Construction Manual Supplement FOR LOCAL AGENCY RESIDENT ENGINEERS



State of California Department of Transportation Division of Construction Office of Contract Administration & Risk Management February 2017



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State of California Department of Transportation Division of Construction

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February 2017



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Purpose

The *Construction Manual* establishes policies and procedures for personnel engaged in contract administration. When a local agency or private entity enters into an agreement with Caltrans to construct a project on the state highway system, they agree that the project will conform to Caltrans standards, policy and procedures. However, not all policies and procedures in the *Construction Manual* are applicable to local agencies or private entities when advertising, awarding, and administering projects. This supplement establishes which sections of the *Construction Manual* are not applicable to local agency and private entity projects, and modifies sections that are partially applicable. Any section not mentioned in this manual is presumed to apply to all projects constructed on the state highway system, regardless of the implementing agency.

The Local Agency Structure Representative Guideline is also available to assist local agencies and private entities when the project includes structures and the Bridge Construction Records and Procedures manual applies.

Scope and Outline

This supplement follows the same general framework as the *Construction Manual*. Not all sections are included in this supplement. Unless stated otherwise, the requirements of the *Construction Manual* apply with the local agency acting in the capacity of Caltrans.

Definitions

- **cooperative agreement**—A formal, legally binding contract between Caltrans and a city, county, or a public entity for the various components of a project, whereby the participants agree to either share or cooperate in state highway improvement projects. Cooperative agreements outline the responsibilities and obligations of the participants. Cooperative agreements are required by law when exchanges of funds or commitments of personnel resources will occur. For projects administered by private entities, a highway improvement agreement is used in place of a cooperative agreement. For the purposes of these guidelines, a highway improvement agreement is considered a "cooperative agreement" unless otherwise noted.
- **encroachment permit**—A permit issued by Caltrans granting permissive authority to enter the state right-of-way and construct approved facilities. It authorizes only the permittee or permittee's agent to perform the scope of work specified within the encroachment permit or cooperative agreement. The permittee may not transfer or assign an approved permit to another party. When a permittee hires a contractor to perform the approved work, an additional permit is required for the contractor.
- federal-aid project—Any project that has received any funding from the Federal Highway Administration (FHWA).
- **implementing agency**—Entity charged with managing the scope, cost, and schedule of a project component to ensure the completion of that component.
- independent quality assurance— Caltrans's efforts to ensure that another entity's quality assurance activities are in accordance with applicable policies, procedures, and standards and the project's quality management plan. When Caltrans performs independent quality assurance, it does not develop, produce, validate, verify, re-check, or perform quality control on another entity's or contractor's work products.
- **local agency**—A public entity (federal, state, county, city, regional transportation planning agency, or other local government entity) that sponsors or administers a construction contract on the state highway system. In addition, for the purpose of this guidance, any private entity that sponsors or administers a construction contract on the state highway system is considered a "local agency" unless otherwise noted.
- **oversight project**—A project within the existing or future state highway right-of-way where the local agency is the implementing agency for the construction component under the terms of a cooperative agreement.
- **projects of division interest (PoDI)**—Federal-aid projects that FHWA has determined to be PoDIs have an elevated risk, contain elements of higher risk, or present a meaningful opportunity for FHWA involvement to enhance meeting program or project objectives. Each PoDI will have a project-specific PoDI stewardship and oversight plan that outlines specific actions required by the FHWA division.
- **project sponsor**—An entity that secures funding for projects and serves as the project advocate. The sponsor chooses an implementing agency and is the customer of the implementing agency. The project sponsor and implementing agency can be the same.
- **quality assurance**—The activities performed at the project level by the implementing agency during construction that provide the confidence that the contractor is fulfilling contract requirements.
- **quality control**—The operational processes, practices, and activities performed by the contractor during construction to ensure and document that the product fulfills contract quality requirements.

Roles and Responsibilities

- **contractor**—Person or business or its legal representative entering into a contract with a local agency for performance of the work. The contractor is responsible for providing quality control as described in the construction contract (including the Caltrans-approved plans and specifications) and the encroachment permit.
- **local agency resident engineer (LARE)**—Used in the same context as resident engineer as described in the *Standard Specifications* and *Construction Manual* except the LARE works for the local agency, not Caltrans. The LARE is responsible for providing quality assurance and project documentation as detailed in the *Construction Manual* and this supplemental manual.
- **oversight resident engineer (ORE)**—A Caltrans employee who performs independent quality assurance of the activities being performed by the LARE, the local agency structure representative, and others assigned to a construction project. The ORE is the local agency's primary Caltrans contact. The ORE assures compliance with applicable state and federal regulations, contract requirements, Caltrans standards and practices, encroachment permits, and cooperative-agreement requirements. For federal-aid projects, the ORE performs independent quality assurance of the quality-assurance work performed by the local agency for the entire project. For non-federal-aid projects, the ORE performs independent quality assurance on only the portion of the project within the existing or future state right-of-way.
- **Structure Construction oversight engineer**—A Caltrans Structure Construction employee who is assigned to assist the ORE. A Structure Construction employee can also be the ORE.
- **Structure representative**—A local agency employee (or a consultant hired by a local agency) that performs quality assurance over the contractor's work that involves structures and who performs the contract's necessary structure-related administrative tasks.

