 000		
120	404094	SEAL LONGITUDINAL ISOLATION JOINT	M	7800		

ENGINEER'S ESTIMATE

08-334844

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
341 (S)	031971	RAMP METERING SYSTEM (LOCATION 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14)	LS	LUMP SUM	LUMP SUM	
342 (S)	031972	MODIFY SIGNAL AND LIGHTING (LOCATION 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12)	LS	LUMP SUM	LUMP SUM	
343 (S)	861504	MODIFY LIGHTING AND SIGN ILLUMINATION	LS	LUMP SUM	LUMP SUM	
344 (S)	031973	MODIFY COMMUNICATION HUB ASSEMBLY	LS	LUMP SUM	LUMP SUM	
345 (S)	031974	MODIFY TRAFFIC MANAGEMENT CENTER	LS	LUMP SUM	LUMP SUM	
346 (S)	869075	SYSTEM TESTING AND DOCUMENTATION	LS	LUMP SUM	LUMP SUM	
347	031982	MOBILIZATION	LS	LUMP SUM	LUMP SUM	
348 (S)	032132	ENVIRONMENTAL RESTORATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____