Section 3  Contract Change Orders

5-301  General
A contract change order is a legally binding document used to make changes to the contract. Form CEM-4900, “Contract Change Order,” is used for contract change orders. Form CEM-4903, “Contract Change Order Memorandum,” must be prepared for each contract change order. This section describes the use of forms CEM-4900 and CEM-4903, describes Caltrans policies for contract change orders, and provides guidelines for writing contract change orders and memorandums.

5-302  Contract Change Order Policy
The authority for Caltrans to make changes to a contract is located in Section 3-403, “Changes” of the Construction Manual (manual). Work that is outside the scope of an existing contract should be done in a separate contract. However, in special situations it may be added to an existing contract if:

- A director’s order has been approved for the new work in accordance with Deputy Directive 26, dated May 1, 1999,
- The Division of Construction chief concurs with adding new work to the existing contract by co-signing the director’s order,
- On all federal-aid projects, the FHWA engineer approves the change as outlined in Section 5-308, “Federal Highway Administration Contract Change Order Requirements,” of this manual,
- On locally funded state highway projects, the contributing agency agrees to the change as outlined in Section 5-310, “Locally Funded State Highway Projects,” of the manual and
- The contractor agrees to the contract change.

District construction personnel should consider the following in determining if the proposed change is within the scope of the original contract. Answering “yes” to any of the following questions indicates that the new work may be outside the scope of the original contract:

- Is the type of work for the proposed change significantly different from other types of work within the original contract?
- Is it necessary for the prime contractor or subcontractors to mobilize specialized forces and equipment to perform the work of the proposed change?
- Will the estimated cost of the proposed work, when combined with all other contract changes, be outside the approved contract allotment?
- Does the proposed change represent a significant deletion to the original contract?
- Does the proposed change significantly delay completion of the contract when compared to the number of original contract working days?
• Is the proposed change outside the original contract limits?

• Can the project be completed as contemplated at the time of bid without the proposed change?

Answering the previous questions assists in determining if a proposal is within the scope of the existing contract. However, a complete analysis of all the facts and circumstances surrounding the proposed change or new work is required to make a final determination. When district construction is uncertain if the new work is within the scope of the original contract, the district construction deputy director must consult the appropriate Division of Construction field coordinator for determination.

When new work resulting from the director’s order may be accomplished best by adding to an existing contract, the district submits a request to the Division of Construction chief to co-sign the order. After the director’s order is approved, district personnel may process a change order incorporating the new work, in accordance with the procedures described in Section 5-311, “Contract Change Order Approval,” of this manual.

5-302A Contract Change Order Payment
When writing a contract change order, the resident engineer often can choose the payment method for added or changed work. However, Caltrans has a policy of preference for the payment method. Always attempt to use the most preferred method. The following lists, in order of preference, the payment methods:

• Contract items at contract unit prices
• Contract items at contract prices with an adjustment in compensation
• Extra work at agreed unit price or lump sum
• Extra work at force account

When a contract item is changed in character, the resident engineer may delete the entire contract item, or the portion of it affected by the change, and pay for the entire work as extra work. A much better choice, though, is to determine a correct and equitable adjustment in compensation to the contract item unit price. An adjustment in compensation providing for increased or decreased costs due to the change in character allows the contract price to remain unchanged. Before resorting to force account payment, resident engineers must make every effort to make adjustments in compensation or negotiate agreed prices.

See Section 3-902, “Payment Methods,” of this manual for methods of payment. Section 3-904, “Payment for Extra Work,” describes how the various methods of payment are used in contract change orders.

5-303 Purpose of Contract Change Orders
Use contract change orders to change any part of the original contract. In addition, contract change orders are used for administrative and other purposes. The following are some of the reasons for writing contract change orders:

• To change contract plans, specifications, or both.
• To describe the work and method of payment for work stipulated in the contract to be paid as extra work.
• To authorize an increase in extra work funds necessary to complete a previously authorized change.
• To make adjustments in compensation.
• To implement a cost reduction proposal or a construction evaluated research proposal. See Section 3-5, “Control of Work,” of this manual for a discussion of cost reduction proposals and Section 3-4, “Scope of Work,” of this manual for a discussion of construction evaluated research.
• To clarify terms of the contract.
• To resolve disputes, potential claims, exceptions during the contract, after the proposed final estimate, and to pay for contract claim determinations. For the use of contract change orders in the dispute resolution process, see Section 5-4, “Disputes,” of this manual.

5-304 Initiation of Contract Change Orders
The resident engineer usually determines the need for and initiates a contract change order. However, the contractor, other Caltrans units, or outside agencies or individuals may request changes. Other Caltrans units requesting a contract change order must clearly document the need for the change. They must provide information sufficient to demonstrate that the requested change meets Caltrans policy for making changes to the contract. For all changes requested by any person except the contractor, indicate “Change Requested by Engineer” on Form CEM-4900, “Contract Change Order.”

5-305 Preliminary Considerations
When preparing to write a contract change order, consider the following:
• Is the proposed contract change order necessary to complete the work as contemplated at the time the plans and specifications were approved?
• What is the overall impact on the planned work?
• Are there sufficient unobligated contingency funds? If additional funds are required, can they be obtained soon enough to prevent delays? See Section 5-2, “Funds,” of this manual for the procedure for obtaining additional funds.
• Will the contract time be affected?
• What are the impacts of extending contract time?
• When a project is nearing completion, give careful consideration to the effect the change will have on the time of completion. Changes near the end of a contract are more apt to extend the time of completion than changes made earlier. Late changes may adversely affect the contractor’s schedule, delay public use of the facility, and disrupt the planned use of Caltrans personnel.
• If the adjustment of time of completion is deferred, how will the adjustment be determined?
• Will the proposed contract change order affect or change the contractor’s planned method of performing the work?
• Is the proposed work already covered in the contract?
• Will the ordered change cause a change in character of the work?
• If an adjustment in compensation resulting from a change in character of the work is deferred, how will the adjustment be determined?
• Is timely coordination with other affected Caltrans units possible? Does the proposed change adhere to existing permit conditions, environmental mitigation requirements, local agency and utility obligations, and right-of-way agreements? Does the proposed change require new coordination, permits, or agreements?

• Will the contractor cooperate in providing timely cost estimates for the extra work at the agreed price and cost information for adjustments in compensation? Should you make your own cost estimates and determinations first and present them to the contractor?

• What methods of payment should be used?

To avoid misunderstanding and obtain full agreement, discuss with the contractor all elements of a change, including the method of compensation and the effect on time. Failure to identify elements requiring consideration may lead to protest.

5-306 Contract Change Order Content

The contract change order must be clear, concise, and explicit. When appropriate, it must include the following:

- What is to be done
- Location and limits of proposed work
- Any applicable specification changes and references to specifications
- The proposed contract change order’s effect on time of completion
- Method and amount of compensation

5-306A Specifications

The specifications for contract item work already included in the contract will apply to added contract item work. You do not need to repeat or reference specifications for added work that is clearly shown to be contract item work.

In the contract change order, completely describe extra work. Include directly or by reference the specifications for extra work, whether paid for at agreed price or at force account. The contractor must complete this extra work exactly as it is specified in the contract change order.

Included in the contract will be some work specifically designated as extra work. For an example of this situation, see Section 12-2.01, “Flaggers,” and Section 12-2.02, “Flagging Costs,” of the Standard Specifications.

The contractor normally chooses the method of performing extra work, subject to the resident engineer’s approval for labor, equipment, and materials for force account work. If, for any reason, the engineer wants to control the method of performing the work, the method must be specified in the contract change order.

5-306B Description of Work

The contract change order must clearly describe added work or other changes to the contract. Include appropriate references to special provisions, contract plans, Standard Plans, or Standard Specifications. Decide if a written statement clearly defines the proposed change or if plans or drawings need to be included.

On plans attached to a contract change order, show pertinent dimensions and the scale or label the plans “not to scale.” Plainly mark reduced reproductions “Reduced Plans, Scales Reduced Accordingly.” When using existing plan sheets, clearly show
the difference between new work, work already included in the contract, and changed or eliminated work. A simple sketch on a letter-sized sheet will more clearly depict the change than an obscure revision to an existing sheet of the original plans. An 8.5” x 11” attachment is always preferable to a full-size contract plan sheet.

Section 6735, “Preparation of Plans and Other Documents,” of the Business and Professions Code, requires that a registered civil engineer signs and stamps or seals all civil engineering plans and specifications. Plans or specifications attached to a proposed contract change order must meet this requirement. A registered civil engineer does not need to sign revisions already covered by Standard Plans, Standard Specifications, standard special provisions, previously engineered drawings, or minor changes not requiring calculations or determinations by a registered engineer.

Show the Caltrans contract number, sheet number, and contract change order number on plans or other documents made a part of a contract change order. Include all attachments to each distributed copy of a contract change order.

5-306C Methods of Payment
This section provides guidelines for using the various methods of payment in contract change orders.

5-306C (1) Increases and Decreases in Contract Items at Contract Prices
Changes in planned work or adding or decreasing work will often result in increases or decreases in contract item quantities. Except for contract items designated in the engineer’s estimate as final pay quantities, show changes in contract item quantities as estimates on a contract change order. Calculate the estimated increases or decreases that will result from the work as changed by the contract change order. The actual quantity paid for each contract item will be determined by the method specified for measuring each contract item quantity. For guidelines on measuring contract item quantities, see Section 3-9, “Measurement and Payment” of this manual.

Show changes in the quantity of contract items that are designated as final pay quantities as fixed amounts added to the quantity shown in the engineer’s estimate. Calculate the increase or decrease in the final pay quantity by the method specified in Section 9-1.015 of the Standard Specifications. For a standard clause for revised final pay quantities, see “Contract Change Order Standard Clauses” later in this section.

For the method of indicating changes in contract item quantities, refer to “Contract Change Order Format” later in this section and see the example contract change orders, Example 5-3.7, Example 5-3.9, and Example 5-3.10, at the end of this section.

5-306C (2) ExtraWork
For the definition of extra work and guidelines for using extra work in contract change orders, see Section 3-4, “Scope of Work,” of this manual. Before designating additional work as extra work, ensure that it cannot be paid for as a contract item, a combination of contract items, or a contract item with an adjustment in compensation.