Section 1-1 Construction Organization

The local agency must provide qualified construction management staff at the level required to perform all duties outlined in Section 1-105, "Construction Project Organization," of the Construction Manual.

Section 1-2 Public Relations

1-201 General

The local agency develops public relations procedures for each element outlined in Section 2, "Public Relations," of the Construction Manual. The local agency informs the ORE of the public relations procedures and regularly updates the ORE on public relation activities.

1-202 Relations with Caltrans Personnel

The local agency main point of contact with Caltrans is the state representative, the ORE.

Section 1-3 Personnel Development

The local agency is responsible for the personnel development of its employees and consultants; thus, this section of the *Construction Manual* is not applicable.

Section 1-4 Facilities and Equipment

The local agency is responsible for providing and maintaining its own facilities, transportation equipment, consumable supplies, and equipment; thus, this section of the *Construction Manual* is not applicable. State facilities or equipment are not provided to the local agency unless specifically stated in the cooperative agreement or the encroachment permit. Refer to the "General Provisions" requirements attached to the encroachment permit.

Section 1-5 Field Expenses and Purchases

This section of the *Construction Manual* is not applicable. The local agency is responsible for the travel expenses, transportation, and miscellaneous purchases of their employees and consultants.

Section 2-2 Traffic

2-215 Construction Zone Enhanced Enforcement Program

When the project calls for Construction Zone Enhanced Enforcement Program (COZEEP), the local agency will contract directly with the California Highway Patrol (CHP) for services. The local agency may use Caltrans forms, but it should be made clear that the local agency, not Caltrans, will be receiving and paying the invoices. The local agency must first offer a COZEEP contract to CHP. If the CHP declines to perform the services, the contract may be offered to the local law enforcement agency having jurisdiction over the state highway system where the project is located.

Section 2-3 Major Construction Incidents

The local agency is responsible for addressing, mitigating, indemnifying, and reporting accidents and major incidents. The LARE must immediately provide the information on Form CEM-0603, "Major Construction Incident Notification," to the ORE. The ORE will file the report in accordance with the procedures established by their Caltrans district office.

Section 3-0 Introduction

The local agency administers the construction contract that they have entered into with the contractor. The contract will likely have adopted Caltrans's *Standard Specifications* with amendments, in addition to any local agency special provisions.

Section 3-1 General

Unless specifically changed in the local agency's special provisions, the abbreviations and definitions in Caltrans's *Standard Specifications* govern the work and contract administration.

Section 3-2 Bidding

When the local agency advertises the project, the local agency will follow its own contract advertising requirements. This section of the *Construction Manual* is not applicable. For federal-aid projects, local agencies must follow the advertising procedures designated in the *Local Assistance Procedures Manual*.

Section 3-3 Contract Award and Execution

This section of the *Construction Manual* does not apply. For federal-aid projects, the local agency must also follow the award procedures in the *Local Assistance Procedures Manual*.

Section 3-4 Scope of Work

3-402 Use of the Materials Found on the Job Site

The contractor may not use material found inside or outside of the planned slope and grade lines without first receiving written approval from the ORE.

3-403 Changes and Extra Work

The cooperative agreement will outline the Caltrans concurrence requirements for change orders that the LARE must follow. The LARE will review the cooperative agreement closely and comply with any special requirements to obtain concurrences by the ORE before execution of any change order. On a local agency-administered project, the LARE uses the local agency's change order process and contract stipulations.

Local agencies administer their construction contracts under different parts of the Public Contract Code and are allowed greater leeway to make scope changes to their construction contracts. A local agency scope change still requires prior concurrence from the ORE and approval from the FHWA engineer on certain federal-aid projects, as outlined in Section 5-308, "Federal Highway Administration Change Order Requirements," of the *Construction Manual*.

3-405 Value Engineering

Unless amended by the local agency prior to advertisement, the Caltrans *Standard Specifications* allow the contractor to submit a value engineering change proposal (VECP). The LARE uses the contract requirements and *Construction Manual* procedures to evaluate the VECP, obtain authorization to implement or reject the VECP, and execute the change order. The ORE must concur on change orders in accordance with the cooperative agreement.

Section 3-5 Control of Work

3-502 Engineer's Authority

The LARE must submit Form CEM-0101, "Resident Engineer's Report of Assignment," to the ORE and the FHWA engineer for Projects of Division Interest (PoDI). The form is available from the ORE or website:

http://forms.dot.ca.gov/

3-504 Partnering

Unless amended by the local agency, Section 5-1.09, "Partnering," of the *Standard Specifications* requires partnering on certain projects. The ORE is available to participate in partnering meetings upon request by the local agency.

3-507 Subcontracting

For federal-aid projects, the LARE must follow the procedures in the *Local Assistance Procedures Manual*. The LARE must assure that contractors are performing at least the minimum amount of work with their own forces as required by the contract.

The local agency is responsible for ensuring that all subcontractor substitutions and due process subcontractor protest hearings comply with Section 4107 of the Public Contract Code.

