# Oversight Resident Engineer GUIDELINES



State of California Department of Transportation
Division of Construction
Office of Contract Administration



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# California Department of Transportation Division of Construction

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# **CONTENTS**

CHAPTER 1 OVERSIGHT PROJECT	1
Section 1.1 Introduction	1
Section 1.2 Definitions	2
CHAPTER 2 OVERSIGHT PROJECT ORGANIZATION	4
Section 2.1 Roles and Responsibilities	
Section 2.2 Caltrans Staff Resources	
2.2.1 Work Plans and Time Charging	
2.2.2 Reimbursed Work	
2.2.3 Encroachment Permits	5
Section 2.3 Local Agency's Construction Management Team	<del>6</del>
Section 2.4 Federal Highway Administration Involvement	8
Section 2.5 Communication	9
CHAPTER 3 QUALITY MANAGEMENT ASSESSMENT	10
Section 3.1 Quality Management Assessment Administration Procedures	
3.1.1 Quality Management Plan	
3.1.2 Funding	
3.1.3 Advertisement, Award, and Administration	
3.1.4 Cooperative Agreement	
3.1.5 Encroachment Permit	
3.1.6 Local Agency Resident Engineer's Report of Assignment	
3.1.7 Oversight Resident Engineer Files	
3.1.8 Change Orders	
3.1.9 Progress Pay Estimates	
3.1.10 Plans, Shop Drawings, and Submittal Review	
3.1.11 Falsework and Shoring Reviews	
3.1.12 Maintenance Responsibility	
3.1.14 Vehicle Load Limits for Structures	
3.1.15 Labor Compliance and Equal Employment Opportunity	
Federal-Aid Projects	
All Other Projects	
3.1.16 Disadvantaged Business Enterprise	
3.1.17 Environmental Hazards and Safety Procedures	
3.1.18 Contractor Potential Claims During Construction	
3.1.19 Contractor Claims After Construction	
Section 3.2 Quality Management Assessment Reviews	
3.2.1 Materials	
3.2.1(a) Source Inspection	23
3.2.1(b) Onsite Materials	
3.2.1(c) Buy America Requirements	24



# Contents

3.2.1(d) Unsite Testing	24
3.2.1(e) Mix Designs	25
3.2.1(f) Caltrans-Furnished Material	25
3.2.2 Construction Activities	25
3.2.2(a) Preconstruction Conference	25
3.2.2(b) Construction Surveying	25
3.2.2(c) Lane Closures and Traffic Control	
Construction Zone Enhanced Enforcement Program	26
3.2.2(d) Safety	26
Caltrans Personnel Responsibilities	26
Public	27
Contractor	27
Accident and Incident Reporting to the District Office and the Division of	
Construction	27
Safety Stand-down	28
3.2.2(e) Water Pollution Control	28
3.2.2(f) Caltrans Utility Services	29
3.2.3 Value Engineering Change Proposals	29
3.2.3(a) Roles and Responsibilities	29
Local Agency Resident Engineer	29
Oversight Resident Engineer	30
Structure Construction Oversight Engineer	30
Structure Design—Office of Special Funded Projects—Liaison Engineer	30
Local Agency	30
3.2.3(b) Value Engineering Change Proposal Design Documents	31
3.2.3(c) Structure-Related Value Engineering Change Proposals	31
CHAPTER 4 PROJECT COMPLETION	32
Section 4.1 Encroachment Permit and Cooperative Agreement Completion	
Requirements	32
Section 4.2 Closeout Procedures	
4.2.1 Federal-Aid Project	
4.2.2 Certification of Environmental Compliance	
4.2.3 Relief from Maintenance and Responsibility	
4.2.4 Local Agency's Job Records	
CHAPTER 5 LIABILITY AND SANCTIONS	
Section 5.1 General Requirements for Liability	_
5.1.1 Public Claims by Persons Not Related to the State	
5.1.2 Caltrans Claims Against a Permittee	
Section 5.2 Deficient Contract Administration and Sanctions	
5.2.1 Encroachment Permit	
5.2.2 Cooperative Agreement	
0.2.2 Outperative Agreement	os



#### **Section 1.1 Introduction**

These guidelines provide a convenient source of information on policy and procedure and should be used by Caltrans employees who provide quality management assessment (QMA) on projects administered by others. These guidelines apply whenever a local agency or private entity is the implementing agency for the construction component of the project. These guidelines are not a contract document between the project sponsor, the contractor, or Caltrans. Guidance documents for the local agency include the *Construction Manual Supplement for Local Agency Engineers* and the *Local Agency Structure Representative Guidelines*.

The encroachment permit and the cooperative agreement outline the requirements and obligations for quality assurance and quality control for the project sponsor and the contractor. Caltrans personnel should use this document as a guide on how to enforce the quality assurance and quality control requirements in the encroachment permit and the cooperative agreement. Unless indicated otherwise, the tasks described in these guidelines are the responsibility of the oversight resident engineer (ORE) or other staff responsible for QMA.

These guidelines do not apply when Caltrans is advertising, awarding, and administering the contract, regardless of the source of project funding. When Caltrans is the implementing agency for construction, use the *Construction Manual* for policy, procedure, and guidance.

#### Section 1.2 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 permittee 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**—An entity charged with successful completion of a project component, and assumes project management responsibilities for the component. There is only one implementing agency for each component.

**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.

**owner-operator**—The entity ultimately responsible for the planning, design, construction, operation, maintenance, and liability of a facility. California Government Code Section 14520.3(b), and the Streets and Highways Code Section 90 establishes Caltrans as the owner-operator of the State Highway System.

**owner-operator approval**—A non-delegable project-related decision that can only be performed by the owner-operator.

**project sponsor**—The project advocate that acquires funding to ensure adequate project funding.

#### OVERSIGHT RESIDENT ENGINEER GUIDELINES

#### Chapter 1—Oversight Projects

**quality assurance**—The performance of all the planned and systematic activities that provide confidence that the product requirements will be fulfilled.

**quality assurance program (QAP)**—The implementing agency's promulgated quality related policies, procedures, and guidelines necessary to ensure the work performed for each project component results in a quality project.

**quality control**—The methods, means, or procedures used by a supplier to monitor and assess products or services to ensure that the final product will fulfill the established quality requirements.

**quality management assessment (QMA)**—The performance of all planned systematic activities by the owner-operator that verifies the implementing agency's quality assurance plan effectiveness and precedes the owner-operator approval.

**quality management plan (QMP)**—A document prepared by the implementing agency that describes by who, what, when, and how quality control and quality assurance activities will be performed for each project component as specified in the QAP.

**quality project**—The result in the fulfillment of project responsibilities in the delivery of products and services that considers stakeholders' interests and fulfills Caltrans' requirements and outcomes.

**risk-based project involvement (RBPI)**—Federal-aid project process that assesses individual projects for threat and opportunity risks. FHWA selects a list of projects for RBPI and identifies FHWA involvement activities. These projects evolved from Projects of Division Interest.

**source inspection**—Quality control tool used to check conformity of a product or assembly before it's shipped by the supplier.



#### Section 2.1 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 the *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 the *Supplement for Local Agency Resident Engineers*.

**METS oversight materials representative**—A Caltrans employee from the Office of Materials Engineering and Testing Services (METS), who performs inspection for materials that require inspection during manufacture or at the source of supply.

**oversight resident engineer (ORE)**—A Caltrans employee who performs QMA for construction oversight projects as defined in these guidelines. The ORE performs QMA of the LARE's work.

**Structure Construction oversight engineer**—A Caltrans Structure Construction representative who is assigned to assist the ORE. A Structure Construction representative can also be the ORE.

#### Section 2.2 Caltrans Staff Resources

The deputy district directors and region division chiefs of Construction are responsible for ensuring that adequate Caltrans staff is assigned to each oversight project to perform required levels of QMA. To accomplish this, personnel in district Construction should work closely with district Project Management to verify that all oversight projects are identified and the resources estimated for each project are adequate.

# 2.2.1 Work Plans and Time Charging

When first assigned an oversight project, the ORE should obtain a copy of the project work plan that determined the resources allocated for QMA activities for the project. Construction staff will charge their time to the appropriate project identification number and work breakdown structure code.

