STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MANUAL CHANGE TRANSMITTAL

NO. 03-2

TITLE: Department of Transportation
Construction Manual

APPROVED BY:
Robert Pieplow
Chief, Division of Construction

DATE ISSUED:
December 31, 2003

SUBJECT AREA
Construction Manual Sections on Buy America Requirements, Communication between resident engineers and the Federal Highway Administration on state administered projects and Character of Workers

ISSUING UNIT
Division of Construction

SUPERSEDES
CPD 02-1, CPB 03-3, and CPB 03-6

DISTRIBUTION
All Manual Holders

The purpose of this manual change transmittal is to provide updates and corrections to the 2001 edition of the Caltrans *Construction Manual*. Please update your manual in accordance with the table below. The relevant pages are indicated in the table.

Section(s)	Remove Old Page(s)	Insert New/Revised Page(s)
Update: Table of Contents, is replaced with a revised section.	No page numbering	TOC.1 thru TOC.4
Update: Chapter 3, Section 512, "Character of Workers," is replaced with a revised section.	3-5.5 thru 3-5.9	3-5.5 thru 3-5.9
Update: Golden Rod, Chapter 3, Section 6, "Control of Materials"	3-6.i	3-6.i
Update: Chapter 3, Section 605, "Certificates of Compliance," is replaced with a revised section.	3-6.1 thru 3-6.4	3-6.1 thru 3-6.4
Update: Chapter 3, Section 708, and 709 are replaced with revised sections.	3-7.9 thru 3-7.10	3-7.9 thru 3-7.10

Section(s)	Remove Old Page(s)	Insert New/Revised Page(s)
Update: Golden Rod, Chapter 5, Section 0, “Conduct of the Work”	5-0.i	5-0.i
Update: Chapter 5, Section 006, “Maintenance Reviews,” web link is removed. New: Chapter 5, Section 007, “Federal Highway Administration Involvement in Contract Administration.”	5-0.7	5-0.7 thru 5-0.10
Update: Golden Rod, Chapter 5, Section 3, “Contract Change Orders”	5-3.i thru 5-3.ii	5-3.i thru 5-3.ii
Update: Chapter 5, Section 308, “Federal Requirements,” is replaced with a revised section.	5-3.19 thru 5-3.24	5-3.19 thru 5-3.24
Update: Chapter 5, Section 311A. “Division of Construction Approval,” 3rd paragraph is revised.	5-3.25 thru 5-3.28	5-3.25 thru 5-3.28
Correction: Chapter 5, Section 501, “General,” web link is corrected.	5-5.1 thru 5-5.2	5-5.1 thru 5-5.2
Index	I-1 thru I-15	I-1 thru I-15

CONSTRUCTION MANUAL

TABLE OF CONTENTS

Chapter-Section

CONSTRUCTION MANUAL

TABLE OF CONTENTS

Chapter-Section

CONSTRUCTION MANUAL

TABLE OF CONTENTS

Chapter-Section

CONSTRUCTION MANUAL

TABLE OF CONTENTS

Chapter-Section

3-511C Procedure

For the contractor to recover damages for a differing site condition claim, the following things must be done:

- Before the bid, the contractor must investigate the site and carefully examine the following items:

  1. Plans
  2. Specifications
  3. "Materials information"
  4. Log of test borings
  5. Other records of geotechnical data (cores and other physical data) obtained by Caltrans' investigation of subsurface conditions
  6. Other records of data to the extent they were available to the contractor.

This investigation is required by Section 2-1.03, "Examination of Plans, Specifications, Contract, and Site of Work," of the *Standard Specifications*.

- The conditions encountered must either be materially different from those represented by the bid documents, other records of data available to the contractors prior to bid, and a site investigation, or be materially different from those normally encountered or inherent in the industry.
- Before disturbing the conditions, the contractor must provide to the resident engineer written notice of them.
- The resident engineer must then investigate the conditions and determine if they differ materially and cause an increase or decrease in the cost or time to do the work.

The resident engineer must remain alert to the possibility that a differing site condition may result in a credit to the state. If such a condition is encountered, the resident engineer must promptly notify the contractor in writing.

The specifications for differing site conditions do not apply to those situations covered in the *Standard Specifications* under Section 8-1.09, "Right of Way Delay", Section 8-1.10, "Utilities and Non-Highway Facilities", or Section 19-1.04, "Removal and Disposal of Man-Made Objects."

Differing site conditions are not considered "changes in character" because the conditions do not result from ordered changes. However, determine and give compensation or credit due to differing site conditions in the same manner as you would for changes in character. For how compensation is made for changes in character and for a sample contract change order, see Section 5-3, "Contract Change Orders," of this manual.

3-512 Character of Workers

3-512 Character of Workers

Section 5-1.12, "Character of Workers," of the *Standard Specifications*, covers the issue of character of workers. In addition, Caltrans policy calls for a work environment with zero tolerance for violence, threats, harassment, and intimidation. This policy also applies to any subcontractor or employee of a contractor in their dealings with Caltrans personnel. Caltrans may discharge a worker from the project for engaging in any of the above mentioned activities.

Discuss the decision to remove a worker with the worker's supervisor prior to issuing the directive. The contractor may request reinstatement of the worker. If requested, the resident engineer's supervisor conducts a meeting with the resident engineer, the contractor's authorized representative, and, at the contractor's discretion, the affected worker. The reason for removal and the contractor's request for reinstatement are discussed at the meeting.

None of these procedures affects the authority of the resident engineer to direct the removal of a worker from the project.

3-513 Final Inspection

3-513 Final Inspection

As a project's completion approaches, the resident engineer must schedule appropriate reviews with maintenance, traffic, and safety personnel.

To resolve any potential problems on interstate projects, request a field engineer from the Federal Highway Administration to review the project before the day of final inspection. Your objective is to prevent last-minute delays in contract acceptance.

According to Section 5-1.13, "Final Inspection," of the *Standard Specifications*, the engineer must do a final observation of the contract work during the final inspection. The district director or an engineer from the district construction, such as the district construction deputy director, construction engineer, structure construction engineer, or resident engineer, must make the final inspection.

Maintain a record of the final inspection in the resident engineer's daily report. The record should state something along the following lines:

> "I made a final inspection of the project today and determined that all contract work has been completed."
>
> *Or,*
>
> "(Name) made the final inspection today and concurred that all contract work has been completed."

Time the final inspection so that the recommendation for contract acceptance will not be delayed pending the inspection. Before the final inspection, give the contractor a written list of items needing attention.

3-513A Work for Other Agencies or Owners

When any work performed under the contract is for other agencies or owners, as a courtesy ask for the concurrence of these entities in the acceptability of the work. Include the concurrence of others such as local agencies, other state agencies, utility companies, and school districts.

Also ask for concurrence from another party or agency if it finances a state highway project or a portion of the project. The district must arrange a joint field inspection with the owner or agency. In writing and in advance (usually 30 days), notify the owner or agency when the facility will be ready for final inspection. Time the inspection so that concurrence for acceptance is available at the time of recommending to the director the acceptance of the contract or relief from responsibility for maintenance. However, do not withhold recommendations for acceptance or relief merely because an outside agency will not concur.