5-306C (2a) Extra work at agreed prices
For guidelines for determining and paying for extra work at agreed price, see Section 3-9, “Measurement and Payment” of this manual.

File with the contract records any calculations made to determine extra work at agreed price. These calculations are subject to audit and must be in such a form that they clearly substantiate and justify the amount paid for extra work. In lieu of showing all the calculations necessary to substantiate extra work at agreed price in the change order memorandum, you can include a statement that such calculations are on file in the project records.
When a subcontractor is to perform extra work paid for by agreed price, include the subcontractor markup in the agreed price calculations. For subcontractor markup guidelines, see Section 3-9, “Measurement and Payment,” of this manual.

Agreed prices may be unit prices or lump sum. Before an agreed price may be used to pay for extra work, the resident engineer and the contractor must agree on compensation. The contractor must execute the contract change order providing for extra work at agreed price.

After the extent of extra work has been determined, request the contractor to submit a proposed agreed price. Analyze the contractor’s proposed price using the force account method. You may also initially determine a proposed agreed price based on a force account analysis and present it to the contractor. When you have reached an agreement, process the contract change order and retain in the project files the records fully justifying the agreed price.

Ensure that payments of agreed lump sum prices do not exceed the amount authorized on the change order. Agreed unit prices can be applied to an estimated number of units in the contract change order. Although the unit price remains fixed, the number of units paid for may vary from the estimated number.

When extra work consists entirely of work that neither the contractor nor any of the subcontractors would normally perform, the work is considered “specialty work,” and the contractor may obtain three bids for the extra work. Determine the agreed price by taking the lowest bid and adding the markup, as described in Section 9-1.03B, “Work Performed by Special Forces or Other Special Services,” of the Standard Specifications. When this method is used, ensure that the work is accurately and completely described when bids are solicited. The same description of the work must be used in the contract change order. If the contractor or a subcontractor includes a bid along with independent firms, you must make an analysis using the force account method. The contractor’s or subcontractor’s bid will be acceptable only if the analysis can justify it.

For examples of contract change orders with extra work at agreed price, see Example 5-3.2 and Example 5-3.10 at the end of this section.

5-306C (2b) Extra work at force account
Pay for extra work at force account under the following conditions:

- When the work cannot be estimated within reasonable limits of accuracy.
- When the resident engineer and the contractor are unable to agree on a unit or lump sum price for the work.

For guidelines for paying for extra work at force account, see Section 3-9, “Measurement and Payment,” of this manual. For examples of contract change orders with extra work paid for on a force account basis, see Example 5-3.1 and Example 5-3.7 at the end of this section.

5-306C (3) Adjustment in Compensation
For definitions of adjustments in compensation, see Section 3-9 of this manual. Section 3-4, “Scope of Work,” of this manual discusses adjustments in compensation for increased or decreased quantities and for changes in character of work.

Adjustments in compensation usually involve estimating the cost of work or determining the actual cost of work performed. The following explains how to estimate or determine such costs.
Verify the contractor’s records of item cost by comparing labor and equipment charged to the item by the contractor to the labor and equipment shown on the daily reports. Charge equipment to the item cost in accordance with the force account method. Exclude down time, and apply the correct force account rental rates. Exclude any overhead costs and any items that should be charged to other work.

Sometimes a contractor may submit cost estimates based on the billing from a specialist plus a markup. When the work is of such a nature that it would qualify under Section 9-1.03B, “Work Performed by Special Forces or Other Special Services,” of the Standard Specifications, you may calculate the adjustment on this basis. Ensure the specialist rate or billing is in line with the firm’s usual charges.

For contract item overrun and underrun adjustments, when the contractor does not furnish sufficient and timely cost information, issue a unilaterally approved contract change order adjusting the item. Base the adjustment on your cost determination. This approved contract change order establishes the time allowed for protest and helps avoid problems and delays after contract completion.

Even though the contractor may have agreed to pay a fixed price to others for an element of work, you can still use a force account based adjustment of the item price. You must use a force account cost determination even when the work is subcontracted unless the element of work was performed by special forces, as defined in Section 9-1.03B, “Work Performed by Special Forces or Other Special Services,” of the Standard Specifications.

For large and complex adjustments, request auditing assistance from the Division of Accounting Services through the Division of Construction.

5-306C (3a) Adjustments for increased or decreased quantities
As soon as it is known that a contract item quantity will vary from the engineer’s estimate by more than 25 percent, consider the method of adjustment that will be used. Make daily reports for the item with the same degree of detail used in force account daily reports. Doing so will facilitate determining any necessary adjustment. When required, make adjustments in compensation for increased or decreased quantities as soon as the contractor completes work on a contract item.

You may calculate adjustments by analyzing the performance of a portion of an item, provided the portion is typical of the item as a whole.

You may verify a contractor’s records by comparing them with Caltrans records. Where more extensive auditing is required, request the assistance of the Division of Accounting Services. When examining the contractor’s records to determine the cost of equipment used, consider only the hours worked. Force account equipment rental rates must be used regardless of what rate the contractor may have used. When verifying contractor’s records, eliminate supervision and overhead costs and any items of costs properly chargeable to other work.

When making adjustments, use Caltrans records to determine the amounts of labor, equipment, and materials. The verified contractor’s records may supplement the Caltrans records, or in some instances, you may need to use only the verified contractor’s records. The resident engineer must use good judgement when reconciling differences between the contractor’s and the engineer’s records to arrive at a reasonable and equitable adjustment.
An item that has been adjusted under the provisions of Section 4-1.03C, “Changes in Character of Work,” of the Standard Specifications, may later become eligible for further adjustment under Section 4-1.03B, “Increased or Decreased Quantities,” of the Standard Specifications.” In making the quantity adjustment, deduct or add payments made in making the change in character adjustment to determine the contractor’s total cost of the work.

5-306C (3b) Adjustment calculations involving asphalt concrete dikes and miscellaneous areas

The contract item “asphalt concrete dike” is paid for by the tonne of asphalt concrete and by the meter for asphalt concrete dike. The contract item “asphalt concrete (miscellaneous areas)” is paid for by the tonne of asphalt concrete and by the square meter for asphalt concrete (miscellaneous areas). The specifications do not exactly separate the work covered under each contract item. This lack of separation causes a problem when it is necessary to adjust either the asphalt concrete dike contract item or the asphalt concrete (miscellaneous areas) contract item.

Although a change in character is not actually involved, the procedure is considered the most equitable to compute the adjustment somewhat in conformance with change in character methods.

The following is the recommended procedure to determine the proper costs for computing adjustments of asphalt concrete dike and asphalt concrete (miscellaneous areas):

• Subtract the estimated normal haul and laydown unit cost for asphalt concrete used in paving from the contract unit price to determine the cost of producing asphalt concrete. For commercial plants, you may use published price lists to determine the cost of producing asphalt concrete.

• To obtain the total cost of producing asphalt concrete used in dikes or miscellaneous areas, multiply the actual mass of asphalt concrete used for dikes or miscellaneous areas by the unit cost of asphalt concrete as determined above.

• To obtain the total force account cost of dikes or miscellaneous areas, add to the total cost of producing asphalt concrete the total force account haul and placing costs for asphalt concrete used in dikes or miscellaneous areas.

• Calculate the force account unit cost of the dike or miscellaneous area item and proceed as with any contract item increase or decrease adjustment.

To some extent, this procedure constitutes an adjustment in the asphalt concrete item as well as in the placing item. However, this statement is true only for the asphalt concrete used on that portion of the dike or miscellaneous areas in excess of 125 percent of the engineer’s estimate. Also, an overrun or underrun in asphalt concrete dike or asphalt concrete (miscellaneous areas) will usually have little effect on the overall quantity of asphalt concrete.

5-306C (3c) Deferred contract item adjustments:

If adjustment was deferred on the original contract change order, you may write a supplemental contract change order to resolve the adjustment.

To simply indicate an item adjustment will not be made, you do not need to write a supplemental contract change order. In this case, a letter from the contractor is sufficient. File a copy of the contractor’s letter with the original contract change order that deferred the adjustment.
Upon completion of the changed work, promptly resolve all deferred item adjustments.

5-306C (3d) Exemption from adjustment:
Unless requested in writing by the contractor, do not adjust a contract item when the total pay quantity is less than 75 percent of the engineer’s estimate. You also do not need to adjust (unless requested in writing by the contractor) if the value based on the contract price for the units of work in excess of 125 percent is less than an amount shown in Section 4-1.03B(1), “Increases of More Than 25 percent,” of the Standard Specifications. As soon as a final contract item quantity is known, decide whether to make the adjustment. Unless an obvious imbalance exists between the contract unit price and actual cost, do not make the adjustment. Inform the contractor in writing whether or not Caltrans will adjust the contract item price.

5-306C (3e) Adjustments for changes in character of work:
Section 3-403, “Changes in Character of Work,” of this manual defines changes in character of work.

Adjustments in compensation for changes in character may be unit or lump sum adjustments. A lump sum adjustment is normally only applied to a lump sum contract item.

A change in character adjustment may require a force account determination of the cost of an entire item as changed and a force account estimate of the cost of the work as planned.

When the changed portion of the work can be separated from the unchanged portion, only a force account determination of the cost of the changed portion is necessary. You can make payment at the contract price plus a separate payment for the added work or credit for any deleted work. When added work is clearly separable from the planned item work, pay for it as a lump sum or unit adjustment in compensation. You may also pay clearly separable added work as extra work at agreed price or force account. For work deleted from the original item work, make an adjustment in compensation (credit) for the deleted portion.

Do not eliminate a contract item and pay for the work at agreed price or force account unless the change is so extensive that the original item no longer applies. If at all possible, never change a contract bid price. Instead, make an adjustment to the contract bid price.

Changes in character always result from an approved contract change order. At times, it will not be possible to come to an immediate agreement with the contractor regarding adjustment of compensation. You may need to complete the entire item before costs can be determined. In such cases, provide for payment at contract prices, and defer adjustment in the initial contract change order. Include an appropriate deferment clause.

5-306D Adjustments to Time of Completion
For a discussion of time of completion and extensions of contract time, see Section 3-805, “Time of Completion,” of this manual.