#### 2.2.2 Reimbursed Work

Local agencies may request that Caltrans perform a quality assurance test if the test can only be performed by Caltrans. Caltrans will perform the test as reimbursed work in accordance with Section 9-203, "Reimbursement," of the *Construction Manual*. No other reimbursed work is allowed.

#### 2.2.3 Encroachment Permits

On some occasions, the Office of Encroachment Permits will request oversight and inspection activities on encroachment permit projects to be performed by Construction employees. This may occur on a project, for example, to relocate utilities before a Caltrans pavement rehabilitation project. The *Oversight Resident Engineer Guidelines* does not apply to encroachment permit projects. Use the *Encroachment Permit Manual* for permit inspection procedures, required forms, and time charging procedures.

Encroachment permit fees associated with oversight projects are defined in the cooperative agreement. The local agency's engineering and final construction permits and the contractor's double permit are generally issued "fee-exempt" unless otherwise stipulated in the cooperative agreement.

#### **Section 2.3 Local Agency's Construction Management Team**

The local agency is responsible for assigning the essential members of the project's Construction management team. Although the cooperative agreement states the roles and responsibilities of both the local agency and Caltrans for the construction phase of the project, it typically does not specify staffing levels. Cooperative agreements only require that the local agency furnish qualified support staff (in-house or consultant) to assist the LARE to ensure that the construction is performed in accordance with the contract standards and specifications. If the local agency does not have in-house staff with appropriate qualifications, they must hire a consultant firm with qualified staff to provide the project management team. Work closely with the local agency to confirm they're providing sufficient staffing throughout the project to meet the workload.

Failure by the local agency to provide sufficient staffing to undertake and satisfactorily complete the project, as outlined in the *Construction Manual*, the *Supplement for Local Agency Resident Engineers*, and the *Local Agency Structure Representative Guidelines*, is just cause to revoke the local agency and the contractor's encroachment permits.

The ORE should be involved early in the construction management team selection process and discuss acceptable staffing levels with the local agency before the local agency assigns project personnel or hires consultants to perform contract administration and inspection duties. Caltrans Construction staff will be invited and should make themselves available to participate in the selection process for consultant construction management firms, including reviewing proposals submitted and participating in the interview and selection process. Check the online debarment list to ensure that no debarred consultant is proposed to do work on the state highway right-of-way, at:

#### http://www.dir.ca.gov/dlse/debar.html

The construction management team usually includes a LARE, the LARE's support staff, a structure representative, a survey group, a water pollution control (WPC) manager, and a certified materials laboratory (as required). The LARE must be registered in the State of California as a civil engineer (other registered disciplines are allowable, depending on the work) and perform the duties of a field site representative. All team members must be qualified to perform their duties, and be thoroughly acquainted with Caltrans methods and procedures.

For all oversight projects in which the LARE and support staff are consultants, the local agency must assign a full-time agency employee to be in responsible charge of the project at all times, though the employee need not be assigned solely to that project. "Responsible charge" means the local agency public employee is:

#### **OVERSIGHT RESIDENT ENGINEER GUIDELINES**

#### Chapter 2—Oversight Project Organization

- Aware of the day-to-day operations on the project.
- Aware of and involved in decisions about changed conditions that require change orders or supplemental agreements.
- Aware of the qualification, assignments, and on-the-job performance of the consultant staff at all stages of the project.
- · Point of contact.
- Visiting the project on a frequency that is commensurate with the magnitude and complexity of the project.
- Reviewing project records to make sure documentation is complete.

Comments, suggestions, and concerns about a consultant's qualifications should be forwarded to the local agency's person in responsible charge. For federal-aid projects, additional duties for the person in responsible charge may be required by FHWA.

Once the construction management team members are selected, the LARE must verify that the local agency's materials lab, all lab personnel, and field engineers are certified by Caltrans to take samples and to perform tests in accordance with Caltrans testing methods. The LARE must place a copy of the TL-0111, "Tester Certificate of Proficiency," in the project files for each lab person and field engineer. Tester information must also be listed in the State Independent Assurance Database.

#### https://sia.dot.ca.gov/index.php

Non-certified personnel are not permitted to perform material acceptance sampling and testing. Laboratory facility certification must be current and placed in the project files. The ORE should check the files periodically to make sure the certifications are in the files and are current.



#### **Section 2.4 Federal Highway Administration Involvement**

The Federal Highway Administration (FHWA) has the authority and responsibility to implement and monitor federal laws, regulations, and executive orders. FHWA must become involved in accordance with the stewardship agreement signed with Caltrans when a project involves federal funding, requires FHWA approval action, or is on a federal-aid highway system.

Stewardship is the process by which federal program responsibility and accountability are delegated to state transportation agencies to act as stewards over those federal functions. This process is documented in a stewardship agreement between FHWA and Caltrans. The stewardship agreement details the acceptance of the maximum degree of authority available to Caltrans. In addition, Caltrans agrees to act as stewards for local agency project review, oversight, and administration of federal-aid highway projects.

FHWA Risk-based Project Involvement Process (RBPI) will assess individual projects for threat and opportunity risks. Few projects with unusual instances with RBPI activities include retaining actions that are delegable to Caltrans. The RBPI process will assist Caltrans and local public agencies to efficiently and effectively deliver the Federal-aid Program.

#### Section 2.5 Communication

A project-specific communication protocol is established before the start of work. Communications between the local agency representatives, Caltrans staff, the FHWA engineer on federal-aid projects, and the contractor is based on the terms of the cooperative agreement, encroachment permits, contract, and these guidelines. These terms and requirements result in communication channels that are different from typical state sponsored and administered projects. Following are the ground rules for communication:

- Caltrans staff may communicate with the local agency's person in responsible charge, the LARE, and construction management team.
- Do not conduct business directly with the contractor. The contractor has a contract with the local agency, not with Caltrans. Therefore, Caltrans does not have the authority to direct or communicate with the contractor or subcontractors, except for emergencies or urgent safety concerns when the LARE or staff are not present.
- The contractor communicates with the LARE.
- If agreed, the LARE may communicate directly with the Department of Engineering Services Materials Engineering and Testing Services (METS) and district Traffic Management. All other communication with Caltrans must be done through the ORE.
- Consultant designers may communicate directly with the Caltrans Design oversight staff to initiate timely design change review and concurrence.
- The LARE may contact the district traffic manager directly for lane closure reporting and for emergencies before contacting the ORE.
- For projects with considerable public interest, make sure the district public information officer is provided with the project status on a regular basis and the LARE's completed Form CEM-0101, "Resident Engineer's Report of Assignment."
- If partnering is established by the local agency, Caltrans staff should make themselves available for the partnering meetings.
- The ORE may participate in the local agency's claim process if Caltrans district management concurs or if the project contains state or federal funds for construction capital.



# Section 3.1 Quality Management Assessment Administration Procedures

All OREs, Structure Construction oversight engineers, and oversight materials representatives should have the latest versions of, or internet access to, the following Caltrans manuals, directives, and guidelines to perform QMA:

- Construction Manual
- Encroachment Permits Manual
- Local Assistance Procedures Manual
- Highway Design Manual
- Independent Assurance Program Manual
- Storm Water Quality Handbooks
- Temporary Pedestrian Access Routes Handbook
- Construction Manual Supplement for Local Agency Resident Engineer
- Bridge Construction Records and Procedures
- Bridge Design Manual
- Local Agency Structure Representative Guidelines
- Construction Quality Assurance Program Manual
- All bridge construction manuals and guidelines
- METS Source Inspection Guidelines for Local Agencies Manual

The QMA administration procedures during the construction phase of typical oversight projects are outlined.

# 3.1.1 Quality Management Plan

Standard cooperative agreement language requires the implementing agency for the construction phase to develop a quality management plan (QMP). The *Construction Manual*, the *Supplement for Local Agency Resident Engineers*, and the *Local Agency Structure Representative Guidelines* are resources the local agency should use to prepare the QMP. Caltrans district Construction, with input from Structure Construction for projects involving structures, must approve the QMP before the encroachment permit for construction is issued. Following is a recommended outline for the QMP.

Local Agency's Quality Management Plan for Construction Phase (Recommended Outline)

- 1. Introduction—Description of the Project to Be Built
  - a. List and describe various elements of the project, such as structures, surveys, stormwater, electrical, landscaping, earthwork, and paving.
  - b. Indicate whether it is a federal-aid project or not.