The letter notifying the owner or agency of readiness for inspection should include the following:

- A reference to the agreement.
- A statement that the inspection is to determine whether work is in compliance with plans, the agreement, or both.
- The date of the inspection.
- A request that when an inspection reveals no deficiencies, the agency's authorized representative responsible for performing the inspection will confirm in writing that the agency agrees to accept the work.
- A statement that failure by the agency to inspect or confirm acceptance in writing will be deemed acceptance of the work as constructed.

If the size or complexity of the work warrants such an action, an agency representative and the resident engineer should make a preliminary joint inspection to correct minor deficiencies before the final inspection described above.

The resident engineer must record in writing preliminary and final joint field inspections, noting what actions were necessary to complete the work to the satisfaction of the agency representative. If the agency representative is satisfied with the completeness but declines concurrence in writing, record this situation.

3-514 Cost Reduction Incentive

3-514 Cost Reduction Incentive

Caltrans encourages contractors to develop and implement innovative approaches to construction projects. When new approaches result in construction cost savings, Caltrans and the contractor may share the savings in construction cost. Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications*, specifies the method and procedure for sharing construction cost savings. A contractor's proposal made in accordance with Section 5-1.14 is called a cost reduction proposal.

The special provisions may allow for the contractor and engineer to organize and participate in a "value analysis" workshop. The workshop's purpose is to identify value-enhancing opportunities that would reduce the total project cost, time of construction, or traffic congestion. Items identified in the workshop could be developed into cost reduction proposals.

Section 5-1.14 applies only to the actual cost of construction. Savings in construction engineering, maintenance, operations, safety, and traffic services, among other items, are not eligible for sharing with the contractor.

3-514A Procedure

Handle cost reduction proposals as follows:

- After discussing the merits of a potential cost reduction proposal with the resident engineer, the contractor may submit a written proposal for approval. The initial written proposal may be preliminary in nature, but for Caltrans to evaluate the anticipated cost savings or other value enhancement, the proposal must provide enough of the information required by Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications*. Thus, the proposal must include information regarding the following:

  1. Any construction effects related to staging, right-of-way, or environment
  2. Any required permits or permit modifications
  3. Maintenance or enhancement of essential functions or characteristics of the project such as service life, reliability, economy of operation, ease of maintenance, desired appearance, conformity to design, safety and other applicable standards, and the time within which the engineer must make a decision on the proposal.

- With assistance from the resident engineer, the construction engineer must coordinate Caltrans' evaluation of the written proposal by the date requested by the contractor.

- Consider the following factors in determining whether or not a proposal is acceptable. (Do not include any cost benefit resulting from these factors in the actual computation of net savings in construction costs.)

  1. Any engineering, environmental, legal or administrative considerations making the proposal impractical or unacceptable.
  2. The relationship of net savings to the cost of evaluating and implementing the proposal
  3. Any total benefit to the public including construction savings or reduced engineering costs
  4. Improved operations
  5. Reduced maintenance
  6. Improved safety and traffic service or other values that clearly favor the proposal

- Compute a cost reduction proposal's net savings due to the changed work in accordance with the methods detailed in Section 4-1.03C, "Changes in Character of Work," of the *Standard Specifications*. The net savings must result from the difference in the actual cost of doing the work in accordance with the contract plans and specifications as originally planned and the actual cost of doing the work based on designs, methods, labor, equipment and materials as changed by the proposal. In determining the net savings, exclude from consideration the contractor's engineering and other costs incurred in preparing the proposal. Also exclude Caltrans' cost of evaluating the proposal, including any portion of this effort for which the contractor paid.

- If the submitted proposal appears acceptable, but Caltrans' anticipated engineering costs are high, the contractor must stipulate in writing a willingness to share such costs before the proposal will be evaluated further. This willingness must be stipulated whether or not the proposal is ultimately adopted. Such a letter from the contractor provides the district with the authority to deduct engineering costs from progress payments. To record Caltrans engineering costs, proceed as follows:

  1. For the phase 3 expenditure authorization, establish a subjob number. Establish this number regardless of the proposal's subsequent approval or rejection. Charge all time spent evaluating the proposal to the subjob number.

  2. To provide the means of segregating costs, the district must immediately prepare and submit for master file the subjob number. After executing the change order for the cost reduction proposal, do not charge construction engineering to the subjob number.

  3. In conformance with Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications*, you may deduct from progress payments a portion of Caltrans' engineering costs for evaluating the cost reduction proposal. Use the following method to determine the deduction. If Caltrans' engineering costs (A) exceed Caltrans' share (B) of the total computed net savings, deduct the difference (A minus B) from progress payments. Inform the contractor of the reason for any deductions.

- If the submitted proposal provides for a substantial benefit to the public but no net savings, the engineer may still proceed with issuing a contract change order based on public benefit. However, the contract change order would not be written as a contract change order for a cost reduction proposal but as an engineer-requested contract change order.

- If the district construction deputy director (or if applicable, the Division of Construction contract reviewer) determines that a preliminary written proposal is acceptable, the contractor may submit a complete proposal. The proposal must contain all information required by Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications.* This information must be in sufficient detail to enable a final review and approval. The information provided should answer all questions that arose from Caltrans' review of the preliminary proposal. It must also include applicable calculations, revised plans, and revised specifications. To resolve issues, the contractor and the resident engineer may need to have additional meetings and discussions. Before forwarding the proposal for final review by the appropriate units, ensure the proposal is complete.

- In accordance with Section 5-1.14, "Cost Reduction Incentive," of the *Standard Specifications*, prepare a contract change order to authorize the cost reduction proposal. For guidance in preparing a contract change order for a cost reduction proposal, see Section 5-313, "Cost Reduction Proposal," in this manual. Carefully consider the contract change order's clauses covering payment to the contractor. In the contract change order, resolve all compensation and other issues related to the proposal. Before starting the authorized work, the contractor must execute and the engineer must approve the contract change order.

Section 6 Control of Materials

Section 6 Control of Materials

Section 6
Control of
Materials

3-601 General

3-601
General

The service life of a properly designed highway depends on the construction method and quality of materials used in the highway's construction. The resident engineer must ensure that materials used in the work comply with specifications. This section presents some general guidelines for ensuring that specifications are met. More specific instructions are covered in Chapter 6-2, "Acceptance of Manufactured Material and Sampling Methods," of the *Construction Manual* (manual). Section 6, "Control of Materials," of the *Standard Specifications*, describes the contractor's responsibilities regarding materials.

Caltrans' Office of Materials Engineering and Testing Services (METS) will assign inspectors for materials that require inspection during manufacture or at the source of supply. Resident engineers must obtain a properly completed Form CEM-3101, "Notice of Materials to Be Used," which lists the contractor's sources of materials and the location at which those materials can be inspected. Review this form to ensure that all expected materials are included. To check the form, use as a guide Table 6-2.1, "Inspection of Fabricated and Manufactured Materials," at the end of Section 6-2, "Acceptance of Manufactured Material and Sampling Methods." The resident engineer should forward the completed form to METS. METS will ensure the proper assignment of inspectors and notify the suppliers of the required inspections.