For other projects, the LARE must administer the requirements of the contract and enforce subcontracting laws in accordance with local agency guidelines and procedures.

3-510 Coordination With Other Entities

The procedures outlined in this section of the *Construction Manual* should be followed with the exception of the model agreement, "Agreement Between a Contractor Working on State Facilities and a Real Property Owner for Disposing of Construction-Related Materials on Property Owner's Property." Use Example 3-5.1, local agency version, found in this supplement.

3-516 Areas for Use

Section 5-1.32, "Areas for Use," of the *Standard Specifications* allows the contractor to occupy the highway only for purposes necessary to perform the work. Any approval to use the right-of-way for temporary storage or any other purpose must have been granted to the local agency in writing prior to construction. For approval of the contractor to use state-owned property for any purpose other than to perform the work, contact the ORE.

3-519 Maintenance and Protection

The cooperative agreement states the local agency is responsible for maintenance of the state highway system within the project limits during construction until one of the following conditions are met:

- The project work has been accepted and the encroachment permit issued to the contractor has been closed.
- 2. Caltrans has approved a request from the local agency for relief from maintenance for all or a portion of the project.

The local agency typically requires the contractor to maintain the state highway system on its behalf.

3-520 Maintenance and Protection Relief

Under Section 5-1.38, "Maintenance and Protection Relief," of the *Standard Specifications*, the local agency may request that Caltrans grant relief from maintenance on a completed work portion. The local agency will typically grant relief from maintenance to the contractor on that portion of work.

3-521 Requests for Information and Potential Claim Records

The local agency is not required to comply with this part of the *Construction Manual*. The local agency may use their own process for initiating contractor inquiries and potential claims. However, the *Standard Specifications* requires the contractor to use Caltrans's process, and would have to be amended by the local agency if any other process is used. For projects that have state or federal funds for the construction capital component of the project, the cooperative agreement requires the local agency to use a claims process acceptable to Caltrans. The district or region's construction office will provide this approval to the local agency and the process will be included in the project specifications.

3-522 Alternative Dispute Resolution Processes

The local agency is not required to comply with this part of the *Construction Manual*. However, the *Standard Specifications* requires the contractor to use an alternative dispute resolution process on certain projects and this would have to be amended by the local agency.

3-523 Final Inspection and Contract Acceptance

At 90 percent completion, maintenance and safety reviews are conducted by Caltrans. The LARE must work closely with the ORE to schedule these final reviews to avoid delay of project acceptance by the local agency and to facilitate timely release of the encroachment permit by Caltrans.

Upon completion of work, the LARE should request a final inspection for acceptance by the ORE in accordance with the encroachment permit. The LARE should not accept the contract from the contractor until the ORE's final acceptance is obtained in writing. The ORE is responsible for notifying the Caltrans units and FHWA personnel of who should attend the final inspection reviews.

Example 3-5.1. Agreement Between a Contractor Working on State Facilities and a Real Property Owner for the Placement of Construction-Related Material Outside the State Right-of-Way: Local Agency Version (1 of 2)

AGREEMENT BETWEEN A CONTRACTOR WORKING ON STATE FACILITIES AND A REAL PROPERTY OWNER FOR THE PLACEMENT OF CONSTRUCTION-RELATED MATERIAL OUTSIDE THE STATE RIGHT-OF-WAY (local agency version)				
	Contract No.: County/Route/Post Mile:			
The	e contractor,, ("Contractor") has ered into Contract No ("Contract"), with (Local Agency), for work that			
is d	lescribed as follows:			
	("Project").			
The	e owner ("Owner") of the			
real	e owner,, ("Owner") of the l property ("Property") located at			
(such as address, location, county and parcel number(s), project station(s), offsets, and other property location information) agrees to allow the placement of approximately cubic yards of (such as soil, aggregate, asphalt grindings and other material) ("Material") that has been generated from the Project on the Owner's Property by the Contractor.				
	oner agrees that the Contractor has assumed ownership of the Material that is being posited on the Property from the (Local Agency).			
Contractor and Owner agree to obtain and furnish to the (Local Agency's) engineer, all necessary permits, licenses, and clearances prior to placing Material on the Property.				
By submission of this agreement to the (Local Agency's) engineer, the Contractor and Owner are acknowledging that they have been informed of all restrictions, laws and permit requirements associated with the transportation and placement of the Material from the Property and have agreed to abide by the same. These laws include but are not limited to:				
	Local Ordinances—Grading permits for the grading, filling, excavation, storage, or disposal of soil or earthen material.			
	California Fish and Game Code (Section 1602), "Lake or Stream Bed Alteration Agreement"—A permit required before the placement of material in a location where it can pass into waters of the state, directly or indirectly, from causes such as erosion or maintenance.			
•	California Fish and Game Code (Section 5650)—Prohibition of the deposit of petroleum products (including asphalt) or any material deleterious to fish, plants, or birds that can pass into the waters of the state.			