# 2. Quality Management Approach

- a. Requirements
  - (1) Roles and responsibilities
  - (2) Records and documentation files, submittals, reports, and closeout
- b. Caltrans standards, guides, and references
  - (1) Construction Manual Supplement for Local Agency Resident Engineers
  - (2) Local Agency Structure Representative Guidelines for projects involving structures

#### 3. Personnel

- a. Organization
  - (1) Outline local agency project manager and person in responsible charge, LARE if local agency employee, and support staff.
  - (2) Consultants, for example, LARE if consultant employee and support staff.
  - (3) Communication plan among entities to include implementing agency's staff and consultants, Caltrans, and contractors, including who determines procedures for nonconforming work quality by the contractor.

    Communication plan should also include reporting structure.
- b. Core personnel activities
  - (1) Match personnel with work elements.
  - (2) Specify roles and responsibilities.
  - (3) Include resumes.
  - (4) Include separate QMP for subconsultants.
- c. Staff and subconsultant activities for federal-aid projects
  - (1) Match personnel with work elements, categorized into labor compliance, disabled business enterprises, equal employment opportunity and civil rights.
  - (2) Specify roles and responsibilities, including resumes and separate QMP for subconsultants.
- d. Materials and Testing
  - (1) Hot mix asphalt (HMA) mix design—job mix formula review, verification, and production start-up.



- (2) Portland cement concrete mix design—aggregate source verification and strength data.
- (3) Plant inspection.
- (4) Acceptance tests are required for scheduling, test frequency, documentation, independent assurance program, matching certifications and roles and responsibilities for nonconforming material and failed test.
- (5) Equipment list—include up-to-date calibrations.
- e. Contacts for advice, assistance, and reviews
  - (1) Environmental analysis
  - (2) Designer of record
  - (3) Right of Way and Land Surveys
- 4. Field or LARE office
  - a. Location—determine and announce
  - b. Office and communication equipment—survey, copier, computer, email address, telephone number, and fax number

# 3.1.2 Funding

The cooperative agreement contains information on project funding. Review the agreement for federal and state funding on the project.

#### 3.1.3 Advertisement, Award, and Administration

Oversight projects are advertised, awarded, and administered by local agencies. Caltrans policy states that the entity that advertises and awards the project must also administer the construction contract. The Division of Construction chief is the only person authorized to grant an exception to this policy.

# 3.1.4 Cooperative Agreement

During the design phase, construction oversight staff should participate in the project development team meetings when the cooperative agreement is developed. To increase the chances of incorporating comments, oversight staff should make comments early and provide a complete justification. This document is the contract between the local agency and the state, and outlines roles and responsibilities. Oversight staff should review and comment on the construction cooperative agreement before execution.

#### 3.1.5 Encroachment Permit

Construction oversight staff must have a copy of the encroachment permit before construction. The contractor must not be allowed onto the state highway right-of-way without possession of an encroachment permit, regardless of the circumstances. Note the expiration date of the encroachment permit, which is typically issued for 1 year at a time, and have the local agency and the contractor renew it as needed.

# 3.1.6 Local Agency Resident Engineer's Report of Assignment

The LARE must complete Form CEM-0101, "Resident Engineer's Report of Assignment," and forward the form to the ORE and to the FHWA engineer. For all projects, the ORE and LARE are listed as contacts under the "California Department of Transportation" section of the form. The ORE will review and distribute the form as required by Section 5-101B, "Construction Forms," of the *Construction Manual*, and district procedures.

# 3.1.7 Oversight Resident Engineer Files

The LARE is responsible for contract documentation and maintenance of all contract records. The ORE is responsible for documenting records of conversations or emails between Caltrans and the local agency representatives, approvals, inspections, reviews, and other such activities.

Cooperative agreements require the local agency's contract administration procedures to conform to the requirements in the *Construction Manual* and the *Supplement for Local Agency Resident Engineers*. Therefore, construction documentation for projects with cooperative agreements are categorized and filed in accordance with Section 5-102, "Organization of Project Documents," of the *Construction Manual*. Contract files maintained by the LARE must be accessible to the ORE and are reviewed periodically throughout the life of the project to verify conformance with Caltrans quality assurance procedures.

The ORE establishes and maintains a project file for each oversight project. At a minimum, the file should include the following:

- Cooperative agreement and encroachment permit.
- Form OFG-1, "Oversight Resident Engineer's Preconstruction Checklist," if used.
- Form OFG-2, "Local Agency and Oversight Resident Engineer Preconstruction Conference Checklist," if used.
- Form OFG-3, "Local Agency Resident Engineer Contract Provisions Checklist" for federal-aid projects only.
- Form OFG-4, "Oversight Resident Engineer's Construction Contract Administration Verification Checklist."
- Form OFG-6, "Final Acceptance Checklist for Caltrans Oversight Projects."



- Contract special provisions and plans, completed bid sheet, and a breakdown of lump sum items, including any addenda, and local agency's standard plans and specifications.
- Form CEM-0101, "Resident Engineer's Report of Assignment."
- Correspondence between the local agency, Caltrans, and FHWA.
- Form TR-0122, "Encroachment Permit Rider," if applicable.
- List of all the change orders and a copy of all change orders requiring Caltrans concurrence.
- Copy of requests for information log, if applicable.
- Copy of authorized submittals, falsework, and shoring plans.
- Form CEM-3101, "Notice of Materials to Be Used."
- Form TL-0028, "Notice of Materials to be Inspected at Job Site."
- Form TL-0029, "Report of Inspection of Material."
- Borrow and disposal site agreements.
- Job photographs.
- Copy of Form TR-0019, "Notice of Change in Clearance or Bridge Weight Rating;"
  TR-0020, "Notice of Change in Vertical or Horizontal Clearance"; or TR-0029,
  "Notice of Change in Clearance or Bridge Weight Rating," if applicable.
- Environmental Protection Agency identification numbers and tracking documentation for disposal of hazardous waste. The cooperative agreement defines responsible parties for hazardous waste disposal.

Usually, the LARE establishes a request for an information file and a tracking log on large projects. The ORE should be aware of the request for information and the corresponding responses, especially if there are state or federal funds on the construction capital phase of the project. If Caltrans input or concurrence is given on a request for information, the ORE should obtain a copy for the project file. The required Structure Construction distribution schedule for request for information is in Bridge Construction Memo 2-19.0, "Administration of Special Funded Projects," of the *Bridge Construction Records and Procedures* manual.

#### 3.1.8 Change Orders

The LARE prepares all change orders. Design changes are reviewed and concurred with by the designer of record. Caltrans is not responsible for resolving design conflicts or even drafting change orders. Review and give written concurrence, or denial, of change orders as outlined in the cooperative agreement. Concurrence is given in advance of performing the work. Design changes are reviewed with the oversight design engineer and significant structure design changes must have the concurrence of the structure liaison engineer. A copy of the change orders requiring the ORE or

Structure Construction oversight engineer's concurrence is kept in the ORE's project file.

Change orders on an oversight project do not need headquarters Division of Construction prior approval. To mitigate any possible delay in the concurrence of change orders, a review process that specifies procedures and timelines between Caltrans and the local agency should be agreed upon before the start of work. The LARE does not get prior approval directly from the FHWA engineer unless the FHWA engineer approves communication directly with the FHWA in advance at the preconstruction meeting.

#### 3.1.9 Progress Pay Estimates

The local agency is responsible for processing progress pay estimates. If the cooperative agreement requires reimbursement of funds administered by Caltrans, the local agency should forward all invoices to the appropriate Caltrans project manager or local assistance engineer. The ORE does not process reimbursement invoices.

# 3.1.10 Plans, Shop Drawings, and Submittal Review

Establish a process for plans, shop drawings, and submittal reviews with the input of the Structure Construction oversight engineer. Submittals and plans for permanent and temporary work, which require the concurrence of Caltrans, are established before the start of construction. Since multiple parties are involved in the review process, review periods are critical to the submittal approval process. A process is established that meets the time limits specified in the approved contract documents. For additional information on the structure submittals, see Bridge Construction Memo D-1.04, "Administration of Special Funded Projects," in the *Bridge Construction Records and Procedures* manual.