Do not allow any material to be incorporated into the work until the required evidence or certificate of inspection has been received and until the field inspection has been completed at the job site.

3-602 State-Furnished Materials

3-602
State-Furnished
Materials

Section 6-1.02, "State-Furnished Materials," of the *Standard Specifications* describes the conditions under which the contractor can receive state-furnished materials. The resident engineer's duties related to these materials include the following:

- Review the special provisions for materials to be furnished. For materials manufactured specifically for the project, such as signs, check with the district unit responsible for ordering them to ensure they will be available when the contractor requests.
- Obtain the contractor's written request for all state-furnished materials. Retain a copy of the request in the project file (under Category 52, "Charges to Total Contract Allotment").
- Ensure the contractor signs a receipt for the materials when they are delivered. Retain a copy of the receipt in the project file.
- If state-furnished materials are damaged or lost, deduct a sufficient amount from the contractor's monthly estimate to cover the estimated cost of repair or replacement, pending such repair or replacement.

- Ensure the return of state-furnished material that has not been used in the work.

3-603 Defective Materials

3-603 Defective Materials

Section 6-1.04, "Defective Materials," of the *Standard Specifications,* provides for the rejection and removal of material that does not meet specification requirements. Except for material that is permitted to remain in place under the specifications for "contract compliance" and "operating range", reject material represented by a test result not meeting the specified requirement. See Section 3-508, "Removal of Rejected and Unauthorized Work," of this manual for guidelines on removal of rejected and unauthorized work.

3-604 Trade Names and Alternatives

3-604 Trade Names and Alternatives

When trade names are used to designate required products, the contractor may furnish other products that are of equal or better quality. Consult with the responsible unit (the design unit, traffic unit, or METS, among others) in making decisions about the acceptability of substitutes.

3-605 Certificates of Compliance

3-605 Certificates of Compliance

For a discussion about certificates of compliance, refer to the subsections entitled "Materials Accepted on the Basis of a 'Certificate of Compliance'" in Section 6-2, "Acceptance of Manufactured Material and Sampling Methods" of this manual. Section 6-1.08, "Foreign Materials," of the *Standard Specification*s, includes the requirements for using foreign materials. A certificate of compliance from the manufacturer (not the contractor) showing compliance with Buy America requirements must accompany all steel and iron products incorporated into a federal aid project. The resident engineer must ensure receipt of the required certificates of compliance and mill test reports.

3-605A Buy America Requirements

The Buy America requirements contained within the United States Code of Federal Regulations, Title 23, Section 635.410 (23CFR635.410) apply to all federal aid projects. Federal aid projects contain special provisions that cover these requirements. Buy America requirements apply to all foreign steel, iron materials, and manufactured iron regardless of the percentage they comprise in a manufactured product or the form they may take. A discussion of the Buy America requirements should be included in preconstruction conferences for federal aid projects.

The contractor must furnish and install only domestic steel and iron materials in federal aid projects, in conformance with the provisions of 23CFR635.410. To be considered a domestic material, all manufacturing processes must take place domestically. Manufacturing begins with the initial melting and mixing and continues through the bending and coating stages. If a domestic product is taken out of the United States for any process, it becomes a foreign source of material. The manufacturing process for steel and iron products is considered complete when the product is ready for use in items such as fencing, posts and girders. It could also be considered complete if the material could be incorporated as components of a more complex product through a further manufacturing process, as is the case for a traffic signal head. The final assembly process does not need to be accomplished domestically so long as the steel or iron component is only installed and no manufacturing process is performed on the steel or iron component.

3-605A(1) Resident Engineer Approval of Minimum Use Requirements

Buy America requiements do not apply to a minimal use of iron and steel materials incorporated in the work provided that all foreign source items do not exceed one tenth of 1 percent (0.1 percent) of the total contract cost or $2,500, whichever is greater. Before incorporating any foreign steel materials into the work, the contractor must submit documentation of the quantity and value of any foreign steel to the resident engineer. Review the documentation to determine if it supports the minimum use rule before allowing the material to be incorporated into the project. If the minimum use rule applies, approve the exception in writing. This applies as a one-time total exemption for each contract, not for each purchase. File the documentation, exceptions, and a running total of the value of foreign iron and steel allowed under the minimal use allowance under Category 41, "Report of Inspection of Materials." Foreign steel materials that exceed the minimal Buy America requirements cannot be designated as non-participating and therefore require a waiver. (See Section 3-605A(2)).

3-605A(2) Federal Highway Administration Approval of Waivers

Caltrans does not have the authority to waive the use of foreign steel and iron in federal aid projects without FHWA approval. The California FHWA Division administrator may grant waivers only upon receiving concurrence from FHWA headquarters in Washington D.C. Approval or denial may take several months.

The contractor must submit the following information to the resident engineer when requesting a waiver to Buy America requirements:

- A detailed description of the waiver item.
- Item cost – obtained from the manufacturer or supplier.
- The country of origin for the product.
- The reason for the waiver.

The resident engineer must provide the following information when preparing a waiver request for the FHWA engineer:

- The contractor's waiver submission.
- Federal aid project number, description, and location.
- Analysis of redesigns using alternate or approved equal domestic product for the project.

FHWA approval of the waiver is required prior to allowing foreign steel or iron into the project. Allowing foreign steel or iron products into a federal aid project without an FHWA approved waiver can result in the loss of all federal funds for the project.

3-606 Out-of-State Fabrication

3-606 Out-of-State Fabrication

Sections 49, 51, 55, 56, and 75 of the *Standard Specifications* include reductions in payment for fabrication at some distance from Sacramento and Los Angeles. In addition, some special provisions may modify the amount to be deducted. Deduct the appropriate amount, applying it as an administrative deduction on estimates that include payment for the item.

3-607 Local Materials

3-607 Local Materials

Section 6-2, "Local Materials," of the *Standard Specifications*, covers the requirements for the use of local materials and the resident engineer's responsibility for testing the materials.

Section 6-2.02, "Possible Local Material Sources," of the *Standard Specifications* requires the contractor to execute certain documents when obtaining materials from property owners with whom Caltrans has arranged the use of such materials. These documents are titled "Supplemental Materials Site Agreement (1) and (2)." Samples of agreement (1) and agreement (2) follow:

Supplemental Materials Site

Agreement (1)

Contract No. _____
District _____
Date _____

TO:_____
District Director, District
, California

Dear _____,

In accordance with Section 6.2, "Local Materials," of the *Standard Specifications*, here is the agreement for using the materials source for the subject Contract, as required before removal of said materials:

WHEREAS, Contractor has entered into Contract No. ____ with the State of California, Department of Transportation, hereinafter called "Department," for the performance of _____ work on road _____, and

WHEREAS, Department has entered into an agreement dated _____,with _____for the obtaining of materials from the property described in said arrangement.

NOW THEREFORE, pursuant to the terms of said arrangement and of said Contract No. _____, Contractor hereby agrees to comply with all terms and conditions of said arrangement between the Department and said property owner and further agrees to hold said property owner harmless from all claims for injury to persons or damage to property resulting from Contractor's operations on owner's property.