A contract change order may specify a positive, negative, or zero adjustment to time of completion.
Whenever you can estimate an adjustment in contract time with reasonable accuracy, try to reach agreement with the contractor. Enter the amount of the adjustment on the change order (including zero adjustments). Regardless of the amount of time actually required, the agreed adjustment becomes binding on both parties. File with the contract records the calculations and other data used to determine adjustments of contract time.

If you cannot determine or agree on an adjustment of contract time in the initial contract change order, you may defer the adjustment. When doing so, write “deferred” on the time adjustment line and include a time adjustment deferred clause in the contract change order.

As soon as the contract change order work is completed, determine the appropriate contract time adjustment. If you cannot reach agreement with the contractor, issue a unilaterally approved supplemental contract change order adjusting contract time.

On contracts with internal time limits or multiple time limits, ensure any contract change order that includes a time extension contains a statement that identifies the time limit(s) to which the extension applies. If an internal milestone date will change, but total contract time remains unaffected, specify the new date in the contract change order and indicate a zero time adjustment.

Periodically during the progress of the contract change order work, resolve extensive deferred time extensions. Do so by issuing a supplemental contract change order covering time allowable to a given date, with the deferment continued for subsequent work. Your objective is to resolve deferred time extensions as soon possible. By doing so, the contractor can better schedule remaining work so as to complete the project within the contract time limits.

The resident engineer may not unilaterally decrease contract time unless this is permitted by the contract specifications. Otherwise, the contractor must agree to changes that reduce contract time. Without this agreement, you can do one of two things:

1. Do not recommend approval of the change if no benefit exists for Caltrans.
2. If substantial benefits exist for Caltrans, issue a unilaterally approved contract change order with no adjustment in contract time.

5-306E Contract Change Order Standard Clauses
The following are examples of standard clauses for specific situations found in various types of contract change orders. Note that any items in brackets are not part of the clause, but are instructions to you in using the clause. In using any of these clauses, ensure that the clause states what is appropriate for your contract change order.

Situation 1: Adjustment Deferred for Increase in Quantities in Excess of 125 Percent of the engineer’s estimate

Standard Clause for Situation 1:

Any adjustment due in accordance with Section 4-1.03B(1), “Increases of More Than 25 Percent”, of the Standard Specifications for contract item(s) No. _______ is deferred.
Situation 2: Adjustment for Increase in Quantities in Excess of 125 Percent of the Engineer’s Estimate

Standard Clause for Situation 2:
Adjustment in compensation in accordance with Section 4-1.03B(1), “Increases of More Than 25 Percent,” of the Standard Specifications:
The following adjustment(s) will be made for units of work in excess of 125 percent of the engineer’s estimate:
[List the contract item(s), unit adjustments, quantities, and total item adjustment(s).]
Or [for a single contract item]:
In accordance with Section 4-1.03B(1), “Increases of More Than 25 Percent,” of the Standard Specifications, the adjustment of the contract unit price for the quantity in excess of 125 percent of the engineer’s estimate for contract item No. _____ [item description] will be $____ per _____ increase [or decrease].
[When you know the total pay quantity, you may apply the unit adjustment to a fixed quantity for an exact total adjustment. When the total pay quantity has not yet been determined, you may apply the unit adjustment to an estimated quantity for an estimated total adjustment.]

Situation 3: Adjustment Deferred for Decrease of More Than 25 Percent

Standard Clause Situation 3:
Any adjustment due in accordance with Section 4-1.03B(2), “Decreases of More Than 25 Percent,” of the Standard Specifications for contract item(s) No. _____, [item title] is deferred.
Situation 4: Adjustment for Decrease of More Than 25 Percent

Standard Clause for Situation 4:

Adjustment in accordance with Section 4-1.03B(2), “Decreases of More Than 25 Percent,” of the Standard Specifications:

The following adjustments will be made for contract items that underran the engineer’s estimate by more than 25 percent:

Or [for a single contract item]

In accordance with Section 4-1.03B(2), “Decreases of More Than 25 percent,” of the Standard Specifications, the adjustment of the contract unit price for contract item No. _____ (item description) will be $_____ increase.

[Normally, in the case of an underrun, you must know the total pay quantity before determining the adjustment. It is usually more convenient to show the adjustment as a lump sum amount because of the specified limit of 75 percent of the engineer’s estimate for total compensation.]

Situation 5: No Adjustment due to Increases or Decreases of More Than 25 Percent of the engineer’s estimate

Standard Clause Situation 5:

No adjustment(s) to the contract unit price of item(s), No.____ [item title], will be made in accordance with Section 4-1.03B(1), “Increases of More Than 25 Percent,” of the Standard Specifications. [Or for decreases, use Section 4-1.03B(2), “Decrease of More Than 25 Percent,” of the Standard Specifications.]

Or [When waiving adjustments for both increases and decreases]

There will be no adjustment for items No. _____ and No. _____ [item titles] in accordance with Section 4-1.03B, “Increased or Decreased Quantities,” of the Standard Specifications by reason of this contract change order.

[The contractor must be in agreement and execute the contract change order before adjustment in compensation for increased or decreased quantities is waived.]

Situation 6: Adjustment Deferred Due to Possible Change in Character

Standard Clause for Situation 6:

Any adjustment due in the contract unit price(s) of item(s) No. ___, [item title] in accordance with the provisions in Section 4-1.03C, “Change in Character of Work,” of the Standard Specifications, is deferred.
Situation 7a: Eliminated Item, Adjustment Deferred

Standard Clause for Situation 7a:
Any adjustment due in accordance with Section 4-1.03B(3), “Eliminated Items,” of the Standard Specifications of contract item No._____ will be deferred until all incurred or unavoidable costs can be determined.

Situation 7b: Eliminated Item, Adjustment Determined

Standard Clause for Situation 7b:
In accordance with Section 4-1.03B(3), “Eliminated Items,” of the Standard Specifications, the adjustment due to the elimination of item(s) No. _____, [item title] is zero. [Or replace zero with whatever costs the contractor has incurred.]

Situation 8: Revised Final Pay Item Quantities

Standard Clause for Situation 8:
The quantity increase shown herein for item No. ____ , [item title] when combined with the quantity shown in the engineer’s estimate, and as modified by any previous change orders or revisions to dimensions made by the engineer, shall be the final quantity for which payment will be made.

Situation 9: Extra Work or Adjustment in Compensation at Agreed Unit Price

Standard Clause for Situation 9:
For this work, the contractor shall receive and accept $ __ per [unit] of [pipe, fence, among other items]. This sum constitutes full and complete compensation for furnishing all labor, material, equipment, tools, and incidentals including all markups by reason of this change.
Situation 10: Extra Work or Adjustment in Compensation at Agreed Lump Sum Price

Standard Clause for Situation 10:

For this work, the contractor will be paid the sum of $ ___. This sum constitutes full and complete compensation, including all markups for this change.

Or

For this work, the contractor shall receive and accept the agreed lump sum of $ ___. This sum constitutes full and complete compensation for providing all labor, material, equipment, tools and incidentals, including all markups by reason of this change.

Or

For this reduction, the contractor agrees to [or will] credit [or pay] the state a lump sum of $ ___. This sum constitutes full and complete compensation, including all markups for this change.

Or

The state will accept a lump sum payment of $ ___ as full compensation for this change.

Or

The contractor shall credit the state $ ___ for each [unit] of item(s) No. ____ [item title]. This sum constitutes full and complete compensation for this change.

Or

There shall be no cost or credit to the state by reason of this change.

Situation 11: Time Adjustment

Standard Clause for Situation 11:

Consideration of a time adjustment will be deferred until completion of the work specified in this contract change order. A determination of a time extension will be made in accordance with Section 8-1.07, “Liquidated Damages,” of the Standard Specifications.

Or

A determination of the delay in completion of the contract due to the work specified by contract change order No. ____ has been made in accordance with the provisions of Section 8-1.07, “Liquidated Damages,” of the Standard Specifications. [Add either of the following sentences to this clause]

Contract change order No. ____ was the controlling item of work for the following dates: [list dates—mm/dd/yy].

The contractor shall be granted [number] working days for the following dates: [list dates—mm/dd/yy].

Or

A determination of the delay in completion of the contract due to work specified by contract change order No. ____ for work performed from [mm/dd/yy] to [mm/dd/yy] [or on mm/dd/yy] has been made. Consideration of time extension for the remaining work continues to be deferred.
Situation 12: Deferred Adjustment for Right-of-Way Delay

**Standard Clause for Situation 12:**
Any adjustment in compensation due to possible delays to the work resulting from this change is deferred until completion of the work. The adjustment will be made in accordance with Section 8-1.09, “Right of Way Delays,” of

Situation 13: Adjustment in Compensation for Overhead Costs

**Standard Clause for Situation 13:**
In accordance with Section 9-1.08, “Adjustment of Overhead Costs,” of the *Standard Specifications*, compensate the contractor the total sum of $___ to cover overhead costs.

Situation 14: Claim Settlement

**Standard Clause for Situation 14:**
Payment indicated in this contract change order provides for full settlement of all claims on this contract [or the contractor’s claim No. ____.]  
Or  
Grant the contractor [number] working days, reducing the overrun in contract time by [number] calendar days, which provides for full settlement of all claims on this contract.  
Or  
This contract change order resolves notice of potential claim No. ____., dated [date].
5-306F Work Designated as Extra Work in the Specifications

The *Standard Specifications* and the special provisions describe certain work and specify that it is to be paid for as extra work. In some cases, supplemental funds are set aside to pay for this extra work. Make an independent cost estimate of the work for which the supplemental funds were provided. This estimate must be as accurate as possible.

Refer to the specific section of the specifications that identifies the extra work in the contract change order. Also, describe the exact work to be performed.

Traditionally, Contract Change Order No. 1 provides for extra work specified for public traffic and public convenience. This contract change order must be limited to the following:

- Work designated as extra work in the specifications
- Work related to the needs of public traffic or for public convenience

Refer to the example contract change order, Example 5-3.1, at the end of this section. This contract change order indicates the method for incorporating specified extra work into a contract change order. Note that the example contract change order is written as extra work at force account. You may also pay for specified extra work as extra work at agreed price if the extent of the work can be accurately determined. This approach is illustrated in the example contract change order, Example 5-3.2, which provides for payment for flaggers at an agreed unit price. Payment for flaggers at an agreed price may be written as a separate contract change order or combined with the other traffic related work paid for as extra work at force account.

