

Chapter 16 Administer Construction Contracts

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All LAPM Exhibits are located at:

<https://dot.ca.gov/programs/local-assistance/forms/local-assistance-procedures-manual-forms>

Chapter 16 Administer Construction Contracts

16.1 Introduction

Chapter Guidance

This chapter provides the procedures and guidelines Local Public Agencies (LPAs) must follow when administering the construction of federal-aid projects. Contract administration is the comprised actions taken after a contract is awarded to obtain and document compliance with contract requirements, such as timely delivery, proper construction, dispute resolution, acceptance, payment, and closing of contract. These actions may include technical administrative and managerial support.

Contract Administration Delegated to Local Public Agencies

For delegated projects, the Federal Highway Administration (FHWA) has assigned the responsibility of contract administration, including construction inspection, to Caltrans. This responsibility is conveyed by Caltrans to the LPA through an E-76, which is the Authorization to Proceed executed for each federal-aid project. For all locally administered federal-aid projects, further delegation of responsibility is made by Caltrans to the LPA through a state/local agreement called a Master Agreement (specific to each LPA) and the program supplements (specific to each project). Delegation to an LPA is based on the following conditions:

- An employee of the LPA is in responsible charge of the project and that person is a full-time employee of the LPA
- All federal requirements are met in performance of the work
- The LPA adequately staffs and equips the project team to properly administer the contract

Such delegation does not relieve Caltrans of overall project responsibility. Caltrans will perform periodic process reviews and oversight to assure compliance.

Local Public Agency Procedures when Administering a Federal–Aid Construction Contract

For projects off the State Highway System (SHS), the LPA must follow the Local Assistance Procedures Manual (LAPM), most notably [LAPM Chapter 9: Civil Rights and Disadvantaged Business Enterprise](#), [LAPM Chapter 15: Advertise and Award Project](#), [LAPM Chapter 16: Administer Construction Contracts](#), and [LAPM Chapter 17: Project Completion](#).

For projects on the SHS (projects constructing permanent improvement within the state right of way), the LPA must follow the procedures found in the following four manuals:

- [Local Agency Resident Engineer Construction Manual Supplement](#)
- [Caltrans Construction Manual](#)
- [Local Assistance Structure Representative Guidelines](#)
- [Bridge Construction Records and Procedures Manual, Volumes 1 and 2](#)

Keep in mind these manuals are not contract documents; they are procedures and guidelines. In case of conflicts, the contract documents and the agency-state agreements prevail. However, if mandated federal-aid requirements were inadvertently omitted from the contract, the LPA must amend the contracts via change order to correct the omissions.

Available Training for Federal-Aid Construction Administration

The following two courses are offered to LPA Resident Engineers (REs) and other staff through the California Local Technical Assistance Program Training:

- The Resident Engineer Academy
- Federal-Aid Series, Day 5, Federal Rules for Construction Contract Administration and Project Completion

The RE Academy introduces students to the roles and responsibilities of an RE and to the requirement of the federal-aid program, while Day 5 of the Federal-Aid Series explains the federal-aid requirements in this chapter and [LAPM Chapter 17: Project Completion](#). To find out more information go to the [HQ Local Assistance Training webpage](#).

Other Available Resources

When a problem arises, the RE has many resources to consult or request assistance, in addition to the LAPM, including the:

- [District Local Assistance Engineer \(DLAE\)](#)
- Construction Oversight Engineer (COE)
- [HQ Division of Local Assistance](#)
- [Federal-Aid Essentials for Local Public Agencies](#)
- [Caltrans Manuals and Guides](#)

The [Caltrans Construction Manual](#) is a great resource for REs, Office Engineers (OE), field inspectors and lab testers, covering topics from change order writing, labor compliance, as well as sampling and testing. [Caltrans Construction Manual](#) (Chapter 4: Construction Details) is especially helpful to those inspecting roadwork operations, providing specific activities to be completed before, during and after construction.

For structure work, the Bridge Construction Procedures Manual should be consulted.

Contract Administration Costs Eligible for Reimbursement

Construction engineering costs (CE) including the work of project advertising, contract administration, supervision and inspection of contract activities, measurement and payments, preparation of as-built plans, and final estimates are eligible for federal-aid reimbursement if identified and programmed in the Authorization to Proceed. A CE cost limitation of fifteen percent (15%) of the Engineer's Estimate is highly recommended for the federal-aid program although it is recognized that the limitation may be inappropriate for some smaller or more complex projects. Although approval is not guaranteed, support documentation including, but not limited to, a project cost breakdown, must be submitted to the DLAE for justifying project funding requests that exceed the recommended CE limitation. During the course of construction and subject to the availability of federal funding, any requests from the LPA for additional CE funds that would result in exceeding the recommended limitation must be submitted to the

DLAE for review and approval. For more information on programming construction engineering see: [LAPM Chapter 3: Project Authorization](#).

16.2 Project Supervision and Inspection

Federal statutes require that the LPA must provide a full-time employee of the LPA who is accountable for the project. This individual is the person in responsible charge of the project. For projects administered by an LPA, the person in responsible charge does not need to be an engineer. The regulations allow one employee to have responsible charge over multiple projects at the same time.

The person designated responsible in charge must be a public employee. This requirement applies even in the following cases:

- a. A consultant is performing the construction engineering services
- b. A consultant has been hired as the City Engineer or Public Works Director

Person in Responsible Charge Duties

The person in responsible charge performs the following duties:

- Administers inherently governmental project activities including those dealing with cost, time, adherence to contract requirements, construction quality and scope
- Maintains familiarity of the day to day project operations, including project safety issues
- Makes or participates in decisions about changed conditions or scope changes that require change orders or supplemental agreements
- Visits and reviews the project on a frequency that is commensurate with the magnitude and complexity of the project
- Reviews financial processes, transactions and documentation to ensure that safeguards are in place to minimize fraud, waste, and abuse
- Directs project staff, LPAs or consultants, to carry out project administration and contract oversight, including proper documentation
- Maintains awareness of the qualification assignments and on-the-job performance of LPAs and consultant staff at all stages of the project

Provide Adequate Project Staff

The LPA must designate a qualified engineer who is empowered to administer the construction contract, known as the Resident Engineer (RE). For projects off the SHS, the RE is not required to be registered, however, if not registered, they must be working under the supervision of a registered engineer. The LPA must furnish sufficient qualified support staff to assist the RE in, but not limited to, construction surveys, soils and foundation tests, measurement and computation of quantities, testing of construction materials, checking shop drawings, and preparation of progress payments and reports. Additional RE responsibilities include the preparation of "As-Built" drawings, filing of documentation, and other inspection and staff services necessary to assure that the construction is being performed in accordance with the project plans and specifications, state and federal laws, and with this manual. For projects with structures, a structures representative may be necessary. The LPA may employ a consultant to provide construction engineering services such as RE's, inspectors, lab testers or surveyors,

however, the LPA must provide a full-time public employee to be the person who is in responsible charge.

Document the Project Staff

List the names, titles and contact number of all staff (Agency and consultants hired by the agency) assigned to the project performing contract administration duties, including engineers, inspectors, lab testers, office help or others. This list should not include any contractors' staff or consultants hired by the prime contractor. Place a copy in the project files. This documentation is essential for auditors to determine the adequacy of the LPA's staffing.

Obtain the Designation of the Contractor's Authorized Representative

Prime contractors, including those operating in joint venture, must be required by the project specifications to designate in writing a person authorized to supervise the work and to act for the contractor on the project. The representative must be present at the jobsite while work is in progress. Both the Caltrans Standard Specifications, as well as the Greenbook, includes this requirement. Place a copy of the authorization in the project file, providing the address and after hours contact information of the person authorized to supervise.

16.3 Maintaining Project Records

The LPA must establish a separate record file for each federal-aid highway project. The project file must contain all data pertinent to the work and to the requirements of the specifications.

In general, project records must support the adequacy of the field supervision, inspection and testing; conformance to contract specifications; and payments to the contractor. Generally, whenever the LPA is unable to produce requested records, it must be assumed by reviewing personnel the required actions were never performed. Organized project files can minimize these negative assumptions.

During the construction phase, Caltrans Construction Oversight Engineers periodically perform reviews and inspection of the LPA project files for compliance with federal and state requirements. Organization and content of the project file is one indicator of the effective and efficient management of the project by the RE. It also minimizes resources necessary for conducting process reviews.

Organization of Project Records

Each agency must develop or adopt a filing index to be used on all federal-aid projects administered by the agency off the SHS. An agency is only required to use the CT filing index for projects on the SHS. The files must be complete and well organized and should include, at a minimum, even on relatively simple projects, the topics indicated below.

Project Record Filing System - Locally Administered Federal-Aid Projects

1. Award Package
 - a. [Exhibit 15-A: Local Agency Construction Contract Administration Checklist](#)
 - b. [Exhibit 15-B: Resident Engineer's Construction Contract Administration Checklist](#)
 - c. [Exhibit 15-M: Detail Estimate](#)
 - d. [LAPM 3-A: Project Authorization/Adjustment Request](#)

2. Project Personnel
 - a. LPA Project Personnel Sheet (names, titles and phone number)
 - b. LPA and Contractor's Emergency Contact Information Sheet
 - c. Contractor's letter designating representative authorized to act for the contractor
3. Correspondence
 - a. To contractor
 - b. From contractor
 - c. General
4. [Exhibit 16-A: Weekly Statement of Working Days](#)
5. Quality Assurance:
 - a. Copy of Quality Assurance Plan
 - b. Independent Assurance
 - i. [Exhibit 16-D: Certificate of Proficiency](#)
 - ii. Certification of Accreditation of Testing Lab (TL-0113)
 - iii. Equipment Calibration Verifications (Nuclear Gauge)
 - c. [Exhibit 16-I: Notice of Material to be Used \(Form CEM-3101\)](#)
 - d. Acceptance Testing Results and Initial Tests (Make a Category 6d for each material such as, 6d1.i, CI 2 Base Test Summary Log, 6d2.ii CI 2 Base Test Results- 6d2.i AC Test Results Log etc. Include items below for each):
 - i. Test Result Summary Log
 - ii. Test Results
 - e. [Exhibit 16-T: Materials Typically Accepted by Certificate of Compliance](#)
 - f. [Exhibit 16-K: Report of Inspection of Material \(Form MR-0029\)](#)
 - g. Buy America Certifications
 - h. [Exhibit 16-G: Corroboration Report](#)
6. Engineer's Daily Reports
 - a. Resident Engineer's Daily Report ([Exhibit 16-C](#), or similar)
 - b. Assistant Engineer's Daily Report ([Exhibit 16-C](#), or similar)
 - c. Structures Engineer
7. Photographs
8. Contract Item Pay Quantity Documents

9. [Exhibit 16-Y: Monthly Progress Payment Item Quantity Calculation Sheet](#), or similar
10. Change Orders (CO)
 - a. CO 1
 - i. Approved CO or equivalent (agencies may use their own form or use State form CEM-4900)
 - ii. CO Memorandum/Transmittal Letter or equivalent (agencies may use their own form or use State form CEM-4903)
 - iii. Written Prior Approval to Proceed
 - iv. Independent Supporting Force Account Cost Calculations (if Agreed Price)
 - v. Justification of time extension
 - vi. Extra Work Reports
 - b. CO 2 etc.
11. Progress Pay Estimates and Status of Funds
12. Labor Compliance and Equal Employment Opportunity (EEO) records
 - a. Certified Payrolls
 - b. [LAPM 16-B: Subcontracting Request](#)
 - c. Photo Documentation of all required posters:
www.fhwa.dot.gov/programadmin/contracts/poster.cfm
 - d. Labor Compliance Interviews
 - e. [Exhibit 16-O: Federal-Aid Highway Contractors Annual EEO Report](#)
13. Disadvantaged Business Enterprise (DBE) Records
 - a. [Exhibit 15-G: Construction Contract DBE Commitment](#)
 - b. [Exhibit 15-H: DBE Information - Good Faith Efforts](#)
 - c. [Exhibit 16-Z1: Monthly DBE Trucking Verification](#)
 - d. DBE Substitution Supporting Documentation (if applicable)
 - e. [Exhibit 17-F: Final Report - Utilization of DBE and First –Tier Subcontractor](#)

Other sections of this chapter explain the content of the above listed file categories.

A large and complex project usually requires a more detailed record-keeping system. The record-keeping system described in Caltrans Construction Manual, [Section 5-102: Organization of Project Documents](#), is suggested for large projects.

Availability of Records for Review or Audit

The record retention period for the non-Federal entities for financial purposes is 3 years and begins when the final voucher is submitted in FMIS and required documentation is submitted to FHWA per the Stewardship and Oversight Agreement. The files must be available at a single location for these reviews and audits. Use of a uniform project record-keeping system, together with diligent maintenance of the system, greatly facilitates a process review and minimizes negative findings. Good records of all construction activities clearly demonstrate to those concerned that project supervision and control were attained on the project.

16.4 Pre-Construction Conference

For all construction projects, the LPA must schedule a pre-construction conference with the contractor.

Required Attendees:

- LPA Representative
- Resident Engineer (if this is not the same person as above)
- Contractor

Possible/Recommended Attendees:

- LPA Labor Compliance Officer
- LPA Safety Officer
- Other Affected Agencies (Fish and Wildlife, Parks and Rec, etc.)
- Emergency Services (Fire, Police, Ambulance, etc.)
- Public Utilities (if relocation or temporary shutdowns are required)
- FHWA Project Oversight Manager

The size, duration, and complexity of the project should be considered when determining who to invite. When an invitation is extended to Caltrans, representation will be up to the DLAE as resources allow. The LPA representatives should discuss important contract issues, submittals, as well as sanctions for non-compliance with local, state, and federal requirements.

Required Topics:

- Safety
- Equal Employment Opportunity
- Labor Compliance
- Subcontracting (including required submittal of the [LAPM 16-B: Subcontracting Request](#))
- DBE
- NEPA, Permits and Environmental Mitigation Commitment requirements
- Potential Traffic or Pedestrian Handling Issues

Recommended Topics:

- Progress Schedule
- Work Plans
- Quality Control/Quality Assurance
- Materials Requiring Certificates of Compliance
- [Materials to be Used Identified \(Exhibit 16-I\)](#)
- Materials Requiring Buy America Certificates
- Contract Training (Apprentice) Goals
- Change Order Process
- Dispute Process
- Potential Utility Conflicts

Additional meetings may be advisable where considerable effort and time is required to cover specific areas. A written record of attendance and items discussed should be made by the administering LPA and should be kept in the project files.

16.5 Partnering

Partnering is a relationship between the LPA and the contractor, formed in order to effectively complete the contract to the benefit of both parties. Through trust, cooperation and teamwork, the goal is to resolve conflicts at the lowest possible level. More information about the partnering process can be found at the [Partnering with Caltrans](#) website.

Partnering is not a requirement of the federal-aid program, but it is eligible for participation as part of the construction engineering cost. Generally, the costs are shared between the contractor and the LPA. When formal partnering is desired, the [Partnering with Caltrans](#) website is available to assist in providing specifications for the process. Informal partnering may also be beneficial and does not require contract provisions to be implemented. Keep in mind, partnering is not a substitute for a contract dispute resolution process.

16.6 Tracking Contract Time

Introduction

Contract time is the maximum time allowed in the contract for completion of all work contained in the contract documents. The LPA must maintain a written record of contract time, often called the Weekly Statement of Working Days (WSWD) or Weekly Project Progress Record. The LPA is responsible for reviewing the contract time requirements, determining the controlling operation, determining if each day is a working day or non-working day, and supporting time extensions.

Documentation similar to [Exhibit 16-A: Weekly Statement of Working Days](#), is an acceptable record of project progress. However, the LPA may use their own form, as long as the required information is recorded. Whichever form is used, as soon as possible and no later than the end of the following week, forward the original statement to the contractor and retain a copy in the project file. Most contracts give the contractor 15 days in which to protest the determinations shown on the form.

“Calendar” Days vs. Working Days

Contract time is specified in days or working days. In both the Greenbook and the Caltrans Specifications, a day is generally defined as every day on the calendar, regardless of weekends, holidays or weather. Because of this, days are frequently called “calendar days.” Calendar days are somewhat rare, and usually reserved for emergency projects or those projects for which weekend and holiday work is desired, for example, repairing damage from a natural disaster. For calendar day projects, the RE must still record the controlling operation and record each day as a working day. Non-working days, unless defined elsewhere in the contract, do not exist on calendar day projects and any change in the completion date requires a CO.

The definition of a working day may vary from one project to another. For example, the 2010 Caltrans Standard Specifications, the 2018 Caltrans Standard Specifications, and the Greenbook each offer slightly different definitions of working day. In addition, project special provisions may modify any of these definitions. Therefore, before determining a day to be a working day or non-working day, it is important to understand and apply the specifications for your project, and not just assume they are the same as those from a previous project.