DATE _____ _____
Contractor
By
Authorized Agent
Title _____

Origin.-Dist. Director
Dupl.-Contr.
Trip. -Prop. Owner
Quad. -Res. Engr.

3-707B Railroad Insurance

State highway construction occasionally requires that a contractor's operations be performed on or near a railroad's operating properties. This proximity varies from minor side encroachments to work involving the direct crossing of a railroad's tracks. Section 13, "Railroad Relations and Insurance Requirements," of the special provisions defines the relationships between Caltrans, the contractor, and the railroad.

When work must be performed on or near a railroad's operating properties, the contractor must provide insurance to ensure the financial ability to meet legal liability for damage, and to cover the losses that a railroad might sustain because of the contractor's operations.

Although contract specifications regarding railroad insurance have been standardized, occasional changes occur because of special situations. Requirements for railroad protective liability insurance vary depending on the railroad company involved. In Section 13 of the special provisions, the Engineering Services, Railroad Agreements Branch will normally issue special instructions for irregular situations.

3-707B (1) Insurance Approvals

Deliver all railroad insurance policies and copies provided to cover the prime contractor in accordance with Section 13 of the special provisions. Allow a minimum of four weeks for the railroad's notice of approval of the insurance. In cases of emergencies, you can obtain verbal release and authority to start work after the railroad has received all the documents.

3-707B (2) Responsibility

The resident engineer must ensure the specified insurance is in force at all times when work is being performed that requires such insurance.

Prohibit work that involves encroachment on railroad property, either by a prime contractor or a subcontractor, until the following conditions have been met:

- The railroad or the Engineering Services, Railroad Agreements Branch, has advised the resident engineer that the contractor, subcontractor, or both, have furnished the specified insurance.
- The resident engineer has a copy of the certificate of insurance.

3-707B (3) Insurance Renewal

Approximately four weeks before the expiration date of an insurance certificate furnished by either a contractor or subcontractor, the resident engineer must notify the contractor, by letter, of the expiration date. If work is to continue on railroad property, request the contractor to obtain renewal insurance. At that time, determine whether work on the railroad property has been completed.

Renewals may be accomplished by endorsing the extension of existing certificates or by issuing new certificates.

Allow sufficient time for railroad approval after the submission of a new railroad protective policy.

3-708 Disposal of Material Outside the Highway Right-of-Way

Do not allow the contractor to dispose of material outside the right-of-way until the contractor has met all the requirements in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the *Standard Specifications*. When these requirements have been met, give the contractor written permission for disposal sites not covered by an agreement between the property owner and Caltrans.

In the case of disposal of material on a property outside the highway right-of-way that is covered by an agreement between the property owner and Caltrans, the resident engineer must prepare the specified document to be executed by the contractor. Use agreements similar to those shown in Section 3-607, "Local Materials," of this manual, with wording modified to indicate disposal sites.

Approval of the disposal of materials outside the highway right-of-way guards against disposal that would harm the highway or cause environmental damage, disposal site damage, or unsightliness.

3-709 Relief From Maintenance and Responsibility

Under conditions specified in Section 7-1.15, "Relief From Maintenance and Responsibility," of the *Standard Specifications*, the contractor may be relieved from maintaining and protecting certain completed portions or sections of the work.

Caltrans policy recommends relief only for those portions of the work specifically mentioned in the specifications unless exceptions are fully justified in the request for relief.

For completed roadways, the specified length of 0.5 km is the minimum practical length of completed main roadway upon which a recommendation can be made for relief from maintenance and responsibility. However, shorter units of completed work, such as on-ramps, off-ramps, frontage roads, or approaches to undercrossings and overcrossings, may also be eligible for relief from maintenance and responsibility. Do not recommend relief from maintenance and responsibility on 0.5 km sections that contain exceptions within that length unless you provide a valid reason presented with and supporting the recommendation.

Exceptions, if any, must be defined by longitudinal sections of highway or certain specified areas. For example, it is unacceptable to recommend relief from maintenance for a total project except for the inlet ditch to the right of stations 20 to 25. It is acceptable to recommend relief for the total project except for stations 15 to 27 (the section of highway that could be affected by the uncompleted ditch to the right of stations 20 to 25).

The following describes what constitutes a "bridge or other structure of major importance":

- For purposes of relief from maintenance and responsibility, a bridge is as defined in Section 1, "Definitions and Terms," of the *Standard Specifications*. A structure will be considered a bridge if it is so identified in the plans or other portions of the contract.
- Other structures that are to be considered of major importance are culverts in excess of 2000 mm in diameter or of approximate equivalent area.
- A facility not meeting the above criteria will be considered of major importance only if its final cost exceeds 5 percent of the original total bid for contract items (including mobilization).

Conduct of the Work

See Section 5-102, “Organization of Project Documents,” of this manual for details to consider when establishing a system for handling assistant resident engineer’s reports on a specific project.

5-006 Maintenance Reviews

5-006 Maintenance Reviews

Keep maintenance superintendents and supervisors informed of the start of work and job progress for all construction projects within the superintendents’ and supervisors’ maintenance areas. Before the start of construction, send a copy of Form CEM-0101, “Resident Engineer’s Report of Assignment,” to the maintenance region manager.

Provide the maintenance superintendents and supervisors an opportunity to review the contract with the resident engineer and to conduct a joint field review of the job site within the first two weeks of construction. The intent of this field review is to accomplish the following:

- Discuss the scope of the project.
- Coordinate contingency planning for traffic management.
- Discuss Caltrans’ maintenance responsibility as described in Section 3-704E, “Highway Maintenance,” of this manual.
- Discuss complex construction activities that could affect adjacent maintenance operations.
- Discuss features requiring special attention.
- Discuss manufacturers’ warranties and service instructions.
- Schedule regular reviews. When the contract work is 50 percent complete schedule at least one review, unless both construction and maintenance representatives agree the review is unnecessary.

When the project nears 90 percent completion, invite the maintenance superintendent, supervisor, or both for a final field review of the project. Ensure this review includes identifying all items necessary to comply with the construction National Pollutant Discharge Elimination System permit, Section A, “Storm Water Pollution Prevention Plan,” Subsection 7, “Stabilization.” A copy of the permit can be obtained from the State Water Resources Control Board via the following web address:

http://www.swrcb.ca.gov/stormwtr/docs/finalconstpermit120602.pdf

The resident engineer should work closely with the district maintenance personnel to make minor field adjustments to the project. The project manager must approve any amendments to the contract plans or specifications that significantly affect project cost, scope, or schedule.

When the work nears completion and just before contract acceptance, the resident engineer must notify the maintenance superintendent or supervisor to facilitate the transfer of maintenance and responsibility from the contractor to Caltrans forces.