5-306G Contract Change Order Format

The example contract change orders at the end of this section follow the generally accepted format for writing contract change orders. The following describes the format:

- **Describe the work or the change that will cause increases and decreases to contract item quantities.** Refer to any attached drawings or documents (sheets __ and _____ of ______). If the contract item work cannot be described separately from other work, describe the entire work at this stage. Describe work paid for by other methods in the appropriate sections of the contract change order. The intent is that the contract change order clearly specifies the work paid for by each payment method.

- **Show the increases and decreases in contract item quantities.** Include the percent of the engineer’s estimate represented by this change. Also show the accumulated change to date from the original quantity in the engineer’s estimate.

- **Write clauses for situations resulting from increases or decreases in contract item quantities (deferred adjustments or actual adjustments in compensation for overruns or underruns).**

- **Write clauses for adjustments or deferred adjustments in compensation due to any cause.** Describe the work or change causing the adjustment or deferred adjustment. Show the amounts of adjustments.

- **Describe work to be paid for as extra work at agreed price.** Show the price agreed. Agreed prices may be fixed unit prices and an estimated or actual number of units, or agreed prices may be fixed lump sums.

- **Describe the work to be paid for as extra work at force account.** Show the estimated cost of the extra work.

- **Write time deferment or time extension clauses.**
5-307  Contract Change Order Memorandum

Include with all contract change orders sufficient documentation to explain what the change does and why it is needed. For this purpose, use Form CEM-4903, “Contract Change Order Memorandum,” with any necessary attachments. The memorandum is intended for interdepartmental use only. Do not send the memorandum to the contractor.

The memorandum must be sufficiently complete to enable a person unfamiliar with the details of the project to review the contract change order and determine the justification for the work, the reasonableness of the compensation, and the time extension provisions.

5-307A Contents of the Memorandum

Include the following in the memorandum:

• State what the contract change order provides. Supplemental contract change orders should also include a description of the original contract change order.

• Explain why the change is needed. When another Caltrans unit requests a change, the correspondence requesting the change should also justify the need for the change. Attach supporting letters to the memorandum.

• State why a particular method of payment was chosen. Include a complete cost analysis, or state that the cost analysis is on file with the project records. The statement should include the method used in making the cost analysis.

• Explain why the ordered change causes any change in the character of the work. To substantiate why any additional compensation is due, you may need to provide a summary of events leading up to the change.

• State the extent of coordination and concurrence. If agreement with any district unit cannot be obtained, then indicate specifically what was said and why it should or should not influence a decision for approval. See Section 5-307C, “Coordination and Concurrence by Others” in this section.

• If prior approval of the change order has been obtained, state the name of the person who granted prior approval and the date.

• Show the unobligated balance of funds available to finance the contract change order. The resident engineer must ensure the available funds are not exceeded. For obtaining additional funds, see Section 5-2, “Funds,” of this manual.

• Show the total authorized funds to date, as well as the dollar amount of a supplemental contract change order.

• Indicate when funds for supplemental work shown in the detailed estimate of job cost are used in the contract change order.

• For major changes on federal “oversight” projects, indicate the name and date of discussion and concurrence, if any, by the Federal Highway Administration (FHWA) transportation engineer. For details relating to federal funding to be shown on the contract change order memorandum, see “Federal Requirements,” “Federal Funding,” and “Determining Federal Participation” in this section.

• For change orders involving participation by local agencies, identify the portion of the work that is applicable to the contributing agency.

• For a contract change order that is to be unilaterally approved, explain why the contractor will not sign it or why the contractor’s signature is not required. Attach a copy of any correspondence from the contractor regarding the contract change order.
Include justification for a contract time adjustment. Describe the method used to determine time extensions. State what operation controlled time during the delay period. Whenever possible, and when resolving a previously deferred time adjustment with a time extension, indicate the specific calendar or working days represented by the time extension. By indicating the specific days, you ensure that other time extensions do not cover the same time period.

Indicate the cumulative time extension and total number of contract change orders with unreconciled deferred time.

5-307B Contract Change Order Category Codes
The resident engineer is responsible for assigning a four-letter code to every contract change order to indicate the main reason for the change. Preferably, there should only be one issue per contract change order. For contract change orders with multiple distinct issues, assign the coding based on the one issue that has the greatest impact to the project. Assign the coding according to the reason for the change, not according to how the problem was corrected. The resident engineer should enter this code on Forms CEM-4903, “Contract Change Order Memorandum,” and CEM-4901, “Contract Change Order Input.”

The contract change order code will identify discrete pieces of information about the change:

1. The type of contract change order (first character),
2. The specification which authorizes the change, or the physical asset which is affected by the change (second character),
3. The source document that led to the need for a change (third and fourth characters), or
4. The disposition of a dispute resolution (third and fourth characters).

Administrative types of contract change orders (accelerations, and changes that are anticipated and authorized by existing administrative specifications) require only minimal coding information. Consequently, extra coding positions will be assigned a default character placeholder, the letter Z. Assign characters from left to right, as subsequent character code selection is dependent on the preceding characters.

- Character 1: Contract Change Order Type

Use the codes in Table 5-3.1, “Contract Change Order Type,” to categorize the contract change order according to its general type (for example: administrative, dispute resolution and others). Coding for dispute resolution takes precedence over coding for any other potential scenario. After selecting the first character code, use the corresponding directions on Table 5-3.1 to complete the coding for the remaining three characters.

- Character 2: Specification, or Physical Asset

Next, based on your selection for the first character code, and using the directions within Table 5-3.2, “Specification, or Physical Asset,” select the code that most accurately identifies the appropriate administrative specification, or the affected physical asset. Enter this code as the second character. In the case of a contract change order that is strictly for acceleration, with no physical change in the planned work (the first character code is a B), then the second character code is defaulted to a placeholder Z character.
• Characters 3 and 4: Source Document, or Dispute Disposition

If the contract change order is needed to bring about a plan or specification change (the first character code is C or D), use Table 5-3.3, “Source Document,” to identify the pair of character codes that together best describe the original document that created the need for the contract change order. The reason for the change may be due to:

• Constructability issues, errors, conflicts, or inconsistencies,
• The introduction of improved products, means or methods, or
• For any other reason, provided that the change will affect some physical aspect of the planned work.

If the contract change order is for a dispute resolution (first character code from Table 5-3.1 is either E, F, G, or H), use Table 5-3.4, “Dispute Disposition,” to assign the third and fourth characters. Begin by selecting the code for the third character that most closely identifies the time frame before the dispute was resolved, Table 5-3.4. The milestones for the third character are listed chronologically. For the fourth character, choose a code from Table 5-3.4 that most accurately explains how the dispute was resolved (entitlement, negotiated settlement, and arbitration award, full or partial resolution.)

If the contract change order type was administrative (first character code is either A or B), then the third and fourth character codes are defaulted to Zs.

General Examples:

Contract change orders that are strictly for constructive accelerations when there is no change to the final configuration of a planned permanent physical asset are all coded “BZZZ.” No additional coding information is necessary.

When a contract change order resolves a dispute based on contract administration, and there was no change to the planned work on some permanent physical asset:

1. The first character will be either E or G, (see Table 5-3.1.),
2. The second character represents the disputed administrative specification. Choose this character from the upper portion of Table 5-3.2,
3. The third and fourth coding characters are selected depending on when and how the dispute was resolved. Choose these characters from Table 5-3.4, “Dispute Disposition.”

When a contract change order is authorized by an administrative specification and there is no formalized dispute involved:

1. The first character will be A, (see Table 5-3.1).
2. Select the second character from the upper portion of Table 5-3.2, and
3. The third and fourth characters will both default to the placeholder letter Z. No other coding information is necessary in this particular example.

The “Contract Change Order Code Generator” is a tool that is used to categorize types of contract change orders. It is available on the Division of Construction’s Intranet web site at:

http://www.dot.ca.gov/hq/construc/cpb/CCO_Code_Generator
## Table 5-3.1: Contract Change Order Type (Character 1)

<table>
<thead>
<tr>
<th>CCO Type</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>A</td>
<td>Contract change order used to pay for work or adjustments already authorized by specifications (supplemental work, quantity adjustments, and other) (Use only the specification codes from the upper portion of Table 5-3.2 for the second character, and Zs for the third and fourth characters)</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Contract change order used to accelerate certain planned work. Describe the reason for acceleration in the transmittal memo (public convenience, staging coordination, delay mitigation, and other) (Use only Zs for subsequent code characters 2, 3, and 4)</td>
</tr>
<tr>
<td>Plan or Specification Change</td>
<td>C</td>
<td>Contract change order needed to change plans or specifications for reasons unrelated to a cost reduction incentive proposal (CRIP). (Use only the Physical Asset codes from Table 5-3.2 for the second character, and Table 3 for the third and fourth characters)</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>Contract change order needed to change plans or specifications due to a CRIP (Use only the Physical Asset codes from Table 5-3.2 for the second character, and Table 5-3.3 for the third and fourth characters)</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>Contract change order either fully or partially resolves certain notices of potential claim (NOPCs) due to some dispute over contract administration. (Use the specification codes from the upper portion of Table 5-3.2 for the second character, and Table 5-3.4 for the third and fourth characters)</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>Contract change order either fully or partially resolves certain NOPCs due to a dispute over an ordered change, which affected some physical asset. (Use either the Physical Asset codes from the lower portion of Table 5-3.2 for the second character, and Table 5-3.4 for the third and fourth characters)</td>
</tr>
<tr>
<td>Claim</td>
<td>G</td>
<td>Contract change order either fully or partially resolves certain contract claims due to some dispute over contract administration. (Use the specification codes from the upper portion of Table 5-3.2 for the second character, and Table 5-3.4 for the third and fourth characters)</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>Contract change order either fully or partially resolves certain contract claims due to a dispute over an ordered change, which affected some physical asset. (Use the Physical Asset codes from the lower portion of Table 5-3.2 for the second character, and Table 5-3.4 for the third and fourth characters)</td>
</tr>
</tbody>
</table>
Table 5-3.2: Specification, or Physical Asset (Character 2)