Example 3-5.1. Agreement Between a Contractor Working on State Facilities and a Real Property Owner for the Placement of Construction-Related Material Outside the State Right-of-Way: Local Agency Version (2 of 2)

- Federal Clean Water Act (Section 301 and 402), "General Permit for Discharges of Storm Water Associated with Construction Activity"—A permit is required prior to soil disturbance of an area of one acre or more.
- Federal Clean Water Act (Section 404), "Permit for Discharge of Dredged or Fill Material"—A
 permit from the United States Army Corps of Engineers may be required for the discharge of fill
 material into waters, including wetlands, of the United States.

Owner and Contractor agree that the Material will be transported, deposited, and left in a manner that will not cause injury or harm to any person or property. If injury or harm does occur to any person or property or if any environmental impacts or litigation arises as a result of the transportation, deposition, or the final form in which the Material is left on the Property, regardless of manner or form, the Owner and Contractor agree to indemnify, defend, protect, and hold harmless the (Local Agency) and State of California, Department of Transportation in any action in law or equity.

Pursuant to the Contract, Owner acknowledges that Contractor will submit this agreement to the (Local Agency) as evidence that the Owner has authorized the placement of the Material on the Property. Owner acknowledges that the Contractor is not authorized to make any representations or agreements on behalf of the (Local Agency).

Contractor and Owner agree that the (Local Agency) and State of California, Department of Transportation are released from any and all obligations to Owner made by Contractor under this agreement.

Owner and Contractor acknowledge that they have had the opportunity to receive independent legal advice with respect to the meaning, implications, and advisability of entering into and executing this agreement.

Date:

(Signature of Property Owner)

Date: _____

(Signature of Contractor's Authorized Representative per Caltrans *Standard Specifications*)

Section 3-6 Control of Materials

3-602 Department-Furnished Materials

The LARE must coordinate with the ORE to obtain the department-furnished materials if specified in the cooperative agreement. The cooperative agreement outlines if the local agency must reimburse Caltrans for department-furnished materials.

3-603 Local Materials

The ORE must concur with changes to mandatory local material sources.

3-605 Brand or Trade Names and Substitutions

The ORE must concur before the contractor furnishes other products claimed to be of equal or better quality.

3-607 Out-of-State Fabrication

The local agency is responsible for performing source inspection activities as per the Source Inspection Quality Management Plan approved by the State Materials Engineer prior to construction.

3-608 Testing

The ORE must concur before the LARE may accept out-of-specification material.

3-610 Suspected Fraudulent Tests and Inspection Reports

When fraudulent tests and inspection reports are suspected, immediately discuss the situation with the ORE or the Structure Construction oversight engineer.

3-611 Guarantee

The local agency must include Section 6-3.06, Guarantee, of the *Standard Specifications*, in the project specifications. The contractor must obtain a valid encroachment permit to perform corrective work on the state highway system.

Section 3-7 Legal Relations and Responsibility to the Public

3-701 Laws to be Observed

Communication with Caltrans must be done through the ORE or the Structure Construction oversight engineer as determined in this manual and the *Local Agency Structure Representative Guidelines*, and the Construction Quality Management Plan.

3-703 Public Safety

The LARE must notify the ORE no less than 20 days and no more than 90 days before implementing proposed vertical and horizontal clearance change or any proposed bridge permit rating change.

3-704 Indemnification and Insurance

Evidence of insurance is provided to the state before issuance of the encroachment permit to the contractor. The LARE is responsible for ensuring that insurance policies do not lapse during execution of the work.

Section 3-8 Prosecution and Progress

3-801 Schedule

The *Standard Specifications* contain requirements for maintaining a critical path method schedule. Unless edited, the contractor must follow that section, and the LARE must follow this section of the *Construction Manual*.

3-802 Preconstruction Conference

Refer to Sections 5-002, "Preconstruction Conference with Caltrans Personnel," and 5-003, "Preconstruction Conference with the Contractor," of this manual for additional guidance.

3-803 Start of Job Site Activities

This section does not apply to the local agency. The LARE should use local agency procedures. The LARE must notify the ORE of the beginning of the work in accordance with the encroachment permit requirements.

3-804 Time

For FHWA federal-aid projects, the LARE must follow the procedures in the *Local Assistance Procedures Manual*. A local agency must have an established method to account for contract time that contains all of the information designated on Caltrans Form CEM-2701, "Weekly Statement of Working Days." Form CEM-2701 is in a format acceptable to FHWA and contains a method of tracking, reporting, and analyzing contract time. Use of Form CEM-2701 by a local agency is recommended but not required.

For non-federal-aid projects, the local agency follows its own established rules.

3-805 Suspensions

The LARE must provide the ORE with a copy of all correspondence notifying the contractor of a temporary suspension or the resumption of work.

3-806 Delays

The local agency is responsible for managing the effects of project delays.

3-807 Liquidated Damages

For FHWA federal-aid projects, the LARE must follow the procedures in the *Local Assistance Procedures Manual*.

For all other projects, the LARE must follow local agency procedures.

3-808 Contractor's Control Termination

The LARE must follow the local agency processes for terminating the contractor's control of a project. The local agency is responsible for all negotiations and agreements with the contractor and the surety. If the surety hires a different contractor to complete the work, that contractor must obtain an encroachment permit before beginning work.

3-809 Contract Termination

The LARE uses local agency procedures for termination of the contract.