# 3.1.11 Falsework and Shoring Reviews

The LARE must send the Structure Construction oversight engineer an authorized copy of all falsework and shoring submittals for work to be constructed adjacent to public traffic and within the existing and future state highway right-of-way. The Structure Construction oversight engineer reviews the submittal to verify that Caltransestablished best practices, policies, and procedures are followed before erection or construction. This review does not include an independent check of the calculations or plans. The Structure Construction oversight engineer also verifies that the LARE or approved representative has independently reviewed and authorized the plans. Whoever authorizes the plans cannot have any affiliation with the person or firm that prepared the plans. An independent review is required. The local agency's authorization must be noted on the authorized plans similar to the authorization used by the structure representative on a Caltrans administered project. The Structure



Construction oversight engineer forwards a copy of the authorized submittal to the ORE.

# 3.1.12 Maintenance Responsibility

During construction, the local agency is responsible for maintaining the state highway right-of-way within the project postmiles as outlined in the cooperative agreement. The ORE is responsible for communicating with Caltrans Maintenance regarding maintenance needs during construction.

#### 3.1.13 Notification of Altered Horizontal and Vertical Clearance

The LARE must notify the ORE of all proposed changes to vertical or horizontal clearance in accordance with Section 3-703, "Public Safety," of the *Construction Manual*. The LARE must submit Form TR-0019, TR-0020, or TR-0029 to the ORE at least 20 calendar days before implementing the proposed vertical or horizontal clearance changes. The ORE must then submit the notices to the Transportation Permits Branch at least 15 calendar days prior to the reduction in clearances. Failure to report proposed changes accurately or in a timely manner may compromise public safety or cause delays to the traveling public.

#### 3.1.14 Vehicle Load Limits for Structures

The LARE is required to follow the guidelines established in Section 3-519B, "Load Limits," of the *Construction Manual*. However, the LARE will not be provided direct access to the Bridge Inspection Records Information System database. The LARE should request the most recent bridge inspection report and instructions from the ORE, who then contacts Structure Construction for assistance.

#### 3.1.15 Labor Compliance and Equal Employment Opportunity

Federal and state laws require contractors working on public works contracts to pay prevailing wages to their employees. The LARE is responsible for ensuring that the contractor is in compliance with the laws. These responsibilities are outlined in Section 8-1, "Labor Compliance," of the *Construction Manual*.

The LARE is also responsible for administration of the nondiscrimination and equal employment opportunity provisions of the contract. These responsibilities are outlined in Section 8-2, "Equal Employment Opportunity," of the *Construction Manual*.

#### Federal-Aid Projects

The local agency is responsible for designating a labor compliance officer to enforce the contract provisions and to ensure that all labor compliance requirements are performed and documented in the project files. The labor compliance officer may be a consultant but cannot be the LARE. The LARE is responsible for notifying the ORE, in writing, who the local agency designates as the labor compliance officer. The LARE

and labor compliance officer are required to follow the procedures outlined in Section 8-1 of the *Construction Manual*.

Verify that the LARE is conducting employee interviews as outlined in Section 8-204, "On-Site Interviews," of the *Construction Manual*. Spot-check the completed Form CEM-2504, "Employee Interview: Labor Compliance/EEO," to make sure that the local agency's labor compliance officer is investigating any irregularities noted during the interviews.

One month after the start of construction, verify that federal posters have been posted for every worker to see. The posters should be posted at, or near, the contractor's office, at the construction site, or at the central gathering point of the contractor's workers. A list of required posters is available on the FHWA website at:

http://www.fhwa.dot.gov/programadmin/contracts/poster.cfm

#### All Other Projects

The local agency is responsible for ensuring that their contractor is complying with state labor compliance laws and regulations, and for reporting labor compliance violations to the California Department of Industrial Relations, Division of Labor Standards Enforcement. The ORE is not required to perform QMA of the local agency's state labor compliance enforcement.

#### 3.1.16 Disadvantaged Business Enterprise

Federal regulations require any local agency awarding a federal aid contract to establish a disadvantaged business enterprise (DBE) program. The regulations also require Federal Highway Administration subrecipients to adopt the Caltrans (primary recipient) DBE Program Plan, including the retainage option implemented by the primary recipient. A local agency must therefore certify it will adopt and adhere to the Caltrans DBE Program Plan. The local agency must submit a signed certification to the Caltrans district local assistance engineer.

As part of the Caltrans DBE Program Plan requirement, the local agency must designate a DBE liaison officer to administer the local agency DBE Program. The DBE liaison officer cannot be a member of the local area resident engineer's staff.

According to Code of Federal Regulations, Title 49, Section 26.13 (49 CFR 26.13), "What assurances must recipients and contractors make?" in each federal aid construction project, the local agency:

"...shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements 49 CFR 26.13. The recipient shall take all necessary and reasonable steps under 49 CFR part



26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the [Recipient] of its failure to carry out its approved program, the Department may impose sanctions as provided for under 49 CFR part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801 et seq.)."

In addition, each contract the local agency signs with a contractor, and each subcontract the prime contractor signs with a subcontractor, must include the following assurance, according to 49 CFR 26.13:

"Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- 1. Withholding monthly progress payments;
- 2. Assessing sanctions;
- 3. Liquidated damages; and/or
- 4. Disqualifying the contractor from future bidding as non-responsible."

It is the responsibility of the DBE liaison officer to set the contract goal. The DBE liaison officer and the local area resident engineer verify the contractor provides good faith efforts to attain the DBE contract goal with certified DBEs throughout the project.

If it becomes necessary for a prime contractor to terminate a DBE for good cause, the prime must submit in writing a request to terminate the DBE. The prime contractor must:

- 1. Detail to the local agency, the good cause reasons for termination.
- 2. All parties, that is the local agency, the prime contractor, and the DBE subcontractor, must be copied on all communications among the parties.
- 3. Before the prime contractor transmits the request to terminate the DBE to the local agency, the prime contractor must afford the DBE 5 days to respond to the prime contractor's request to terminate notice.
- 4. The DBE has 5 days to file a written protest to the prime contractor and to the local agency, stating the DBE objections to the proposed termination of its



- subcontract. The DBE should also provide the reasons why the local agency should not approve the prime contractor's request to terminate.
- 5. According to 49 CFR 26.53, "What are the good faith efforts procedures recipients follow in situations where there are contract goals?" the local agency must require the prime contractor not to terminate the DBE subcontractor without prior written consent. The local agency must include in each prime contract a provision stating:

"That the contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains your written consent as provided in this paragraph (f); and

That, unless your consent is provided under this paragraph (f), the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE."

- 6. The local agency will consider the request for termination and provide written consent to terminate if the local agency determines the prime has good cause to terminate the DBE firm. See good cause circumstances at 49 CFR 26.53.
- 7. If the local agency consents to the termination, the prime contractor must make good faith efforts to find another DBE subcontractor to substitute for the original DBE. The prime contractor must direct its good faith efforts at finding another DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the contract goal originally established for the procurement or make available other work items originally planned for the prime, to make up for any shortcoming to meet with the original DBE commitment at the onset of the project.
- 8. The prime contractor must document all good faith efforts. The local agency should request the good faith efforts documentation for review and consideration.
- 9. The contractor must submit the documentation within 7 days of the request.
- 10. To determine the prime contractor's responsiveness to DBE provisions for subcontractor substitutions, the DBE liaison officer and local area resident engineer must review and evaluate the good faith efforts of the prime contractor.
- 11. The local agency shall then provide written determination to the prime contractor stating whether it demonstrated sufficient good faith efforts.
- 12. The local agency must remind the prime contractor of the contract clause required by 49 CFR 26.13. This regulation retells the prime contractor that



failure to carry out these requirements is a material breach of the contract and may result in the termination of the contract or such other remedies if the prime contractor fails to comply with these requirements.

To finish, the local agency can only count expenditures to a DBE contractor towards the DBE goal if the DBE performs a commercially useful function (CUF). A DBE performs a CUF when it is responsible for execution of the work of the contract and is carrying out its responsibilities by performing, managing, and supervising the work involved. To perform a CUF, the DBE must also be responsible, for materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE performed a CUF, the local agency must evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is performing and the DBE credit claimed for its performance of the work, and other relevant factors.

The local agency's DBE program is comparable to Section 8-3, "Disadvantaged Business Enterprises and Disabled Veteran Business Enterprises," of the *Construction Manual*. The local agency officers and personnel replace Caltrans divisions, officers, and personnel. Quarterly, the oversight resident engineer spot-checks to verify the local agencies meet with DBE requirements.