5-007 Federal Highway Administration Involvement in Contract Administration

Federally funded projects are classified as either nonexempt or exempt to indicate the Federal Highway Administration (FHWA) oversight requirements as stated in the stewardship agreement between FHWA and Caltrans. The stewardship agreement between FHWA and Caltrans can be found by visiting the budgets website:

http://onramp/hq/budgets/library.htm

Caltrans assigns project numbers to federally funded projects, and upon FHWA classification, adds a suffix "N" or "E" to the project number. Nonexempt projects (suffix "N") are subject to full FHWA oversight requirements. Exempt projects (suffix "E") are exempt from full FHWA oversight requirements.

Caltrans has been delegated oversight approval authority for all federally funded projects except those activities not covered by Title 23 of the United States Code (National Environmental Policy Act [NEPA], right-of-way, and civil rights among other activities). Consequently, there are several issues or events that require the resident engineer to seek FHWA approval or request FHWA involvement in a project.

Nonexempt (suffix "N") projects are subject to full FHWA oversight requirements, so early and frequent communication with the FHWA engineer is essential to ensure full compliance with all federal requirements. Exempt (suffix "E") projects are exempt from full FHWA oversight requirements. Resident engineers are not formally required to communicate with the FHWA engineer except for a few instances. Informal discussions for technical guidance are encouraged.

5-007A Events invoking Federal Highway Administration Involvement on Nonexempt projects

There are several events during the construction phase of an "N" project that may make FHWA involvement necessary. The resident engineer should meet with their FHWA engineer immediately following award of the contract to determine when FHWA involvement, if any, is necessary. The FHWA engineer is contacted sufficiently in advance of any project event deemed necessary to allow their participation. In all other cases, contact the FHWA engineer as soon as practical to ensure federal concurrence and participation.

Events invoking FHWA involvement may include:

- Preconstruction conferences.
- Partnering workshops.
- Value analysis studies.
- Notices of potential claim (NOPC):
    1. Submission and updates to the list of NOPCs to the NOPC log to FHWA engineer.
    2. Resident engineer's determination of NOPC merit.
    3. Notice of potential claim resolution.
    4. Updates to items 1 through 3 above.

- Dispute review boards:
  1. Formation.
  2. Meeting invitations.
  3. Recommendation of dispute review board.
  4. Copies of Caltrans and contractor acceptance or rejection of DRB recommendations.
- Proposed final estimate: Submit a copy of the final acceptance checklist to FHWA engineer (see Example 5-0.1 at the end of this section) with a copy of the proposed final estimate.
- Claims:
  1. Exceptions to the proposed final estimate payments.
  2. FHWA agreement to amount of settlement.
- Director days.
- Boards of review:
  1. Meetings.
  2. Recommendations.
- District Director Determinations.
- Arbitration - Division of Construction coordinators will be responsible for keeping the FHWA area engineer informed of:
  1. Filings.
  2. Hearings.
  3. Settlements.
  4. Decisions.
- Other major milestones, events, or occurrences as deemed necessary by the resident engineer and the FHWA engineer.

Example 5-0.1 Final Acceptance Checklist for Federal-Aid "N" Projects

FHWA
FINAL ACCEPTANCE CHECKLIST
FOR FEDERAL-AID "N" PROJECTS

Project Information:

EA No. _____ Federal-aid No. _____
Project Description: _____
District/County/Route/KP: _____
Date Awarded: _____ Approval Date: _____
Time Started: _____ Work Started: _____
Contract Days: _____ Final No. Working Days:_____
Original Completion Date: _____ State Acceptance Date: _____
Liquidated Damages (No. of days and total $ amount): _____

Submittals:

	Submitted?	Date:
Material Certification (CM 6-1.1)	Yes/No – N/A	_____
Form FHWA-47M	Yes/No – N/A	_____
Proposed Final Estimate	Yes/No – N/A	_____
Last Statement of Working Days	Yes/No – N/A	_____
Contractor's Written Statement Of Claims (Submitted Separately)	Yes/No – N/A	_____
List of contract change orders (Approved and Pending) (Participating/Non-Participating)	Yes/No – N/A	_____
List of Time Extensions (FHWA Approved/Not Approved)	Yes/No – N/A	_____
Form CEM-2402 (F) Final Report Utilization of DBE	Yes/No – N/A	_____
Mitigation Monitoring Reporting Record (If available, status of environmental commitments if not completed)	Yes/No – N/A	_____

Additional Information:

Labor Compliance Problems: _____
_____
Any other changes: _____
_____

(Original – Project File cc – FHWA – with Proposed Final Estimate)

Section 3 Contract Change Orders

5-307C (2) Project Management

For contract change orders with the following conditions, obtain concurrence from the project manager:

- Potential for significant delays to the planned work.
- Unanticipated large project cost increases, including those requiring a request for additional funds.
- Changes that may be considered outside the scope or intent of the planned work.

The project manager's duties relating to contract change orders include the following:

- Monitoring project costs.
- Expediting decisions by functional units as needed, so as not to delay or otherwise adversely affect the contractor's operations.

5-307C (3) Structures

Where changes are to be made that involve structures, the Office of Structure Construction determines the need for the change, the intent or content of the change order, and any methods or restrictions in doing the work. The resident engineer is responsible for administration, including processing for approval of the contract change order. The structure construction engineer and personnel in Engineering Services may need to concur. For procedures for obtaining concurrence for structure contract change orders, see Section 7-00, "Contract Change Orders," of the *Bridge Construction Records and Procedures Manual*.

5-307C (4) Materials

The district materials engineer, as well as the project engineer, must concur with all contract change orders that change or modify material specifications. Also, seek concurrence from the district materials engineer for proposed changes in structural section, slope rates, installation of subsurface drains, removal of unsuitable material, erosion control, and repair of slides and slipouts.

5-307C (5) Traffic

Obtain concurrence from the appropriate traffic engineer in the district for contract change orders affecting traffic management plans, hours of work, detours, signing, highway lighting, traffic signals, illuminated signs, guardrail, barriers, delineation, or any other traffic control device or facility. Clear any proposed special sign with the district traffic design engineer.

5-307C (6) Maintenance

Obtain concurrence from the appropriate maintenance region manager or engineer for changes affecting maintenance facilities, lands and buildings, and maintenance operations. Concurrence from the appropriate maintenance manager or engineer is required for all contract change orders affecting the use of maintenance funds.

5-307C (7) Right-of-Way

Obtain concurrence from the district right-of-way unit for any changes to right-of-way contracts or agreements, right-of-way fencing or alignment, or gates.

Contact the district right-of-way unit for assistance with any required rights-of-entry permits, easements, or agreements.

The district utility coordinator must concur with all changes involving utility work. The district utility coordinator must also make proposed revisions to Form RW 13-14, "Notice to Owner." For information about coordinating utility work, see Section 3-809, "Utility and Non-Highway Facilities," of this manual.

5-307C (8) Environmental

For environmental concerns and requirements, see Chapter 7, "Environmental," of this manual. Contact the district environmental unit for assistance and concurrence with any change affecting environmental considerations or requirements or affecting obligations or commitments to other agencies.