Determining the Controlling Activity

The Greenbook and the Caltrans Standard Specifications both define a working day as any day except Saturday, Sunday and holidays, but their definitions differ when the contractor is prevented from working due to events such as weather, labor strikes, material shortages, traffic control restrictions, etc. The most significant difference is the Caltrans Standard Specifications grant a non-working day only if the controlling activity was affected.

For contracts using the Caltrans Standard Specifications, before one can determine if a day was a working day or non-working day one must know what is the controlling activity. The controlling activity is the construction activity that will extend the scheduled completion date if delayed. It is determined from the project schedule critical path. The critical path is the longest continuous chain of activities for the project that has the least amount of total float of all chains. If the progress schedule does not accurately represent current conditions, request the contractor update the progress schedule.

Note, when completing a WSWD, it is important to record the controlling activity (determined by the current schedule), not what work was performed that week (determined by the contractor), as they are not always the same.

Working Day vs. Non-Working Day

For contracts using the Caltrans Standard Specifications, once the controlling activity is known, the RE can make the determination if a given day should be recorded as a working day or non-working day. The WSWD must indicate the factors that affected the work, such as weather conditions, lane closure restrictions, or strikes. Based on these factors and the contract specifications, each day must be recorded as a working day or a non-working day.

It can be helpful to have a column, Working Day No Work Done on Controlling Operation, to record any working day on which no work is done on the project or on the controlling activities. If the reasons are known, note them in the Remarks. This information is useful in disputes regarding inadequate time. Further discussion of tracking contract progress and the use of [Exhibit 16-A: Weekly Statement of Working Days](#) is contained in Section 3-804: Time of the [Caltrans Construction Manual](#).

The Effects of Inclement Weather

Do not just assume that rain equals a non-working day and sun equals a working day. For projects using the Caltrans Standard Specifications, if the controlling activity is not dependent upon weather, such as concrete curing or an embankment settlement period, a working day must be charged during inclement weather.

When determining non-working days, loss of time because of inclement weather may extend beyond the period of actual inclement weather. Situations occur where no progress on the controlling activity is possible though the full crew might have worked the entire day. This may be due to the grade being too wet to work, access to the work needing to be reestablished, or saturated material needing to be removed from the tops of slopes.

Inclement weather can be other than wet or cold weather. For instance, it may be too hot to produce concrete that meets specified temperatures. If all specified precautions have been complied and the concrete work is the controlling activity, a weather nonworking day should be granted.

Contract Time Extensions

Contract time extensions must have written approval by the administering agency. Generally, the approval is made by a change order for a specified number of working days. Be sure to provide justification of any time extensions in the project files, such as a Time Impact Analysis, or a detailed narrative. Failure to do so can result in loss of federal funds. Record time adjustments on the WSWD upon approval of the change order (see [Section 16.10: Change Orders](#) for more information regarding Adjustment to Time of Contract Completion).

Events which do not warrant a time extension since they are generally considered to be under the contractor's control are:

- Maintenance shutdowns
- Breakdowns
- Suspensions or stop work orders due to safety, permit or pollution violations
- Shutdowns due to construction accidents
- Material delays

Liquidated Damages

If the contractor exceeds the number of construction days (working days or calendar days) specified in the contract (plus those added by CO), liquidated damages in the dollar amount specified in the contract must be deducted from monies owed to the Contractor. Failure to do so may result in loss of federal funds.

16.7 Subcontractors

Introduction

Contractors can use subcontractors on their projects, provided the subcontractor and the prime contractor complies with contract requirements, state and federal laws, and regulations. All subcontracts should be in the form of a written agreement and contain all pertinent provisions and requirements of the prime contract, including all the required federal-aid contract language. Refer to [LAPM Chapter 12: Plans Specifications & Estimate](#) for specific details of these requirements.

When projects use subcontractors, the RE must focus on:

- Knowing which subcontractors are working on the project and on which specific items they are working.
- Ensuring that the prime is using the subcontractors listed in the bid documents.
- Ensuring that the prime is performing at least 30% of the total contract work, or the % specified in the Special Provisions, whichever is greater.
- Ensuring the subcontractors listed in the bid documents are used for the work specified in the bid documents, and are not removed or replaced without prior written authorization from the RE.
- Ensuring the prime contractor does not subcontract work they are required to perform using their own forces that exceeds the threshold (more than half a percent of the total bid or \$10,000 whichever is greater).

Approval of Subcontractors Prior to Starting Subcontracted Work

The RE has the responsibility of approving subcontractors on federal-aid projects. In general, approval is necessary for only first-tier subcontractors. Before subcontracted work starts, the contractor must submit [LAPM 16-B: Subcontracting Request](#) for approval. This form is the first step to ensure all rules and regulations related to subcontracting on federal-aid projects are met.

Section 5-1.13: Subcontracting of the [Caltrans Standard Specifications](#) requires the contractor to submit this form, and Section 3.3: Status of Subcontractor of the Greenbook requires this form or a facsimile. When the contract is awarded, provide the contractor blank Subcontracting Request forms. The contractor may submit them for approval any time prior to the start of a particular subcontracted item of work; there is no need to submit all subcontractors at one time. The last page of the form contains instructions for completing the form.

Upon receipt of the form, and before approving the contractor's request, complete the following:

1. Compare the Subcontracting Request to [Exhibit 12-B: Subcontractor List/Bidders List](#).
2. Compare the Subcontracting Request to [Exhibit 15-G: Construction Contract DBE Commitment](#).
3. Confirm the prime contractor has not subcontracted work they are required to do with their own forces.
4. Verify the subcontractors are not on the Department of Industrial Relation's (DIR) debarred contractors list available at: <http://www.dir.ca.gov/dlse/debar.html>.

More information regarding steps one through four can be found below. Upon completing steps one to four, if the Subcontracting Request meets all the requirements, sign and date the form and provide a copy to the contractor.

Place a copy in the project file. If the request does not meet all the requirements, request corrections or explanations and ask the contractor to resubmit.

STEP 1: Compare the Subcontracting Request to the Bidder's List of Subcontractors

Requirements of the Fair Practices Act in the Bidding Process

Sections 4100 through 4114 of the Public Contract Code are called the Subletting and Subcontracting Fair Practices Act (Act) and applies to California's construction projects. The Act is designed to prevent prime contractors from bid shopping for subcontractors after bids are opened and the low bidder is known.

The Act requires that subcontracted work in excess of one-half of one percent (0.5%) of the contractor's total bid amount or \$10,000, whichever is greater, must be listed in the prime contractor's bid proposal. This is accomplished when the contractor submits [Exhibit 12-B: Subcontractor List/Bidders List](#).

Reviewing the Forms

Compare the Subcontractor Request submitted by the contractor with the Bidder's List of Subcontractors, looking for potential violations. Confirm that the subcontractors and the work percentages are correct.

Verify the Following:

- Any subcontractor listed on the request to perform more than one-half of one percent 0.5% of the contract or \$10,000, whichever is greater, is also shown on the List of Subcontractors.
- No subcontractor is listed on the request to perform work that is shown on the List of Subcontractors to be performed by another company.

When a prime contractor fails to list a subcontractor in its bid, the law requires the prime contractor must perform the work with its own forces. The prime contractor may not add an unlisted subcontractor by requesting a substitution. Exceptions to this requirement are discussed in Public Contract Code 4107 (c) and Public Contract Code 4109. Ensure the listed subcontractor performs the work, or the contractor complies with the substitution procedures in the Act.

Request the contractor make corrections and resubmit the form for approval, if there are any conflicts.

Common Violations of the Subletting and Subcontracting Fair Practices Act

The following are examples of common violations of the Act by a prime contractor:

- Subcontracting additional work to a listed subcontractor where the work was not originally listed as subcontracted work, and is in excess of the threshold requirements
- Using a subcontractor not listed at bid time whose dollar value of work is in excess of the threshold
- Substituting subcontractors without the LPA's written consent
- Performing work with their own forces that the bid documents designated a subcontractor to perform

If the Prime Contractor is found to be in Violation of the Fair Practice Act:

If these or any other violations actually occur during the work:

- The contractor must be assessed a penalty of up to 10 percent of the value of the work as defined by contract item unit prices.
- The penalty is taken as an administrative deduction.

Discuss the issue with your LPA's Labor Compliance Officer and consult Section 3-507C (4), Violations of the Subletting and Subcontracting Fair Practices Act of the [Caltrans](#)

[Construction Manual](#) for direction on how to proceed. Consult the Construction Oversight Engineer (COE) for additional guidance, if needed.

Substitution of a Listed Subcontractor

To replace, or substitute, a subcontractor listed in the bid documents per the Fair Practices Act, the prime contractor must submit a written request based on the reasons identified in [Public Contract Code Section 4107](#). Examples of acceptable substitution reasons listed in the code are insolvency, failure to furnish bonds, unlicensed, failure to pay prevailing wages, and failure to execute a subcontract.

When the prime contractor requests a substitution, review the code to determine if the reason provided by the contractor is eligible for substitution. If yes, follow the process outlined in your contract documents, or if not provided, consult [Section 3-507C \(2\)](#), Substitution Process of the [Caltrans Construction Manual](#). The process generally requires written notice to the subcontractor by certified mail and five business days to submit a written objection to the substitution. Follow the process carefully and maintain documentation in the project files.

Hearing Process when the Subcontractor Objects to being Substituted:

The intent of the substitution hearing is to give both parties the opportunity to explain to the hearing officer why a substitution should or should not occur. For details on the hearing process see [Section 3-507C \(3\)](#) of the [Caltrans Construction Manual](#).

Accidental Listing of a Subcontractor not Required to be Listed:

Occasionally, the contractor will include subcontractors on the Bidder's List of Subcontractors that the Act does not require to be listed (those doing less than the greater value of 0.5% of the contract or \$10,000). In this instance, update the Subcontracting Request to identify the new subcontractor. If the subcontractor is a DBE, refer to [Section 16.9: Employment Practice: Labor Compliance, EEO, DRB Construction Records and Accounting Procedures](#) of this chapter for additional requirements.

STEP 2: Comparing the Subcontracting Request to the Bidder Disadvantaged Business Enterprise (DBE) Commitment Form

Code of Federal Regulations (CFR) DBE Requirements in the Bidding Process

The CFR requires that contractors take necessary and reasonable steps to ensure that DBEs have opportunity to participate in federal-aid contracts (49 CFR 26). The contractor must make work available to DBEs and select work parts consistent with available DBE subcontractors and suppliers.

Thus, the Required Federal-aid Contract Language stipulate that the contractor must meet the DBE goal shown in the project special provisions, or demonstrate that adequate good faith efforts were made to meet the goal. This is accomplished by the contractor's submittal of [Exhibit 15-G: Construction Contract DBE Commitment](#), at bid time. Regardless of how the contractor's DBE commitment compares to the project's DBE goal, (as documented on [Exhibit 15-G](#)), the contractor is bound to utilize all listed DBE subcontractors or suppliers. Any exceptions to this would require the contractor to pursue a substitution approval.

Common Violations of the DBE Commitment Process

The following are examples of common DBE violations by a prime contractor:

- Substituting DBE subcontractors without the LPA's written consent
- Performing work with their own forces that the bid documents designated a DBE subcontractor to perform

Compare the Subcontracting Request submitted by the contractor with the certified Bidder DBE Commitment form looking for potential violations. Verify no subcontractors are listed to perform work that should be performed by a DBE. Request the contractor make corrections and resubmit the form for approval, if there are any conflicts.

If the prime contractor is found to be in violation of the DBE commitment requirements:

- The LPA does not pay for work listed on [Exhibit 15-G](#), unless it is performed or supplied by the listed DBE or a substitute authorized in writing
- When the LPA does not pay for the work listed, the value of that work is determined by the contract bid prices, not amount of the subcontract between the prime and the sub
- The penalty is taken as an administrative deduction

If these or any other violations actually occur during the work, discuss the issue with your LPA's Labor Compliance Officer and consult Part 1e of [Exhibit 12-G: Required Federal-Aid Contract Language](#), and [Section 8-304A \(2\)](#), When the Listed DBE Does Not Perform the Work of the [Caltrans Construction Manual](#). You may also consult your COE for additional guidance, if needed.

Substitution of a DBE Subcontractor

To replace, also known as substitute, a DBE subcontractor, the prime contractor must submit a written request based on one or more of the 11 reasons identified in [Exhibit 12-G](#). Examples of acceptable reasons are: insolvency, failure to furnish bonds, unlicensed, failure to execute a subcontract, failure to have a valid contractor's license, owner's death, debarment, and failure or refusal to perform.

When requesting a substitution, the prime contractor must include:

- One or more of the reasons listed in [Exhibit 12-G](#)
- A copy of the five-day notice from the prime contractor to the DBE regarding the request
- A copy of the response to the five-day notice from the DBE to the prime contractor regarding the request
- If applicable, the contractor's good faith effort documentation

The substitute DBE must perform at least the same amount of work as the original DBE under the contract to the extent needed to meet the DBE goal. Refer to Part 1e of [Exhibit 12-G](#) for the detailed substitution process. Also consult [Section 8-304B \(2\)](#), [Disadvantaged Business Enterprise Substitutions](#) of the [Caltrans Construction Manual](#). Follow the process carefully and maintain documentation in the project files.

STEP 3: Confirm the Prime Contractor has not Subcontracted Work that he is Required to do with their Own ForcesLimits on the Amount of Work Subcontracted

CFR 635.116 requires the prime contractor perform at least 30 percent of work using the contractor's own organization. The LPA is allowed to increase this percentage through their contract specifications. A contractor's own organization includes only workers employed and paid directly by the prime contractor and who only utilize equipment owned or rented by the prime contractor, with or without operators.

Calculating the Amount of Work Subcontracted

The contractor must state on the Subcontracting Request what percentage and dollar amount of an item will be subcontracted. The RE must verify the amount. Any rational method of estimating the amount will be acceptable, for example:

- The percentage of an area, volume, or length
- The portion applicable to material cost
- The portion of labor and equipment cost

When an entire item is subcontracted, use the prime contractor's item bid price as the dollar amount for the form. When a portion of an item is subcontracted, apply the percentage of the bid item subcontracted to the prime contractor's item bid price as the dollar amount for the form.

Limits on the Work the Prime Contractor can do with their Own Forces

See steps one and two, above, for limits imposed by the Fair Practices Act and DBE Commitments, respectively.

STEP 4: Verify the Subcontractors are not on the Department of Industrial Relation's Debarred Contracts List

Visit the Department of Industrial Relation's Debarred Contracts list and confirm that the subcontract is not on the list and has been debarred.

16.8 Engineer's Daily Reports

Procedures

The LPA must write daily reports to document the work in progress. These daily reports may be written by the construction inspector, the Assistant RE and/or the RE, as project and staffing needs dictate. The daily report must document what work was performed, where and how it was performed, and who performed it. The details must be sufficient so that someone not familiar with the project could re-create the events that occurred and review of the contractor's costs to perform the work in a manner similar to force account. The report should also document significant events or conversations, and activities performed to ensure contract compliance.

The Daily Reports should record the following:

- General Information
 - The date
 - A brief description of the weather

- The printed name and signature of the author
- For each person working on the project:
 - The full name
 - The labor classification
 - The employer
 - The hours worked, broken down by contract item and/or Contract Change (CO) work
- For each piece of equipment working on the project:
 - The make and model (or contractor's ID number)
 - The hours worked, broken down by contract item and/or CO work

Equipment should be identified sufficiently to enable determination of the applicable rental rates and operator's minimum wage. Consider in the design of your daily report form that it is important to know who operated what equipment, as this may affect the wage rate. In some cases, it may be desirable to record dates of arrivals or departures of equipment, as well as idle time for breakdown or other reasons.

The Narrative Portion of the Report should include:

- A description of the contractor's operation
- The location where the work was performed (stations, off sets, depths, etc.)
- Statements made by the contractor or LPA personnel, which are pertinent to the work
- Activities performed by LPA staff to ensure the materials and workmanship complies with the contract specifications
- Sampling
- Acceptance Testing
- Measuring
- Collection of Certificates of Compliance
- Contract Item Quantity supporting information (measurements, tonnage, waste)

The description of the work performed must be sufficient to determine proper labor classification, such as differentiating work performed by a laborer versus work performed by an electrician. Workers must be classified and paid according to the work they actually perform, regardless of union affiliation, other titles, or designations.

See [Exhibit 16-C: Resident and Assistance Engineers Daily Report](#) for an example of both the RE's and Assistant RE's daily report forms used by Caltrans are shown as. The engineer's daily reports discussed herein are required in addition to any extra work reports submitted by the contractor. The daily reports must be kept current and in the project files.

16.9 Employment Practice: Labor Compliance, EEO, DBE

Labor Compliance

Labor compliance is the LPA's effort to ensure the contractor is complying with all the applicable labor laws, acts and statutes detailed in the contract provisions. This section presents the guidelines for performing labor compliance. These guidelines apply to all state or federally funded projects.

