STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

MANUAL CHANGE TRANSMITTAL

NO. **13-11**

TITLE: Department of Transportation *Construction Manual*	APPROVED BY: for Shirley Choate Mark Leja, Chief Division of Construction	DATE ISSUED: June 28, 2013
SUBJECT AREA Table of Contents and various sections of the *Construction Manual*	ISSUING UNIT Division of Construction	
SUPERSEDES CPDs 04-2, 09-8, 09-10, 09-14, 10-2, 10-4, 10-6, and 10-9.	DISTRIBUTION All Requested Manual Holders	

This manual change transmittal delivers the revisions of Chapter 5, Sections 1 and 5 of the *Construction Manual.* Updated sections may contain updated language, information, corrections, and references resulting from updates to the 2010 *Standard Specifications*, and from policy, and procedural changes. Change bars in the margins of the revised sections indicate text that was changed or added.

Please update your manual according to the table below.

Section	Incorporates	Remove Old Page(s)	Insert New/Revised Page(s)
Goldenrod, Chapter 5, Section 1, "Project Records and Reports"	None	5-1.i thru 5-1.vi	5-1.i thru 5-1.iii
Chapter 5, Section 1, "Project Records and Reports"	All of: CPDs 04-2, 09-8, 09-10, 09-14, 10-2, 10-4, 10-6, 10-9. Parts of: CPBs 07-6, 09-14, 10-5.	5-1.1 thru 5-1.76	5-1.1 thru 5-1.81
Goldenrod, Chapter 5, Section 5, "Emergency Contract Administration"	None	5-5.i	5-5.i
Chapter 5, Section 5, "Emergency Contract Administration"	Part of CPB 10-3	5-5.1 thru 5-5.7	5-5.1 thru 5-5.5

Section 5-1, "Project Records and Reports"

- Updates references to align with 2010 *Standard Specifications*.
- Updates terminology and text to align with 2010 *Standard Specifications* and current policy.

- Removes references to outdated forms.
- Eliminates repetition of form numbers and names within form descriptions.
- Updates cross reference within *Construction Manual*.
- Changes SI units to US customary units.
- Adds new forms and descriptions.
- Reintroduces Form CEM-2402(s), "Final Report—Utilization of Disabled Veteran Business Enterprises (DVBE)—State Funded Projects Only."
- Eliminates repetition of form numbers and names within form descriptions
- Includes parts of the following Construction Policy Bulletins:
  - CPB 07-6, "Progress Pay—Entering Contract Milestones into the Contract Administration System"
  - CPB 09-14, "Request for Information"
  - CPB 10-5, "Changes to the Dispute Review Board Process"
- Includes all of the following Construction Procedure Directives:
  - CPD 04-2, "Disposition of Construction Project Records"
  - CPD 09-8, "Recovery Act Reporting"
  - CPD 09-10, "Supplemental Progress Payment Estimates"
  - CPD 09-14, "Resident Engineer Daily Reports and Monthly Pay Quantity Verification"
  - CPD 10-2, "Consistent Implementation of Caltrans Storm Water Management Program"
  - CPD 10-4, "Implementation of New Construction General Permit"
  - CPD 10-6, "Small Business Utilization Report Pilot Program Cancellation"
  - CPD 10-9, "Implementation of New Construction General Permit Risk Levels 2 and 3"

Section 5-5, "Emergency Contract Administration"

- Changes director's contract authority from $131,000 to $270,000.
- Adds "emergency limited bid contract language and web link to guidelines.
- Changes name of Form ADM-0366.
- Eliminates service contract language.
- Updates terminology to align with 2010 *Standard Specifications.*
- Incorporates part of CPB 10-3 describing process for using new forms for fund requests, and information on payment procedures and emergency contracts.
- Adds language that boiler plate contract and sample provisions on emergency force account and emergency limited bid contracts is available.
- Adds web address for the Department of Conservation SMARA information.
- Deletes Section 5-511, "Sample Provisions for Emergency Force Accounts," because provisions are now available through the Division of Procurement and Contracts.

Section 1 Project Records and Reports

This manual is being updated to reflect changes from the 2006 to the 2010 *Standard Specifications*. Bracketed section numbers refer to the 2006 *Standard Specifications*.

Section 1 Project Records and Reports

5-101 Forms Used for Contract Administration

5-101A General

One of the duties of the resident engineer is to keep accurate and complete records of the work. This section includes a list of forms used in administering a construction project and maintaining records. Use forms not related directly to contract administration, such as personnel documents and accounting forms, in accordance with instructions contained in other Caltrans manuals.