The environmental document on any project is valid only for the work described by the document and shown on the plans submitted for environmental approval. For any work proposed in addition to or as a deviation from the approved work, consult with the district environmental unit. Significant changes may require amended or additional environmental approval or permits. The types of changes that may require additional consultation and approval include the following:

- New materials sites
- New haul or access roads
- Previously unidentified clearing and grubbing and hazardous materials
- Increases in earthwork
- Utility relocation
- Diversion or extraction of water from a stream not covered by a Lake/Streambed Alteration Agreement, more commonly known as a "1601 permit," with the Department of Fish and Game
- Disposal sites
- Revision to allowable work windows

5-307C (9) Locally Funded Projects

For guidelines for processing contract change orders on locally funded projects, see Section 5-310, "Locally Funded State Highway Projects, " later in this section.

5-308 Federal Highway Administration Contract Change Order Requirements

5-308 Federal Highway Administration Contract Change Order Requirements

5-308A Nonexempt Projects

Nonexempt (suffix "N") projects are subject to full FHWA oversight requirements. Early and frequent communication with the FHWA engineer is essential to ensure full compliance with all federal requirements.

5-308A(1) Federal Highway Administration Approval Requirements– Major Contract Change Orders

Major contract change orders require FHWA approval. The resident engineer must obtain approval before proceeding with a proposed change. The resident engineer may obtain same-day verbal approval by telephone upon furnishing the FHWA engineer with the information they request. Following the verbal approval, the FHWA engineer sends the written approval electronically (e-mail, fax, or both). The district sends a copy of the contract change order and contract change order memorandum to the FHWA engineer upon approval of the contract change order.

Written and signed FHWA approval is required for any of the following major contract change orders:

- Contract change order that would increase the cost greater than $200,000.
- Contract change order that would increase the cost of anticipated supplemental work item listed in the detail estimate greater than $200,000.
- Supplemental contract change orders above the $200,000 threshold.
- Changes in specifications (with the exception of lane requirements and hours of work charts).
- Changes in method of payment.
- Changes in material processing.
- Changes in type or quantity of materials furnished (with the exception of minor building materials).

  Example:

  The contract change order changes the individual aggregate base to an asphalt concrete material.
- Changes in proprietary or sole source materials for which specific or blanket approval has not been previously given.
- Waivers to the Buy America requirements, above the minimal amount that is allowed in Section 3-605, “Certificates of Compliance,” of the *Construction Manual* and the project special provisions.
- Cost Reduction Proposal.
- Experimental Work Plan.

- Changes to federal environmental requirements such as:

  1. Environmental mitigation. See Mitigation Monitoring Reporting Record, if available.

  2. Permit conditions.

  3. Agreements with federal resource agencies.

     Example:

     Revising sound walls – height, length, location, adding auxiliary lanes, and disturbing a site on or eligible for National Register of Historic Places

- Introduction of new social, environmental, or economic issues that need to be addressed under applicable federal laws
- Changes to, or requiring of, mandatory disposal or borrow sites, Public Interest Finding and National Environmental Policy Act (NEPA) clearance may be needed.
- Expansion of project limits beyond the limits set in the environmental document.
- Form of payment (not just a contract change order) to a contractor resulting from a claim, board of review, exception to proposed final estimate, district director determination or arbitration.
- Supplemental contract change orders to all of the above.
- Change resulting in a contract time extension of 20 or more working days. Additionally, if time is extended by more than 20% of the original contract working days, then that change and each subsequent contract change order to extend time.

5-308A(2) Federal Highway Administration Approval Requirements– Minor Contract Change Orders

Contract change orders other than those listed above are considered minor. Although approval may be granted retroactively, minor contract change orders require written and signed FHWA approval. These approvals occur during FHWA construction reviews, or occur with final approval of the project by FHWA.

5-308B Exempt Projects

Exempt (suffix "E") projects are exempt from full FHWA oversight requirements, so resident engineers are not formally required to communicate with the FHWA engineer except for a few instances. Informal discussions for technical guidance are encouraged.

5-308B(1) Federal Highway Administration Involvement Requirements– Major Contract Change Orders

There are several events that may make FHWA involvement necessary. The FHWA engineer is contacted sufficiently in advance of the project event deemed necessary to allow their participation. In all other cases, contact the FHWA engineer as soon as practical to ensure federal concurrence and participation.

FHWA involvement is required for any of the following major contract change orders:

- Changes to federal environmental requirements:

  1. Environmental Mitigation. See Mitigation Monitoring Reporting Record, if available.

2. Permit conditions.

3. Agreements with federal resource agencies.

   Example:

   Revising sound walls – height, length, location, adding auxiliary lanes, and disturbing a site on or eligible for the National Register of Historic Places.

- Introduction of new social, environmental or economic issues that need to be addressed under applicable federal laws.
- Changes for mandatory disposal or borrow sites – Public Interest Finding and NEPA clearance may be needed.
- Waivers to the Buy America requirements, above the minimal amount that is allowed in Section 3-605, "Certificates of Compliance," of the *Construction Manual* and the project special provisions.
- Project limits expanding beyond the limits set in the environmental document.

5-308C All Federally Funded Projects

For each case listed in section 5-308A(1) and 5-308B(1), the resident engineer contacts the Federal Highway Administration engineer and provides documents as necessary. In addition to the major and minor contract change orders listed above for "N" and "E" projects, there are several other issues or events that may invoke the involvement of the FHWA. See Section 5-007 "Federal Highway Administration Involvement in Contract Administration."

5-309 Fund Segregation Determination

5-309 Fund Segregation Determination

Funds for a project may come from more than one source, such as from state highway funds, local funds, and federal funds. For a contract change order, the resident engineer must segregate funds between the different fund sources. For more information on project funding, see Section 5-2, "Funds," of this manual. Show the proper distribution of contract change order funding on Form CEM-4903, "Contract Change Order Memorandum."

Each contract change order may have an effect upon each source of funds provided for a particular project. Segregation of these funds is only necessary if the funds differ from the pro-rata share as indicated in the federal detail estimate. If the contract change order funding is the same as that indicated in the detail estimate, simply mark the appropriate box on Form CEM-4903.

A contract change order may not be eligible for participation from one or more of the funding sources, depending upon the location and the work to be performed.

For example, a contract change order written for a project funded from both federal and other sources may not be eligible for federal participation. In this case, the cost of the contract change order must be distributed between the other funding sources. In the box in the lower right-hand corner of Form CEM-4903, show the percent of participation by each funding source.

At the beginning of the project, the resident engineer should receive the federal detail estimate with an estimate for each category of funds and the applicable limits of eligibility. If not, contact the project manager. In some cases the FHWA transportation engineer has a color-coded plan title sheet for more complex multiple-funded projects.

5-310 Locally Funded State Highway Projects

Generally, participation will be based on Caltrans' original agreement with the contributing agency.

Before making changes that affect work for contributing agencies, ensure that such changes are within the scope of the agreement. If not, take action (usually through the district local projects unit) to have the agreement modified.

In the margin of the headquarters and district copies of contract change orders covering the work, obtain the signature of an authorized representative of the affected agency.

Include in the contract change order memorandum sufficient information to identify the portion of the work that is applicable to the contributing agency. As soon as the contract change order and memorandum is approved, send the Division of Accounting Services, Accounts Receivable and Program Accounting section a copy.