The basis for these labor compliance procedures and the legal authority for LPAs to enforce labor compliance provisions derive from the California Labor Code, the Code of Federal Regulations, regulations of the FHWA, the California Code of Regulations, and the United States Department of Labor.

State and federal laws require contractors working on public works contracts to pay prevailing wages to their employees. Prevailing wages are predetermined hourly rates for each craft that are set by both the United States Department of Labor and the California Department of Industrial Relations. The prevailing hourly wage rate is composed of the basic hourly wage rate plus fringe benefits.

In addition, these laws:

- Define overtime and overtime pay
- Establish a workday and a workweek
- Require substantiation of wages via certified payrolls
- Determine covered work, (work requiring the payment of prevailing wages), vs. non-covered work

The Federal-aid Highway Acts established that laborers and mechanics employed on federal-aid projects are paid at wage rates generally prevailing for the same type of work on similar construction in the immediate locality. The federal wage rate determinations are included in the contract. The California Department of Industrial Relations determines the general prevailing state wage rates and those rates must be referenced in the contract.

Role of the Local Public Agency Labor Compliance Officer

Annually, each LPA must designate a Labor Compliance Officer. The Labor Compliance Officer has the responsibility of overseeing the LPA's labor compliance program. The duties include:

- Providing appropriate labor compliance training for LPA personnel
- Ensuring labor compliance requirements are performed and documented for all state and federally funded projects
- Assisting the RE in determining appropriate deductions or penalties

Many Labor Compliance Officers also perform duties listed below under Role of the Resident Engineer.

Resident Engineer's Role

The RE has the responsibility of enforcing the labor compliance provisions of the contract at the project level. To fulfill this responsibility, the RE and support staff must have a working knowledge of the requirements. A good place to start is a complete review of Form FHWA-1273, Required Federal-aid Contract Language, found in your special provisions.

Early oversight and enforcement of the labor compliance requirements is preferable to investigations of violations and withholding penalties. In order to accomplish this, the RE must perform or delegate the following tasks:

Task 1: Review the Labor Provisions of the Contract with the Contractor at the Pre-Construction Meeting

Include Labor Compliance Requirements as a topic on the pre-construction meeting agenda. The Federal-Aid Contract Prejob Checklist found on the [Caltrans Labor Compliance](#) website is a helpful tool for developing a discussion outline. Portions of the checklist require modification to conform to your contract provisions, form numbers and LPA policies.

Task 2: Prepare Daily Reports

See [Exhibit 16-C: Resident and Assistance Engineers Daily Reports](#), earlier in this chapter for the information that is needed to document the presence of the contractor's employees and owner-operators at the job site, and the work performed.

Task 3: Obtain Certified Payrolls and Owner Operator Listings

A payroll is a record of all payments a contractor made to employees working on the project. A certified payroll is one that contains the signed declaration required in Part IV-3, Payrolls and Records, of Form FHWA-1273. The provisions require the contractor and all subcontractors to:

- a. Submit payrolls weekly
- b. Sign a Statement of Compliance with each payroll submitted

The required weekly payroll information may be submitted in any form desired, however, Form WH-347, Payroll, is available for the convenience of contractors. An executed certification on the reverse side of optional Form WH-347 satisfies the requirement for submission of a statement of compliance. The prime contractor is responsible for the submission of all copies of payrolls by all subcontractors.

By signing the Statement of Compliance, the contractor or subcontractor is certifying that the following statements for the pay period are correct:

- a. The information required under 29 CFR 5.5(a)(3)(ii) and 29 CFR 5.5(a)(3)(i) is being maintained and is correct and complete.
- b. Each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract has been paid the full weekly wages earned, without rebate, either directly or indirectly, and no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3.
- c. Each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits, or cash equivalents, for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

Develop a system to track the submission of payrolls. Prior to making the monthly progress payment to the contractor, be sure all certified payrolls, owner operator listings and statements of compliance have been submitted for the previous month. If documents are missing, see Discrepant, Delinquent or Inadequate Payrolls later in this section.

Task 4: Check all Certified Payrolls

Review payrolls to verify that each laborer or mechanic has been paid not less than the prevailing hourly wage applicable for the classification of work performed as specified in the contract. When state and federal wage rates differ, the contractor is required to pay the higher of the two.

Overtime must be paid:

- a. For all hours worked in excess of eight in any workday
- b. For all hours worked in excess of 40 in any workweek
- c. For the first eight hours worked on the seventh consecutive day of work in a workweek
- d. As at least 1.5 times the regular hourly wage plus fringe benefits

For additional information on checking payrolls, owner-operator listings, calculating wage rates, fringe benefits and overtime, see the Labor Compliance section of the [Caltrans Construction Manual](#).

When checking payrolls against the prevailing wage rates, it is recommended that you place checkmarks adjacent to those wage rates verified and initial the pages. It is also recommended that you tab the payrolls that you have checked so you can refer to them quickly during a review or audit. File all payrolls and listings in the project records.

Task 5: Conduct Employee Interviews

Interview contractor employees using [LAPM 16-N: Employee Interview: Labor Compliance EEO](#), or the Spanish version of this form, [LAPM 16-N ESP: ENTREVISTA DE EMPLEADO: CUMPLIMIENTO LABORAL / EEO](#). During the interview, the employee is asked questions regarding wage rates, hours of work, and type of work performed. The interview is used to check the validity of information shown on the certified payroll records. See item seven below for information on cross checking interviews and payrolls.

Interview a minimum of two employees per contract, per month, including at least one interview from the prime contractor and each subcontractor until such time as the contract is accepted or all employees on the project have been interviewed. The number of interviews taken must constitute a representative sample of workers employed on the project, including a variety of crafts and trades.

The contract provisions allow you to interview employees during work hours on the job per Part V-3c, Payrolls and Basic Records of Form FHWA-1273. However, try to conduct the interviews at times that minimize disruption to the contractor's operation. Assure the interviewees that their statements will be confidential. Interview employees individually and away from supervisory personnel and other contractor staff. Do not disclose to the employer the identity of the employee without the employee's consent. Be sure the interviewer and the RE sign the form and file a copy in the project records.

Task 6: Maintain Written Evidence of Apprentices Employed on the Project

An apprentice is a contractor's employee who is registered in a formal training program governed by an apprenticeship committee. Part V-4a, Apprentices and Trainees of Form FHWA-1273, permits apprentices to work for less than the prevailing wage rate provided they are registered in bona fide apprenticeship program.

If the contractor uses apprentices, the RE must:

- a. Track apprentices used on the contract in daily reports
- b. Ensure apprentice classifications are correctly identified on certified payrolls
- c. Obtain and file written evidence from the contractor that apprentices are registered in an appropriate program
- d. Confirm the ratio of apprentices to journeyman is not greater than permitted by the apprenticeship agreement

Apprentices lacking evidence of registration, and apprentices in excess of allowable ratios must be paid the journeyman wage.

Written evidence of registration can be provided with form DAS-1, Apprenticeship Agreement, or a letter from the Department of Apprenticeship Standards.

On federal-aid projects, evidence of federal registration must be provided on U.S. DOL Form ETA-671, Program Registration and Apprenticeship Agreement, or a letter from the United States Office of Apprenticeship providing notice of registration.

If the number of apprentices is specified in the special provisions, the contractor must submit for a work plan specifying:

- a. Number of apprentices to be trained for each classification,
- b. Training program to be used, and
- c. Training start date for each classification.

The contractor must obtain approval of the plan before starting work. File a copy of the approved plan in the project records.

Task 7: Cross Check Daily Reports, Interviews, Payrolls and Wage Rates in Order to Determine Contractor and Subcontractor Compliance

Each month compare one of the employee interviews to the payroll record and daily reports for the week the interview was performed. Confirm that:

- a. Employee was classified properly for the work the employee was doing at the time of the interview as described in the daily reports
- b. Correct wage rate was paid for the proper classification
- c. Overtime rate was paid for any work in excess of 8 hours in a day or 40 hours in a week, or for the first eight hours work on a seventh consecutive day

A single worker may perform many different tasks covered by more than one craft or classification during the course of a single day. In this situation, the contractor may break up the work into the different classification and pay accordingly, or it may pay the worker the highest applicable wage rate for the entire day. If the highest wage rate is paid for the entire day, separate entries in the payroll records are not required.

If you find payroll discrepancies through review, random confirmation or worker complaints, see the CT Labor Compliance Policy Bulletin 11-01 for required follow up steps.

Task 8: Document that the Required Posters and Wage Rates are Displayed at the Job Site

Document that the posters and wage rates are legible and posted in plain view where employees are not intimidated to read them. If the project has multiple locations without a single gathering place, the contractor may need to be creative, mounting them to the portapotty or a sandwich board that can be easily moved.

A photograph of the display is a good way to document that the contractor was in compliance. If you are unable to take a photo, the engineer performing the verification must note compliance in the daily report. Place a copy of the photo or daily report in the project labor compliance file.

A checklist helpful for performing verification is available at:

<https://dot.ca.gov/programs/construction/labor-compliance/labor-compliance-posters>.

Note that the laminated all-in-one posters many contractors purchase do not contain all the required information.

Task 9: Compare all Force Account (time and material) Billings to Certified Payrolls

Confirm the names of employees, wage rates, and hours listed on change order bills match information listed on the contractor's certified payrolls. If the documents do not show identical information, do not approve payment of the change order bill until the discrepancy is corrected.

Task 10: Take Action for Payroll Delinquencies, Discrepancies and Inadequacies

If the Contractor Fails to Submit all Certified Payrolls, or Submits Incomplete Certified Payrolls

The RE must notify the contractor in writing which certified payroll documents are missing or inadequate, as well as withheld pay due to the contractor on the monthly progress payment. A withholding up to 10% of the payment is recommended a minimum of \$1,000 and a maximum of \$10,000. However, Part IV-3c, Payrolls and Basic Records of Form FHWA-1273 states contracting LPAs may cause the suspension of any further payments.

Make withholds separately for each payment period in which a new delinquency or inadequacy appears. When all delinquencies or inadequacies for a period have been corrected, release the withholdings covering that period on the next progress payment. Withholdings can only be taken once for each missing document and do not compound on each monthly estimate. See [Labor Compliance Policy Bulletin 11-01](#) for required follow up steps.

A sample letter titled, "Notice of Delinquent or Inadequate Certified Payroll Records," can be found at the [Caltrans Labor Compliance](#) website and used to notify the Contractor of certified payroll issues. Be sure to use your LPA letterhead and modify the language as appropriate.

If the Contractor Refuses to Provide Payrolls

When contractor does not comply with your request to submit missing or corrected payrolls, the issues become violations and are compiled into a wage case.

If the prime contractor refuses to submit certified payrolls, the RE must notify the contractor by certified mail that payrolls have not been received. The letter advises the contractor that they are in violation of the contract, and if payrolls are not submitted within 10 days of receipt of this letter, penalties will be assessed in accordance with California Labor Code Section 1776(g) in the \$100 per worker for each calendar day the payroll has not been submitted. This type of penalty must be pre-approved by the Department of Industrial Relations prior to deducting any funds from the contractor. Process an administrative deduction in the full amount of labor compliance penalties on a monthly basis. These deductions are penalties and are not refundable to the contractor, regardless of the method used to obtain the payrolls. See Chapter 8: Labor Compliance of the [Caltrans Construction Manual](#) for further discussion on this matter and consult your Labor Compliance Officer.

Which Workers are Covered by the Labor Provisions of the Contract

Every laborer or mechanic employed at the job site or site of work that performs part of the contract work is subject to the labor provisions of the contract. The laborer or mechanic may be either an employee of the prime contractor, an employee of an approved or listed subcontractor, or some other person or firm who furnishes on-site labor, including:

- Employees of equipment rental firms operating rented or leased equipment used in the work
- Owner-operators of general construction equipment such as graders, cranes, or excavators
- Firms that furnish engineering services, such as construction inspection, materials testing, and land surveying, regardless of whether that firm is hired by the contractor or the LPA
- Suppliers and fabricators who install manufactured products
- Corporate officers, supervisors or foremen who, regularly and for a substantial period of time, perform journeyman work

The terms job site or site of the work as applied to labor compliance are not limited to the actual geographic location or limits of the project. These terms include any location or facility established for the sole or primary purpose of contributing to the specific project.

Typical examples include material sites, processing plants, fabrication yards, garages, or staging sites set up for the exclusive or nearly exclusive furtherance of work required by the project. Consult the Labor Compliance chapter of the [Caltrans Construction Manual](#) for more information on Covered and Non-Covered employees.

Equal Employment Opportunity (EEO)

This section presents the requirements for administration of the nondiscrimination and EEO provisions of the contract.

California nondiscrimination and EEO requirements for public works contractors are located in Title VI, Civil Rights Act; Section 12990, Government Code; Title 2, Fair Employment and Housing Commission; Sections 8107 and 8203, California Code of Regulations; Part II, Nondiscrimination of FHWA Form-1273 calls the contractor's attention to these and other requirements.

State and federal laws mandates contractors working on public works contracts not discriminate based on race, religion, sex, color, national origin, age or disability, and to take affirmative action to assure equal opportunity.

What is the REs Role?

The RE must perform the activities listed below:

- Discuss EEO requirements at the pre-construction meeting. The [Federal-Aid Contract Prejob Checklist](#) found on the [Caltrans Labor Compliance](#) website is a helpful tool for developing a discussion outline. Portions of the checklist require modification to conform to your contract provisions, form numbers and LPA policies.
- Perform employee interviews (see item 5 under Labor Compliance).
- Verify EEO posters have been placed (see item 8 under Labor Compliance). The contractor's EEO Officer must be listed by name in the posted policy.
- Review [Exhibit 16-O: Federal-Aid Highway Construction Contractors Annual EEO Report](#). All contractors, including subs of any tier must submit this form to the RE. The requirement applies to all contractors who have federal-aid contracts exceeding \$10,000 and who worked any part of the last full week of July. The form shows the composition of the contractor's workforce by race and gender for each job category. Withhold \$10,000 if the contractor fails to submit the form by August 15th.
- Counter sign and submit PR-1391 to the DLAE by August 25 of each year.

Report EEO Violations

In accordance with the U.S. Department of Labor (DOL), Executive Order 11246, if you become aware of any possible violations of EO 11246 or 41 CFR 60, you have the authority and responsibility to notify the Office of Federal Contract Compliance Programs.

For contact information, see [Exhibit 16-Q: U.S. Department of Labor, Office of Federal Contract Compliance Programs](#) (offices within California).

Disadvantaged Business Enterprises (DBE)

Federal regulations define DBE as firms owned and controlled by individuals who are either socially or economically disadvantaged, or both. This section presents the requirements for administration of the DBE requirements of the contract. These guidelines apply to all federally funded projects.

The DBE requirements comes from 49 CFR 26, FHWA Form-1273, Disadvantaged Business Enterprises, Part 1, and [Exhibit 12-G: Required Federal-Aid Contract Language](#).

49 CFR 26 requires that bidders take all necessary and reasonable steps to achieve a DBE goal, which by their scope, intensity, and appropriateness to the objective, could reasonably expected to obtain sufficient DBE participation, even if they were not fully successful (49 CFR 26 Appendix A). The required federal-aid contract language in [Exhibit 12-G](#) requires the contractor meet the DBE goal shown in the project special provisions or submit documents that demonstrate adequate good faith efforts were made to meet the goal.

DBE "goal"

The DBE goal is a percentage of the total contract value that must be performed by certified DBE contractors. The DBE program is designed to increase DBE participation on federally funded contracts by ensuring nondiscrimination in the award and administration of Department

of Transportation assisted contracts, creating a level playing field on which DBEs can compete fairly, and by helping remove barriers to the participation of DBEs.

DBE Commitment Form

[Exhibit 15-G: Construction Contract DBE Commitment](#) provides the RE with a listing of specific work to be done or materials to be furnished by specific DBEs and is based on information the contractor submitted during the bidding process. The commitment is the percentage of work on the contract that the bidder has committed to perform using certified DBE contractors or suppliers. The commitment may be less than, equal to, or greater than the goal depending on the bidder. However, the contractor must meet the DBE commitment, regardless of the contract goal, or submit documents that demonstrates adequate good faith efforts were made to meet the goal. The RE will receive the approved DBE commitment form in the award package.

Role of the RE

The RE is responsible for monitoring and enforcing the DBE provisions of the contract. Therefore, the RE and support staff must have a working knowledge of the requirements. A good place to start is a complete review of Part 1, Disadvantaged Business Enterprises, of the [Exhibit 12-G: Required Federal-aid Contract Language](#), found in your special provisions and the DBE section of the Standard Specifications.