The Division of Construction issues new or revised construction forms. All Division of Construction forms have a prefix of CEM (Construction Engineering Management) and a number that is related to the form's uniform filing system category. If an existing form no longer meets the need that it was designed for, use the following procedure to propose a change:

- Complete Form CEM-9001, "Construction Manual Proposed Change," and send it to the Division of Construction publications unit. Explain the reason for the proposed change and attach a draft of the proposed revised form.
- The Division of Construction will review the proposed change and make a decision regarding any future revision.

Not all forms issued by the Office of Materials Engineering and Testing Services (METS) are listed in this manual. If a test method includes a specific form, contact METS.

A list of forms issued by the Office of Structure Construction is shown in Volume I, Section 16 of the *Bridge Construction Records and Procedures* manual.

5-101B Construction Forms

All Division of Construction forms are available online at:

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

Following is a list and descriptions of the Division of Construction forms:

Form CEM-0101 Resident Engineer's Report of Assignment

When assigned to a new project, the resident engineer must use this form to provide contact information. Distribute copies of the report according to instructions on the form and any district instructions.

It is not necessary or desirable to hold the form until all information is available. Submit partial information with a note that a supplemental form will follow.

Section 1 Project Records and Reports

5-101 Forms Used for Contract Administration

Form CEM-0501 *Relief from Maintenance*

The resident engineer uses this form to recommend that the contractor be relieved from maintenance and responsibility in accordance with Section 5-1.38 [*7-1.15*], "Maintenance and Protection Relief", of the *Standard Specifications.* For more information refer to Section 3-520, "Maintenance and Protection Relief," of this manual.

Form CEM-0601 *Construction Safety Report*

The resident engineer or the project safety coordinator uses this form to document periodic project safety reviews.

Form CEM-0602 *Project Safety Program Statement*

The resident engineer uses this form to list the sections of the Code of Safe Practices that apply to the project. This form may also be used to designate an employee as the project safety coordinator.

Form CEM-0603 *Major Construction Incident Notification*

The resident engineer uses this form to report major construction incidents. Instructions for completion are included on the last page of the form.

Form CEM-0606 *Construction Safety Checklist*

The resident engineer uses this form to document the contractor's attention to safety procedures while performing the work. Choose the appropriate section of the form for the work being performed.

Form CEM-1101 *Documents Bond of State Highway Oversight Projects*

The local agency and Caltrans project manager complete this form. The project manager submits the form to the encroachment permits unit when local agencies have failed, in the past, to produce and submit required documents at the completion of a previous contract they administered on the state highway system. For details on the use of this form, refer to Section 4-101, "Projects with Documents Bond," of the Caltrans *Oversight Engineer Field Guidelines*.

Form CEM-1201 *Subcontracting Request*

The contractor submits this form and the resident engineer uses the form to calculate the percentage of work to be performed by the contractor. Section 3-5, "Control of Work," of this manual describes the procedures. The resident engineer must sign this form before the contractor can begin on the applicable subcontracted work. Before approval, verify that subcontractors are not on the debarred contractors list that is available on the California Department of Industrial Relations website:

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

Form CEM-1202 *Contractor Action Request—Change of Name/Address—Assignment of Contract Monies*

The contractor submits this form to the resident engineer to request a change in the contractor's name or address or to request an assignment of monies due or to become due the contractor under the contract in accordance with Section 5-1.12 [*8-1.02*], "Assignment," of the *Standard Specifications.*

Form CEM-1203 *Contractor Action Request—Assignment of Contract Performance*

The original contractor or the contractor's surety submits this form to the resident engineer in accordance with Section 5-1.12 [*8-1.02*], "Assignment," of the *Standard Specifications.*

Form CEM-1204 *American Recovery and Reinvestment Act (ARRA) Monthly Employment Report*

The contractor submits this form monthly. The resident engineer reviews the information and retains the form in the construction project records.

Form CEM-1901 *Burial Location of Soil Containing Aerially Deposited Lead*

The contractor submits this form to the resident engineer and email address ADL@dot.ca.gov within 5 business days of completing placement of the material. The resident engineer reviews the information and retains the form in the construction project records.

Form CEM-1902 *Burial Location of Soil Containing Naturally Occurring Asbestos*

The contractor submits this form to the resident engineer and email address NOA@dot.ca.gov within 5 business days of completing placement of the material. The resident engineer reviews the information and retains the form in the construction project records.