Section 3-9 Payment

This section does not apply to the local agency.

For FHWA federal-aid projects, the LARE must administer the requirements of the contract and follow the procedures in the *Local Assistance Procedures Manual*. These procedures outline a clear and easy-to-follow trail for the total quantity paid from the current amount back to the first measurement or calculation for each contract item.

For other projects, the LARE must follow the local agency procedures.

Chapter 4

The LARE and staff must follow the procedures in this chapter to provide quality control and quality assurance for the construction contract for portions of the work within existing or future State right-of-way.

The intent of the chapter is to provide guidance to the LARE and staff in the areas of inspection, measurement, and payment for the various contract items. In addition, the chapter provides guidance for administering the technical requirements of the *Standard Specifications*. This chapter is not a substitute for the local agency's thorough understanding of the work, the contract specifications governing that work, and the recruitment and retention of sufficiently trained and experienced staff to administer the contract.

Each technical aspect is addressed by the general description of the work, the actions to be taken before the work begins, the actions to be taken during the course of the work, and requirements for the proper measurement and payment for the work.

This chapter covers all sections of the Caltrans *Standard Specifications* with the exception of Division I, "General Provisions;" Division II, Section 10, "General;" and Division XII, "Building Construction." For structures-related work covered in Division VI, "Structures," of the *Standard Specifications*, the guidelines in Chapter 4 are general in nature. The guidance for technical structures issues, including inspecting, measuring, and paying for structures contract item work, is included in the Structure Construction's *Bridge Construction Records and Procedures* manual.

Section 5-0 Conduct of the Work

5-001 Resident Engineer's Pending File

It is recommended, but not required, that local agencies use the information and procedures provided in this section.

5-002 Preconstruction Conference with Caltrans Personnel

The LARE should follow the procedures in this section of the *Construction Manual* with one exception. Instead of meeting with Caltrans personnel, the LARE should meet with the local agency project development personnel. Before the preconstruction conference with the contractor, the LARE must meet with the Caltrans ORE assigned to the project. The name and phone number of the ORE is usually listed on the encroachment permit. It is recommended that the LARE contact the ORE well in advance of the start of work to ensure that the ORE has time to confirm the attendance of Caltrans personnel at the meeting. The encroachment permit includes the minimum time required to notify the ORE before the start of work. The LARE should meet with the local agency project engineer, consultant, and other appropriate parties to review and discuss the project.

5-003 Preconstruction Conference with the Contractor

The LARE must hold a preconstruction conference with the contractor as outlined in this section. The ORE must be invited to attend the meeting to observe and be available to answer questions, but not to be a main speaker.

5-004 Resident Engineer's Daily Report

The LARE must follow the procedures outlined in this section of the *Construction Manual* with the exception that Form CEM-4501, "Resident Engineer's Daily Report/Assistant Resident Engineer's Daily Report," need not be used if the local agency has an acceptable alternative.

5-005 Assistant Resident Engineer's Daily Report

The LARE must follow the procedures outlined in this section of the *Construction Manual* with the exception that Form CEM-4601, "Assistant Resident Engineer's Daily Report," need not be used if the local agency has an acceptable alternative.

5-006 Maintenance Reviews

The ORE is responsible for communication with Caltrans maintenance.

The LARE is responsible for scheduling a field review with the ORE when the project nears 90 percent.

5-007 Federal Highway Administration Involvement in Contract Administration

On projects where FHWA involvement is required, the LARE is responsible for keeping the FHWA engineer informed, as necessary. Contact is initiated first through the ORE until direct FHWA contact by the LARE is approved by the FHWA engineer.

Section 5-1 Project Records and Reports

5-101 Forms Used for Contract Administration

The LARE must follow the procedures outlined in this section and must use the Caltrans forms in this section except as noted below. Use of the following forms is optional:

Form CEM-0501 Relief from Maintenance

The local agency may use its own procedure for granting relief from maintenance to the contractor.

- Form CEM-0601 Construction Safety Report
- Form CEM-0606 Construction Safety Checklists
- Form CEM-2006 Legally Responsible Person Authorization of Approved Signatory
- Form CEM-2006T Legally Responsible Person Authorization of Approved Signatory Lake Tahoe Hydrologic Unit
- Form CEM-2023 Stromwater Training Record
- Form CEM-2024 Stormwater Training Log
- Form CEM-2034 Stormwater Best Management Practices Status Report
- Form CEM-2051 Stormwater Sampling and Analysis Log-Optional
- Form CEM-2058 Stormwater Meter Calibration Record
- Form CEM-20DAPP Appendix D Notification Log
- Form CEM-20DCON SWPPP/WPCP Attachment D, Contractor Personnel Training Record
- Form CEM-20DSUB SWPPP/WPCP Attachment D, Subcontractor Personnel Stormwater Training Record
- Form CEM-2101 COZEEP Daily Report
- Form CEM-2102 COZEEP/MAZEEP Task Order
- Form CEM-2103 COZEEP/MAZEEP Cancellation Form
- Form CEM-2601 Construction Progress Chart
- · Form CEM-2701 Weekly Statement of Working Days
- Form CEM-2702 Overrun in Contract Time
- Form CEM-4501 Resident Engineer's Daily Report/Assistant Resident Engineer's Daily Report
- Form CEM-4601 Assistant Resident Engineer's Daily Report
- Forms CEM-4801 Quantity Calculations through CEM-9001 Construction Manual Proposed Change