5-311 Contract Change Order Approval

Caltrans must approve a contract change order, and whenever possible, the contractor should sign it. When the contractor signs a contract change order, it is referred to as "executed." If the contractor refuses to sign the contract change order, then Caltrans may approve it "unilaterally."

So that the contractor will execute the contract change order, make every effort possible to reach agreement. However, do not delay the work by waiting for the contractor to respond. If necessary, submit the contract change order for unilateral approval. Receipt by the contractor of an approved contract change order establishes a time for protest. If the contract change order is not protested within the specified time, it is considered an executed contract change order. Refer to Section 4-1.03A, "Procedure and Protest," of the *Standard Specifications* and Section 3-403, "Changes," in this manual.

You may routinely submit for approval without the contractor's signature any supplemental contract change orders written solely to increase force account funds. However, should the extent or type of work covered in the supplemental contract change order differ from that included in the original, submit the supplemental contract change order to the contractor for acceptance.

On sensitive or complex contract change orders, districts are encouraged to submit draft contract change orders to the Division of Construction for review and recommendation before preparing the final contract change order. In following this practice, however, discuss the work with the contractor in the usual manner.

5-311A Division of Construction Approval

The Division of Construction must approve the following types of contract change orders.

1. Any contract change order that does not provide for anticipated supplemental work that would increase the cost of the contract by more than $200,000.
2. Any contract change order that increases the cost of anticipated supplemental work listed in the detailed estimate by more than $200,000.
3. Once the $200,000 threshold is reached, each supplemental contract change order.
4. Any change in the following:

- Specifications (with the exception of "Lane Requirements and Hours of Work" charts)
- Method of payment
- Method of materials processing
- Type or quality of materials to be furnished (with the exception of minor building materials)
- Proprietary material for which specific or blanket approval has not been previously received.

5. Any change that results in a contract time extension of 20 or more working days. Additionally, if time is extended by more than 20 percent of the original contract working days, then that change and each subsequent contract change order to extend time.

Nonexempt projects (suffix "N") are subject to full FHWA oversight requirements. Major contract change orders require FHWA approval before commencing the work authorized by the contract change order. Refer to Section 5-308A(1) "Federal Highway Administration Approval Requirements – Major Contract Change Orders," in this manual. FHWA approval is required before requesting Division of Construction approval.

For a contract change order requiring Division of Construction approval, the Division of Construction will authorize the district to issue and approve the contract change order. Copies of contract change orders transmitted to headquarters for district authority to issue and approve must bear the resident engineer's signature, and the properly authorized person in the district must sign the "approval recommended" line. Follow the procedures described below under "Division of Construction Prior Authorization" and "District Prior Authorization" for prior approval of contract change orders.

5-311B District Approval

The district director may approve or delegate authority to approve contract change orders that do not fall under the requirements for Division of Construction approval.

District approval of contract change orders may not be delegated below the level of a construction engineer or senior-level resident engineer. Within this delegation, senior-level resident engineers or construction engineers may be given authority to approve contract change orders that increase the contract cost or approved supplemental work by up to $50,000.

Only the Division of Construction or district construction deputy director may approve contract change orders for cost reduction incentive proposals.

5-311C Division of Construction Prior Authorization

For those changes that require Division of Construction approval, request prior authorization from the Division of Construction. To send the information necessary to evaluate the change, use the procedure established between the district and the Division of Construction contract reviewer.

If sufficient information is included in the request for prior authorization, the Division of Construction will authorize the district to issue and approve the contract change order. Authority to issue and approve a contract change order allows the district to authorize the resident engineer to order the contractor to proceed with the work. The contract change order may then be approved in the district.

If the proposal appears to be satisfactory but more information is needed, the Division of Construction may authorize the district to proceed with the work. This allows the resident engineer to order the contractor to proceed with the work. However, follow district procedures to ensure that construction engineers are aware of and concur with the change. When the necessary information is received, the Division of Construction will authorize the district to issue and approve the contract change order.

If the proposed work seems inappropriate, or the submittal lacks sufficient justification to support the proposed change, the Division of Construction will request additional information or will not authorize the change.

5-311D District Prior Authorization

Districts must establish procedures for issuing prior authorization of contract change orders. After receiving prior authorization, the resident engineer may order the contractor to proceed with the work. This order, as well as the prior authorization, must be dated and in writing. In the case of a contract change order requested by the contractor, the district must have written assurance before allowing work to proceed that the contractor will execute the contract change order.

Actively pursue preparation and final approval of contract change orders for work covered under a prior authorization. Prior authorization does not include the authority to make payments for the work.

5-312 Copy Distribution

5-312 Copy Distribution

For federal oversight (nonexempt) projects, send two copies, with all attachments, of each contract change order approved by the district to the Division of Construction contract reviewer. For all other projects, send one copy of contract change orders approved by the district to the Division of Construction contract reviewer.

5-313 Cost Reduction Proposals

5-313 Cost Reduction Proposals

For procedures for a cost reduction proposal, see Section 3-5, “Control of Work,” of this manual.

Prepare all cost reduction proposal contract change orders as a complete package, with no indeterminate or deferred time or cost considerations.

Give careful attention to the clauses in the contract change order covering payment. Cost reduction incentive change orders may involve any combination of contract item work, adjustments in compensation, and extra work at agreed price.

Contract item prices for the contract items possibly may not represent the costs of doing either the planned or changed work as computed on a force account basis. In this case, in addition to increases and decreases at contract prices, include adjustments in compensation to reflect the actual force account cost of increases and decreases in contract item quantities. Also, in the analysis of cost savings, you may have to consider adjustments based on a 25 percent overrun or underrun.

Cost reduction proposal contract change orders must include an adjustment in compensation that returns one half of the savings to the contractor. Determine the adjustment in the following manner:

- Determine the total decrease in construction cost. This decrease will be the sum of increases and decreases in contract items at contract unit prices, adjustments in compensation including change in character adjustments, and extra work at agreed price.
- Provide for an adjustment in compensation to pay the contractor one half of the total decrease.

5-314 Examples of Contract Change Orders

5-314 Examples of Contract Change Orders

The following are examples of contract change orders and contract change order memorandums. Use these "cookbook" examples and standard clauses cautiously. The examples are for guidance and general format only. For instance, the examples contain assumptions that may or may not fit actual project situations. Also, the *Standard Specifications* and special provisions in use at the time the examples were written are the basis for the example contract change orders. Do not assume that your project uses the same specifications. Base contract change orders on specifications included in the project for which the contract change order is written.