# 3.1.17 Environmental Hazards and Safety Procedures

Hazardous materials, waste, spills and contamination are handled in accordance with Section 2-108, "Hazardous Materials," and Chapter 7, "Environmental Stewardship," of the *Construction Manual*. Funding for cleaning up hazardous waste is dependent on the specific language in the cooperative agreement.

Responsibility for hazardous waste and contamination found within the project limits is 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 must follow the procedures outlined in the cooperative agreement. Expect 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.

The LARE may not use Caltrans emergency waste contracts to address hazardous and contaminated materials issues. The ORE must never sign the hazardous waste manifest. The local agency is the generator of the waste and is the responsible party for signing the hazardous waste manifest.

When a cooperative agreement project with active Caltrans oversight is determined to have Aerially Deposited Lead (ADL) soil, local agencies must comply with Caltrans' ADL Agreement, including requiring the submittal of a Lead Compliance Plan and an Excavation and Transportation Plan, and sending notifications to Department of Toxic Substances Control. The LARE must transmit the documents to the ORE who will give them to the hazardous waste technical specialist. The hazardous waste technical specialist reviews the Lead Compliance Plan and Excavation and Transportation Plan, and sends notifications to Department of Toxic Substances Control. The surveying requirement applies in the specifications for thermal resistance types of soil, such as R-1 and R-2. The LARE must transmit the survey data to the ORE, who then delivers it to the hazardous waste technical specialist. Active Caltrans oversight includes following the same procedures for ADL soil management that are followed on a Caltrans administered project. Note: Caltrans' ADL Agreement does not apply to encroachment permit projects.

#### 3.1.18 Contractor Potential Claims During Construction

The LARE and contractor must follow the procedures for potential claim records in accordance with the *Standard Specifications* and the contract special provisions. The LARE must notify and provide the ORE with a list of all potential claim records whenever state or federal funds are used for the construction capital phase of the project. The LARE must send copies of the list to both the FHWA engineer and the ORE.

#### 3.1.19 Contractor Claims After Construction

The local agency must administer and process all construction contract claims pursuant to the requirements set forth under Public Contract Code, Section 9204 and Public Contract Code, Section 20104, et seq.



# Section 3.2 Quality Management Assessment Reviews

The function of the LARE's quality assurance process is to verify that the project is constructed in accordance with the *Standard Specifications*, *Standard Plans*, contract special provisions and plans, and conforms with the methods and practices specified in the *Construction Manual*. The ORE's primary role is to perform QMA by verifying that the LARE is performing their duties and responsibilities. The ORE performs this role by exercising the authority given in the cooperative agreement and encroachment permit. The cooperative agreement authorizes Caltrans to accept or reject the work, order any actions necessary to provide public safety and the preservation of property, and verify compliance with all provisions of the encroachment permit.

To simplify the QMA process, the following forms are checklists of items that should be checked when reviewing a project. This is not an all-inclusive list of everything that needs to be checked when providing QMA. Providing QMA also requires the LARE to verify that the project is constructed in accordance with Caltrans-approved plans, specifications, and estimate (PS&E). Not all of the forms are applicable to every project, nor are all sections of each form required to be completed.

The forms are available at the Division of Construction website at:

http://www.dot.ca.gov/hq/construc/forms.htm

- 1. OFG-1, "Oversight Resident Engineer's Preconstruction Checklist," is a convenient list of items to have when first assigned responsibilities for an oversight project.
- 2. OFG-2, "Local Agency and Oversight Resident Engineer Preconstruction Conference Checklist," provides a list of items to discuss with the LARE at the first meeting.
- 3. OFG-3, "Local Agency Resident Engineer Contract Provisions Checklist," is used to verify and document that the local agency's contract meets federal requirements.
- 4. OFG-4, "Oversight Resident Engineer's Construction Contract Administration Verification Checklist," documents each visit to the project site or office by the ORE, the Structure Construction oversight engineer, and their staff. This documentation should include the scope of activities, approvals, safety review comments, records of conversation, and other items noted on the checklist to verify construction contract administration. The checklist does not need to be filled out completely with each visit, only the items that were reviewed. The checklist does not include detailed labor, equipment, and material information; the LARE's staff perform that task.
- 5. OFG-6, "Final Acceptance Checklist for Caltrans Oversight Projects," is for the ORE to use when doing the semifinal review, the safety and maintenance reviews, and the final acceptance of the local agency-administered construction contract.

The district Construction senior engineer signs pages 3, 4, and 6 before the ORE's final acceptance.

For federal-aid projects, the primary role of the ORE is to represent FHWA and to verify that the LARE is ensuring compliance with federal requirements outlined in the contract and the *Construction Manual*. Caltrans has accepted this responsibility as part of the stewardship agreement with FHWA.

Following are the essential steps to take before the beginning of construction:

- Review the cooperative agreement, encroachment permit, project plans, and contract special provisions. Form OFG-1 may be used as a tool for this.
- Verify that the local agency has initiated contract administration procedures in accordance with the Construction Manual. Form OFG-2 may be used as a tool for this.
- If the project is receiving federal-aid funds, send Form OFG-3 to the LARE for completion prior to the preconstruction conference. This form is a QMA check to make sure all the federal contract provisions have been included in the contract.

Once construction has started, determine the frequency of field reviews and project record reviews. The typical inspection procedures for QMA of project materials and construction activities are outlined on Form OFG-4.

#### 3.2.1 Materials

Contracts administered by local agencies must provide for acceptance sampling and testing as required in Chapter 6, "Sampling and Testing," of the *Construction Manual*. This includes full administration of sampling, testing, inspection programs, and acceptance of those materials and processes involved in the work described in Chapter 6 and elsewhere in the *Construction Manual*.

#### 3.2.1(a) Source Inspection

The METS guidelines for QMA and oversight projects may be found at:

https://mets.dot.ca.gov/manuals/SIGLA/

The local agency performs its own source inspection, and is required to prepare a Separate Source Inspection Quality Management Plan (SIQMP). The state materials engineer must approve each SIQMP before issuance of the encroachment permit for construction and will verify that the implementing agency has prepared a SIQMP conforming to Caltrans standards. If this approval is not obtained before the beginning of construction, contact the Caltrans project manager and they will obtain approval. A sample for a SIQMP can be found at:

http://www.dot.ca.gov/hq/esc/Translab/OSM/documents/qualitysystem



#### 3.2.1(b) Onsite Materials

The LARE is responsible for accepting or rejecting all onsite materials. All materials must be approved before placement or incorporation into the work. Material tags must be collected, matched with Form TL-0029, "Report of Inspection of Material," and placed in the proper category of the project files. Certificates of Compliance (COC) must be collected for materials listed on Form TL-0028, "Notice of Material to be Inspected," and placed in the proper category of the project files. The LARE is responsible for accepting or rejecting material delivered to the job site which has not been released by the materials inspector and may be accepted by a COC. The contractor must provide the certificates before incorporating the material into the project. Only fabricated material for which the LARE has received a Form TL-0028 or TL-0029 can be incorporated into the project. The ORE performs benchmark inspection of files to verify the documentation is in the files.

#### 3.2.1(c) Buy America Requirements

Section 3-604, "Buy America" of the *Construction Manual* covers Buy America Act requirements. The LARE is required to verify that all certificates contain the required information, and that there are certificates for all materials and products covered under Buy America Act incorporated permanently into the project. The ORE should provide quality assurance for the files for QMA.

If the contractor requests a waiver of the Buy America Act requirements, prior approval from the FHWA engineer is required. The FHWA's prior approval can be granted only upon receiving concurrence from FHWA headquarters in Washington D.C. Approval of the Buy America Act waiver has not been delegated to Caltrans or local agencies. Even \$1.00 of federal-aid funds on a project makes the entire project subject to the Buy America Act requirements. Buy America requirements are applicable if a project receives FHWA funding for any development or construction activities, including National Environmental Policy Act studies, right-of-way acquisition, preliminary engineering, or construction.

#### 3.2.1(d) Onsite Testing

Acceptance tests must be performed on all material delivered that will be incorporated into the work, as required by the *Construction Manual* and contract documents. The LARE is responsible for verifying that the appropriate number of acceptance testing samples are taken and tested before accepting the work. The local agency's laboratory performs the acceptance tests and forwards the results to the LARE. The ORE spot-checks the files at least quarterly to verify that these procedures are followed in accordance with Caltrans methods and frequencies.