Prevention of DBE violations is preferable to imposing penalties for non-compliance; to accomplish this, the RE must perform or delegate the following activities:

Before the Work

Activity 1: Review the DBE Provisions of the Contract and the DBE Commitment Form with the Contractor and Construction Staff at the Pre-Construction Meeting

Include DBE Utilization Requirements as a topic on the pre-construction meeting agenda. The Federal-Aid Contract Prejob Checklist found on the [Caltrans Labor Compliance](#) website is a helpful tool for developing a discussion outline. Portions of the checklist require modification to conform to your contract provisions, form numbers and LPA policies. Ensure the field staff knows who should be performing DBE work. Be sure to emphasize the requirements for a DBE substitution, especially the requirement that written approval must be obtained prior to performing the work or payment will be withheld.

Activity 2: Compare the DBE Commitment Form (Exhibit 15-G) and the Contractor's Subcontracting Request (LAPM 16-B) prior to Approving the Subcontracting Request

Do not construe the DBE Commitment form as a request to subcontract as required by the contract specifications. The contractor must still submit a Subcontracting Request form listing the DBEs for approval. For details on approving the Subcontracting Request, see Item 2, under Approval of Subcontractors Prior to Starting Contracted Work in Section 16.7: Subcontracting, earlier in this Chapter. If the value of the DBE subcontractor's work exceeds the dollar figure threshold (half of one percent of the total bid, or \$10,000, whichever is greater) specified in the Fair Practices Act, the DBE must also be listed on the subcontractor list.

Activity 3: Be sure any DBE subcontractor who wants to begin work has been approved on LAPM 16-B: Subcontracting Request (See Activity 2 above)

During the Work**Activity 4: Verify the DBE Performs a Commercially Useful Function (CUF)**

A DBE performs a commercially useful function when it does all of the following (as per CFR 26.55[c]):

- Performs at least 30 percent of the total cost of its contract with its own work force and does not subcontract out portions of its contract work that are greater than normal industry practices for the type of work performed.
- Performs, manages, and supervises the work involved.
- Negotiates prices, determines quantity and quality, orders materials and supplies, pays for the materials and supplies, and installs the materials where applicable.
- The listed trucking DBE must own and operate at least one fully licensed, insured operational truck used on the contract.

A DBE firm does not perform a CUF if its role on the contract is limited to being an extra participant in a transaction or contract; through which funds are passed in order to obtain the appearance of participation.

The prime contractor is ultimately responsible for ensuring that a DBE performs a CUF. At the same time, State and Federal regulations require LPAs ensure work committed to a DBE is being performed by the correct firm, and that firm is performing a CUF.

- If the DBE is a subcontractor, document in the daily reports when the firm works. Include all details required in Section 16.8 of this Chapter: Engineer's Daily Reports. Cross-check the reports against the DBE Commitment form Exhibit 15-G to ensure the appropriate firm is performing the work or providing the materials.
- Confirm that certified payroll records have been received for the DBE. Refer to Task 4: Check all Certified Payrolls under "Resident Engineer's Role" in Section 16.9 of this Chapter: Employment Practice: Labor Compliance, EEO, DBE.
- If the DBE firm is a materials supplier, request the contractor provide documents such as delivery confirmation reports and canceled payment checks to confirm the DBE supplied the materials.
- If the trucking is part of the contractor's DBE commitment, identify trucking firms and drivers and associated items of work for each trucking firm on daily inspection reports. In addition, ensure the contractor submits Exhibit 16-Z1: Monthly DBE Trucking Verification by the 15th of the month for the previous month's trucking activities. If the prime contractor fails to submit the form, hold an administrative deduction for missing documents on the progress pay estimate. Randomly confirm the information on these forms by requesting copies of weighmaster certificates and canceled payment checks from the contractor. Cross-check the information against daily inspection reports as well.
- Do not pay for work unless it is performed or supplied by the DBE listed on the DBE Commitment form, unless a substitution has been authorized prior to performance of the work. For information on the substitution process, refer to LAPM Chapter 9, Section 9.8: Termination and Substitution of DBE Sub-Contractors.

If a DBE fails to perform a CUF, the LPA should take actions to enforce the contract. These actions can include:

- Deny or limit credit towards the contract DBE goal
- Require the prime contractor to make Good Faith Effort to replace the DBE to meet the goal on remaining work
- Withhold progress payments

For additional information on CUF and failure to comply go to the FHWA website [Federal-Aid Essentials for Local Public Agencies](#) and choose Commercially Useful Function.

Activity 5: Ensure Submittal of Exhibit 9-F: Monthly Disadvantaged Business Enterprise (DBE) Payment by the 10th of the month for the previous month's activities by the Prime Contractor

This form documents payments made the previous month to DBEs, regardless of tier including contractors, material suppliers, truckers, or service providers. If the prime fails to submit the form, take a payment withhold. Confirm the information on Exhibit 9-F using documents such as Exhibit 15-G, LAPM 16-B, daily inspection reports, or other documentation. (Exhibit 9-F is submitted by the Prime Contractor directly to business.support@dot.ca.gov with a copy to the LPA).

Activity 6: Ensure Prompt Payments to DBEs

If contractor fails to promptly pay DBE firms or other subcontractors within 7 days of receiving a progress **payment** relating to that **subcontractor's** work notify your Labor Compliance Officer and take a performance failure withhold until corrected.

After the Work

Activity 7: Ensure Submittal of Exhibit 17-O: Disadvantaged Business Enterprises (DBE) Certification Status Change

This form notifies the LPA if a DBE becomes decertified or a business entity becomes certified as a DBE before completing its work. The contractor must submit this form even if there were no changes in DBE certification.

Activity 8: Obtain and Verify the Accuracy of Exhibit 17-F: Final Report – Utilization of DBEs

Be sure the contractor submits the Final Report. If the form is not submitted within 90 days of contract acceptance withhold \$10,000 on the next progress pay estimate per the federal requirements. Release the money only upon submission of the completed form. Confirm the form is complete and correct. The description of the work performed, the company performing the work, and the date the work was completed can be checked using the contract records. The contractor is to list the actual dollar amount paid to each entity and the date of the final payment to the entity. If actual DBE utilization (or item of work) was different than that approved at award, the contractor must provide an explanation. Examples of items the contractor would need to explain in writing includes why the names of subcontractors, work items, or dollar figures do not match the contractor's initial plan.

Activity 9: Compare the Final Report – Utilization of DBE to the DBE Commitment Form

Compare the contractor's original dollar commitment with the amount shown on the final DBE report. Review the contractor's calculations to verify the appropriate amount is credited

for participation of DBE suppliers and truckers. Table 16-1 lists the criteria for crediting DBE supplier and trucker participation.

Activity 10: Withhold Payment if DBE Commitments were not met

If the contractor does not meet the DBE commitment, hold only the amount of contract funds necessary to meet the original DBE contract goal. If the contractor does not attain the original goal for reasons beyond their control, then no funds should be withheld. Examples of issues beyond the contractor's control are: if a change order eliminates a portion of an item originally designated to be performed by a DBE, or if the Engineer's Estimate overestimated the work shown on the plans. The subcontractor refusing to show up or not coordinating with the Prime contractor's schedule does not qualify as "beyond the contractor's control," as the contractor should have requested a substitution. If there is a change order, then the contract goal applies to the change order as well as the original contract. The Prime Contractor must make GFE to obtain additional work for the DBE participation. If no issues with the final utilization reports are identified, sign the final report. For federally funded contracts, the signature of the RE provides written certification of DBE participation through onsite monitoring and record review activities. Additional information regarding DBE enforcement, substitutions, violations and penalties see [Section 16.7: Subcontracting](#) for more information pertaining to Approval of Subcontractors Prior to Starting Subcontracted Work.

Consult with your DBE liaison officer for questions on implementing enforcement activities.

Table 16-1: Disadvantaged Business Enterprise (DBE) Materials and Transportation

If the DBE is a ...	And if the DBE ...	The credit toward the DBE goal is ...
Supplier	manufactured the materials*	100%
	acts as a regular dealer * (including bulk materials)	60%
	is neither a manufacturer nor a regular dealer	reasonable fees or commissions for the procurement and delivery
Trucking Company	uses trucks it owns , insures and operates using drivers it employs	100%
	uses trucks leased from another DBE firm , including owner-operator who is a certified DBE**	100%
	uses trucks leased from a non-DBE firm , as long as the DBE firm uses its own drivers	100%

Note: the determination above be made on a contract by contract basis.

* 49 CFR 26.55 (d)(6) defines manufacturer and regular dealer.

** A lease must indicate the DBE has exclusive use of and control over the truck. The leased truck may work for others during the term of the lease with the consent of the DBE, as long as the lease gives the DBE absolute priority for use. The lease must be long term and not for the specific project.

16.10 Change Order (CO)

Introduction

A change orders is a legally binding document used to make changes to the original construction contract. Change Orders are negotiated agreements with the contractor that affect the cost, time, design or specification requirements, or a combination of the four.

The authority for LPAs to make changes to a contract is located in Section 4-1.05: Changes and Extra Work of the CTSS and in Section 3: Changes in Work of the Greenbook.

Any change to the approved plans or specifications, or the addition of work, must be covered by a change order. In addition, change orders are used for administrative purposes. The following are some of the reasons for writing 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 describe the work and method of payment for unforeseen work to be paid as extra work
- To authorize a supplemental change order (an increase in extra work funds necessary to complete a previously authorized change order)
- To make payment adjustments
- To implement a value engineering change proposal (Refer to Section 4-1.07 of the CTSS)
- To clarify terms of the contract
- To resolve disputes or potential claims

The RE usually determines the need for and initiates a change order. However, the contractor, other LPA units, outside LPAs, or individuals may request changes. If the change order is requested by the contractor, indicate Change Order Requested by Contractor on the Change Order. For changes requested by any person except the contractor, indicate Change Requested by Engineer.

Preliminary Considerations

When preparing to write a change order, consider the following:

- Is the proposed change order necessary to complete the work as contemplated at the time the plans and specifications were approved?
- Is the proposed work already covered in the contract?
- What is the overall impact on the planned work?
- Will the proposed change order affect or change the contractor's planned method of performing the work?
- Will the ordered change cause a work-character change?
- Will the contract time be affected?
- What are the impacts of adjusting contract time?
- What methods of payment should be used?
- Are there sufficient contingency funds? If not, can additional funds be obtained soon enough to prevent delays?
- Does the proposed change adhere to the approved environmental document, existing permit conditions, utility obligations, and right-of-way agreements?

Any change in environmental mitigation commitments, permit conditions, agreements with resource LPAs, or the introduction of new social, environmental, or economic issues that need to be addressed under applicable federal, state, or local law should be referred to [Caltrans District Local Assistance](#) for further action. Changes in scope for ATP projects must be approved by Caltrans/CTC.

To avoid misunderstanding and to 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 protests.

Contract Change Order Prior Authorizations

The LPA may make changes to a project and add extra work under Section 4-1.05, “Changes and Extra Work,” of the Caltrans Standard Specifications and Section 2-7 “Changes Initiated By the Agency” of the Standard Specifications for Public Works Construction (Greenbook). The resident engineer describes the change and extra work, the payment basis, and any time adjustment in a change order. The standard specifications further allow the resident engineer to order the contractor to start work before a change order is approved. This is done using a written authorization to proceed.

LPAs should have procedures for prior authorizations to proceed for those instances when change order work must begin before a change order is executed.

In order to ensure prompt payment for ordered extra work, the resident engineer must reserve and advise the contractor of the change order number upon issuing an authorization to proceed for extra work. This will allow the contractor to submit change order bills while the change order is being processed. When prior authorizations are granted, the full change order must be immediately written and submitted to the contractor within 7 working days of the date of authorization to proceed.

The change order (extra work) bills must not be paid until the change order is fully executed and funded.

Change Order Documents

For each change order, the following documents must be prepared:

- The change order
- A memorandum explaining and justifying the change order

For many change orders, the following documents must also be prepared:

- PE stamped, signed and dated revised plan sheets and Specifications
- Cost estimate calculations performed by the LPA, not the Contractor, supporting any agreed prices
- A time impact analysis justifying any time extensions

Writing the Change Order

The change order must be clear, concise, and explicit. If you have properly written the change order, an auditor should be able to understand what work was performed without further explanation from the LPA’s staff. When appropriate, it must include the following:

- a. Description of the Work to be Done

The 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 whether a written statement clearly defines the proposed change or if plans or drawings need to be included.

On plans attached to a change order, show pertinent dimensions and the scale, or label the plans not to scale. When using existing plan sheets, clearly show the difference between the proposed (change order) work and the planned (original work). A simple sketch on a letter-sized sheet is adequate for some change orders.

Section 6735, Preparation, Signing, And Sealing of Civil Engineering Documents of the Professional Engineers Act requires all civil engineering plans and specifications that are permitted or that are to be released for construction must bear the signature and seal or stamp of the licensee and the date of signing and sealing or stamping. All final civil engineering calculations and reports must bear the signature and seal or stamp of the licensee, and the date of signing and sealing or stamping.

Plans or specifications attached to a proposed change order must meet this requirement, with the exception that a licensed 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 licensed engineer.

The contractor normally chooses the means and method of performing extra work. However, if the method of payment is force account (time and materials), the method of work is subject to the RE's approval for labor, equipment, and materials. If for any reason the engineer wants to control the means method of performing the work, the method must be specified in the change order.

b. Location and Limits of the Work

Be as specific as possible when describing the location and limits of the work. If available, use stations, off-sets and depths, as applicable. On smaller jobs without stations, use Post Miles, intersections, street addresses, or other identifying features that unambiguously defines the limits.

c. Applicable Specification Changes and References to Specifications

The specifications for bid item work already included in the contract will apply to added bid item work. You do not need to repeat or reference specifications for added work that is clearly shown to be bid item work. Include directly or by reference, the specifications for extra work paid for at an agreed price or at force account. The contractor must complete this extra work exactly as it is specified in the change order.

d. Method and Amount of Payment

When writing a change order, the RE often can choose the payment method for added or changed work. In other instances, for example, Section 12-1.03, Flagging Costs of the CTSS, the method of payment is specified. The following lists, in order of preference, the payment methods to be used when no method is specified:

Method 1: Increases and Decreases in Bid Items at Bid Item Unit Prices

When paying for changes in planned work or for adding or reducing work, the RE will estimate the increases or decreases that will result from changed work initiated by the change order. The actual quantity paid for each bid item will be determined by the method specified for measuring each bid item quantity. Using existing bid items at bid prices preserves the integrity of the open and competitive process.

Increases and decreases (or estimated increases or decreases) in bid items at contract prices may be executed with the contractor's agreement or unilaterally, if necessary.

Method 2: Bid Item Unit Prices with a Payment Adjustment

The second method the RE must consider to pay for changes is the use of the bid items at bid prices plus a payment adjustment. A payment adjustment is a monetary

increase or decrease applied to the unit price. Payment adjustments are most commonly used for work character changes and item quantity increases or decreases of more than 25%.

Payment Adjustments for Increased or Decreased Quantities

When a bid item quantity varies by more than 25%, determine the payment adjustment to the bid item unit price following Section 9-1.06, Changed Quantity Adjustments, of the CTSS. The adjustment is the difference between the unit price and the unit cost of the total item pay quantity. For decreases, the department does not pay more than 75 percent of the bid item list.

Unless requested in writing by the contractor, do not adjust a bid item when the total pay quantity is less than 75 percent of the bid item list. 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 is in excess of 125 percent is less than \$5,000. When required, make payment adjustments for increased or decreased quantities as soon as the contractor completes work on a bid item. If a contract item quantity overruns in excess of 125% of the original quantity and the RE decides or chooses not to adjust the contract unit price, documentation (usually in the form of a Memo to File) must be contained in the project's (Change Order) file to explain why.

Payment Adjustments for Work-Character Change

Before work can be considered a work-character change, an ordered change to the plans or specifications must occur. If such an ordered change materially increases or decreases the unit cost of a bid item, then a work-character change has occurred. Do not eliminate a bid 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. A payment adjustment providing for increased or decreased costs due to the work-character change allows the contract price to remain unchanged. The goal is to make a payment adjustment for the costs resulting solely from the change, while avoiding unfairly eliminating the contractor's profit in the original bid item, paying for additional costs resulting from a contractor's bad bid price, or from price escalations.

Additional information regarding payment adjustments, including other types of adjustments and how to calculate a payment adjustment, can be found in the Caltrans Standard Specifications and the Construction Manual at the following locations:

- Section 9-1.15, Work-Character Changes, CTSS
- Section 9-1.06, Changed Quantity Payment Adjustments, CTSS
- Section 3-403A, Work-Character Changes, CTCM
- Section 3-904C, Work-Character Changes, CTCM
- Section 5-306C(2) Payment Adjustments, CTCM

Method 3: Extra Work at Agreed Prices (Unit or Lump Sum)

Pay for extra work at agreed prices under the following conditions:

- When no contract item or combination of items exist that apply to the changed or added work
- When the change is so extensive that the original item no longer applies

Agreed prices may be unit or lump sum. When writing the change order, agreed unit prices can be applied to an estimated number of units. Although the unit price remains fixed, the number of units paid may vary from the estimated number shown on the change order as determined by the actual work performed. Use agreed unit price when the quantity to be performed cannot be determined precisely such as, AC dike, traffic striped, HMA etc.