Form CEM-2001 *National Pollution Discharge Elimination System Annual Certification*

The resident engineer uses this form to file the annual stormwater permit certification by July 1 of each year. Refer to Chapter 7, "Environmental Stewardship," for details on the stormwater permit certification.

Form CEM-2002 *Notification of Construction (NOC)*

The resident engineer, with the assistance of the district construction stormwater coordinator, fills out this form. The Caltrans National Pollutant Discharge Elimination System (NPDES) Permit requires Caltrans to submit the notification to the Regional Water Control Board. Instructions are included on the last page of the form.

Form CEM-2004 *Notification of Completion of Construction (Desert Areas)*

The resident engineer or district stormwater coordinator submits this form for projects requiring a stormwater pollution prevention plan for region 6 or 7 of the California Regional Water Quality Control Board.

Form CEM-2005 *Notification of Rainfall Erosivity Waiver*

The resident engineer submits this form as required by the Caltrans NPDES permit. Instructions are included on the last two pages of the form.

Form CEM-2006 *Legally Responsible Person Authorization of Approved Signatory*

The district director submits this form and the resident engineer reviews the information for completeness and accuracy. File the form in the construction project records. Instructions are included on the last page of the form.

Form CEM-2006T *Legally Responsible Person Authorization of Approved Signatory—Lake Tahoe Hydrologic Unit*

The district director submits this form to the California Regional Water Quality Control Board, as required by the Caltrans NPDES permit. Instructions are included on the last page of the form.

Form CEM-2008 *SWPPP/WPCP Amendment Certification and Acceptance*

The resident engineer reviews this form for completeness and accuracy as submitted by the contractor, and files it in the construction project records. Instructions are included on the last page of the form.

Form CEM-2009 *SWPPP/WPCP Amendments Log*

The resident engineer reviews this form for completeness and accuracy as submitted by the contractor, and files it in the project files. Instructions are included on the last page of the form.

Form CEM-2023 *Stormwater Training Record*

The resident engineer reviews this form as submitted by the contractor, and files it in the project files. Instructions are included on the last page of the form.

Form CEM-2024 *Stormwater Training Log*

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2030 *Stormwater Site Inspection Report*

The resident engineer fills out and files this form in the project records. Instructions are included on the last page of the form.

Form CEM-2031 *Daily Stormwater Site Inspection Report*

The resident engineer submits this form to the California Regional Water Quality Control Board, as required by the Caltrans NPDES permit. Instructions are included on the last page of the form.

Form CEM-2034 *Stormwater Best Management Practices Status Report*

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the form.

Form CEM-2035 *Stormwater Site Inspection Report Corrective Actions Summary*

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2040 *Weather Forecast Log*

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2041 *Weather Monitor Log*

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2045 Rain Event Action Plan—Highway Construction Phase

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included within the pages of the form.

Form CEM-2045T Rain Event Action Plan—Highway Construction Phase Contractor Action Request—Lake Tahoe Hydrologic Unit

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included within the pages of the form.

Form CEM-2046 Rain Event Action Plan—Plant Establishment Phase

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included within the pages of the form.

Form CEM-2047 Rain Event Action Plan—Inactive Project

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included within the pages of the form.

Form CEM-2048 Storm Event Sampling and Analysis Plan

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included within the pages of the form.

Form CEM-2049 Qualifying Rain Event Sampling and Analysis Plan

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included within the pages of the form.

Form CEM-2049T Qualifying Rain Event Sampling and Analysis Plan—Lake Tahoe Hydrologic Unit

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included within the pages of the form.

Form CEM-2050 Sample Information, Identification, and Chain-of-Custody Record

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2051 Stormwater Sampling and Analysis Log

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2052 Stormwater Sample Field Test Report

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2054 Stormwater Sample Laboratory Test Report

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2055 Stormwater Equipment Maintenance Log

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2056 *Stormwater Turbidity Meter Calibration Record*

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included within the pages of the form.

Form CEM-2057 *Stormwater pH Meter Calibration Record*

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2058 *Stormwater Meter Calibration Record*

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2061 *Notice of Discharge Report*

The resident engineer submits this form to the California Regional Water Quality Control Board, as required by the Caltrans NPDES permit. Instructions are included on the last page of the form.