<table>
<thead>
<tr>
<th>Code</th>
<th>Specification (use this portion of Table 5-3.2 only when the first character code is A, E, or G)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4-1.03B(1 &amp; 2): Quantity adjustments</td>
</tr>
<tr>
<td>B</td>
<td>4-1.04: Detour repair</td>
</tr>
<tr>
<td>C</td>
<td>5-1.116: Differing site conditions</td>
</tr>
<tr>
<td>D</td>
<td>7-1.01A(5): Apprentice training</td>
</tr>
<tr>
<td>E</td>
<td>7-1.08: Public convenience</td>
</tr>
<tr>
<td>F</td>
<td>8-1.07: Miscellaneous time adjustments</td>
</tr>
<tr>
<td>G</td>
<td>8-1.09: Right-of-Way delay</td>
</tr>
<tr>
<td>H</td>
<td>8-1.10: Utility and non-highway facilities</td>
</tr>
<tr>
<td>I</td>
<td>9-1.08: Overhead cost adjustment</td>
</tr>
<tr>
<td>J</td>
<td>12-2, 12-4: Flagging and other temporary traffic control</td>
</tr>
<tr>
<td>K</td>
<td>15-2.05: Unsuitable reconstruction material</td>
</tr>
<tr>
<td>L</td>
<td>19-1.04: Buried man-made objects</td>
</tr>
<tr>
<td>M</td>
<td>19-2.02: Unsuitable earthwork material</td>
</tr>
<tr>
<td>N</td>
<td>19-2.04: Slides and slipouts</td>
</tr>
<tr>
<td>O</td>
<td>20-4.03: Planting area rock and debris removal, disposal</td>
</tr>
<tr>
<td>P</td>
<td>20-5.025, 86-1.06: Maintaining existing facilities</td>
</tr>
<tr>
<td>Q</td>
<td>SP: California Paving Asphalt Index price adjustment</td>
</tr>
<tr>
<td>R</td>
<td>SP: Dispute Review Board meetings</td>
</tr>
<tr>
<td>S</td>
<td>SP: Interest for late payments</td>
</tr>
<tr>
<td>T</td>
<td>SP: Value analysis meetings (Not CRIPs)</td>
</tr>
<tr>
<td>U</td>
<td>SP: Partnering meetings</td>
</tr>
<tr>
<td>V</td>
<td>SP: Quality control/assurance</td>
</tr>
<tr>
<td>W</td>
<td>SP: Other listed supplemental work (Describe in transmittal memo)</td>
</tr>
<tr>
<td>X</td>
<td>Other: Other (Describe the “other” specification in transmittal memo)</td>
</tr>
<tr>
<td>Z</td>
<td>Default: (Use only when the first character is B)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Physical Asset (use this portion of Table 5-3.2 only when the first character code is C, D, F, or H)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Building (maintenance facilities, pump stations, etc.)</td>
</tr>
<tr>
<td>B</td>
<td>Electrical (signals, lighting, communications, electrical systems, etc.)</td>
</tr>
<tr>
<td>C</td>
<td>Drainage (culvert, subsurface, roadway drainage, gutters, lined ditches, etc.)</td>
</tr>
<tr>
<td>D</td>
<td>Earthwork (excavation, embankment, soil stabilization, slope protection, erosion control, etc.)</td>
</tr>
<tr>
<td>E</td>
<td>Landscaping (plants, irrigation, etc.)</td>
</tr>
<tr>
<td>F</td>
<td>Materials (borrow or disposal sites, surplus, salvage, etc.)</td>
</tr>
<tr>
<td>G</td>
<td>Property (fence, survey monument, easements, Right-of-Way obligations, etc.)</td>
</tr>
<tr>
<td>H</td>
<td>Structure (vehicle or pedestrian)</td>
</tr>
<tr>
<td>I</td>
<td>Base, subbase, shoulder backing</td>
</tr>
<tr>
<td>J</td>
<td>Surfacing (pavement, pavement reinforcing, shoulders, sidewalks)</td>
</tr>
<tr>
<td>K</td>
<td>Traffic control devices (barriers, railing, signing, delineation, etc.)</td>
</tr>
<tr>
<td>L</td>
<td>Utility</td>
</tr>
<tr>
<td>M</td>
<td>Wall (retaining, sound, aesthetic, etc.)</td>
</tr>
<tr>
<td>X</td>
<td>Other (Describe the “other” affected permanent physical asset in transmittal memo)</td>
</tr>
<tr>
<td>Z</td>
<td>Default (Use only when the first character is B)</td>
</tr>
<tr>
<td>Character 3 (General)</td>
<td>Code</td>
</tr>
<tr>
<td>----------------------</td>
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</tr>
<tr>
<td>A</td>
<td>A</td>
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<td>C</td>
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</table>
Table 5-3.4: Dispute Disposition (Characters 3 and 4)

(Use Table 5-3.4 only when the first character code is E, F, G, or H, from Table 5-3.1, representing a Dispute Resolution)

<table>
<thead>
<tr>
<th>Character 3 (Time Frame)</th>
<th>Character 4 (Resolution Authority)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code</strong></td>
<td><strong>Chronological Milestone</strong></td>
</tr>
<tr>
<td>A</td>
<td>Prior to a “Differing Site Condition Management Review Committee” (DSC-MRC) hearing</td>
</tr>
<tr>
<td>B</td>
<td>Prior to a “Dispute Review Board” (DRB) hearing</td>
</tr>
<tr>
<td>C</td>
<td>Prior to the “Construction Contract Acceptance” (CCA) date</td>
</tr>
<tr>
<td>D</td>
<td>Prior to the Proposed Final Estimate (PFE) date</td>
</tr>
<tr>
<td>E</td>
<td>Prior to a “Board of Review” (BOR) hearing</td>
</tr>
<tr>
<td>F</td>
<td>Prior to an Arbitration Filing</td>
</tr>
<tr>
<td>G</td>
<td>Prior to the Arbitration Hearing</td>
</tr>
<tr>
<td>H</td>
<td>Prior to the Arbitrator’s Decision</td>
</tr>
<tr>
<td>I</td>
<td>After the Arbitrator’s Decision</td>
</tr>
</tbody>
</table>
5-307C Coordination and Concurrence by Others
Secure recommendation or concurrence from affected functional units and other agencies. Concurrence is evidence of agreement with a change in the contract and does not constitute approval of a contract change order. Process all contract change orders for approval as described in Section 5-311, “Contract Change Order Approval.”
Use procedures established in the district for circulating contract change orders for concurrence. If contacted parties are unresponsive, in the contract change order memorandum, state the facts and what was done instead to ensure the proposed change is appropriate. Obtaining concurrence is not intended to cause delay to the project.

The following lists some of the Caltrans functional units and reasons for seeking their concurrence.

5-307C (1) Project Development
The project engineer must concur with all design-related contract change orders, including plan or specification changes and cost reduction proposals. You may obtain design assistance from the project engineer on some of the more complex design changes. Remember that the project engineer is the engineer of record, and unless the project engineer is consulted the resident engineer may not know why some design decisions were made.

By coordinating with the project engineer on all design and specification contract change orders, a continuous “constructability review” process develops. Cooperation between design and construction personnel will result in better plans and specifications and fewer contract change orders. Cooperation will also reduce potential for construction delays, limit negative effects on the contractor, and lessen the potential for contract claims.

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
5-308 Federal Highway Administration Contract Change Order Requirements

5-308A Full Oversight Projects
Projects with a suffix of “N” 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 percent 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 State-Authorized Projects

Projects with a suffix of “E” are state-authorized, 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
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.

6. Any work that is outside the scope of the existing contract, refer to Section 5-302, “Contract Change Order Policy,” of the Construction Manual ( manual).

Projects with a suffix of “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

For full oversight federal 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

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

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 5-3.1** Flagging and Traffic Control. Extra Work at Force Account.
- **Example 5-3.2** Flagging Only. Extra Work at Agreed Price.
- **Example 5-3.3** Resolution of a Notice of Potential Claim. Adjustment in Compensation.
- **Example 5-3.4** Compensation for Late Payment of Extra Work Bills. Adjustment in Compensation.
- **Example 5-3.5** 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 5-3.6** Change in Specified Material. Change in Character Adjustment in Compensation.
- **Example 5-3.8** Compensation for Right-of-Way Delay. Adjustment in Compensation.
- **Example 5-3.9** Cost Reduction Incentive. Decrease Contract Item. Adjustment in Compensation.
- **Example 5-3.11** Adjustment for Asphalt Price Fluctuation. Adjustment in Compensation.
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.
Example 5-3.1  Flagging and Traffic Control (Extra Work at Force Account) (2 of 3)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER

CEM-4900 CT# 7541-3501-0

Change Requested by:  ☑ Engineer  ☐ Contractor

TO Contractor

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. NOTE: This change order is not effective until approved by the Engineer.

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price, and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer’s Estimate.

Extra Work at Force Account:

Furnish flaggers in accordance with Section 7-1.08, “Public Convenience,” and Section 7-1.09, “Public Safety,” of the Standard Specifications. Furnishing flaggers will be paid for as specified in Section 12-2.02, “Flagging Costs,” of the Standard Specifications.

Repair damage to detours caused by public traffic in accordance with Section 4-1.04, “Detours,” of the Standard Specifications.

In accordance with Section 7-1.08, “Public Convenience” of the Standard Specifications:

Except as otherwise provided for construction area signs in Section 12, “Construction Area Traffic Control Devices,” of the Standard Specifications, furnish, install, and remove sign covers.

Furnish a pilot car and driver for the purpose of expediting the passage of public traffic through the work under one-way controls.

In order to expedite the passage of public traffic through or around the work and where ordered by the engineer, furnish and install signs, lights, flares, temporary railing (Type K), barricades, and other facilities, not to be paid for as separate contract items.

Perform work ordered by the engineer for the accommodation of public traffic after the roadbed has been brought to a smooth and even condition and prior to commencing subgrade operations.