5-102 Organization of Project Documents

The LARE must use the Caltrans uniform filing system for all projects that will be within the existing or proposed state right-of-way. Not all categories listed may be applicable to a project being administered by a local agency. Categories that are not applicable may include the following:

CATEGORY 1	Required usage is limited to Form CEM-0101, "Resident Engineer's Report of Assignment," and the personnel roster, although the LARE may file other documents as indicated.
CATEGORIES 2, 3, 4	May not be applicable.
CATEGORIES 16 and 17	Are not applicable if the local agency uses alternative procedures.
CATEGORY 28	May not be applicable.

The LARE should discuss with the ORE the appropriate level of project documentation and organization of the project records. Early agreement between the LARE and ORE will help to ensure that the project records are adequate to administer the contract, will withstand an audit, and will preserve funding participation.

5-103 The Contract Administration System

This section does not apply to the local agency.

5-104 Final Construction Project Records

The LARE is responsible for providing Caltrans with the as-built plans described in Section 5-104 (D), "As-Built Plans," of the *Construction Manual*. The as-built plans must be stamped "as-built," signed by the local agency, and in compliance with the specific requirements of the cooperative agreement and encroachment permit.

Other required project records that must be provided to Caltrans upon completion of the project are defined in the cooperative agreement, the encroachment permit, and other areas of this supplement.

The local agency must retain and maintain project records for the duration identified in Section 5-104 (C), "Disposition of Construction Project Records," of the *Construction Manual*.

Section 5-2 Funds

This section applies only to Caltrans-advertised, -awarded, and -administered projects. The LARE should refer to the *Local Assistance Procedures Manual* and the *Local Assistance Program Guidelines* for local federal-aid fund requirements.

Section 5-3 Change Orders

5-301 General through 5-307 Change Order Memorandum

These sections of the *Construction Manual* do not apply. LAREs prepare all change orders in accordance with their local agency procedures. Every effort should be made to have the designer of record review and concur with design changes. Engineering changes that are subject to the California Professional Engineers Act must be stamped and signed by a professional engineer licensed by

California. Though the ORE is available to assist and facilitate Caltrans reviews and acceptances of design conflict resolutions, Caltrans is not responsible for resolving design conflicts or for preparing change orders.

5-308 Federal Highway Administration Change Order Requirements

The LARE must follow the procedure outlined in this section of the *Construction Manual* and requirements outlined in Section 16.13, "Contract Change Orders," of the *Local Assistance Procedures Manual*. All communication with the FHWA is normally done through the ORE. The FHWA may approve direct communication in advance at the preconstruction meeting or during the course of the project as conditions warrant.

When a change requires FHWA approval, that approval must be obtained before proceeding with the change. A change order may be rejected by the FHWA if approval was not obtained before the work and before execution of the change order. Such a change order would likely result in being determined ineligible for federal funding reimbursement.

5-309 Federal Segregation Determination on Change Orders

This section of the Construction Manual does not apply.

5-310 Locally Funded State Highway Projects

This section of the Construction Manual does not apply.

5-311 Change Order Approval Process

The ORE will review all change orders affecting public safety, public convenience, protected environmental resources, the preservation of property, design and specification changes, and all major changes as defined in the *Construction Manual*, as outlined in the cooperative agreement, and the encroachment permit. The LARE must obtain the ORE's written concurrence before allowing the contractor to perform the work.

5-312 Substantiation

This section of the Construction Manual does not apply.

5-313 Executed Change Order Copy Distribution

The LARE must send copies of all executed change orders and memorandums (backup information) to the ORE. The ORE handles distribution within Caltrans and is responsible for sending copies to FHWA when required. Responsibility for sending copies to FHWA can change during the life of the project.

5-314 Value Engineering Change Proposals

This section of the Construction Manual does not apply.

5-315 Examples of Change Orders

This section of the Construction Manual does not apply.

Section 5-4 Disputes

This section of the *Construction Manual* does not apply to local agency projects. The LARE follows local agency procedures. If the local agency uses Caltrans's *Standard Specifications*, the LARE must administer the contract and address disputes in accordance with the *Standard Specifications* and the contract's special provisions. If the local agency uses their own dispute process, the contract

specifications should amend the Caltrans Standard Specifications to include the local agency process.

Caltrans *Construction Manual* Section 5-4, "Disputes," provides guidance on good practices to administer construction disputes. Contractor potential claim records, boards of review, and claims are addressed under this section. Caltrans personnel will not be used to resolve construction disputes.

If the project has state or federal funds, the LARE must notify and provide the ORE with the current list of potential claim records as each record is received. When the project is an FHWA Project of Division Interest, the LARE may be required to send copies of the potential claim record list to the FHWA engineer.