Determining and Justifying the Agreed Price

After the extent of extra work has been determined, do the following:

- Perform, independent of the contractor, a force account cost estimate, including markups to determine a proposed agreed price.
- Request the contractor submit a proposed agreed price.
- Analyze the contractor's price for any errors or omissions, and compare your cost estimate to the contractor's.
- If your force account analysis supports the price proposed by the contractor, write and process the change order.
- If your estimate does not support the contractor's proposed price discuss how and why your estimates differ. If you cannot come to an agreement, perform the work at force account.

It is not sufficient to just review a contractor's proposed price and decide it is reasonable without performing your own independent cost estimate calculations.

Documenting an Agreed Price

File with the contract records any calculations and supporting documentation used to determine agreed prices for extra work payment. If an initial discrepancy exists between the LPA's independent estimate and the contractor's proposal, be sure to document (in the Change Order file) the steps, iterations, and negotiations that resulted in the final agreed price. Documentation could include emails and/or revisions to the LPA's independent estimate to support the agreed price dollar amount shown on the Change Order.

Be sure all calculation pages are signed and dated by the person performing the calculations and the person checking the calculations. 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. Loss of federal funding for the Change Order can occur if the LPA has not fully justified and documented any agreed prices.

In some instances, LPAs wish to use historical data, rather than force account calculations to support agreed prices; this must be done cautiously. The historical data must come from multiple sources and represent recent, like work, including similar quantities and constraints. A bid price for installing 100 units is unlikely to be representative of the cost to install 10,000 units of the same work. Similarly, the bid price to perform nighttime highway work is not reflective of the cost to perform the same work during the day on an urban arterial. Finding multiple recent sources that accurately represent like work is difficult. For this reason, the force account method is recommended.

When an agreed price is to be used to pay for extra work, the RE and the contractor must agree on compensation prior to performing the work. If there is no time to fully

execute the change order before performing the work, be sure the agreement is documented in your written authorization to start the work. The contractor must execute the change order before payment can be made. Do not unilaterally process a change order that uses the agreed price method of payment.

Method 4: Extra Work at Force Account

Pay for extra work using the force account method under the following conditions:

- When methods one and two above cannot be used
- When the work cannot be estimated within reasonable limits of accuracy
- When the RE and the contractor are unable to agree on a unit or lump sum price for the work
- When the contractor refuses to sign a change order

Additional information regarding paying for extra work at force account can be found in Section 3-9, Payment of the CTSS, Section 3-9 of the CTCM, and your contract specifications.

e. Any Adjustment to Time of Contract Completion

When change order work modifies the critical path and scheduled completion date of the accepted schedule, a time adjustment is warranted. A change order may specify a positive, negative, or no adjustment to contract time. If the controlling operation is unaffected, an extension of the contract time is not warranted.

Whenever you can estimate an adjustment to time with reasonable accuracy, try to reach an agreement with the contractor. Enter the amount of the time adjustment on the change order (including when there is no adjustment). Regardless of the amount of time actually required to perform the changed work, the agreed adjustment becomes binding on both parties.

Determining a Time Adjustment

For smaller projects request a revised schedule from the contractor to evaluate effects on the completion date. For larger projects, the contractor submits a time impact analysis (TIA) to the RE with each time adjustment request. A TIA illustrates the impact of each change on the scheduled completion date. Review the TIA for logic and duration impacts to determine the time adjustment, or construct an independent TIA to determine the time adjustment. See Section 8-1.02D (8) of the CTSS regarding TIAs.

File the calculations and other data used to determine any adjustments to time with the contract records.

Failure to justify and document a contract time adjustment can result in loss of federal funding.

Deferring a Time Adjustment

If you cannot determine or agree on an adjustment of time in the initial 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 change order. As soon as the change order work is completed, determine the appropriate time adjustment. Include the specific dates in the change order. If you cannot reach agreement with the contractor, issue a unilaterally approved supplemental change order adjusting time. Your objective

is to resolve deferred time adjustments as soon possible. Timely resolution of time deferments allows the contractor to efficiently schedule remaining work to complete the project within the time limits.

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

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

For additional discussion of time of completion and adjustments to time, refer to Section 3-804, Time, and Section 5-306D, Adjustments to Time of Completion of the CTCM.

Change Order Format

The intent is that the change order clearly specifies the work paid for by each payment method. The following describes the format:

- Describe the work or change that will cause increases and decreases to bid item quantities.
- Show the increases and decreases in bid item quantities. Include the percent change from the original quantity in the bid item list resulting from this change. Also, show the accumulated percent change to the original quantity in the bid item list resulting from all change orders to date.
- Include clauses regarding deferred or actual payment adjustments for overrun or under run situations resulting from actual or estimated increases or decreases in bid item quantities.
- Include clauses for adjustments or deferred payment adjustments due to any cause. Describe the work or change causing the adjustment or deferred adjustment. Show the amounts of adjustments if not deferred.
- Describe work to be paid as extra work at agreed price. Show the price as 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.
- Be sure to reference any attached drawings or documents (sheets ___ and ___ of ___).
- Show any time adjustment: + ___ days, -- ___ days, no time adjustment, or deferred time adjustment.
- Include time deferment or time adjustment clauses.

Example change orders can be found in Section 5-315 of the CTCM. The examples follow a generally accepted format for writing change orders.

Change Order Memorandum

A change order memorandum is a one or two-page document that explains and justifies the change. While a change order answers the questions of what, where, how and for how much,

think of the memorandum as answering the question of why. If you have properly written the memorandum, an auditor should be able to understand the reasons for the work and the reasonableness of the compensation and time adjustments, without help from LPA staff.

The memorandum is intended for interagency use only. Do not send the memorandum to the contractor.

Include the following in the memorandum:

- In a few sentences, briefly state what the change order provides. Supplemental change orders should also include a description of the original change order. Do not repeat everything on the change order.
- Explain the need for the change, including the contractual basis of the change. When another unit or another LPA requests a change, the correspondence requesting the change should also justify the need for the change. Attach supporting letters to the memorandum.
- State the reasons 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. State the method used in making the cost analysis.
- If the ordered change causes any work character change, explain the reasons. To substantiate any adjustment in compensation due, you may need to provide a summary of events leading up to the change.
- State the extent of coordination and concurrence with others; other units, LPAs, Caltrans, etc. if applicable.
- For major changes on federal projects of division interest projects, indicate the name and date of discussion and concurrence, if any, by the FHWA engineer.
- If prior approval of the change order has been obtained, state the name of the person who granted prior approval and the date.
- For a change order that is to be unilaterally approved, explain why the contractor will not sign or why the contractor's signature is not required. Attach a copy of any correspondence from the contractor regarding the change order.
- Include justification for a time adjustment. Describe the method used to determine the time adjustment. State the controlling activity during the delay period.

Whenever possible, and when resolving a previously deferred time adjustment, indicate the specific working days that experienced delay and represent the period of the time adjustment. By indicating the specific working days, you ensure other time adjustments do not cover the same time period. Specify if any portions of the work are nonparticipating (see [LAPM Chapter 3: Project Authorization](#) for more details regarding nonparticipating work).

Help Writing Change Orders and Change Order Memorandum

Examples of change orders and memorandums, as well as useful clauses can be found at the following websites:

- Change Order Standard Clauses
<https://dot.ca.gov/programs/construction/change-order-information/change-order-standard-clauses>

- Change Order Examples
<https://dot.ca.gov/programs/construction/change-order-information/change-order-examples>

Use these cookbook examples and standard clauses cautiously. The examples are for guidance and general format suggestion 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 change orders.

Do not assume that your project uses the same specifications. Base change orders on specifications in your contract. The Change Order chapter of the Caltrans Construction Manual can be found at <https://dot.ca.gov/-/media/dot-media/programs/construction/documents/policies-procedures-publications/construction-manual/sec5-3.pdf>.

Participating and Nonparticipating: Federal-Aid Segregation Determination on Change Orders

For a change order, the RE must identify and segregate the funds required from each source. Change order work that is eligible for federal-aid reimbursement is often called participating. A change order may be declared:

- Participating
- Participating in part
- Nonparticipating

In general, most changes are participating provided they are necessary to complete the project as originally contemplated at the time the plans and specifications were approved. A change order is participating in part when some of the work in the CO is eligible for reimbursement and some is not.

Following are some items which often are deemed nonparticipating:

- Work done prior to authorization of federal funds
- Work beyond the scope of work included in the project environmental document
- Work outside project limits as defined in the project authorization document
- Utility work that is not a result or purpose of the road or bridge work
- Payment for work done by an unapproved subcontractor
- Plant establishment periods of over 3 years
- Adjustment of private facilities (signs, fences, sprinklers, etc.) unless included in a right-of-way (R/W) agreement or permit
- Work not on a properly designated route
- R/W obligation not programmed
- R/W obligation already compensated
- Work chargeable to other programs
- Maintenance work (except Demonstration Programs)
- Work not in accordance with approved specifications unless quality is not reduced

- Non-highway related work
- Work outside of LPA rules or limits
- Work done for COs which exceeds the authorized amount of federal funds
- Work over and above amount programmed
- Deviations from design standards
- Nonconforming materials
- Equipment rental rates in excess of those in the Equipment Rental Rate book
- Excessively expensive treatments that do not appear to be in the public interest

LPAs are strongly advised to contact their District Local Assistance Office to discuss the issue of participating vs. non-participating on proposed change orders.

Federal requirements cannot be circumvented by classifying work as non-participating. For example, the LPA cannot avoid the requirements of the Buy America regulations by declaring the steel in a project non-participating.

All questions regarding work eligibility for federal-aid reimbursement can be directed to the DLAE for guidance.

Other Issues

Quantity Balancing Change Orders

Several LPAs, at or toward the end of a project, like to write a balancing change order, whereby all items for which the actual quantity placed differed from the original bid estimate quantity are captured and tabulated in a change order document. This is more of an accounting mechanism that enables the LPA to accurately update their contingency balance on the project. As such, a balancing change order is not required, but is permissible.

Materials Delays

The contractor is responsible for the timely order and delivery of materials for the project. A delay in delivery of materials does not in itself generally support an extension of contract time. However, if an unusual market condition (i.e., an industry-wide strike, natural disaster, or area-wide shortage) occurs, a time extension may be in order.

Right of Way Delays

The FHWA policy generally does not permit participation in time extensions for delays due to the Right of Way Certification required from the LPAs prior to the FHWA project authorization. Whenever the railroad or utility is permitted to adjust its facilities coincidentally with contract operations, such activities must be clearly addressed in the contract provisions. All parties should understand that any interference by the railroad or utility to the contractor's operations generally will not constitute an allowable delay. In general, an extension of contract time due to R/W delays is very unusual and is the exception rather than the rule. For federal-aid eligibility of an extension, it must be shown that:

- The construction work was actually delayed by the ROW, railroad, or utility difficulty.
- The contractor did everything required by the contract to minimize the delay.
- The LPA was unable to exercise effective control of the situation despite its best efforts.

Process reviews should be conducted by the COE's and the DLAE periodically to monitor approved change orders. If change orders are found to be ineligible during a process review, federal funds paid for the change order should be withdrawn from the project.

Equipment Rental Rates

Federal policy requires that actual costs be used to determine extra work payments; however, actual equipment costs are not always readily available. A state subject to the FHWA's concurrence, may adopt an industry equipment rate guide or it may develop its own guide. In California, the guide is the Caltrans Labor Surcharge and Equipment Rental Rates book. Overtime, multiple shift and delay factors apply to these rates as detailed in the guide.

Equipment rental rates paid in excess of those shown in the guide are not eligible for federal-aid reimbursement.

For major change orders and/or Change Orders on Projects of FHWA Division Interest, FHWA may retain approval authority for such specific change orders.

16.11 Quality Assurance Program

Introduction

A [Quality Assurance Program \(QAP\)](#) is a program that will ensure the materials and workmanship incorporated into each construction project conform to the requirements of the contract plans and specifications including approved changes. The main elements of a QAP are an acceptance program and an independent assurance program.

For federal construction projects, each LPA is required to adopt a QAP. Caltrans will not process a Request for Authorization for Construction without verification of an adopted QAP. The QAP must be signed by the LPA public works director or, if the director is not registered, it must be delegated to the next highest registered Engineer. The QAP must be updated at least every five years. Copies of the approved QAP must be kept on file and available for state review.

The LPA is required to adhere to their QAP during the construction of the project, but a QAP is not part of the contract. A QAP can be thought of as a commitment by the LPA to FHWA.

A typical QAP is structured as shown below:

- 1) General Discussion
- 2) Variations for Projects on or off the SHS
- 3) Materials Acceptance Program
 - a) Minimum Sampling and Testing Frequency Requirements
 - b) Sample Testing Results Summary Log
 - c) Materials Accepted by a Certificate of Compliance per the Contract Specifications
 - d) Source Inspection Process
- 4) Independent Assurance (IA) Program
 - a) Tester Certification Process
 - b) Laboratory Qualification Process
 - c) Equipment Calibration Process

5) Materials Certification Process for completed project

Variations for Projects On or Off the SHS

The requirements of a QAP depend on whether the project is on or off the SHS.

For projects on the SHS, the LPA must adopt the Caltrans QAP detailed in the following manuals and guides:

- [Caltrans Construction Manual](#)
- [Construction Manual Supplement for Local Agency REs](#)
- [Local Assistance Structure Representative Guidelines](#)
- [Independent Assurance Manual](#)

In addition, the current Caltrans Standard Specifications (CTSS) and Plans must be part of the Plans, Specifications and Estimate (PS&E). Test methods used must be as specified in the CTSS and special provisions.

For projects off the SHS, LPAs may adopt the Caltrans QAP described above or may develop their own QAP conforming with the requirements of the QAP Manual and FHWA regulations. For projects off the SHS and on the NHS, the LPA must use the current Caltrans or Greenbook Standard Plans and Specifications. Tests methods used may be either CTM, ASTM, AASHTO, or other nationally recognized test methods, but must be specified in the contract documents.

Consult the Quality Assurance Program Manual for complete information on developing and maintaining a QAP. A template for LPAs developing their own QAP can be found in Appendix Y of the QAP manual, or an alternative can be provided by your district Local Assistance Office.

Materials Acceptance Program

The QAP for all LPA projects must include a materials acceptance program. A materials acceptance program must be used to determine the quality and acceptability of materials and workmanship incorporated into the project. The program must address soils and aggregates, and manufactured and fabricated materials.

Acceptance of Unprocessed and Processed Soils and Aggregates

The acceptance of processed and unprocessed soils and aggregates includes verification sampling, testing, and inspection, and, in special cases, may include the results of quality control sampling and testing. Examples of unprocessed materials include sand, rip rap, subgrade, and embankment and backfill materials. Examples of processed materials include aggregates, bases, PCC and HMA. The contract and the QAP combine to ensure the quality of the soils and aggregates entering the project.

Generally, the contract will specify what criteria the material must meet, and what test method will be used to determine if the material met or failed the criteria; the QAP will specify the minimum number of samples to be taken and tests to be performed to ensure the material has met the criteria, and where the material will be sampled. Sometimes, the contract documents will specify the frequency and location of the sampling and testing, overriding the QAP.

Responsibilities of the RE

It is important that the RE read each contract and not assume a new contract has the same specifications as the last contract. The RE must ensure the correct criteria is used to determine if the material passed or failed. The passing criteria is found in the contract specifications, but in

some cases, the specifications allow the contractor to submit mix designs which establish the criteria. For example, the contractor is allowed to submit gradation target values (TV) for HMA mix designs and chose X factors for concrete mix designs. Be sure mix designs are approved prior to work and that the lab and inspectors have been provided a copy of the approved mix design.

The RE must ensure the correct test method is used as specified in the contract. Verification and quality control testing must be performed in accordance with a recognized testing standard. While California Test Methods, the American Society for Testing and Materials (ASTM), and the American Association of State Highway and Transportation Officials (AASHTO) test methods are all acceptable test methods on LPA projects, the test method to be used must be specified in the contract documents at bid time. The RE or lab cannot change the test method during the project without first writing a CO and providing justification. The RE must ensure the correct version of the test method is used. When the specifications reference a test method by number, it indicates the test in effect on the date of the Notice to Bidders. This means the test methods for each project are fixed and are not necessarily the latest revisions.

The California Test Methods are published on the Internet at:

<http://www.dot.ca.gov/hq/esc/ctms/index.html>

ASTM Test Methods are available at the following Internet address:

<http://www.astm.org>

AASHTO Test Methods are available at the following Internet address:

<http://www.transportation.org>

The RE must ensure that field personnel who perform tests for compliance with the specifications are certified to conduct the test method indicated by the contract. This is discussed further under Independent Assurance Program.