Shape shoulders and reshape subgrade as necessary for the passage of public traffic thereon during subgrade preparation on paving operations.

Apply water for the purpose of controlling dust caused by public traffic only in accordance with Section 10-1.04, “Payment,” of the Standard Specifications.

In accordance with Section 12-4.01, “Measurement and Payment,” of the Standard Specifications, do the following:

After initial placement of barricades, and if ordered by the engineer, move barricades from location to location.

Move temporary railing (Type K) laterally when ordered by the engineer and when such repositioning is not shown on the plans.

Furnish, erect, maintain, move, and remove additional construction area signs when ordered by the engineer.

In accordance with Section 10-1.xx, “Temporary Crash Cushion Module,” of the Special Provisions.
Repair crash cushion modules damaged by public traffic.

When ordered by the engineer, reposition crash cushion modules when such repositioning is not shown on the plans.

In accordance with Section 10-1.xx, “Traffic Plastic Drums,” of the Special Provisions, after initial placement move plastic traffic drums from location to location when ordered by the engineer.

Estimate of extra work = $20,000.00

By reason of this order, the time of completion will be adjusted as follows: No Adjustment

We, the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above. NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.
Example 5-3.2

Flagging Only (Extra Work at Agreed Unit Price) (1 of 3)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER MEMORANDUM

CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

TO

FROM

E. A.

Resident Engineer

CO-RTE-PM

FILE

FED NO.

E. A.

CO-RTE-PM

FED NO.

DATE

TO FILE

DATE

CONTRACT CHANGE ORDER MEMORANDUM

CEM-4903 (OLD HC-39 REV. 6/93) CT# 7541-3544-0

Resident Engineer

CCO NO. 2

SUPPLEMENT NO. 2

CATEGORY CODE

SUPPLEMENTAL FUNDS PROVIDED $ 60,000 for flagging and traffic control

CONTINGENCY BALANCE (including this change): $ 230,000.00

INCR  DECR $ 48,302.80

HEADQUARTERS APPROVAL REQUIRED? YES NO

IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? YES NO

This change order provides for

Flagging in accordance with Section 12-2.02, “Flagging Costs,” of the Standard Specifications. Payment for flaggers and furnishing flaggers as extra work under this contract change order will be made at agreed unit (hourly) prices. Hourly costs, based on prevailing wage rates with force account markups applied have been determined for laborers and for the contractor’s foremen. The straight time and overtime rates for foremen include the cost of a pickup truck at the specified equipment rental rate.

The Standard Specifications provide that an additional 5 percent markup is added to the cost of extra work at force account performed by a subcontractor. The hourly rates shown in the contract change order for the subcontractor’s employees include the additional 5 percent markup.

In case there is a change in prevailing wages or labor surcharge rates affecting the cost of flaggers and furnishing flaggers, a supplemental contract change order will be written to revise the hourly agreed prices.

Calculations used to determine the agreed prices are on file with the project records.

This contract change order will not affect contract time and no adjustment in contract time is provided for.

CONCURRED BY:

CONSTRUCTION ENGINEER/BRIDGE ENGINEER

DATE

ESTIMATE OF COST

ITEMS

THIS REQUEST

TOTAL TO DATE

PROJECT ENGINEER

DATE

FORCE ACCOUNT

$ 48,302.80

$ 48,302.80

PROJECT MANAGER

DATE

AGREED PRICE

ADJUSTMENT

TOTAL

$ 48,302.80

$ 48,302.80

FHWA REP.

DATE

FEDERAL PARTICIPATION

PARTICIPATING

PARTICIPATING IN PART

NONPARTICIPATING (Maintenance)

NONPARTICIPATING

ENVIRONMENTAL

DATE

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

HQ OR DISTRICT PRIOR APPROVAL BY

DATE

RESIDENT ENGINEER SIGNATURE

DATE

California Department of Transportation • Construction Manual • August 2006

5-3.36

Contract Change Orders
You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities, and prices to be paid. (Segregate between additional work at contract price, agreed price, and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

**Extra Work at Agreed Unit Price:**

Furnish flaggers in accordance with Section 7-1.08, “Public Convenience,” and Section, 7-1.09, “Public Safety,” of the *Standard Specifications.* Furnishing flaggers will be paid for as specified in Section 12-2.02, “Flagging Costs,” of the *Standard Specifications* and as follows:

The following agreed hourly prices are determined in conformance with the provisions in Section 9-1.03, “Force Account Payment,” of the *Standard Specifications* and represent the state’s 50 percent share of flagging costs. The contractor must maintain a daily log of flagging labor by individual. The copy of the log and a signed extra work bill must be submitted to the resident engineer before the 15th day of each month for payment. These agreed prices are subject to revision due to any changes in prevailing wage rates or labor surcharge rates.
Example 5-3.2  Flagging Only (Extra Work at Agreed Unit Price) (3 of 3)
Example 5-3.3  Resolution of a Notice of Potential Claim (Adjustment in Compensation) (1 of 2)

This change order provides for Settlement of Notice of Potential Claim No. 2 dated June 1, 2000.

This contract change order compensates the contractor for additional costs incurred in the construction of retaining wall No. 3. The contract plans showed an existing 36-inch drainage culvert to be 6 meters in back of the top of the retaining wall. It was found to be much closer. The contractor was required to install special shoring to protect the culvert and submitted Notice of Potential Claim No. 2 for reimbursement of the protective work. Records of the protective work were kept during construction of the retaining wall. The resident engineer determined that, due to the plan error, the contractor is entitled to be reimbursed for the cost of protecting the culvert.

The adjustment in compensation at agreed lump sum, provided for in the contract change order, is based on the force account cost of protecting the culvert. Records and calculations used to determine the adjustment in compensation are on file in the project records.

This change was discussed with the construction engineer and she agrees that the contractor should receive additional compensation for protecting the culvert.

There will be no time adjustment by reason of this contract change order since the work involved did not affect the controlling operation.
Example 5-3.3  Resolution of a Notice of Potential Claim (Adjustment in Compensation) (2 of 2)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Sheet 1 of 1

**CONTRACT CHANGE ORDER**

CEM-4900 CT# 7541-3501-0

Change Requested by: ☒ Engineer    ☐ Contractor

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<th>CCO NUMBER</th>
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TO Contractor

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities, and prices to be paid. (Segregate between additional work at contract price, agreed price, and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate

---

**Adjustment in Compensation at Agreed Lump Sum:**

Compensate the contractor for additional costs incurred in the construction of Retaining Wall 3.

The contractor will receive and agrees to accept the lump sum of $23,000.00 for this change. This contract change order resolves Notice of Potential Claim No. 2, dated June 1, 2000.

Adjustment in compensation = $23,000.00

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<th>Estimated Cost:</th>
<th>Decrease</th>
<th>Increase</th>
<th>$23,000.00</th>
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By reason of this order, the time of completion will be adjusted as follows: **No Adjustment**

---

**SUBMITTED BY**

SIGNATURE  (PRINT NAME & TITLE)  DATE

**APPROVAL RECOMMENDED BY**

SIGNATURE  (PRINT NAME & TITLE)  DATE

**ENGINEER APPROVAL BY**

SIGNATURE  (PRINT NAME & TITLE)  DATE

We, the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above. **NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.**

---

**CONTRACTOR ACCEPTANCE BY**

SIGNATURE  (PRINT NAME & TITLE)  DATE
Example 5-3.4  Compensation for Late Payment of Extra Work Bills (Adjustment in Compensation)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER MEMORANDUM
CEM-4903 CT# 7541-3544-0

TO
FROM
Resident Engineer

CCO NO. 4
SUPPLEMENT NO. SUPPLEMENTAL FUNDS PROVIDED
CATEGORY CODE $ 843.84
CONTINGENCY BALANCE (including this change): $ 127,127.12

HEADQUARTERS APPROVAL REQUIRED? □ YES ☑ NO
SUPPLEMENTAL FUNDS PROVIDED $ 843.84 INCR ☑ DECR ☐
IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? □ YES ☑ NO

This change order provides for

Payment of interest for late payment of undisputed extra work bills.

The contractor submitted acceptable extra work bills in the amount of $40,000 on September 8, 2000, for work performed on Contract Change Order 2 and Contract Change Order 3. However, because of filing errors in the resident engineer’s office, these bills were not paid within the time limits specified in Section 5-xx, “Interest on Payments,” of the Special Provisions. The bills were paid on the estimate for the period ending December 20, 2000, and the check including payment for these bills was issued January 6, 2001.

The interest paid by this contract change order is calculated for the 77-day period beginning October 20, 2000, and ending January 5, 2001.

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

ITEMS

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FEDERAL PARTICIPATION
☑ PARTICIPATING  ☐ PARTICIPATING IN PART
☐ 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
Example 5-3.4  Compensation for Late Payment of Extra Work Bills (Adjustment in Compensation) cont.)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER

CEM-4900 CT# 7541-3501-0

Sheet 1 of 1

TO Contractor

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract.  **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities, and prices to be paid. (Segregate between additional work at contract price, agreed price, and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

**Adjustment in Compensation at Agreed Lump Sum:**

In accordance with Section 5.xx, “Interest on Payments,” of the Special Provisions, provide payment of interest for the following extra work bills:

CCO No. 2, Daily Extra Work Reports 28, 29, 30, and 32.
CCO No. 3, Daily Extra Work Report 1, 2, 5, 7, and 8.

Interest = $40,000 X (0.10/365) X 77 days = $843.84.

Total adjustment = $843.84.

By reason of this order, the time of completion will be adjusted as follows: **No Adjustment**

**Estimated Cost:** □ Decrease  □ Increase  ☑ $843.84

By the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above.  **NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.**

**CONTRACTOR ACCEPTANCE BY**

SIGNATURE  (PRINT NAME & TITLE)  DATE

□ Decrease  □ Increase  ☑ $843.84

California Department of Transportation • Construction Manual • August 2006

5-3.42  Contract Change Orders
This contract change order provides for

Eliminating the foliage protectors shown on the plant list, in the remarks column (Sheet HP-1).

The district landscape architect has determined that foliage protectors are not needed on this project. Attached is a letter from the district landscape architect requesting this change.