The cooperative agreement may require the local agency to provide an administrative claim resolution process that is acceptable to Caltrans. The local agency must process claims through its own process. The claims process outlined in Section 5-4, "Disputes," of the *Construction Manual* may be used as a prototype for the essential elements of a local agency administrative claim process. Local agency personnel or consultants rather than the ORE or other Caltrans personnel must be used to develop and administer this process.

Federal-aid projects must comply with the *Local Assistance Procedures Manual*. The LARE's failure to obtain approval from the district local assistance engineer for a claim settlement before paying the contractor can result in the claim settlement being ineligible for federal funding.

Section 5-5 Emergency Contract Administration

This section of the Construction Manual does not apply.

Section 6-1 Sample Types and Frequencies

6-101 General and 6-102 Types of Sampling and Testing

The LARE is responsible for ensuring that sampling and testing of materials or products and quality of work are in strict accordance with the contract provisions, the encroachment permit, the cooperative agreement, and this section. Initial material sampling, initial material testing, calibration of contractor and consultant equipment, scale and material production plant certification, oversight of the contractor's quality control testing, and LARE quality assurance and acceptance testing are all the responsibility of the local agency.

The LARE must verify and use only sampling and testing personnel certified by Caltrans. The LARE must verify and accept only test results from the local agency or consultant laboratories accredited by Caltrans in accordance with the Caltrans *Independent Assurance Manual*. These requirements may only be modified by the cooperative agreement.

Specialty tests as noted in Section 6-102F, "Special Samples and Tests," of the *Construction Manual* may be conducted by Caltrans for unanticipated issues, unique circumstances, or special requirements that develop after construction has begun. Acceptance tests are performed for all materials that will be incorporated into the work. Limited availability of laboratories to conduct routine acceptance tests does not constitute a reclassification of a routine acceptance test to specialty test status. It is an acceptance test if the test must be performed to ensure that the material or the construction process meets the requirements of the contract.

6-103 Field Sampled Material Identification for Testing

Do not use this section unless some of the materials testing will be performed by a Caltrans testing facility. The LARE uses local agency procedures and forms to ship samples to a non-Caltrans testing facility.

6-104 Shipping of Field Samples

If the cooperative agreement indicates that Caltrans performs the testing, the LARE must provide a copy of the contract plans and specifications to Materials Engineering and Testing Services along with the CEM-3101, "Notice of Materials to be Used" (Materials Engineering and Testing Services does not automatically receive copies, so the LARE must provide them).

6-105 Acceptance Records

The LARE must retain records of all samples and tests, prepare a summary of all sampling and testing conducted on the project, and document actions taken to resolve unsatisfactory test results. This information must be filed in the project files. The LARE establishes the materials testing files in accordance with Section 5-102, "Organization of Project Documents," for Category 37, "Initial Tests and Acceptance Tests," of the *Construction Manual*.

Each subcategory of Category 37 must have a testing results summary to track acceptance testing for each item of work. In the testing results summary, corrective actions or retesting tests for all failed tests must be noted in the "Remarks" column of the form.

The LARE's use of Form CEM-3701, "Test Result Summary," or test summary logs facilitates the tracking of adequacy and frequency of material sampling and testing. The logs also make the ORE's review of material sampling and testing more efficient.

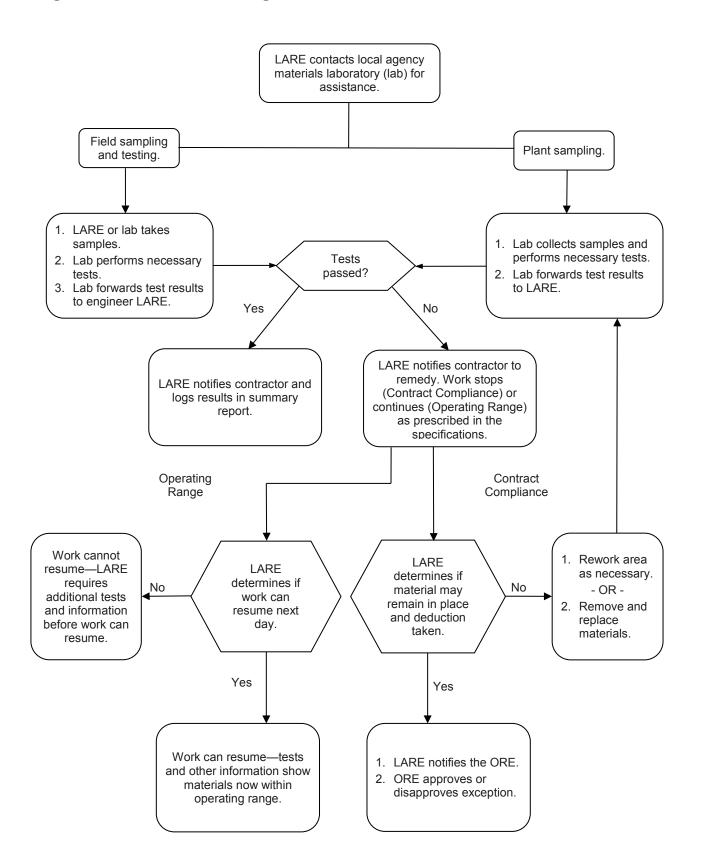
Figure 6-103.1, "Materials Testing Process," shows the materials testing and acceptance process that the LARE must use to ensure that materials used in the work comply with the contract provisions, cooperative agreement, and encroachment permit.