Testing and Sampling Frequency Tables

The RE must also ensure the minimum number of samples are taken and tests are performed as required by the adopted QAP's Testing and Sampling Frequency Table. Often a QAP will call for taking more samples than are used to perform tests. This is beneficial in the case of failing results. The RE can then go back and test additional samples to determine the exact limits of the failing material.

Test Data and Summary Logs

The RE must obtain test data and results from the lab in a timely manner and keep records of all samples and tests in the project files. The RE must keep a test results summary log for each test method performed more than once. Use [Exhibit 16-Z2: Acceptance Testing Results Summary Log](#) or a similar form. On larger projects, it may be necessary to keep multiple logs for the same test method, broken out by salient features such as compaction tests performed on the roadway structural section on one log, and those performed on structural backfill on a separate log. The use of a summary log facilitates the review of material sampling and testing by Caltrans and FHWA reviewing personnel, and assists the RE in tracking the frequency of testing.

Failing Test

Whenever failing tests occur, sufficient additional acceptance tests must be taken to isolate the affected work. Documentation of the results of such additional tests must be included in the records, including a description of the corrective measures taken. Corrective action or retesting

of failing tests must be noted in the remarks column of the test summary log. Documentation of the reason that materials represented by failing tests were incorporated into the project must be in the project files.

Mix Design Approval and Checking

Mix designs must be submitted by the Contractor and include the name of the material plant, the product name, a mix design ID number, and item of work in which it is to be used. The RE must review and approve the mix design in writing. A copy of the approved mix design must be placed in the files. Field inspectors must verify that the mix delivered to the job site matches the approved mix design. The inspector must place a check mark adjacent to the mix ID shown on the weigh tag and initial the tag. Tags are to be collected at the point of delivery to the jobsite.

Acceptance of Minor Quantities of Materials without Testing

If stated in the LPA's QAP, relatively minor quantities of construction materials may be accepted without testing provided the following 3 conditions are met:

1. Visual examination of the material is performed.
2. The manufacturer or supplier has recently furnished similar materials found to be satisfactory using normal sampling and testing requirements.
3. The manufacturer (or supplier in the case of HMA or concrete) provides certification that the material furnished complies with the contract specifications.

The following list suggests approximate maximum quantities of materials that may be accepted under the conditions indicated above:

- Aggregates other than for use in Portland Cement Concrete; not to exceed 100 tons per day nor more than 500 tons per project
- Bituminous mixtures (includes HMA); not to exceed 50 tons per day (sample at Engineer's discretion if project total is less than 500 tons)
- Bituminous material (includes Asphalt); not to exceed 100 gallons per project

Acceptance of Manufactured or Fabricated Materials

The acceptance of manufactured and fabricated materials is most frequently based on one of the following 3 methods:

Source Inspection

Source inspection is the inspection, sampling and testing of manufactured and prefabricated materials at locations other than the job site. It is most commonly performed on materials involving structural integrity or safety to the public, such as precast pre-stressed concrete members, structural steel, and poles for electrical systems. The purpose is to ensure that structural materials comply with contract requirements in regard to raw materials, fabrication processes, personnel certification, and in-process quality control testing.

The LPA determines which materials will be source inspected. For a list of manufactured or prefabricated materials that are commonly source inspected for Caltrans projects, see Table 6-2.1, Inspection of Fabricated and Manufactured Materials of the [Caltrans Construction Manual](#). Resources to assist in the development of a Source Inspection Program can be found at: <https://dot.ca.gov/-/media/dot-media/programs/engineering/documents/mets/sigla-manual.pdf>.

Source inspection is performed by the LPA or a qualified consultant. Caltrans no longer provides source inspection services for projects off the SHS. Caltrans may provide source

inspection for projects on the SHS if terms are detailed in a cooperative agreement or encroachment permit. For more details on the inspection procedures, refer to Section 6-3, Field Tests, of the [Caltrans Construction Manual](#) and the Office of Structural Materials Practices and Procedures (OSMPP) manual.

Due to the costs incurred when traveling to inspect materials sourced far from the job site, Section 6-3.05B: Source Inspection Expense Deductions of the CTSS provides the details for deductions to be taken when applicable.

Verification at the source of fabrication does not guarantee acceptance at the job site. Table 6-2.1 referenced above also includes items that must be checked or rechecked at the job site to ensure that the materials are acceptable. The RE must inspect the material upon arrival to be sure it meets the requirements of the specifications and is undamaged by shipping and handling. The RE must obtain and file the source inspectors report.

Materials Accepted on the Basis of Authorized Materials List

The CTSS identifies some materials that must be on an authorized materials list. The list is available at: <https://dot.ca.gov/programs/engineering-services/authorized-materials-lists>. For contracts using the CTSS, the RE must verify the materials furnished are shown on the appropriate authorized materials list before the material is used on the project. Materials shown on the authorized materials list may also require a certificate of compliance or sampling and testing for acceptance.

Materials Accepted by Certificate of Compliance

The LPA may permit the use of certain manufactured products, materials or assemblies accompanied by a Certificate of Compliance (COC) prior to sampling and testing, provided these products, materials or assemblies do not involve structural integrity or safety to the public. Additionally, these items must have a history of having met specifications based upon previous sampling and testing. The manufacturer of the products, materials or assemblies must sign the Certificate of Compliance and state that the included materials and workmanship conform in all respects to the project specifications. The contract documents must specify which materials require the Contractor to submit a Certificate of Compliance. The RE is responsible for ensuring that a Certificate of Compliance is furnished with each lot of these materials delivered to the work site. [Exhibit 16-T1: Materials Requiring a Certificate of Compliance Per the Caltrans Standards Specifications](#) and [Exhibit 16-T2: Materials Requiring a Certificate of Compliance Per the Greenbook](#) are lists of materials for which the contractor must submit a COC per the respective project specifications. The COC must be furnished before the material is incorporated into the work and include:

- Project number
- Certified material lot number matching lot tags affixed or stenciled to the released materials
- Manufacturer's signature
- A statement that the material complies with the specifications of the contract

All materials accepted on the basis of a signed Certificate of Compliance must be documented in the inspector's daily reports. Inspect the material upon arrival to be sure it meets the requirements of the specifications and is undamaged by shipping and handling before accepting. Manufactured products, materials or assemblies used on the basis of a Certificate of Compliance may be sampled again at the job site and tested at any time during the life of the

contract. Items found not in conformance with contract requirements must be rejected whether in place or not.

A Certificate of Compliance for each item must be kept in the RE's file.

Materials Requiring a Buy America Certification

Steel and iron products incorporated into the project must comply with Buy America requirements of the CFRs. All steel and iron products must be delivered with a COC stating all manufacturing processes involved in the production of the products occurred within the United States. These processes include:

- Rolling
- Extruding
- Machining
- Bending
- Grinding
- Drilling
- Coating
- Welding
- Smelting

In addition to the COC requirements mentioned earlier in this section, a Buy America COC must also include the mill markings or heat numbers.

The Buy America requirements apply to the entire construction contract if any federal-aid money has been authorized for any phase of the project, not just the construction phase. The LPA cannot circumvent the Buy America requirement by declaring that the material is being paid for with the non-federal portion of the funding.

Buy America does not apply to temporary steel such as that used in falsework, sheet piling or shoring. A minimal use of foreign iron and steel is allowed provided that the total delivered cost to the project site is less than \$2,500.00 or 0.1 percent of the contract amount, whichever is greater. Supporting invoices, including the cost of transportation, must be on file in the project records.

The LPA's failure to comply with Buy America provisions will result in the loss of federal funding for not only the applicable contract items, but likely will result in the loss of all federal funding authorized for the construction phase of the project.

Material QA Costs

Material inspection, testing and sampling costs are eligible to be charged to the construction engineering phase of the project.

Agencies using the Greenbook can, as outlined in Section 4-1.3.3, select a consultant laboratory to sample and test materials at distant locations. This specification allows for the agency to have the contractor pay for the costs of this service; however, the contractor must not select or exercise authority over the consultant laboratory.

Independent Assurance (IA) Program

The other main element of a QAP program is the IA program. The following information regarding IA programs is directed to REs and construction management staff implementing the QAP during project construction. QAP developers and laboratory managers are directed to the QAP Manual and the Independent Assurance Manual for more detailed information on developing and maintaining an Independent Assurance Program.

The IA program consists of activities that are unbiased and are an independent evaluation of all the sampling and testing procedures used in the acceptance program. The requirements are defined in 23 CFR 637:

- Testing equipment be evaluated by using calibration checks and proficiency samples
- Testing personnel be evaluated by observation and proficiency samples

It is often said that an acceptance program tests the material, while an IA program tests the testers.

Responsibilities of the RE

During project construction, the RE must verify that the IA program is being executed by performing the following tasks:

- Obtaining Certifications of all Sampling and Testing Personnel
- Obtaining Qualifications of all laboratories
- Verifying equipment is calibrated

Certification of Sampling and Testing Personnel

All samplers and testers, including project, laboratory and consultant personnel, must possess a current certificate of proficiency for the tests performed. A copy of the certificate must be in the project files. It is important that samplers as well as testers are certified to ensure the integrity of the sample and that the sample was taken at the right time, from the right location, using the correct method, and is properly labeled.

The Joint Training and Certification Program (JTCP) was established by Caltrans, LPAs, and industry to make the certification process more efficient and to obtain consistent, reliable quality testing. The JTCP offers training and certification in hot mix asphalt, soils and aggregates, and Portland cement concrete.

For CTMs not covered by the JTCP, Caltrans will still provide certification. When test methods not covered by the JTCP or Caltrans are used, certifications must be obtained from other acceptable organizations such as ACI, or the agency/testing consultant may need to hire a second lab to perform IA. The process for qualifying sampling and testing personnel should be detailed in the LPA's Independent Assurance Program of the QAP.

IA sampling and testing is not to be used for determining quality and acceptability of material incorporated into the job. Such tests are used only for the purpose of determining the reliability of testing personnel.

Qualification of Laboratory

All laboratories providing testing services for projects located in California must:

- Possess a current certificate of qualification.
- Be under the responsible engineering management of a California registered Professional Engineer with experience in inspection and testing of construction materials. The Engineer must certify the results of all tests performed by laboratory personnel under his or her supervision.
- Maintain their laboratory testing equipment in accordance with recognized national calibration standards.
- Participate in one or all of the following:

- The AASHTO Materials Reference Laboratory (AMRL)
- The Cement and Concrete Reference Laboratory (CCRL) inspection programs
- The Caltrans Reference Sample Program

These proficiency sample testing programs conform to the FHWA requirement that each State Transportation Agency must participate in an approved laboratory inspection and comparative sample testing program.

All laboratories which use Caltrans' test methods must participate in the Caltrans Reference Sample Program. Upon request, if CTMs are being used, Caltrans Materials Engineers will qualify LPA's (or consultant's) laboratories. Caltrans IA staff will issue Form TL-0113, Caltrans Accredited Laboratory Inspection Report, valid for one year. Those laboratories which do not use Caltrans' test methods must participate in the AMRL and CCRL programs to fulfill proficiency sample testing program requirements.

Equipment Calibration General

The LPA laboratory must calibrate field construction laboratory equipment and portable field test equipment (sand cones, scales, moisture test equipment, slump cones, air meters, etc.) prior to use on construction projects, and re-calibrate as frequently as required. The maximum interval between calibrations is one year. The LPA is responsible for calibration of laboratory testing equipment used for testing on LPA projects, whether or not the equipment is owned by the LPA, a consultant contractor, or sub-contractor. Consultant laboratory-supplied equipment must be calibrated by the consultant or LPA.

Calibration of test equipment must conform to Section 8-03, Field Tests of the [Caltrans Construction Manual](#). Two sections in the QAP manual describe the procedures that the IA personnel are to use when calibrating materials testing equipment. Upon proper calibration, a decal must be firmly affixed to each piece of calibrated equipment. Decal type and required information are specified on page 63 of Appendix B of the Quality Assurance Program Manual. A manufacturer's or service contractor's decal is acceptable as long as the above-required information is readily available. Should such decal become unreadable or lost, then the equipment is to be re-calibrated as soon as possible. Where such equipment either requires repair or cannot be repaired, a timely repair or replacement must be secured.

Equipment Calibration - Nuclear gauge

All LPA's and/or consultant's nuclear gauges must be calibrated on National Institute for Standards and Technology (NIST) traceable blocks and have current calibration stickers.

Equipment Calibration - Materials Plants

Plants producing construction materials such as HMA, concrete, cement treated bases, lean concrete bases, etc. must have a current CEM-4204, Material Plant Quality Program (MPQP) Acceptance Sticker or California Test 109, Method for Testing of Material Production Plants approval. This ensures the accuracy and suitability of the scales and meters used to proportion materials, and is important to the uniformity and quality of the material. The Material Plant Quality Program can be found at <https://dot.ca.gov/programs/construction/material-plant-quality-program>.

Records

All material records of samples, tests, material releases and certificates of compliance for a given project must be incorporated into the project file. It is recommended that this file be

organized as described in [Section 16.3: Maintaining Project Record](#) of this chapter. The complete project file must be available at a single location for inspection by Caltrans and FHWA personnel at any time during the construction project. The file must be available at the LPA administrative office for at least three years following the date of final voucher. When two or more projects are being furnished materials simultaneously from a single plant, it is not necessary to secure separate samples for each project; however, individual test reports are to be supplied to complete the records for each project.

Project Certification

Upon completion of the project, the RE must complete [Exhibit 17-G: Materials Certificate](#). The RE and the LPA's Person in Responsible Charge must sign the certificate. All materials incorporated into the work which did not conform to specifications must be explained and justified on the Materials Certificate, including changes by virtue of change order. The original is submitted to the DLAE in the Report of Expenditures and a copy is placed in the project file.

16.12 Environmental Stewardship

Introduction

The National Environmental Policy Act (NEPA) mandates that steps be taken to prevent or eliminate damage to the environment. This is accomplished through the environmental processes detailed in [LAPM Chapter 6: Environmental Procedures](#). Furthermore, the LPA is responsible for complying with applicable state and local laws, obtaining necessary permits, and ensuring that mitigation commitments are fully incorporated into the Plans, Specifications and Estimate, and implemented during construction. This section outlines the RE's responsibilities to fulfill these requirements.

Responsibilities of the RE

The responsibility to ensure that all environmental mitigation commitments are incorporated during construction falls on the RE. First, the RE must double check that no mitigation commitments were inadvertently omitted from the PS&E, then the RE must ensure that the commitments are properly executed during construction, and third, the RE must ensure that the execution was adequately documented.

At the start of each project, to ensure no mitigation commitments were omitted from the PS&E, the RE must obtain and read the key documents related to environmental mitigation for the project, including:

1. The approved project environmental document. This document will have been signed by Caltrans and will be one of the following three types:
 - Categorical Exclusion (CE)
 - Finding of No Significant Impact (FONSI)
 - Record of Decision (ROD)
2. The Environmental Commitment Record (ECR). The ECR is a tool for tracking and documenting the completion of all mitigation commitments. It is developed during the PS&E phase and compiles all terms, conditions, and mitigation measures required by all the environmental permits, approvals and agreements from resource and regulatory agencies.

The ECR usually comes in a spreadsheet format and includes the following:

- A brief description of the commitment
- The name and page number of the document requiring the commitment (for example, Fish and Wildlife Permit, page 24)
- The phase in which the commitment will be executed (R/W, PS&E or Construction)
- The name of the LPA person certifying that the commitment was completed and the date

If the project has no mitigation commitments, it is helpful if the project development team note this on a blank ECR in the project file.

3. All environmental permits, approvals and agreements from resource and regulatory agencies. Not all projects will have these documents.

Before construction begins, check if any mitigation commitments were inadvertently omitted from the PS&E. If yes, write a change order to include them. Check the permit dates and obtain extensions if necessary. Consult the agency person in responsible charge, the agency environmental liaison, and the design team, as needed. Bring the environmental commitments to the attention of the contractor and agency staff at the pre-construction meeting.

Environmental commitments might include using biological or archeological monitors, temporary fencing, relocating plants or animals, or enforcing dust and noise control, among other things. Be sure the contractor includes mitigation commitments in the project schedule, if appropriate.

During construction, ensure the contractor is complying with all requirements and document compliance using the assistant RE daily reports and photographs. Other documentation might include letters approving the monitors, sign-in sheets from required crew trainings, and copies of required reports or surveys. Sign and fill in the dates on the ECR (or equivalent) as mitigation commitments are completed. If the contractor is not complying with the mitigation commitments, document and take action. Actions might range from letter writing to payment withholdings to project suspension. Consult your contract and permits.

After project acceptance, confirm all monitoring reports and post-construction mitigation reports were submitted to permitting agencies, if applicable. Certify on the ECR (or equivalent) that all mitigation commitments have been completed and documented.