As required in Section 10-2.01A, Cost Breakdown," of the Special Provisions, the contractor submitted a cost breakdown for highway planting. The price for foliage protectors included in the cost breakdown submittal is $1.50 each. The contract change order provides for an adjustment in compensation, based on the submitted price and the special provision.

The deleted portion of the lump sum contract item, highway planting, is subject to Section 4-1.03B(3), “Eliminated Items,” of the Standard Specifications. The contractor purchased no material and did no work on foliage protectors. Therefore, the contract change order provides that no adjustment in compensation is made in accordance with Section 4-1.03B(3).
Example 5-3.5 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) cont.

Delete foliage protectors shown under remarks on the plant list of Contract Plan Sheet HP-1 and shown on the highway planting cost breakdown submitted by the contractor in accordance with Section 10-2.01A, “Cost Breakdown,” of the Special Provisions.

Adjustment in Compensation at Agreed Unit Price:

In accordance with Section 10-2.01A, “Cost Break-Down,” of the Special Provisions, an adjustment in compensation (decrease) will be made to Contract Item 36 (Lump Sum), Highway Planting.

Item 36 – Highway Planting (Foliage Protector Unit)
Decrease 2400 EA Foliage Protectors (-100 %) @ $1.50 Ea……………$3,600 (-6 %)

In accordance with Section 4-1.03B(3), “Eliminated Items,” of the Standard Specifications and Section 10-2.01A, “Cost Break-down,” of the Special Provisions, the adjustment due to eliminating foliage protectors is zero.

Estimated Cost: : Decrease $3,600.00

By reason of this order, the time of completion will be adjusted as follows: No Adjustment

SUBMITTED BY

APPROVAL RECOMMENDED BY

ENGINEER APPROVAL BY

CONTRACTOR ACCEPTANCE BY

We, the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above. NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.
### Example 5-3.6  
Change in Specified Material. Change in Character (Adjustment in Compensation)

#### STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

**CONTRACT CHANGE ORDER MEMORANDUM**

**CEM-4903) CT# 7541-3544-0**

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| SUPPLEMENTAL FUNDS PROVIDED | $ 922.32 | INCR | DECR |

| HEADQUARTERS APPROVAL REQUIRED? | YES | NO |

| IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS? | YES | NO |

**This change order provides for**

Furnishing 3.51 mm thick pipe in lieu of 2.77 mm thick pipe for the 1800 mm diameter corrugated metal pipe at station “N” 375+00.

The district materials engineer requested this change because of new information obtained regarding the abrasiveness of the streambed load at this location. The letter requesting the change is attached.

This change constitutes a change in character for the contract item for 1800 mm diameter corrugated metal pipe. A unit price adjustment of $25.62 per meter will be paid for the increased pipe thickness. The adjustment is based on price quotes for the two pipe sizes from the supplier. A 15 percent material markup was added to the difference in the two quotes to arrive at the unit adjustment. Records supporting this adjustment are on file in the project records.

No adjustment in contract time is warranted. This change does not affect contract time.

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| RESIDENT ENGINEER SIGNATURE |

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California Department of Transportation • Construction Manual •August 2006

Contract Change Orders 5-3.45
Example 5-3.6  Change in Specified Material. Change in Character (Adjustment in Compensation) cont.

YOU ARE DIRECTED TO MAKE THE FOLLOWING CHANGES FROM THE PLANS AND SPECIFICATIONS OR DO THE FOLLOWING DESCRIBED WORK NOT INCLUDED IN THE PLANS AND SPECIFICATIONS FOR THIS CONTRACT.

NOTE: THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY THE ENGINEER.

DESCRIPTION OF WORK TO BE DONE, ESTIMATE OF QUANTITIES, AND PRICES TO BE PAID.

SEGREGATE BETWEEN ADDITIONAL WORK AT CONTRACT PRICE, AGREED PRICE, AND FORCE ACCOUNT. UNLESS OTHERWISE STATED, RATES FOR RENTAL OF EQUIPMENT COVER ONLY SUCH TIME AS EQUIPMENT IS ACTUALLY USED AND NO ALLOWANCE WILL BE MADE FOR IDLE TIME. THE LAST PERCENTAGE SHOWN IS THE NET ACCUMULATED INCREASE OR DECREASE FROM THE ORIGINAL QUANTITY IN THE ENGINEER'S ESTIMATE.

ADJUSTMENT IN COMPENSATION AT AGREED UNIT PRICE:

FURNISH 3.51 MM THICK PIPE IN LIEU OF THE SPECIFIED 2.77 MM THICK PIPE FOR THE 1800 MM DIAMETER CORRUGATED METAL PIPE CULVERT AT STATION "N" 375+00.

IN ACCORDANCE WITH SECTION 4-1.03C, "CHANGES IN CHARACTER OF WORK," OF THE STANDARD SPECIFICATIONS, A UNIT PRICE ADJUSTMENT OF $25.62 PER METER OF 1800 MM DIAMETER CORRUGATED METAL PIPE WILL BE PAID FOR FURNISHING 3.51 MM THICK PIPE IN LIEU OF 2.77 MM THICK PIPE. THIS ADJUSTMENT CONSTITUTES FULL COMPENSATION, INCLUDING ALL MARKUPS, FOR THIS CHANGE.

ESTIMATED COST: 36 M @ $25.62 / M = $922.32

By reason of this order, the time of completion will be adjusted as follows: No Adjustment

We, the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above. NOTE: IF YOU, THE CONTRACTOR, DO NOT SIGN ACCEPTANCE OF THIS ORDER, YOUR ATTENTION IS DIRECTED TO THE REQUIREMENTS OF THE SPECIFICATION AS TO PROCEEDING WITH THE ORDERED WORK AND FILING A WRITTEN PROTEST WITHIN THE TIME THEREIN SPECIFIED.

CONTRACTOR ACCEPTANCE BY

SIGNATURE (PRINT NAME & TITLE)  DATE

California Department of Transportation • Construction Manual • August 2006

5-3.46  Contract Change Orders

This change order provides for

1. Adding an additional area of permeable blanket and underdrain system.
2. Furnishing Class 1 permeable material in lieu of the specified Class 3 permeable material.
3. Removing and replacing permeable material already placed.

The Class 3 permeable material specified in the Special Provisions did not function properly. The district materials engineer recommended that Class 1 permeable material be used instead for permeable blankets. Unanticipated ground water was encountered throughout the entire cut between Stations “A” 725 + 00 and “A” 737 + 00. The district materials engineer recommended that the planned permeable blanket and underdrain system between Stations “A” 722 + 50 and “A” 725 + 00 be extended to Station “A” 737 + 00. The district materials engineer’s letter, recommending these changes, is attached.

This contract change order increases quantities of Contract Item 6, “Roadway Excavation,” and Contract Item 48, “Permeable Material (Blanket).”

We have provided a change in character adjustment in compensation for the permeable material contract item. The adjustment, based on the contractor’s force account analysis and verified by the engineer, represents the increased cost in processing the permeable material. Calculations supporting the adjustment are on file with the project records.

Adjustment in compensation due to the overrun in Contract Item 48, “Permeable Material (Blanket),” is deferred until the completion of the item.

Removing and disposing of the Class 3 permeable material previously placed will be paid for as extra work at force account. There is no contract item that would be applicable to this work.

California Department of Transportation • Construction Manual • August 2006

Contract Change Orders 5-3.47
The contractor requested an adjustment in contract time of an additional eight working days. Placing the additional permeable material will delay structural section work (the controlling item), and time will be required to begin producing the Class 1 permeable material. The engineer’s analysis, on file with the contract records, verifies that an eight-day extension of contract time is reasonable.

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**FEDERAL PARTICIPATION**
- ☑ Participating
- ☐ Participating in Part
- ☐ None

**FEDERAL SEGREGATION (If more than one funding source or P.I.P. type)**
- ☑ CCO Funded Per Contract
- ☐ CCO Funded As Follows

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You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

As shown on sheets 3 and 4 of this contract change order, place a permeable blanket and underdrain system between stations “A” 725 + 00 and “A” 737 + 00. Place permeable material (blanket) between station “A” 722 + 50 and “A” 725 + 00.

**Estimate of Increases in Contract Items at Contract Unit Prices:**

- **Item 6 roadway excavation**
  - 5,000 m³ (1 %) @ $1.25/ m³ = $ 6,250.00 (+ 8 %)

- **Item 48 permeable material (blanket)**
  - 17,760 tonnes (27 %) @ $6.00 $ 106,560.00 (+27%)

- **Item 46 200 mm perforated plastic pipe underdrain**
  - 2,600 m (23 %) @ $60.00 $ 156,000.00 (+23%)

Estimated increase $ 268,810.00

Any adjustment due in accordance with Section 4-1.03B(1), “Increases of More Than 25 Percent,” of the **Standard Specifications**, for Contract Item 48 is deferred.

**Adjustment in Compensation at Agreed Price:**

In lieu of Class 3 permeable material, as specified in the **Special Provisions**, use Class 1 permeable material for all permeable blankets. In accordance with Section 4-1.03C, “Changes in Character of Work,” of the **Standard Specifications**, the contractor will accept and receive $1.48 per tonne of permeable material (blanket). This sum constitutes full payment, including all markups, for this change.

Estimated adjustment 80,000 tonnes @ $1.48 $ 118,400.00

Extra Work at Force Account:

Remove the Class 3 permeable material (blanket) from the roadbed between station “A” 722 + 50 and “A” 725 + 00 and place it in the embankment at station “A” 715 + 00.

Estimate of extra work $ 17,000.00

By reason of this order, the time of completion will be adjusted as follows: 8 Working Days Extension

We, the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above. NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.
This change order provides for

Compensating the contractor for a right-of-way delay.

A 300 mm waterline, crossing the right-of-way at station “A” 453 + 45 was lowered and placed in a steel conduit before construction began on the project. During roadway excavation operations, a check was made on the elevation of the waterline, and it was discovered that an error of approximately 2 meters had been made in establishing the relocated elevation. The line was critical for water service in the area and could be taken out of service for only short time periods. Roadway excavation had to be suspended from September 29, 2000, through October 12, 2000, while city water crews lowered the line below planned subgrade.