The LARE must provide documentation showing that the local agency has an approved QAP (only for federal-aid projects) and that all local agency employees, consultant employees, and laboratories contracted by the local agency are certified by Caltrans before performing acceptance sampling and tests. When California test methods are used, a Caltrans certified independent assurance representative certifies acceptance testers. Similar to a Caltrans Construction project, local agencies and consultants are considered certified if issued a Form MR-0111, "Certificate of Proficiency for an Acceptance Tester," by Caltrans independent assurance staff and are on the statewide certified tracking system. When local agencies use test procedures other than California test methods, refer to the Caltrans *Independent Assurance Program Manual*.

#### 3.2.1(e) Mix Designs

Hot mix asphalt and portland cement concrete mix designs must be acceptable to the Caltrans district laboratory. The contractor's proposed mix design must be submitted to the ORE with Form CEM-3101, "Notice of Materials to be Used." Forward a copy of the proposed mix design to the district's laboratory for an acceptability review. The ORE and the Structure Construction oversight engineer (for concrete structures) must review and accept hot mix asphalt and portland cement concrete mix designs.

#### 3.2.1(f) Caltrans-Furnished Material

Arrange to have Caltrans provide material as specified in the contract special provisions and cooperative agreement. The contractor must submit a materials request to the LARE who forwards it to the ORE for processing.

#### 3.2.2 Construction Activities

# 3.2.2(a) Preconstruction Conference

The LARE must inspect contractor activities as specified within the cooperative agreement. Before the start of work, communicate expectations to the LARE through a discussion of the *Construction Manual* and the *Supplement for Local Agency Resident Engineers*, contract requirements, enforcement procedures, safety, and other pertinent requirements. Checklists on Form OFG-1, "Oversight Engineer's Preconstruction Checklist," and Form OFG-2, "Local Agency and Oversight Engineer's Preconstruction Conference Checklist," may be useful tools for documenting this communication.

The LARE will conduct a preconstruction conference with the contractor. The ORE shall attend the meeting and be prepared to listen and answer questions, but not to be a main speaker.

#### 3.2.2(b) Construction Surveying



Construction staking must be done in accordance with Chapter 12 of the Caltrans *Surveys Manual*. The district's Surveys Unit should be notified when any construction surveying is performed by the local agency or contractor so district Surveys can perform QMA for field surveying. All surveying, construction or otherwise, performed by a local agency or contractor must meet all quality control and quality assurance guidelines as established by the district Surveys Unit and Right of Way Unit. The district's Surveys Unit and Right of Way Unit should perform a QMA review of the record of survey maps showing the new right-of-way lines. The setting of right-of-way monuments and filing of the record of survey maps with the county surveyor is the responsibility of whoever prepares the right-of-way maps and legal descriptions. Contact the district's Surveys Unit and Right of Way Unit to determine document types for which they require copies.

# 3.2.2(c) Lane Closures and Traffic Control

The contractor must follow the requirements of Section 12-4.02A(3)(b), "Closure Schedules," of the *Standard Specifications*. The LARE will be given access to the webbased Lane Closure System in order to review and approve the contractor's requested closures in accordance with Section 4-1202C (1a), "Lane Closure System" of the *Construction Manual*. The ORE will provide QMA of the Lane Closure System submittals by spot-checking to verify compliance with the approved traffic management plan for the project.

# Construction Zone Enhanced Enforcement Program

The Construction Zone Enhanced Enforcement Program (COZEEP) involves hiring the California Highway Patrol to help with traffic control in a work zone. The local agency contracts directly with the California Highway Patrol for COZEEP services, unless an alternate arrangement is documented in the cooperative agreement. The local agency may use Caltrans forms when administering COZEEP contracts, but it should be made clear that it is the local agency, and not Caltrans, that should receive and pay invoices for COZEEP services.

#### 3.2.2(d) Safety

#### Caltrans Personnel Responsibilities

All Caltrans QMA field staff may be required to read and sign the local agency's code of safe practices before entering the construction site. A copy is retained and placed in the local agency's contract files. If the code of safe practices is not available, the *Code of Safe Practices* developed for Caltrans employees must be used. Caltrans employees must follow the requirements of the *Caltrans Safety and Health Manual* on all oversight projects.

Point out work and safety items that do not comply with both Caltrans and the Department of Industrial Relations, Division of Occupational Safety and Health standards, and discuss possible remedies with the LARE. If there are unresolved work deficiencies, that portion of the work may be suspended by the authority provided within the encroachment permit and the cooperative agreement. A meeting between the local agency's public works director or executive director and the district Construction deputy director may be required to resolve deficiencies. Work will be allowed to resume only after an agreement has been reached.

# **Public**

The ORE is authorized to stop the contractor's operation wholly, or in part, and to take appropriate action when public safety is jeopardized. Caltrans ensures that public safety and convenience are maintained whenever work is performed under an encroachment permit within the state highway right-of-way. This applies to all aspects of the work such as: lane closures, shoulder closures, traffic stoppages, signing, night work, detours, dust control, quality of temporary pavements, crash cushions, temporary railings, pavement transitions, falsework, shoring, and delineation. Periodically inspect the job sites for safety compliance and possible deficiencies. If any deficiency is observed, send a written notice to the LARE directing the LARE to correct the deficiency. Once the deficiency is corrected, send a written notice describing the resolution of the deficiency to the LARE and document it in the project file.

#### Contractor

The contractor is bound by the conditions and provisions of their encroachment permit and the encroachment permit issued to the local agency. Overseeing contractor safety is the responsibility of the LARE. If there are safety concerns regarding contractor activities, notify the LARE immediately. If the LARE or the project staff is unavailable, stop the contractor's or subcontractor's operation wholly, or in part, and take appropriate action when safety is jeopardized.

Accident and Incident Reporting to the District Office and the Division of Construction

The LARE must immediately report all major accidents and incidents within the limits of the project to the ORE. In accordance with established reporting policies outlined in the Section 2-3, "Major Construction Incidents," of the *Construction Manual*, report all major accidents and incidents involving the public or construction personnel in accordance with the *Construction Manual* and district policy. Complete Form CEM-0603, "Major Construction Incident Notification," and file the report following the procedures established by Caltrans district offices.



#### Safety Stand-down

Following a significant safety incident, LARE must implement a safety stand-down in accordance with Section 2-1.06C, "Safety Stand-down" of the *Construction Manual*. The safety stand-down will include Caltrans and contractor personnel to improve the safety culture and awareness.

# 3.2.2(e) Water Pollution Control

The contractor and LARE are responsible for water pollution control, with a QMA role from the ORE. Local agency projects are subject to reviews from the Caltrans district Construction stormwater coordinator, the ORE, and environmental regulatory personnel. Determine if the LARE is verifying that all water pollution control measures are completed as summarized in the following:

- Verify that the Notice of Intent has been submitted to the regional water quality control board (RWQCB) before construction begins for projects that include work that disturbs more than 1 acre. The local agency will submit the Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB that is naming a local agency employee as the legally responsible person on the Notice of Intent. A Caltrans employee should not be named as the legally responsible person for oversight projects. This should have been completed prior to issuing the encroachment permit, so simply asking for the waste discharge identification number issued by the RWQCB would be sufficient verification.
- Verify that the LARE receives, reviews, and accepts a project SWPPP or Water Pollution Control Plan (WPCP). Verify that the LARE reviews and accepts all amendments to the approved WPCP or SWPPP to reflect current field operations.
- Verify that soil disturbing construction activities do not start until the SWPPP or WPCP is accepted by the LARE.
- Review and concur with the SWPPP or WPCP to verify that the LARE requires the contractor to comply with the water pollution control requirements.
- Verify that the LARE has all SWPPP or WPCP deficiencies corrected immediately.
- Cooperate with the RWQCB and other regulatory agencies.
- Conduct a final walk-through of the project at 90 percent completion with the LARE and the maintenance superintendent or region manager following Sections 5-006, "Maintenance Reviews," and 7-104B, "Water Pollution Control," of the Construction Manual. The LARE should complete and submit a copy of Form MTCE-0023, "Construction to Maintenance 90% BMP Completion Walkthrough," to reflect changes and corrective actions implemented since the 90 percent construction completion review with Maintenance.