Form CEM-2062 *Numeric Action Level Exceedance Report*

The resident engineer submits this form to the California Regional Water Quality Control Board, as required by the Caltrans NPDES permit. Instructions are included on the last page of the form.

Form CEM-2062T *Numeric Action Level Exceedance Report—Lake Tahoe Hydrologic Unit*

The resident engineer submits this form to the California Regional Water Quality Control Board, as required by the Caltrans NPDES permit. Instructions are included on the last page of the form.

Form CEM-2063 *Numeric Effluent Limitation Violation Report*

The resident engineer submits this form to the California Regional Water Quality Control Board, as required by the Caltrans NPDES permit. Instructions are included on the last page of the form.

Form CEM-2063T *Numeric Effluent Limitation Violation Report—Lake Tahoe Hydrologic Unit*

The resident engineer submits this form to the California Regional Water Quality Control Board, as required by the Caltrans NPDES permit. Instructions are included on the last page of the form.

Form CEM-2065 *Notice of Discharge Log Instructions*

The resident engineer files this form as filled out by the contractor, in the project files. Instructions are included on the last page of the form.

Form CEM-2070 *SWPPP/WPCP Annual Certification of Compliance*

The resident engineer submits this form to the California Regional Water Quality Control Board, as required by the Caltrans NPDES permit. Instructions are included on the last page of the form.

Form CEM-2090 Notice of Completion of Construction

The resident engineer submits this form to the California Regional Water Quality Control Board, as required by the Caltrans NPDES permit. Instructions are included on the last page of the form.

Form CEM-20CC Attachment CC, Water Pollution Control Best Management Practices List

The contractor's water pollution control manager completes the form at different phases of the construction project to document the type and quantity of best management practices planned to be implemented in the field to prevent water pollution. Information in this form helps the water pollution control manager mobilize labor and coordinate necessary supplies in an orderly and efficient manner. In addition, information in this form allows the stormwater inspector to fully understand the construction stage and anticipated quantity of best management practices in the field during the site visit.

Form CEM-20DAPP Appendix D, Notification Log

Subcontractors and material suppliers must be notified of their responsibilities on the construction job site related to stormwater runoff pollution prevention. This form documents the stormwater pollution prevention notifications given to each subcontractor and material supplier.

Form CEM-20DCON SWPPP/WPCP Attachment D, Contractor Personnel Training Record

Contractor personnel responsible for implementation of stormwater pollution prevention practices are required to be adequately trained in this field. Attachment D documents the training record of the contractor's personnel. This form is included in the stormwater pollution prevention plan (SWPPP) and is updated as necessary.

Form CEM-20DSUB SWPPP/WPCP Attachment D, Subontractor Personnel Stormwater Training Record

Subcontractor personnel responsible for implementation of stormwater pollution prevention practices are required to be adequately trained in this field. Attachment D documents the training record of the subcontractor's personnel. This form is included in the SWPPP and is updated as necessary.

Form CEM-20EE SWPPP Attachment EE, Stormwater Sampling Locations

This form lists all potential water quality sampling locations within a project site during the course of construction. This form is prepared by the qualified SWPPP developer at the start of the project and is included in the SWPPP. During the course of construction, depending on the stage of construction and areas of disturbed soil activities, appropriate sampling locations from this list are selected for sampling of the stormwater runoff or discharge.

Form CEM-2101 COZEEP Daily Report

The California Highway Patrol and Caltrans jointly use this form to report highway patrol resources used for the Construction Zone Enhanced Enforcement Program (COZEEP). Chapter 2, "Safety and Traffic," of this manual further describes the use of the form.

Form CEM-2102 COZEEP/MAZEEP Task Order

The resident engineer uses this form to request highway patrol support for the Construction Zone Enhanced Enforcement Program. Additional use of this form is described in Chapter 2, “Safety and Traffic,” of this manual.

Form CEM-2103 COZEEP/MAZEEP Cancellation Form

The resident engineer uses this form to cancel any previously requested highway patrol support for the Construction Zone Enhanced Enforcement Program. Additional use of this form is described in Chapter 2, “Safety and Traffic,” of this manual.

Form CEM-2401 Substitution Report for Disadvantaged Business Enterprise (DBE) or Underutilized Disadvantaged Business Enterprise (UDBE)

The contractor fills out and provides this form to the resident engineer who uses the information to authorize DBE subcontractor substitutions. Sections 3-8, “Prosecution and Progress,” and 8-3, “Disadvantaged Business,” of this manual contain additional information on substituting subcontractors.