The following list provides brief descriptions of the example contract change orders and method of payment included in this section:

Example 5-2.1	Flagging and Traffic Control. Extra Work at Force Account.
Example 5-2.2	Flagging Only. Extra Work at Agreed Price.
Example 5-2.3	Resolution of a Notice of Potential Claim. Adjustment in Compensation.
Example 5-2.4	Compensation for Late Payment of Extra Work Bills. Adjustment in Compensation.
Example 5-2.5	Eliminate Portion of a Lump Sum Contract Item with a Specified "Cost Break-Down." Adjustment in Compensation. Clause for No Adjustment Due to Eliminated Work.
Example 5-2.6	Change in Specified Material. Change in Character Adjustment in Compensation.
Example 5-2.7	Additional Work. Change Material Specifications. Increase in Contract Items. Change in Character Adjustment. Extra Work at Force Account.
Example 5-2.8	Compensation for Right-of-Way Delay. Adjustment in Compensation.
Example 5-2.9	Cost Reduction Incentive. Decrease Contract Item. Adjustment in Compensation.
Example 5-2.10	Additional Work. Increase Contract Items. Clause for Final Pay Items. Extra Work at Agreed Price.
Example 5-2.11	Adjustment for Asphalt Price Fluctuation. Adjustment in Compensation.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Page 1 of 1

CONTRACT CHANGE ORDER MEMORANDUM

CEM-4903 CT# 7541-3544-0

DATE

TO			FILE E. A. CO-RTE-PM FED NO.
FROM Resident Engineer			
CCO NO. 1	SUPPLEMENT NO.	CATEGORY CODE	CONTINGENCY BALANCE (including this change): $ 230,000.00
$ 20,000 ☒ INCR ☐ DECR			HEADQUARTERS APPROVAL REQUIRED? ☐ YES ☒ NO
SUPPLEMENTAL FUNDS PROVIDED $ 20,000 for flagging and traffic control			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? ☒ YES ☐ NO

This change order provides for

Flagging and traffic control work specified in the *Standard Specifications*.

The *Standard Specifications* and *Special Provisions* specify certain work to be performed to expedite the safe and convenient passage of public traffic around and through the work. Such work is specified to be paid for as extra work. This contract change order provides for payment as extra work at force account of all such traffic-related work to be performed on this project.

This contract change order will not affect contract time and, therefore, provides for no adjustment in time of completion.

CONCURRED BY:	
CONSTRUCTION ENGINEER/BRIDGE ENGINEER	DATE
PROJECT ENGINEER	DATE
PROJECT MANAGER	DATE
FHWA REP.	DATE
ENVIRONMENTAL	DATE
OTHER (SPECIFY)	DATE
	DATE
HQ OR DISTRICT PRIOR APPROVAL BY	DATE
RESIDENT ENGINEER SIGNATURE	DATE

ESTIMATE OF COST

	THIS REQUEST	TOTAL TO DATE
ITEMS	$ 0.00	$ 0.00
FORCE ACCOUNT	$ 20,000.00	$ 20,000.00
AGREED PRICE	$ 0.00	$ 0.00
ADJUSTMENT	$ 0.00	$ 0.00
TOTAL	**$ 20,000.00**	**$ 20,000.00**

FEDERAL PARTICIPATION

☒ PARTICIPATING ☐ PARTICIPATING IN PART ☐ NONE

☐ NONPARTICIPATING (Maintenance) ☐ NONPARTICIPATING

FEDERAL SEGREGATION (If more than one funding source or P.I.P. type)

☐ CCO FUNDED PER CONTRACT ☐ CCO FUNDED AS FOLLOWS

FEDERAL FUNDING SOURCE	PERCENT

Section 5 Emergency Contract Administration

Section 5
Emergency
Contract
Administration

5-501 General

5-501
General

An emergency contract is authorized by a director's order. A director's order is a document that approves the use of special authority, delegated by state law, to set aside normal contracting procedures so that Caltrans can quickly initiate and complete emergency work sooner than can be done under normal processes. The district maintenance unit has the responsibility to obtain a director's order for emergency work. Director's orders may also be obtained to prevent the imminent threat of catastrophic damage.

The Public Contract Code, Section 1102, defines an emergency as "a sudden unexpected occurrence that poses clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services."

Currently, a district director can approve emergency contracts costing up to $117,000. For emergency work exceeding this threshold amount, the director or delegated deputy director has approval authority.

For guidelines on director's orders, go to the Caltrans Division of Maintenance Intranet site at the following address:

http://onramp.dot.ca.gov/hq/maint/imms/index.htm

Deputy Directive 26, "Use of Director's Orders," also covers director's orders.

A number of different types of emergency contracts exist. District construction division is usually involved in emergency force account contracts and emergency informal bid contracts. Emergency informal bid contracts occur once the initial disaster response is accomplished. The district design unit will prepare plans and specifications for this type of contract. For contract administration, follow the normal procedures outlined in the *Construction Manual* (manual).

This section provides guidelines to assist resident engineers in administering emergency force account contracts.

5-502 Emergency Force Account Contracts

5-502
Emergency Force
Account Contracts

When time is of the essence to reopen a roadway or facility, or the need to prevent imminent failure exists, a "no-bid" (sole-source) emergency contract is allowed when covered by a director's order. The Office of Procurement and Contracts of the Division of Administrative Services typically prepares and executes these service contracts. The resident engineer becomes the contract manager on a force account contract once work begins.

Form ADM-0366, "Confirmation of Verbal Agreement Other than for Equipment Rental," is the document that allows the contractor to begin work with verbal approval, and the form obligates the contractor to enter into a service contract with Caltrans.

When using the form, which is limited to the highest level of emergency, the work should begin within a day. For written prior approval, the emergency work should begin within a few days of written approval. Do not permit the contractor to begin work until the proper approvals have been obtained.

5-503 Specifications

5-503 Specifications

In the description portion of Form ADM-0366, "Confirmation of Verbal Agreement Other Than for Equipment Rental," add the following:

- A brief description of the work and estimated total cost.
- The location and limits of the work.
- The business enterprise participation goals, if required.
- The statement: "All work will be paid for in accordance with Section 9-1.03, "Force Account Payment," of the Caltrans *Standard Specifications* dated (year) as amended by the attached provisions."

For the current provisions for force account emergency contracts, see the end of this section.

5-504 Selection of Resident Engineer and Support Staff

5-504 Selection of Resident Engineer and Support Staff

The construction engineer must establish adequate staffing levels to ensure control of work, testing, and documentation and to ensure current contract files and fund expenditures. To put an individual in responsible charge at the site, the construction engineer must also expeditiously assign a resident engineer.

When structure work is necessary, use personnel from the Office of Structure Construction.

5-505 Contractor Selection and Notification

5-505 Contractor Selection and Notification

District construction should appoint a construction engineer as "contractor selection coordinator." The district maintenance unit, contractor selection coordinator, and the construction engineer should coordinate their efforts to select a contractor for an emergency contract. The unit that selects, contacts, and notifies the contractor varies in each district. Generally, Caltrans prefers that district construction handle these duties because these divisions are most aware of local contractors' varying capabilities. The Division of Maintenance maintains a registry of contractors available for emergency contracts.

When selecting a contractor for an emergency contract, consider factors such as the following:

- Availability of resources
- Mobilization response time
- Proven management abilities
- Current contractor's license
- Corporate cooperation

Some local contractors can be as responsive and effective as a larger firm, so for quick emergency response, if the smaller firm is available and selecting that firm would prevent delaying other ongoing Caltrans work, consider the smaller firm.

Index

A

B

Index

C

D

E

F

Index

G

Index

H

I

J

L

M

N

O

P

Q

R

S

T

U

V

W