6-106 Project Materials Certification

The LARE must complete and sign Form CEM-6302, "Final Materials Certification," upon completion of the project. The form is submitted to the ORE who is responsible for forwarding it to FHWA if required for the project.

6-107 Materials Acceptance Sampling and Testing

The LARE must follow the procedures outlined. The LARE may also use the frequency table in the local agency-approved quality assurance program if their quality assurance program meets or exceeds Caltrans's requirements.



Section 6-2 Acceptance of Manufactured or Fabricated Materials and Products

The LARE must follow the procedures outlined in this section of the *Construction Manual*. The LARE is responsible for performing all source inspection activities according to the approved Source Inspection Quality Management Plan approved by the Caltrans State Materials Engineer prior to construction.

Section 6-3 Field Tests

The LARE must follow the procedures outlined in this section of the *Construction Manual*. Field laboratories and equipment are the responsibility of the local agency unless otherwise provided in the cooperative agreement.

Section 7-1 Environmental Rules and Requirements

7-101 General, 7-102 Environmental Commitments Record, and 7-103 Protection of Environmental Resources

The local agency is responsible for obtaining and complying with all permits, licenses, agreements, and certifications required for the project unless otherwise identified in the cooperative agreement. The LARE is not required to follow these sections of the *Construction Manual* as long as there are equivalent methods for monitoring compliance with environmental commitments.

7-104 Air, Water, and Noise Pollution Control

The LARE must follow the procedures outlined in this section and in Caltrans National Pollutant Discharge Elimination System permit issued by the State Water Resources Control Board (SWRCB). When the local agency is the implementing agency for construction of a project, they must also assign the legally responsible person (LRP) and submit the Notice of Intent to the SWRCB to comply with the statewide Construction General Permit. Caltrans does not submit the Notice of Intent for projects administered by the local agency. Caltrans provides concurrence of the final stormwater pollution prevention plan before it is submitted to the SWRCB, and the LARE submits a copy of the stormwater pollution prevention plan to the ORE. Upon completion of the project, the local agency submits the Notice of Termination to the SWRCB. Caltrans will not accept the construction project from the local agency until verification that the Notice of Termination has been approved by the SWRCB.

7-105 Permits, Licenses, Agreements, and Certifications

The local agency is responsible for obtaining and complying with all permits, licenses, agreements, and certifications unless otherwise stated in the cooperative agreement.

7-106 Hazardous Materials

The LARE must follow the procedures outlined in this section of the Construction Manual.

7-107 Hazardous Waste and Contamination

Responsibility for hazardous waste and contamination found within the project limits are outlined in the cooperative agreement. The LARE must coordinate contact with the district hazardous waste coordinator through the ORE. The local agency is responsible for providing hazardous materials training to the LARE and staff. The LARE may not use Caltrans emergency waste contracts to address hazardous and contaminated materials issues unless specifically provided for by the cooperative agreement or encroachment permit.

The LARE must follow the procedures outlined, except the LARE will contact the ORE. The ORE will contact the district hazardous waste coordinator. When the contractor is handling and disposing of hazardous waste, the LARE generates and provides the Environmental Protection Agency generator identification number.

7-108 Solid Waste Disposal and Recycling Reporting

Under the *Standard Specifications*, the LARE is responsible for obtaining the solid waste disposal and recycling report from the contractor, reviewing the report for accuracy, and submitting the report to the ORE.

The ORE distributes the solid waste disposal and recycling report to the district recycling coordinator.

7-109 Certificate of Environmental Compliance

The LARE is responsible for preparing and signing the certificate of environmental compliance (CEC). Local agency environmental staff and the project manager also sign the CEC. The CEC must be provided to the ORE prior to Caltrans's acceptance of the project from the local agency.

Section 8-1 Labor Compliance

It is optional for the LARE and the local agency to follow the procedures outlined in this section of the *Construction Manual*. The local agency must establish guidelines and procedures for administering labor compliance provisions of the contract. The California Labor Code; the Code of Federal Regulations, Title 29, Part 5; and regulations of the Federal Highway Administration and the United States Department of Labor provide the basis for contract administration protocol and the statutory authority to enforce labor compliance contract provisions. For federal-aid contracts, the local agency must designate a labor compliance officer, separate from the LARE, in accordance with the *Local Assistance Procedures Manual*.

Section 8-2 Equal Employment Opportunity

The LARE and the local agency must follow the procedures outlined in this section of the *Construction Manual*.

Section 8-3 Disadvantaged Business Enterprises and Disabled Veteran Business Enterprises

For federal-aid contracts, the LARE and the local agency must follow the procedures outlined. The local agency must designate a Disadvantaged Business Enterprise Program liaison officer in accordance with the *Local Assistance Procedures Manual*. The local agency will use its own staff for removal or substitution hearings. The Disabled Veteran Business Enterprises requirements do not pertain to local agency-administered projects.

This chapter provides guidance only to Caltrans personnel. Local agency LAREs should not refer to this chapter for guidance.