16.13 Progress Payments, Accounting Procedures and Payment Records

Introduction

Progress payments are compensation to the prime contractor for the value of work completed during a covered period. Contract language generally calls for progress payments to be made at least once each month as the work progresses.

The LPA may request reimbursement for project costs incurred from Caltrans, who in turn requests reimbursement from FHWA. The reimbursement request is typically based on the progress payment made to the contractor. The progress payment is based on an estimate prepared by the engineer. Each estimate reflects the total contract item work completed during the pay period, [extra work bills submitted for approved change order work](#), materials on hand, deductions, and withholds.

Since FHWA may only participate in the actual, allowable and allocable costs of a project, it is essential the estimate supporting the reimbursement request be based on accurate quantities. CFR 635.123, Determination and Documentation of Pay Quantities requires that each state Department of Transportation have procedures in place which provide adequate assurance that the quantities of completed work are determined accurately and on a uniform basis throughout the state for all federal-aid projects, including those administered by LPAs. This section outlines those procedures.

Procedures

State administered projects and projects on the SHS must follow the procedures outlined in the [Caltrans Construction Manual](#). LPA administered projects must use a similar accounting system. The essential elements of the system are: 1) source documents, 2) contingency balance tracking, and 3) estimate of the final cost of work.

1. Source Documents
2. Contingency Balance Tracking
3. Estimate of the Final Cost of Work

Source Documents

Source documents are the original documents, data, and records containing the details to substantiate a transaction entered in an accounting system. Source documents are the permanent record sheets that create a clear and easily followed accounting trail from the total pay quantities in the proposed final estimate, back to the first measurement or calculation for each bid item; and for extra work at force account payments back to records and costs substantiating performance of the work.

The most common source documents are:

Contract Item Quantity Calculation Sheets

Contract Item Quantity Calculation sheets, also known as Q sheets, support and document item payments made to the contractor each month. A separate quantity calculation sheet must be prepared for each contract item being paid for each progress payment. For example, if in the month of May, payments were made on 12 contract items, there should be 12 separate item calculation sheets.

Each Q sheet must clearly record the following:

- The appropriate bid item number
- The location of the work or installation (sta., depth, offset, etc.)
- The measurements and calculations performed to determine the quantity actually performed by the contractor to be paid (this requirement applies equally to lump sum items)
- The source of any figure, calculation, or quantity shown on the source document (field count or measurement, scale weight, planned dimension)
- The name, date and signature of the person preparing the document
- The name, date and signature of the person who independently checked the document and calculations

Additional Q sheet requirements and considerations:

- Q sheets must be produced by the LPA not by the contractor.
- Quantities should be measured in accordance with the method directed in the measurement or measurement and payment clauses in the contract specifications for each bid item. For more information about measuring quantities for specific bid items, refer to Chapter 4, Construction Details of the [Caltrans Construction Manual](#).
- Calculation sheets should be checked as soon as practicable, but in any event, prior to payment of a final estimate.
- The quantity paid-to-date shown on the estimate for a bid item must agree with the sum of the quantities on all the source documents for that item.

[Exhibit 16-Y: Monthly Progress Payment Item Quantity Calculations](#) is an example of a quantity calculation sheet.

Weight Tickets

Weight tickets, sometimes referred to as load slips are used to support both item quantity payments made by weight and extra work paid at force account. Weight tickets must be collected at the point of delivery and validated by a representative of the administering LPA. This is accomplished by the LPA employee signing or initialing the load slip upon delivery to indicate the represented material was used in the work (this is also the time to check the proper mix design or specified material has been delivered). If applicable, on the load slip, indicate any quantity of material not included for payment, such as unused or wasted material. When a determination is made to reduce the quantity, advise the contractor's foreman or superintendent of the amount and reason for the reduction. In the daily report, document the reduction and the name of the contractor's employee who you advised of the reduction.

Consider organizing Q sheets and weight tickets by bid item so an easily followed audit trail exists. Total and bundle the tickets by each day worked, and place in the project files.

Daily Reports

Daily reports are required to support quantity calculation sheets and force account payments. See [Section 16.8: Engineer's Daily Report](#) of this manual for information on producing adequate daily reports.

Material Invoices

Payment for material purchased for extra work paid at force account must be supported by a copy of the vendor's invoice whenever possible. If no individual invoice is available, as in the case of materials taken from contractor's stock, a copy of the mass purchase invoice may be used as support. If no invoice is available to support unit purchase prices, submit a statement with the change order bill. In the statement, explain how the unit prices were verified.

Any invoices the contractor submits must represent the material actually used.

Material on Hand

A material on hand but not incorporated into the work is eligible for a progress payment if:

1. Compliant with other Contract parts
2. Material cost exceeds either of the following:
 - 2.1. \$50,000

- 2.2. \$25,000 if the requestor is certified as one or more of the following:
 - 2.2.1. DBE
 - 2.2.2. Small business as certified by Department of General Services, Office of Small Business
3. Purchased
4. Invoice is submitted
5. Stored within the LPA and you submit evidence that the stored material is subject to the LPA's control
6. Protected from weather and contamination
7. Water pollution control measures are established and maintained
8. Requested on the Caltrans form ([CEM-5101](#)) or LPA equivalent

Section 3-906E, "Materials on Hand," of the Caltrans [Construction Manual](#) contains related guidance on materials on hand.

Contract Change Order Extra Work Billings

Payments for change order work must not be made until the change order is approved/ executed.

Force Account Cost Calculations

These calculations consist of adding specified markups to the actual cost of labor, equipment, and material used to perform the extra work. The contractor must submit bills covering each change order for each day that force account extra work is performed. Compare the force account bills submitted to:

- Labor and equipment hours shown on the daily reports (Tentative Agreements from the Contractor, i.e. with Contractor's letterhead, are not valid for approving payment for Extra Work Bills)
- Material quantities shown on the daily reports
- Prevailing wage rates and payrolls
- Equipment rental rates in the official rental rate book
- Material invoices supplied

Keep a copy of the approved force account bill and the supporting documents in the project files.

Contingency Balance Tracking

The contingency balance must be updated each month to reflect item overruns and approved change order work.

Estimate of the Final Cost of the Work

An anticipated changes sheet must be kept in the project files where the current estimated probable final cost of the work is recorded.

Approval of Progress Pay Estimates and Reimbursement

The RE is responsible for the accuracy of a progress pay estimate. By approval, the RE verifies the quantities are correct, and the data submitted conforms to these policies.

The progress pay estimate, all invoices and supporting documentation are submitted to the DLAE as part of the Invoice Package. See [LAPM Chapter 5: Invoicing](#) for more information. Chapter III, Section 3-9: Payment of the [Caltrans Construction Manual](#) is a good reference document to assist LPAs in organizing their accounting system for a typical federal-aid project.

16.14 Safety Provisions

Introduction

Federal and state laws establish occupational safety and health standards with which all employers must comply. These laws basically require an employer to provide a safe place of employment; i.e., one that is reasonably free from danger to life, or health.

Procedures

The contractor will be required under the contract specifications to comply with safety rules and regulations (see the FHWA Form-1273 section titled Safety - Accident Prevention). The Construction Safety Orders of the California Division of Industrial Safety apply to all federal-aid contracts.

In administering this part of the contract, the engineer is required to verify the contractor properly provides a safe work environment for its workmen. Under no circumstances should the contractor be instructed orally or in writing on how to correct a deficiency. The unsafe condition should simply be identified as well as the specific regulation involved, if it is known. In carrying out the responsibilities of assuring safety compliance as a contract requirement, the following guidelines should be used:

1. **Imminent Hazard** - These are conditions that, if not corrected, would likely result in an accident causing severe or permanently disabling injury, or death.

When an imminent hazard is found to exist or when the contractor permits repeated occurrences of a hazardous condition, the RE should take the following steps:

- a. Advise the contractor verbally of the condition and the need for immediate correction.
 - b. Remove all employees from the hazardous exposure.
 - c. Have the contractor remove all personnel not necessary to make the corrections. Complete all necessary abatement actions.
 - d. If the contractor complies, document the incident in the contract's Safety Diary with appropriate references in the RE's Diary.
 - e. If the contractor does not comply, shut-down the affected operation(s). Document the condition(s) and your action taken in writing. Whenever it is necessary to shut-down a contractor's operation, the LPA Construction Safety Coordinator and the Division of Occupational Safety and Health (Cal/OSHA) should be notified of the hazardous condition and the actions taken. Diaries giving all details leading up to the suspension and copies of orders by the RE and/or the Division of Occupational Safety and Health should be maintained in the contract files (Category 6 if Caltrans' filing system is used).
2. **Dangerous Conditions (Serious Hazards)** - These are conditions that do not present an immediate danger to workers but if not corrected could result in a disabling injury and possibly death, or could develop into an imminent hazard.

When a dangerous condition (sometime referred to as a serious hazard) is found to exist, the RE should take the following steps:

- a. Advise the contractor verbally of the condition and the need for timely correction. If appropriate, set a compliance deadline.
 - b. Remove state and consultant employees from the hazardous exposure.
 - c. If the contractor complies, document the incident in the contract's Safety Diary with appropriate references in the RE's Diary.
 - d. If the contractor does not comply, consider ordering the shut-down of affected operation(s). Document the condition(s) and your action taken in writing. If the operation is ordered to be shut-down, proceed in the same manner as described for an imminent hazard.
- 3. Minor or Non-Serious** - These are conditions that could result in minor injuries or that may be classified as a threat to health.

When a non-serious or minor condition is found to exist, the RE should take the following steps:

- a. Advise the contractor verbally of the condition and the need for correction.
- b. If the contractor complies, document the incident in the contract's Safety Diary.
- c. Protect state and consultant employees from exposure.
- d. If the contractor fails to correct the condition or permits its repeated occurrence, the Construction Safety Coordinator should be notified.

Citations & Information Memorandum

Cal/OSHA issues citations if, during an inspection, they observe an employee exposed to an unsafe or unsanitary condition. Citations may also be issued in situations where an employee exposure can be shown to have occurred even though it was not observed during the course of the inspection. Every citation will identify the violation and the gravity of the violation (serious, general or regulatory).

In addition to the authority of issuing citations, Cal/OSHA has the authority to prohibit entry into an unsafe area or to use unsafe equipment (Labor Code Section 6325) when an imminent hazard exists. The violation of this type of order is a misdemeanor.

When an actual exposure cannot be demonstrated, but a condition is found to exist that would be a violation if an exposure were to occur, then Cal/OSHA may issue an Information Memorandum. To allow an employee to be exposed to a condition identified in an Information Memorandum constitutes a willful violation of the Safety Orders.

Should a contractor receive a citation, shut-down order (yellow tag), or an Information Memorandum, the Construction Safety Coordinator should be notified. The RE should react to the Cal/OSHA action as outlined in the previous section. The level of action will be based on the severity as determined by Cal/OSHA.

16.15 Traffic Safety in Highway and Street Work Zones

Introduction

The purpose of this section is to ensure adequate consideration is made for traffic safety in highway and street work zones on all federal-aid construction projects.

Procedures

Each LPA must develop and implement procedures consistent with the requirements of this section and [LAPM Chapter 12: Plans, Specification & Estimate](#) (Section 12.6: Plans) that will contribute to the safety of motorists, bicyclists, pedestrians and construction workers on all federal-aid highway construction projects. For each construction project, the LPA's procedures must include, but not be limited to the following:

1. Temporary Traffic Control (TTC) Plan

- Before work begins, traffic control plans, when developed for handling traffic through a construction or maintenance project, must be approved by the Engineer of the LPA or authority having jurisdiction over the highway. TTC plans may range in scope from a very detailed plan designed solely for a specific project, to a reference of standard plans or manuals. The degree of detail in the TTC plan depends on the project complexity and traffic interference with construction activity.
- TTC plans must be developed for all projects and included in the plans, specifications and estimates (PS&Es).
- The TTC plan must comply with Part 6, Temporary Traffic Control, of the California Manual on Uniform Traffic Control Devices (CA MUTCD).
- The scope of the TTC plan must be determined during the planning and design phases of a project.
- Per the CA MUTCD, the TTC plans must be prepared by a person who understands the fundamental principles of TTC and work activities to be performed. For those agencies using the Greenbook, it specifies the preparer must be a Registered Civil or Traffic Engineer.
- The design, selection, and placement of TTC devices for a TTC plan must be based on engineering judgment.
- Provisions may be incorporated into the project bid documents that enable contractors to develop an alternate TTC plan. This alternate or modified plan must have the approval of the engineer of the LPA prior to implementation.

2. Responsible Person

The LPA should designate a qualified person at the project level who should have the primary responsibility and sufficient authority for assuring the TTC plan and other safety aspects of the contract are effectively administered. While the project or RE may have this responsibility on large complex projects, another person should be assigned at the project level to handle traffic control on a full-time basis. This individual's name should be included in the Resident Engineer Contract Administration Checklist (see [Exhibit 15-B: Resident Engineer's Construction Contract Administration Checklist](#)) if the RE is not given this responsibility.

3. Training

All individuals responsible for the development, design, implementation and inspection of traffic control should be adequately trained. Flaggers must be trained as per the Construction Safety Orders in the California Code of Regulations (Title 8, Division 1, Chapter 4, Subchapter 4, Article 11, Section 1599, Flaggers).

4. Accident Analysis

The LPA should analyze construction and maintenance work site accidents for the purpose of correcting deficiencies which are found to exist on individual projects and to improve the content of future traffic control plans.

5. Pay Items

The method of payment for traffic control items should be described in the project specifications.

16.16 Final Inspection and Construction Engineering Review by the State

A final inspection of the work should be made by the LPA. This inspection should occur prior to final completion and before project verification by Caltrans DLAE. Any punch list items resulting from this inspection must be completed by the contractor prior to the expiration of contract time. For details on final inspection, see [LAPM Chapter 17: Project Completion](#) (Section 17.3: Final Inspection Procedures for Federal-Aid Projects). The RE must also take this time to do one last review of the project Environmental Commitment Record, confirming all mitigations were performed and finalizing necessary documentation. LPA construction engineering records may be reviewed during the life of the project or up to three years after final voucher.

16.17 Contract Disputes and Claims

Introduction

All federal-aid projects must include contract provisions containing administrative procedures for dealing with contractor claims. Claim procedures must be included in a LPA's contract special provisions or standard specifications. These procedures must allow for the proper treatment of the following two conditions:

1. Protests or potential claims that have not been resolved during the progress of the work and which have been restated as claims with the return of the proposed final estimate.
2. Situations wherein the first notification of any problem is a claim submitted with the return of the proposed final estimate.

The procedures in the contract claims provisions must not be bypassed or modified through the use of change orders.

This section provides guidance to timely address and resolve contract disputes and claims. This section applies to all federal-aid projects.

Background

A contract dispute is a disagreement between the contractor and the LPA, often over the need to revise the contract, which is generally for additional time or compensation. Among other things, disputes stem from disagreements in the interpretation of plans, specifications, bid

proposals, material handouts, and field conditions. Administrative disputes also occur and may include the following:

- Contract item quantity payments
- Changed quantity payment adjustments
- Administrative deductions and withholdings
- Extra work: labor, equipment, and materials

Disputes become claims when the contractor lists disputes as exceptions to the proposed final estimate.

Claims Avoidance

Claims avoidance is the most prudent step an RE can take to minimize the number and the size of claims. Claims are minimized or avoided if the RE appropriately engages with the contractor and properly administers the contract. Be knowledgeable about the contract documents, policies, and procedures, including federal and state laws applicable to the proper administration of the contract. Maintain a respectful relationship with the contractor throughout the project.

When disputes occur, try to resolve them as early as possible, in accordance with the contract, and at the lowest responsible level. Take the following suggested actions to resolve disputes and minimize claims:

- Communicate with the contractor
- Define the critical issues
- Gather the facts
- Review appropriate contract specifications and documents
- Determine responsibilities
- Consult subject matter experts
- Work within the contractual constraints
- Communicate your position timely
- Provide clear reasons when no merit exists
- Compensate the contractor promptly when merit exists
- Document resolution and elevate, if appropriate

The inclusion of formal Partnering in the contract may help reduce disputes, or aid in early resolution. See Section 5-1.09: Partnering of the CTSS. Section 5-1.43 [9-1.04], Potential Claims and Dispute Resolution of the Standard Specifications requires the contractor to minimize and mitigate the impacts of disputed work or events.

Section 5-5, Delays of the Greenbook obligates the contractor to avoid losses due to delays by the judicious handling of forces, equipment, or plant.

Alternative Dispute Resolution (ADR) techniques can also be included in the contract provisions to help resolve disputes and claims. ADR is any method of resolving disputes other than by litigation. Techniques include negotiation, mediation; disputes review board (DRB), mini-trial,

and arbitration. These methods vary by the amount of assistance from outside sources and the amount of decision responsibility taken away from the disputing parties.