Form CEM-2402(F) Final Report—Utilization of Disadvantaged Business Enterprises (DBE), First—Tier Subcontractors

The contractor completes this form. The resident engineer certifies the form. It describes work performed and materials provided by disadvantaged business enterprise firms. Refer to Section 8-3, “Disadvantaged Business,” of this manual for details.

Form CEM-2402(S) Final Report—Utilization of Disabled Veteran Business Enterprises (DVBE), State Funded Projects Only

The contractor fills out and certifies this form which describes work performed and materials provided by disabled veteran business enterprise firms. The resident engineer verifies the form. Refer to Section 8-3, “Disadvantaged Business,” of this manual for details.

Form CEM-2403(F) Disadvantaged Business Enterprises (DBE) Certification Status Change

The contractor fills out and certifies this form. The resident engineer uses the form to verify the actual dollar amount paid to DBE subcontractors on federally funded projects that have a change in certification status during the course of the contract. Refer to Section 8-3, “Disadvantaged Business,” of this manual for details.

Form CEM-2404(F) Monthly DBE /UDBE Trucking Verification

The contractor must submit this form before the 15th of each month. It lists the dollar amount paid to the DBE trucking companies for truck work performed by DBE certified truckers and for any fees or commissions for non-DBE truckers used each month on the project. Instructions for filling out this form are located on the last page of the form.

Form CEM-2501 Fringe Benefit Statement

The contractor completes this form for labor compliance purposes. Refer to Section 8-1, “Labor Compliance,” of this manual for more information.

Form CEM-2502 *Contractor or Subcontractor Payroll*

When it is requested, furnish this form to the contractor. It is used to fulfill the payroll submittal requirements of the contract. Refer to Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2503 *Statement of Compliance*

The contractor may use this form for the required statement of compliance with payroll submittals. Refer to Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2504 *Employee Interview: Labor Compliance/EEO (Stock # 7541-3512-3)*

Use this form to record information from interviews of contractors' employees. Directions for the interviewer are on the back of the form. Refer to Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2504 *(Spanish), Entrevista de Empleado: Labor Compliance/EEO*

Same as previous. Form printed in Spanish.

Form CEM-2505 *Owner-Operator Listing Statement of Compliance*

If they do not include this data on their certified payrolls, contractors may use this form to report payments made to owner-operators. Refer to Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2506 *Labor Compliance—Wage Violation*

The district labor compliance officer uses this form to document labor compliance wage violations. Refer to Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2507 *Labor Violation: Case Summary*

The district labor compliance officer uses this form in conjunction with Form CEM-2506 to summarize labor violation cases. Refer to Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2508 *Contractor's Payroll Source Document Audit Summary*

The district labor compliance officer uses this form to document the verification of the contractor's payroll source document audit. Refer to Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2509 *Checklist—Source Document Audit*

The district labor compliance officer uses this form during the contractor's payroll source document audit. Refer to Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2510 *Truck Owner-Operator Certification of Ownership*

The truck owner-operator uses this form to identify the vehicle used and certify ownership or lease of the vehicle. The form should be submitted once per project to the district labor compliance office unless changes to the data would necessitate a new form. Refer to Section 8-1, "Labor Compliance," of this manual for more information.

Form CEM-2601 Construction Progress Chart

The resident engineer maintains this form for each project. Refer to Section 3-8, "Prosecution and Progress," of this manual for details.

Form CEM-2701 Weekly Statement of Working Days (Stock # 7541-3528-7)

The resident engineer uses this form to track contract time on construction contracts. The last page of the form and Section 3-8, "Prosecution and Progress," of this manual contain instructions for filling out the weekly statement of working days.

Form CEM-2702 Overrun in Contract Time

The Division of Construction may use this form to grant time adjustments after contract time has elapsed. For more information refer to Section 3-8, "Prosecution and Progress," of this manual.

Form CEM-3101 Notice of Materials to Be Used (Stock # 7541-3511-1)

The contractor must use this form to list all materials to be used on the project. Refer to Section 6-2, "Acceptance of Manufactured Material and Sampling Methods," of this manual for details on the use of the form. Instructions to the contractor are on the last page of the form.

Form CEM-3501 Hot Mix Asphalt Production Report

The plant inspector uses this form to document daily hot mix asphalt production processes and report any plant, material, and production deficiency to the resident engineer.