Some of the roadway excavation equipment was sent to other work, and the remainder of the equipment that was made idle by the delay remained at the job site. The adjustment in compensation provided for in the contract change order represents the cost of idle equipment calculated as specified in Section 8-1.09, “Right of Way Delays,” of the Standard Specifications. Records were kept of equipment moved off the site to other work and moved back in when roadway excavation resumed. Cost of move-out and move-in are paid for as extra work at agreed price. The contract change order does not include payments for the idle time of workers. A full day of work was completed on September 28, 2000, before the work was suspended.
Records and cost calculations for the adjustment in compensation and for the extra work at agreed price are on file with the project records.

The contract change order provides for an increase in contract time of 10 working days. Earthwork was the controlling operation, and it was delayed for the period between September 29, 2000, and October 12, 2000, inclusive.
Example 5-3.8  Compensation for Right-of-Way Delay  (Adjustment in Compensation) (3 of 3)

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities, and prices to be paid. (Segregate between additional work at contract price, agreed price, and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer’s Estimate.

**Adjustment in Compensation at Agreed Lump Sum:**
In accordance with Section 8-1.09, “Right of Way Delay,” of the *Standard Specifications*, the contractor agrees to accept the sum of $6,853.00 as full compensation for idle equipment due to suspension of roadway excavation from September 29, 2000, through October 12, 2000.

Adjustment of compensation………… $ 6,853.00 increase

**Extra Work at Agreed Price**
The contractor agrees to accept and receive the sum of $2,350.00 as full compensation for the extra cost of moving equipment made necessary by the suspension of roadway excavation from September 29, 2000, through October 12, 2000.

Extra work…………………. $ 2,350.00 increase

A determination of the delay in completion of the contract due to the right-of-way delay caused by the suspension of the earthwork from September 29, 2000, through October 12, 2000, has been made in accordance with the provisions of Section 8-1.07, “Liquidated Damages,” of the *Standard Specifications*.

The contractor shall be granted 10 working days for the following dates: August 29, 2000, through September 12, 2000.

Estimated Cost: : ☐ Decrease  ☑ Increase  $ 9,203.00

By reason of this order, the time of completion will be adjusted as follows: **10 Working Days**

We, the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above. **NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.**

**CONTRACTOR ACCEPTANCE BY**

SIGNATURE (PRINT NAME & TITLE) DATE
This change order provides for

A cost reduction incentive to eliminate the falsework opening at the Brighton Overhead (Br. No. 24-289 R/L).

The contractor negotiated an agreement with Ms. Mary Smith, owner of the property served by the driveway passing under the Brighton Overhead. A copy of the agreement is attached. As a result of the agreement, the temporary falsework opening at the Brighton Overhead can be eliminated. The contractor submitted a cost reduction incentive proposal providing for elimination of the opening. The Division of Structure Construction has approved revised falsework plans.

The estimated net savings in construction costs resulting from this contract change order are $5,890.60. The net decrease is based on the following:

1. A decrease in Contract Item 3, “Temporary Railing (Type K),” at the contract price of $4,312.00. A cost analysis, on file with the project records, verifies that the contract price of this item is reasonably close to the actual cost of the work determined by the force account method.
2. A decrease in the cost of constructing the Brighton Overhead falsework of $1578.60. This decrease is based on the contractor’s submitted force account analysis verified by the engineer. Cost information and analysis are on file with the project records.
On half of the construction cost savings, $2,945.30 is returned to the contractor as an adjustment in compensation in accordance with the cost reduction incentive specification.

This change had no effect on contract time, and no adjustment in contract time is made in the contract change order.
Example 5-3.9  Cost Reduction Incentive (Decrease Contract Item-Adjustment in Compensation) (3 of 3)

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities, and prices to be paid. (Segregate between additional work at contract price, agreed price, and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer’s Estimate.

In accordance with Section 5-1.14, “Cost Reduction Incentive,” of the **Standard Specifications**, eliminate the falsework opening at the Brighton Overhead (Br. No. 24-289 R/L).

### Decrease Contract Item at Contract Item Price:

- **Item No. 3, “Temporary Railing (Type K),”** 392 m (7 %) @ $11.00/m = $4,312.00 (-7 %)

### Adjustment in Compensation:

- In accordance with Section 4-1.03C, “Changes in Character of Work,” of the **Standard Specifications,** the state will receive a credit of $1,578.60 by eliminating the falsework opening at the Brighton Overhead.

**Adjustment in compensation (decrease) = $ 1,578.60**

In accordance with Section 5-1.14, “Cost Reduction Incentive,” of the **Standard Specifications,** the contractor agrees to accept the above decrease in contract payments and a lump sum payment of $2,945.30 as full compensation for this change.

**Adjustment in compensation (increase) = $ 2,945.30**

By reason of this order, the time of completion will be adjusted as follows: **No Adjustment**

### Estimated Cost:

- **Decrease**
- **Increase**
- **$2,945.30**

We, the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above. **NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.**
This contract change order provides for

Constructing a reinforced concrete box culvert at Station 782 + 32, to serve as a cattle pass.

Before the project was advertised, the district right-of-way agents were unable to close negotiations with the abutting property owner adjacent to Station 782 + 32. An Order of Immediate Possession was obtained so that construction could begin. Before the start of construction, negotiations were finally closed. The major item of agreement was the construction of a 2440 mm x 2440 mm reinforced concrete box culvert, located at Station 782 + 32, to serve as a cattle pass from one portion of the property to the other. There are no applicable contract items for constructing the reinforced concrete box culvert. The contractor quoted a price of $216.00 per cubic meter of concrete, in-place, for the reinforced concrete box culvert. The resident engineer verified this cost as reasonable by performing an independent force account analysis. The cost submittal and independent analysis are filed in the job records. Structure excavation and structure backfill will be measured and paid for by contract item.

The project engineer and the construction engineer agreed with this change.

Construction of the reinforced concrete box culvert will not affect contract time. No adjustment of contract time is provided for in the contract change order.
Example 5-3.10 Additional Work- Increase Contract Items- Clause for Final Pay Items
(Extra Work at Agreed Price) (2 of 3)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CONTRACT CHANGE ORDER
CEM-4900 CT# 7541-3501-0

Change Requested by: Engineer

TO
Contractor

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities, and prices to be paid. (Segregate between additional work at contract price, agreed price, and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

**Increases in Contract Items at Contract Prices:**

Perform excavation and backfill for the reinforced concrete box culvert shown on sheet 3 of 3 of this contract change order.

Item No. 43 (F) – Structure Excavation
220 m³ (7 %) @ $8.83/ m³ = $ 1,942.60 (+18 %)

Item No. 44 (F) – Structure Backfill
250 m³ (3%) @ $18.85/ m³ = ……………………….  $ 4,712.50 (+11 %)

Total increase in contract items = $6,655.10

The quantity increase shown here for Contract Items 43 and Contract Item 44, when combined with quantities shown in the engineer’s estimate, and as modified by any previous change orders or revisions to dimensions made by the engineer, will be the final quantities for which payment will be made for each contract item.
Example 5-3.10  Additional Work- Increase Contract Items- Clause for Final Pay Items
(Extra Work at Agreed Price) (3 of 3)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CONTRACT CHANGE ORDER
CEM-4900 CT# 7541-3501-0

Change Requested by: ☒ Engineer  ☐ Contractor

Extra Work at Agreed Unit Price:

Construct a reinforced concrete box culvert at station 782 + 32 as shown on sheet 3 of 3 of this contract change order and Standard Plans D80, D82, and D83. Perform all work in accordance with Section 51, “Concrete Structures,” and Section 52, “Reinforcement,” of the Standard Specifications.

A payment of $216.00 per cubic meter of concrete, measured in accordance with the Standard Specifications, will constitute full compensation, including all markups, for constructing the reinforced concrete box culvert, complete in-place, including all reinforcing steel and incidentals.

Estimate of extra work = 172 M3 @ $216.00 = $37,152.00 increase

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By reason of this order, the time of completion will be adjusted as follows: No adjustment

SUBMITTED BY
SIGNATURE (PRINT NAME & TITLE) DATE

APPROVAL RECOMMENDED BY
SIGNATURE (PRINT NAME & TITLE) DATE

ENGINEER APPROVAL BY
SIGNATURE (PRINT NAME & TITLE) DATE

We, the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above. NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.

CONTRACTOR ACCEPTANCE BY
SIGNATURE (PRINT NAME & TITLE) DATE
Example 5-3.11  Adjustment for Asphalt Price Fluctuation (Adjustment in Compensation)

This change order provides for

Adjustments of compensation for fluctuations in the California Statewide Paving Asphalt Price Index.

This change is made in accordance with the requirements of Section 5-xx, “Compensation Adjustment for Price Index Fluctuations,” of the Special Provisions. Contract Item 20, “Asphalt Concrete,” and Contract Item 22, “Asphalt Concrete Base,” are subject to the adjustment. The contract change order authorizes the maximum amount allowed by the special provision.
Example 5-3.11  Adjustment for Asphalt Price Fluctuation (Adjustment in Compensation) cont.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
CONTRACT CHANGE ORDER  
CEM-4900 (OLD HC-5 REV. 9/97) CT# 7541-3501-0  
Change Requested by:  ☑ Engineer  ☐ Contractor

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TO Contractor

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities, and prices to be paid. (Segregate between additional work at contract price, agreed price, and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

### Adjustment in Compensation at Unit Price:

Adjust the contract unit prices of the contract items listed below in accordance with Section 5.1xx, “Compensation Adjustments for Price Index Fluctuations,” of the *Special Provisions*.

- Item 20, Asphalt Concrete
- Item 22, Asphalt Concrete Base

Estimated cost increase = $120,000.00

By reason of this order, the time of completion will be adjusted as follows: **No Adjustment**

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<th>SUBMITTED BY</th>
<th>APPROVAL RECOMMENDED BY</th>
<th>ENGINEER APPROVAL BY</th>
<th>CONTRACTOR ACCEPTANCE BY</th>
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We, the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment, therefore, the prices shown above. **NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specification as to proceeding with the ordered work and filing a written protest within the time therein specified.**

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California Department of Transportation • Construction Manual • August 2006

Contract Change Orders 5-3.61