- **Negotiation:** Negotiation occurs when parties resolve the issues themselves, usually at the project level. The LPA's administrative processes would also be considered as negotiation.
- **Disputes Review Board (DRB):** A DRB is a standing 3-person committee created specifically for the project which meets on a regular basis to review and resolve all disputes before they become formal claims. Both parties choose a member who represents them and selects the third member. The operating procedures are described in the contract and the operating costs are shared by both parties. Written decisions are rendered by the board however, the decisions are typically non-binding.
- **Mediation:** Mediation consists of using a neutral party as a catalyst to depersonalize the dispute. The mediator does not decide the dispute, but instead tries to facilitate communication and help the parties achieve compromise and settlement. Mediation is normally non-binding.
- **Mini-Trial:** A mini-trial is a settlement process in which each party's counsel presents a summary of their respective cases, including any evidence and witnesses, to a panel. The panel consists of senior officials of the LPA and the contractor, plus a neutral official. The officials have authority to settle the dispute FHWA also has a representative at the mini-trial who has the authority to approve any settlement reached by the parties. Mini-Trials are non-binding.
- **Arbitration:** Arbitration is a proceeding in which the dispute is resolved based on fact and law, by one or three arbitrators. The arbitrators are chosen by the parties. Although decisions may or may not be binding and without appeal, in almost all cases, the arbitration decision is accepted by both parties. Usually, the only cases carried on to litigation are those that involve a point of law. Arbitration is permitted under the State Public Contract Code.

Specifications are available at [California Department of Transportation Standard Specifications](#) website. For more information contact the DLAE.

Claim Procedures and Contract Provisions

During the Project

For projects using Caltrans Standard Specification during the course of the project and up to receiving the proposed final estimate, the contractor must submit a contract dispute or protest in the form of a Request for Information (RFI). If the RFI leads to a dispute, the contractor must follow the three-part potential claim process specified in the contract. The three parts of the potential claim process begins with [Exhibit 16-UI: Initial Potential Claim Record](#), [Exhibit 16-US: Supplemental Potential Claim Record](#), and [Exhibit 16-UF: Full and Final Potential Claim Record](#). Ensure that on all claims-related documents, the date and time of receipt and the name of the person who received it are noted. Ensure the RFI and potential claim documents are complete and timely. If the information is incomplete, notify the contractor and request the contractor resubmit the document with the complete information within the required timeframe.

Relevant portions of the Caltrans Standard Specifications include, but are not limited to:

- Section 5-1.06, Protests
- Section 5-1.42, Requests for Information

- Section 5-1.43, Potential Claims and Dispute Resolution

Relevant portions of the Standard Specifications for Public Works Construction, also known as the Greenbook, include, but are not limited to:

- Section 3-4, Changed Conditions
- Section 3-5, Disputed Work

LPAs should always review relevant portions of their special provisions.

Additional guidance on responding to RFIs and potential claims on properly documenting the dispute resolution process can be found in the following sections of the [Caltrans Construction Manual](#):

- Section 3-521, Requests for Information and Potential Claim Records
- Section 5-403, Requests for Information, Potential Claim Records Claims

Sample dispute response clauses are located in the [Caltrans Construction Manual](#), Section 3-521E: Sample Dispute Response Clauses, including sample responses for the following topics:

- RFI to Protest Differing Site Condition
- RFI to Protest a Time Adjustment Determination in a Change Order
- RFI to Protest a Weekly Statement of Working Days
- Potential Claim Record

After the Proposed Final Estimate

LPAs must diligently pursue the satisfactory resolution of claims within a reasonable period of time. It is important to follow your contract claims process to ensure the process is completed within the statutory requirement of 240 days. If the contractor has diligently pursued and exhausted the administrative procedures specified in the contract, the contractor is entitled to file for arbitration of its claims 240 days after contract acceptance, even if the LPA has not issued a claims determination. The LPA is not required to give advance notification to the DLAE or FHWA of the details of claims unless estimated defense and/or settlement costs would require an increase in the amount of federal funds authorized for the project.

Claims that involve difficult, complex, or novel legal issues should be brought to the attention of the DLAE. The DLAE will contact the FHWA for assistance, if appropriate. The DLAE may provide limited engineering and administrative assistance in the claim defense, depending on the complexity and size of the claim, as well as the availability of Caltrans' staff resources.

False Statements Concerning Highway Projects

This section applies to all federal-aid highway construction projects.

Title 18 of the US Code Section 1020 is an anti-fraud statute originating from the Federal-Aid Road Act of 1916. The making or use of false statements is a felony, punishable by fine of not more than \$10,000, or imprisonment of not more than 5 years, or both. Making or using false claims for the purpose of obtaining payment against federal funds, will subjects violators to forfeiture of \$2,000 for each violation.

This section specifically provides that willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of federal law and requires that the false statements poster, Form FHWA-1022, be posted on the project.

The LPA is to conduct investigations on complaints and review records that are potentially vulnerable to fraud. It is also the LPA's responsibility to furnish the prime contractor with the required poster (Form FHWA-1022) and to ensure it is posted accordingly.

Federal-Aid Participation

The eligibility for and extent of federal-aid participation, up to the amount of federal funds authorized for the project, in a contract claim should be determined by the LPA in accordance with the following:

- a. Contract claim defense costs which are directly allocable to a federal-aid project but not including general administrative and other overhead costs, are reimbursable up to the federal statutory share. Such costs are reimbursable at the same participation rate as the related construction project.
- b. Federal funds will participate in contract claim awards to the extent that any contract adjustments made are supported and have a basis in terms of the contract and applicable state law, as fairly construed. Further, the basis for the adjustment and contractor compensation should be in accord with prevailing principles of public contract law.
- c. Federal funds can participate in interest associated with a claim if three conditions are met:
 - The interest must be allowable by statute or specification
 - The interest is not the result of delays caused by dilatory action of the LPA or contractor
 - The interest rate does not exceed the rates provided for by statute or specification
- d. Acts of LPA employees involved in contract administration and contract plan preparation matters which subsequently give rise to claims, are reimbursable to the extent the actions are reasonable and within the standards of the profession. Federal funds will not participate if it has been determined that LPA employees, officers, or agents acted with gross negligence, or participated in intentional acts or omissions, fraud, or other acts not consistent with usual LPA practices in project design plan preparation or contract administration.
- e. Federal funds will not participate in such cost items as consequential or punitive damages, anticipated profit, or any award or payment of attorney's fees paid by the LPA to an opposing party in litigation; and in tort, inverse condemnation, or other claims erroneously styled as claims under a contract.
- f. In those cases where LPAs receive an adverse decision in an amount more than the LPA can support prior to the decision, or settles a claim in an amount more than the LPA can support, the contract claim award is eligible for federal-aid participation up to the appropriate federal matching share, to the extent that it involves a federal-aid participating portion of the contract, provided that:

- The DLAE was consulted and concurred with the proposed course of action
- All appropriate courses of action have been considered
- The LPA pursued the case diligently and in a professional manner

Additional Funds

If contract claim defense and/or award costs will exceed the amount of federal funds authorized for the project, the LPA should contact the DLAE for assistance. For regionally programmed federal-aid funds (Regional Surface Transportation Program, Congestion Mitigation and Air Quality Improvement Program, etc.) the Regional Transportation Planning Agency (RTPA) or Metropolitan Planning Organization (MPO) must be involved in authorizing additional funds. For state discretionary funds, the Caltrans Division of Local Assistance (DLA) will make the determination. Many of these programs may also require California Transportation Commission (CTC) approval for the additional funds. The [Local Assistance Program Guidelines \(LAPG\)](#) should be consulted for procedures for obtaining funding from the various Local Assistance funding programs.

Generally, the LPA must take action to settle the claims that are deemed to have merit first, and then initiate the request for the additional funds. However, if estimated claim defense costs alone will exceed available funds, approval for the additional claim defense costs may be obtained in advance, depending on the funding program. If approval is received, the DLAE will initiate authorization of the additional federal funds upon receipt of a Request for Authorization, and copies of a revised finance letter and detail estimate. It is important to note that while additional funds may be authorized and obligated, reimbursement of costs is still subject to the standards described in this manual. Upon resolution of all contract claims, if additional federal funding is required, the DLAE will review the documentation and recommend the appropriate action depending on program constraints and the circumstances of the claim settlement. The adequacy of the LPA's project supervision and inspection, including the keeping of proper records, will be considered in this determination.

Invoices

Claim defense costs are considered construction engineering if incurred before the final invoice and should be included in progress billing invoices prepared and submitted to Caltrans (see [LAPM Chapter 5: Invoicing](#)).

Contract claim awards are billed as construction contract costs. These costs are usually not known until the final invoice is prepared. Claims award costs are included in the Final Invoice, Final Detail Estimate, and reported on the CO Summary. These documents are included in the mandatory Report of Expenditures submitted to the DLAE (see [LAPM Chapter 17: Project Completion](#)). Documentation of approvals from the appropriate fund manager for additional funds, if required, should also be included in the Report of Expenditures.

Upon receipt of the Report of Expenditures, the DLAE will accept the LPA certification regarding the accuracy of the reported costs and approve payment after verifying the project was completed in accordance with the scope described in the project authorization.

Documentation

The LPA must document the determination of participation by providing in writing the following:

- Legal and contractual basis for the claim

- Cost data supporting any payment made
- Other facts supporting the award or settlement

Federal-aid participation should be supported by an audit of the contractor's actual costs unless costs can be substantiated with project records or an audit would not be cost-effective.

Where difficult, complex, or novel legal issues appear in the claim, such that evaluation of legal controversies is critical to the consideration of the award or settlement. The LPA must include in its documentation a legal opinion from its counsel providing the basis for determining the extent of the liability under local law, with a level of detail commensurate with the magnitude and complexity of the issues involved. All contract records must be retained by the LPA for a minimum period of three years from the date of the final voucher.

Recovery of Compensatory Damages

The federal share pertaining to the recovery of compensatory damages should be equivalent to the federal share of the project or projects involved. In cases where LPAs affirmatively recover compensatory damages through contract claims, cross-claims, or counter claims from contractors, subcontractors, or their agents should be credited to the project or projects from which the claim or claims arose.

16.18 Construction Oversight Program

For locally administered federal-aid highway projects off the State Highway System, construction oversight reviews will be performed by Caltrans Local Assistance Construction Oversight Engineers (COEs). DLAE staff may participate in the reviews, if available.

Types of Reviews

The purpose of construction oversight reviews is to verify LPA compliance with federal-aid construction contract administration requirements. These reviews may be conducted prior to the start of the construction contract, during construction, and/or after the completion of the construction contract as described below. The objective is to perform at least one review on all projects.

Preliminary Construction Review

The purpose of the preliminary construction review is to provide supplementary oversight and guidance regarding construction contract administration to the LPA on a federal-aid construction project prior to the start of contract work. Preliminary reviews will be performed on selected federal-aid projects requiring a greater degree of oversight. The following factors may be used when selecting projects for preliminary review:

- High cost and/or complex projects
- Projects administered by agencies with previous sanctions/findings
- Lack of experienced/trained LPA personnel
- Per request by the LPA or DLAE for additional assistance

During preliminary construction reviews, the COE will meet with the LPA's construction contract administration team and discuss project record documentation requirements using the [Pre-Construction Review Checklist](#). The COE will also explain new policies or procedures, discuss

available training, and highlight common problem areas and the means to avoid them. The timing of this type of review is targeted for after bid opening, but prior to beginning construction.

Mid-Construction Review

Mid-construction reviews will be performed on selected federal-aid construction projects. Factors to be considered in determining which projects to review include:

- High cost and/or complex projects
- Projects administered by agencies with previous sanctions/findings
- Projects that did not have a preliminary construction review
- Duration of the project
- Project location

During these reviews, the COE will meet with the LPA's resident engineer and review the project records. The Mid-Constriction Review Checklist will serve as the basis for this review. Any major deficiencies will be identified, and the LPA will be notified of the deficiencies (see Review Findings below). The timing of this type of review is targeted for 40% to 60% of construction completion, but should not take place until the LPA has processed at least one progress payment to the contractor.

Post Construction Review

Post construction reviews will be performed on a case-by-case basis. Projects that did not receive a preliminary or mid-construction review, or had major deficiencies identified during a mid-construction review, are candidates for a post construction review. The purpose of the post construction review is to verify that federal and state requirements for construction contract administration have been met, and to ensure that major deficiencies noted during mid-construction reviews have been fully resolved in conformance with an accepted corrective action plan. The Post-Construction Review Checklist will serve as the basis for this review. Accepted corrective action plans will also be utilized in the review. Any further major deficiencies will be identified, and the LPA will be notified of the deficiencies (see Review Findings below).

Review Findings

Results of the construction oversight reviews will be forwarded to the LPA and the DLAE within two weeks. Any major deficiency identified during a review will require development of a corrective action plan by the LPA in consultation with the District within 30 days of receipt of the major deficiency notification. Major deficiencies are those errors of commission or omission, which violate federal or state law or regulation, and if uncorrected, would prevent federal or state participation in all or a portion of the project.

Corrective action plans will identify actions the LPA will take to address each major deficiency noted. Corrective actions may include modifications of LPA policies and procedures, and participation in training to address systemic related deficiencies, while project specific issues may require additional measures to remedy deficiencies to ensure compliance with federal and state requirements and ensure reimbursement eligibility. Corrective action plans must also include timelines for each action to be implemented. Failure to provide and implement corrective actions may result in sanctions or federal ineligibility notices against the project or LPA.

16.19 References

18 USC 1020

<https://www.gpo.gov/fdsys/granule/USCODE-2011-title18/USCODE-2011-title18-part1-chap47-sec1020>

23 CFR

<https://www.fhwa.dot.gov/legsregs/directives/cfr23toc.htm>

23 CFR 637

<http://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=23:1.0.1.7.25>

29 CFR 5.7(b)

<https://www.law.cornell.edu/cfr/text/29/5.7>

41 CFR 60

<https://www.govinfo.gov/content/pkg/CFR-2018-title41-vol1/xml/CFR-2018-title41-vol1-part60.xml>

48 CFR Part 31

https://ecfr.io/Title-48/cfr31_main

49 CFR

http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49tab_02.tpl

Bridge Construction Records and Procedures Manual. V 1

<https://dot.ca.gov/programs/engineering-services/manuals/bridge-constr-records-proc-manual-vol1>

California Department of Transportation Standard Specifications

<https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications>

California Division of Industrial Safety - Construction Safety Orders

<https://www.dir.ca.gov/title8/sub4.html>

California Information Practices Act (Civil Code Sections 1798, et seq.)

https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=CIV&division=3.&title=1.8.&part=4.&chapter=1.&article

California Public Contract Code Chapter 4

https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=PCC&division=2.&title=&part=1.&chapter=4.&article=

California Public Records Act (Government Code Section 6253)

http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNum=6253

Caltrans Construction Contract Standards

<https://dot.ca.gov/programs/design>

Caltrans Construction Manual

<https://dot.ca.gov/programs/construction/construction-manual>

Caltrans Labor Compliance Website

<https://dot.ca.gov/programs/construction/labor-compliance>

Federal-Aid Contract Prejob Checklist

<https://dot.ca.gov/-/media/dot-media/programs/construction/documents/labor-compliance/prejob-checklists/federal-aid-contract-prejob-checklist-form201903.pdf>

Federal Aid Programming Guide (NS 23 CFR 635A) (Materials and right of way delays)

<https://www.fhwa.dot.gov/construction/contracts/0635asup.cfm>

FHWA Technical Advisory, Construction Contract Time Determination Procedures, TA 5080.15

<https://www.fhwa.dot.gov/construction/contracts/t508015.cfm>

Form FHWA 1273 Contract Provisions

<https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf>

HQ Division of Local Assistance Training for Local Agencies Web page

<https://dot.ca.gov/programs/local-assistance/other-important-issues/training>

HQ Division of Local Assistance Web page

<https://dot.ca.gov/programs/local-assistance>

Local Agency Resident Engineer Construction Manual Supplement

<https://dot.ca.gov/-/media/dot-media/programs/construction/documents/policies-procedures-publications/construction-manual/cm-supplement-lare-a11y.pdf>

Local Assistance Structure Representative Guidelines

<https://dot.ca.gov/programs/construction/publications>

Partnering with Caltrans

<https://dot.ca.gov/programs/construction/partnering>

State of California DOT, Quality Assurance Program Manual for use by Local Agencies, December 2008

<https://dot.ca.gov/-/media/dot-media/programs/local-assistance/documents/reports/qap-manual.pdf>

Technical Advisories (TA): T 45401 Equipment Rental Rates

<https://www.fhwa.dot.gov/programadmin/contracts/ta45401.cfm>

US DOT, FHWA, Contract Administration Core Curriculum

<https://www.fhwa.dot.gov/programadmin/contracts/coretoc.cfm>

Washington State Department of Transportation, Local Agency Guidelines

<http://www.wsdot.wa.gov/localprograms/LAG/>