Form CEM-3502 Hot Mix Asphalt Placement Report

The paving inspector uses this form to document daily hot mix asphalt placement processes and report any material and construction deficiencies to the resident engineer.

Form CEM-3511 Contractor Job Mix Formula Proposal

The contractor uses this form to submit to the resident engineer, before the work begins, the hot mix asphalt mix formula they have tested and intend to use on the project. The form states job mix formula target values for aggregate sieves and the percent of asphalt binder, as well as source information for all materials.

Form CEM-3512 Contractor Hot Mix Asphalt Design Data

The contractor uses this form to document the testing data developed by the mix design laboratory. Refer to Section 4-39, "Hot Mix Asphalt," of this manual for more information.

Form CEM-3513 Caltrans Hot Mix Asphalt Verification

Caltrans verifies that the proposed job mix formula complies with the specifications on this form. The resident engineer signs and returns the form to the contractor. Refer to Section 4-39, "Hot Mix Asphalt," of this manual for more information.

Form CEM-3514 Contractor Job Mix Formula Renewal

The contractor submits test results for renewal of hot mix asphalt job mix formula on this form to the resident engineer. When the test results indicate that the sampled and tested hot mix asphalt complies with the specifications, the resident engineer requests the district materials laboratory perform hot mix asphalt verification testing. Refer to Section 4-39, “Hot Mix Asphalt,” of this manual for more information.

Form CEM-3701 Test Result Summary

The resident engineer may use this form to summarize acceptance tests on each material. Refer to Category 37, “Initial Tests and Acceptance Tests,” in Section 5-102, “Organization of Project Documents,” of this manual for details.

Form CEM-3702 Relative Compaction Summary

The resident engineer may use this form to summarize compaction test results in the same manner that Form CEM-3701 is used for other tests.

Form CEM-3703 Caltrans Production Start-Up Evaluation

The resident engineer uses this form to record the testing results at the beginning of production. Refer to Section 4-39, “Hot Mix Asphalt,” of this manual for more information.

Form CEM-3801 Request for Assignment of Inspectors, Samplers, and Testers

The contractor uses this form to submit the names of quality control staff for hot mix asphalt projects using the QCQA process. Refer to the *Quality* Control *Manual for Hot Mix Asphalt* for more information.

Form CEM-3802 Quality Control Inspector Affidavit of Proficiency

The contractor uses this form to document the hot mix asphalt experience and training of proposed hot mix asphalt quality control inspectors for projects using the QCQA process. Refer to the *Quality Control Manual for Hot Mix Asphalt* for additional information.

Form CEM-3803 Daily Summary of Quality Control Testing

The contractor uses this form to provide a summary of quality control test results for each day that hot mix asphalt is placed on a QCQA process project. Refer to the *Quality Control Manual for Hot Mix Asphalt* for more information.

Form CEM-3804 Hot Mix Asphalt Inspection and Testing Summary

The contractor uses this form to provide a checklist that shows the inspections and testing for each day that hot mix asphalt is placed on a QCQA process project. The contractor’s quality control manager must document on this form deviations from the specifications or regular practices and certify that the information, tests, or calculations, comply with the contract specifications. Refer to the *Quality Control Manual for Hot Mix Asphalt* for more information.

Form CEM-4101 Materials Release Summary

The resident engineer uses this form to summarize the materials released by METS and materials inspected at the job site.

Form CEM-4102 Material Inspected and Released on Job

The resident engineer uses this form to list certain materials that may arrive on the job site without a Form TL-0029, “Report of Inspection of Material.” Refer to Section 6-3, “Field Tests,” of this manual for details.

Form CEM-4202 Material Plant Safety Checklist

The materials plant inspector uses this form when checking a materials plant for safety.

Form CEM-4401 Solid Waste Disposal and Recycling Report

The contractor completes and certifies the information reported on this form. The resident engineer reviews then submits the authorized form to the district recycling coordinator with a copy to the statewide recycling coordinator in headquarters Division of Design. The use of this form is described in Section 7-109, "Solid Waste Disposal and Recycling Reporting," of this manual.

Form CEM-4501 Resident Engineer's Daily Report/Assistant Resident Engineer's Daily Report (Stock # 7541-3506-1)

The resident engineer and assistant resident engineers use this form to record project activities daily. For more information, refer to Section 5-0, "Conduct of the Work," of this manual.