 After final soil stabilization, the local agency must submit a Notice of Termination (NOT) to the RWQCB and submit a copy of the approval of the NOT by the RWQCB to Caltrans before acceptance of the work.

# 3.2.2(f) Caltrans Utility Services

Most oversight projects involve modification or additions to Caltrans utility service. For example, signal systems and street lighting involve electrical services just as landscape systems involve electrical and water services. Items to check before the start of construction are as follows:

- For electrical systems, verify the service points with the district electrical specialists, the LARE, and the electrical company following district procedures.
- For water systems, verify the service points with the maintenance landscape supervisor or district landscape architect, the LARE, and the water company following district procedures.

At completion of construction, complete and submit Form FA-2134, "Utility Account Action Request."

# 3.2.3 Value Engineering Change Proposals

All oversight projects are required to use the Caltrans *Standard Specifications* as part of their contract, unless they are specifically amended by the local agency and approved by Caltrans during PS&E preparation. Therefore, in accordance with Section 4-1.07B, "Value Engineering Change Proposal," of the *Standard Specifications*, the local agency's construction contractor can submit a value engineering change proposal (VECP) to potentially reduce construction costs.

From a monetary aspect, VECPs are most viable when the savings in construction costs exceed the costs needed to develop and review the VECP and results in net savings to the project. A VECP generally becomes undesirable, however, when the review costs exceed the sponsoring agency's portion of the construction savings.

Section 3-405, "Value Engineering," of the *Construction Manual* contains general guidelines that explain how to process a VECP.

#### 3.2.3(a) Roles and Responsibilities

The following individuals are involved in collectively accomplishing the review and approval of all VECPs:

#### Local Agency Resident Engineer

- Local agency's point of contact.
- Leads, coordinates, and facilitates interaction for the overall cost reduction proposal development, provides input, and reviews with the contractor, the ORE,



the Structure Construction engineer, and the Office of Special Funded Projects liaison engineer.

- Reviews cost-reduction proposals for feasibility, constructability, and compliance with the construction contract.
- Determines if a cost reduction proposal is cost effective.
- Provides the final cost reduction proposal approval in the form of a contract change order.

For structure-related VECPs and for the purposes of this section of the guidelines, it is assumed the LARE also performs the duties of a structure representative as outlined in the *Construction Manual*.

# Oversight Resident Engineer

- Acts as a main point of contact for Caltrans.
- Provides written approval through change order concurrence to allow a VECP change to the approved PS&E.

#### Structure Construction Oversight Engineer

For structure related changes:

- Reviews concepts and designs for feasibility, constructability, cost effectiveness, and conformance to standards.
- Verifies that the LARE's procedures will adequately address Caltrans' interests.
- Verifies that the LARE or structure representative is performing the necessary coordination with the Office of Special Funded Projects liaison engineer.

#### Structure Design—Office of Special Funded Projects—Liaison Engineer

For structure-related changes:

- Provides input relative to feasibility and cost effectiveness of the proposed VECP.
- Obtains reviews and concurrence from the local agency's design engineer.
- Performs QMA of the local agency's design engineer's review, reviews for conformance to Caltrans standards, and obtains the necessary reviews and concurrence from other units within the Division of Engineering Services.
- Provides approval for modifications made to the previously approved PS&E.

#### Local Agency

- Provides concurrence with VECP changes and the impacts on project costs and schedules.
- Makes the engineer of record available to review VECPs.



#### **OVERSIGHT RESIDENT ENGINEER GUIDELINES**

#### Chapter 3—Quality Management Assessment

 Factors in the potential review costs, including those by the engineer of record and by Caltrans (if determined to be appropriate by the Caltrans project manager), to help determine if the VECP is beneficial.

#### 3.2.3(b) Value Engineering Change Proposal Design Documents

Design documents must be developed by the contractor to support the VECP. The documents must meet the same quality standards as required in the project development phase. Documents that do not meet the standards are returned to the contractor and further reviews must not proceed until documents of sufficient quality are submitted.

# 3.2.3(c) Structure-Related Value Engineering Change Proposals

Additional guidance regarding structure-related VECP proposals, including roles, submittals, review processes, and review times can be found in Section 5-3, "Cost Reduction Incentive Proposals," of the Office of Special Funded Projects' *Information and Procedures Guide*.

# Section 4.1 Encroachment Permit and Cooperative Agreement Completion Requirements

The local agency and the contractor are required to notify Caltrans when the requirements of the encroachment permit have been met. Form TR-0128, "Notice of Completion," or any other written notification, may be submitted to the ORE for this purpose. Although the contractor was issued an encroachment permit, Caltrans does not provide construction contract acceptance to the contractor. There is only a satisfactory completion of the encroachment permit requirements by the local agency and the contractor. The encroachment permit may be closed after construction activity on the state highway is completed and there is no more need for the contractor or local agency to encroach on the right-of-way. However, additional actions may be needed before the project manager closing out the cooperative agreement. The encroachment permit requirements are typically fulfilled when the following conditions are met:

- Construction is completed in full compliance with the cooperative agreement and encroachment permit conditions.
- Maintenance agreements have been completed and executed.
- Notice of Termination has been approved by the RWQCB when construction for projects covered by the Construction General Permit is completed.

To help make the local agency aware of all the conditions that are to be met, review and coordinate Caltrans' project completion reviews of the local agency project at 90 percent completion. Before contract acceptance, discuss the findings of these reviews with the LARE. During this discussion, identify items that need addressing and might prevent Caltrans' acceptance of the project.

Use Form OFG-6, "Final Acceptance Checklist for Caltrans Oversight Projects," when performing the semifinal review, the safety and maintenance reviews, and final acceptance of the local agency-administered construction contract. The district Construction senior engineer signs pages 3, 4, and 6 before the ORE's final acceptance. This checklist must be filed in Caltrans project records after the Construction senior engineer's final review and approval.

Perform the final inspection of the project within one week of notification. If the local agency has not complied with all terms and conditions of the encroachment permit, the ORE informs the local agency of the discrepancies and requests corrections. On all projects, corrections must be detailed in writing.

For oversight projects that have cooperative agreements, the cooperative agreement is not closed out until Caltrans and the local agency have signed a "Cooperative Agreement Closure Statement." The Caltrans project manager is responsible for closing out the project's cooperative agreement. Send updated copies of OFG-6 to the project manager to keep the project manager informed on the status of the final

#### OVERSIGHT RESIDENT ENGINEER GUIDELINES

#### Chapter 4—Project Completion

acceptance process and to prevent cooperative agreement closeout before final acceptance.

Project documentation required by Structure Construction will be processed by the Structure Construction oversight engineer in accordance with the *Bridge Construction Records and Procedures* manual. Refer to Bridge Construction Memo D-1.04, "Administration of Special Funded Projects," for job acceptance records required by Structure Construction and the corresponding submission responsibilities when the project includes structure work.

During construction, the service installation, energy, and water bills are usually paid by the local agency or their contractor. When the modifications or additions are completed, the electrical system will be inspected for compliance by the district electrical specialist and the utility company will be authorized to energize the system. At 90 percent completion, water system connections should be inspected by district landscape maintenance or the district landscape architect. Upon acceptance of the contract by the local agency, notify their district electrical and water billing coordinator of the changes or additions to the district utility system. For most new signal or landscape projects, there will be a shared responsibility for the signal system and the landscaping. A maintenance agreement establishes how Caltrans and the local agency share the responsibility. This agreement should be executed before completion of construction and Caltrans accepts control and maintenance of the project.

When the work authorized by the encroachment permit has been satisfactorily completed, notify the local agency in writing that Caltrans has accepted the work. Forward this written acceptance to the Caltrans project manager and the district encroachment permit engineer's unit to close the encroachment permits for the contractor and local agency. Following is an example of content for this letter of acceptance to the local agency:

"This letter is in response to your written request dated mm/dd/yyyy to close the encroachment permits for project identification number xxxxxxxxxx. Caltrans has completed its review of the construction project and has determined that all requirements of the encroachment permit, plans, and specifications have been met. The work is hereby accepted, and encroachment permits xxx and xxx will be closed. By this acceptance of the work, the local agency is granted relief of maintenance for the project limits, and maintenance responsibilities are now defined in the executed Maintenance Agreement for this highway. As per cooperative agreement xx-xxx, additional project documents and submittals may be required. The cooperative agreement will be closed out when all requirements of the agreement have been met." [Modify the text of the letter to the specific requirements of the project.]