Form CEM-4601 Assistant Resident Engineer's Daily Report (Stock # 7541-3504-6)

Assistant resident engineers use this form to record daily individual contract item activity. It is also used to record extra work activity and to verify contractor's personnel listed on payrolls. For more information refer to Section 5-0, "Conduct of the Work," of this manual.

Form CEM-4701 Drainage System Summary

The resident engineer and assistant resident engineers use this form to record progress and summarize activity on drainage contract items. Refer to Category 47, "Drainage Systems," in Section 5-102, "Organization of Project Documents," of this manual for details.

Form CEM-4801 Quantity Calculations (Stock # 7541-3520-0)

The resident engineer and assistant resident engineers use this form for the basic source document for most contract item quantity calculations.

Form CEM-4900 Change Order

The resident engineer uses this form for change orders. Refer to Section 5-3, "Change Orders," of this manual for information about change orders.

Form CEM-4901 Change Order Input (Stock # 7541-3516-2)

The resident engineer and assistant resident engineers use this form to input change orders for the project record and estimate data. Refer to Section 5-103D, "Change Orders," of this manual for details.

Form CEM-4902 Extra Work Bill (Short Form) (Stock # 7541-3500-8)

The contractor uses this form for billing extra work. Details for use are on the last page of the form and are also included in Section 5-103E, "Change Order Billing," of this manual. The resident engineer may authorize contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit change order bill data on a computer report identical to this form for all Caltrans projects.

Form CEM 4902A *Extra Work Bill—Title Page (Stock # 7541-3496-7)*

The contractor uses this form for billing extra work. It is the first page of the four-part changer order bill. It identifies the project, change order number, method of payment and performer of work. This form also provides for manual calculation of the bill. Details for use are on the last page of the form and are also included in Section 5-103E, "Change Order Billing," of this manual. The resident engineer may authorize contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit change order bill data on a computer report identical to this form for all Caltrans projects.

Form CEM-4902B *Extra Work Bill—Labor Charges (Stock # 7541-3497-9)*

Contractors use this form for billing extra work. It is used to enter labor charges and other expense subject to labor markup. Details for use are on the last page of the form and are also included in Section 5-103E, "Change Order Billing," of this manual. The resident engineer may authorize contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit change order bill data on a computer report identical to this form for all Caltrans projects. This form is used with Form CEM-4902A, "Extra Work Bill—Title Page."

Form CEM-4902C *Extra Work Bill—Equipment Charges*

The contractor uses this form to enter equipment charges to the change order bill. Instructions for use are on the second page of the form and are also included in Section 5-103E, "Change Order Billing," of this manual. The resident engineer may authorize contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit change order bill data on a computer report identical to Form this form for all Caltrans projects. This form is used with Form CEM-4902A, "Extra Work Bill—Title Page."

Form CEM-4902D *Extra Work Bill—Material Charges*

The contractor uses this form for billing extra work. It is used to enter material charges to the change order bill. Details for use are on the last page of the form and are also included in Section 5-103E, "Change Order Billing," of this manual. The resident engineer may authorize contractor-designed forms. With prior approval from the Division of Construction, the contractor may submit change order bill data on a computer report identical to this form for all Caltrans projects. This form is used with Form CEM-4902A, "Extra Work Bill—Title Page."

Form CEM-4903 *Change Order Memorandum*

The resident engineer uses this form in conjunction with Form CEM-4900, "Change Order," to report the necessary engineering and administrative data relative to the change. Refer to Section 5-3, "Change Orders," of this manual for details.

Form CEM-4904 *Caltrans Authorization for Using Internet Extra Work Bill System*

To authorize a contractor's access to the Caltrans Extra Work Billing (EWB) System, the resident engineer completes this form, outlining contract markups and change order bill roles. The resident engineer submits the form, along with completed Form CEM-4905 from the contractor, to the appropriate district change order bill administrator.

Form CEM-4905 *Contractor Authorization for Using Internet Extra Work Bill System*

Section 5-1.27D [*9-1.03C*], "Cost Accounting Records," of the *Standard Specifications* requires contractors to furnish the resident engineer with daily reports of any extra work. The prime contractor completes this form for authority to use the internet to submit change order bills. The contractor submits this form, usually at the preconstruction meeting, to the resident engineer or to the managing partner if the contract is a joint venture. Required change order bill training and the EWB website provide additional information.

http://www.dot.ca.gov/hq/construc/iewb/

Form CEM-5101 *Request for Payment for Materials on Hand*

The contractor uses this form to request payment for materials on hand. Instructions for the form and administrative procedures are covered in Section 3-9, "Measurement and Payment," of this manual.