#### OVERSIGHT RESIDENT ENGINEER GUIDELINES

Chapter 4—Project Completion

Once the Office of Encroachment Permits receives a copy of this letter, both the parent permit and the double permit for the construction project will be closed. The Caltrans project manager will enforce the remaining cooperative agreement requirements for the project.

Forward the project file and the required project documentation to the district's Construction document coordinator for archiving. Verify that copies, or originals, of selective required project documentation are distributed to the appropriate district units within the established times.

#### Section 4.2 Closeout Procedures

# 4.2.1 Federal-Aid Project

In addition to the encroachment permit and cooperative agreement project completion requirements outlined in the previous section, all federal-aid projects must follow the documentation requirements in Section 5-1, "Project Records and Reports," of the *Construction Manual.* 

# 4.2.2 Certificate of Environmental Compliance

The LARE is responsible for verifying that the Certificate of Environmental Compliance is prepared and distributed as outlined in the *Supplement for Local Agency Resident Engineers* and in Section 7-110, "Certificate of Environmental Compliance," of the *Construction Manual*. The Certificate of Environmental Compliance will be signed by the local agency's responsible parties.

# 4.2.3 Relief from Maintenance and Responsibility

When a local agency administers a construction contract and uses Caltrans' *Standard Specifications* as part of the contract documents, they will include the following or similar language in their contract special provisions:

"Standard Specification: The 20## edition of the Standard Specifications of the State of California, Department of Transportation. Any reference therein to the State of California or a State agency, office, or officer shall be interpreted to refer to the LOCAL AGENCY or its corresponding agency, office, or officer acting under this contract."

By including this special provision, or similar language, the authority to grant relief from maintenance and responsibility is transferred from the executive officer of the Department of Transportation to the executive officer of the local agency. The local agency, not Caltrans, has the contract with the contractor. Consequently, the local agency, not Caltrans, is automatically responsible for maintenance of the segment the local agency accepted. Standard language, or similar, in cooperative agreements states:

"As the IMPLEMENTING AGENCY for construction, [PARTNER NAME] is responsible for maintenance of the State Highway System within the PROJECT limits as part of the construction contract until a request from [PARTNER NAME] is submitted and approved by CALTRANS for a relief from maintenance for any portion of the PROJECT in accordance with CALTRANS Standard Specifications."

By the terms of the cooperative agreement, the State will only accept responsibility and maintenance when:



#### **OVERSIGHT RESIDENT ENGINEER GUIDELINES**

#### Chapter 4—Project Completion

- The construction contract is completed in its entirety and the contract is accepted by the local agency. Relief from Maintenance may also be granted for a portion of the project following Section 5-1.38, "Maintenance and Protection Relief," of the Standard Specifications, and Section 3-520, "Maintenance and Protection Relief," of the Construction Manual. District Maintenance should be consulted before granting a partial relief from maintenance.
- The ORE has accepted the work.
- A maintenance agreement with the local agency exists, if required.

The local agency may grant relief from maintenance and responsibility to the contractor for a segment of contract limits; however, the local agency will still be responsible for maintenance and retains responsibility for that segment unless all three conditions previously noted have been satisfied.

# 4.2.4 Local Agency's Job Records

When work is complete, the local agency will submit the project history file to the ORE. The cooperative agreement will indicate the local agency's document retention period. Standard cooperative agreement language states:

- Partners will maintain and make available to each other all OBLIGATIONS-related documents, including financial data, during the term of this AGREEMENT.
- Partners will retain all obligations-related records for 3 years after the final voucher.

# Section 5.1 General Requirements for Liability

The encroachment permit general provisions and the cooperative agreement hold the permittee responsible for all liability, personal injury, and property damage. When required, the applicant must show evidence of liability insurance before issuance of the encroachment permit. A company authorized to transact business in the State of California must provide the insurance.

When liability insurance is required, the applicant must furnish an endorsement to the policy naming Caltrans, its officers, and employees as "additional insured." Professional liability exclusion is standard in insurance policies. This provides the state with adequate protection against foreseeable risks as additional insured.

Types of claims that may be encountered on oversight projects are classified into the following two primary categories.

# 5.1.1 Public Claims by Persons Not Related to the State

Contact the district Claims Unit for procedures to process a claim.

#### 5.1.2 Caltrans Claims Against a Permittee

Any claims made by Caltrans' district Encroachment Permit offices are related to incomplete or unacceptable work performed by a permittee and are claimed or billed against the performance bond, when applicable. Caltrans legal staff manages the actual legal or court action taken against the permittee (local agency or contractor). Inform the Construction field coordinator when legal or court action is taken against a permittee.

#### Section 5.2 Deficient Contract Administration and Sanctions

As outlined in earlier chapters, the main function of the ORE is to perform QMA to verify that the LARE is properly administering the project in conformance with the plans, specifications, cooperative agreement, and encroachment permit. Perform this role by exercising the authority given in the cooperative agreement and encroachment permit as described in the following sections. The cooperative agreement and the encroachment permit authorize Caltrans to accept or reject the work, order any actions needed for public safety and the preservation of property, and verify compliance with all provisions of the encroachment permit and cooperative agreement.

If it is found that the LARE is not performing required duties, even after several meetings discussing the deficiencies with the LARE and the local agency's person in responsible charge, report the situation to the deputy district director for Construction. The deputy district director for Construction must then contact the local agency's public works director or executive director to seek a solution to the problem. The ORE may be asked to participate in these discussions.

#### 5.2.1 **Encroachment Permit**

A local agency is granted permission to enter onto the state highway right-of-way and construct an approved facility under the encroachment permit. The encroachment permit is a valid contract between the local agency and Caltrans. Under the encroachment permit, Caltrans has the right to revoke the encroachment permit for violation of the encroachment permit conditions, contract special provisions, or other stipulated requirements. Without an encroachment permit, the local agency and their contractor are required to suspend all work on the project site. Any work Caltrans does to put the project site back into a safe operating condition or restore it to the original condition will be billed to the local agency, the local agency's contractor, and the contractor's bonding company, depending on the circumstance involved in the encroachment permit being revoked. The local agency and their contractor can be required to provide additional bonding, to deposit additional funds, and to pay additional fees for the encroachment permit to be reissued.

Before revoking the encroachment permit, meet with the LARE to discuss the issues, ask for an action plan to correct any deficiencies, and discuss possible Caltrans action if the deficiencies are not corrected. If the LARE repeatedly fails to correct the deficiencies after several meetings, contact the local agency's person in responsible charge for the project, and discuss the situation. Discuss the situation with the deputy district director for Construction before having the deputy district director for Construction request that the encroachment permit is revoked.

#### 5.2.2 Cooperative Agreement

A cooperative agreement is a legally binding contract between Caltrans and a local agency. For those projects administered by a local agency, the following language, or similar language, is included in the cooperative agreement:

"PARTNERS will perform all OBLIGATIONS in accordance with federal and California laws, regulations, and standards; FHWA STANDARDS; and CALTRANS STANDARDS."

The local agency has agreed that construction contract administration must follow Caltrans requirements, including the *Construction Manual*, the *Supplement for Local Agency Resident Engineers*, and the *Local Agency Structure Representative Guidelines*.

In the worst case, Caltrans can take over a project and complete it, then be reimbursed with gas tax funds that were due the local agency. Most local agencies would find this scenario unappealing. Discussing the various options and the possibility of withholding or canceling federal-aid funds should persuade the local agency and the LARE to conform to Caltrans requirements.

If the LARE, or staff, is not following Caltrans' contract administration procedure as agreed to in the cooperative agreement, Caltrans can ask for removal of the LARE or staff. The following language, or similar language, is included in the cooperative agreement:

"Each PARTNER will verify that personnel participating in OBLIGATIONS are appropriately qualified or licensed to perform the tasks assigned to them."

If the LARE is not following the requirements agreed to in the cooperative agreement or QMP, the ORE may request that the LARE or their staff be removed from the project. Before requesting removal of the LARE, or staff, meet with the LARE to discuss the issues, ask for an action plan to correct the deficiencies, and discuss possible Caltrans action if the deficiencies are not corrected. If the LARE does not correct the deficiencies, contact the local agency's person in responsible charge and discuss the situation. Also, discuss the situation with the deputy district director for Construction before requesting that the deputy district director for Construction have the LARE or staff removed.