Form CEM-5501 *Partnering Facilitator Evaluation—Kick-Off*

When partnering is implemented on a Caltrans construction project, the resident engineer uses this form to gather project team evaluations of the partnering facilitator's performance following the kick-off partnering workshop.

Form CEM-5502 *Partnering Facilitator Evaluation—Close-Out*

The resident engineer uses this form to gather project team evaluations of the partnering facilitator's performance following the close-out partnering workshop.

Form CEM-6002 *Contract Administration System (CAS)—Report Requests*

Use this form to obtain reports available from the contract administration system. Refer to Section 5-103, "The Contract Administration System," of this manual for details.

Form CEM-6003 *Progress Pay—Estimate Project Initiation or Update*

Use this form to add new information or to change information in the contract administration system. For details refer to Section 5-103B, "Project Initiation and Update," of this manual.

Form CEM-6004 *Contract Transactions Input*

Use this form to input estimate data into the contract administration system for the project record and estimate. Refer to Section 5-103C, "Contract Transactions," of this manual for details.

Form CEM-6101 *Project Record—Estimate Request*

The resident engineer uses this form to request that an estimate be run. Refer to Section 5-103F (1), "Procedure," of this manual for details.

Form CEM-6201 *Notice of Potential Claim*

Contractors use this form to submit notices of potential claims to the resident engineer. For details on the use of this form see Section 5-4, "Disputes," of this manual.

Form CEM-6201A *Initial Notice of Potential Claim*

Contractors use this form to submit an early notice of a potential claim issue. For details on the use of this form, see Section 5-4, "Disputes," of this manual.

Form CEM-6201B Supplemental Notice of Potential Claim

Contractors use this form to submit a detailed description along with the necessary attachments of the nature, circumstances, and estimated costs of a potential claim as a follow up to Form CEM6201A, "Initial Notice of Potential Claim."

Form CEM-6201C Full and Final Documentation of Potential Claim

Contractors use this form to submit a complete documentation of a potential claim after completion of the work for which Forms CEM-6201A and CEM-6201B have been submitted. For details on the use of this form, see Section 5-4, "Disputes," of this manual.

Form CEM-6201D Initial Potential Claim Record

The contractor uses this form to detail the nature and circumstances of the potential claim. For details on the use of this form, refer to Section 5-4, "Disputes," of this manual.

Form CEM-6201E Supplemental Potential Claim Record

The contractor uses this form to detail the potential claim and cost associated with the claim. For further details on the use of this form, refer to Section 5-4, "Disputes," of this manual.

Form CEM-6201F Full and Final Potential Claim Record

The resident engineer uses this form to document the circumstances and costs associated with the potential claim. For details on the use of this form, refer to Section 5-4, "Disputes," of this manual.

Form CEM-6202 Dispute Resolution Board Establishment Report

The resident engineer completes and submits this form to the Division of Construction after the initial DRB meeting has been held. For details on the use of this form, refer to Section 5-4, "Disputes," of this manual.

Form CEM-6203 Dispute Review Board (DRB) Update Report

The resident engineer completes and submits this form to the Division of Construction yearly beginning on the anniversary of the contract first working day. For details on the use of this form, refer to Section 5-4, "Disputes," of this manual.

Form CEM-6204 Dispute Resolution Board Dispute Meeting Report

The resident engineer completes and submits this form to the Division of Construction when Caltrans has sent a response to DRB recommendation and the contractor's response has been received or has been accepted by default. For details on the use of this form refer to Section 5-4, "Disputes," of this manual.

Form CEM-6205 Dispute Review Board (DRB) Completion Report

Resident engineers complete and submit this form to the Division of Construction 30 days after receipt of the contractor's exceptions to the proposed final estimate. For details on the use of this form see Section 5-4, "Disputes," of this manual.

Form CEM-6206 Dispute Resolution Advisor—Establishment Report

The resident engineer completes and submits this form to the Division of Construction for selection of the dispute resolution advisor. For details on the use of this form refer to Section 5-4, “Disputes,” of this manual.

Form CEM-6207 Dispute Resolution Advisor—Dispute Meeting Report

The resident engineer completes and submits this form to the Division of Construction with Caltrans’ response to the dispute resolution advisor’s recommendations. For details on the use of this form refer to Section 5-4, “Disputes,” of this manual.

Form CEM-6208 Dispute Resolution Ladder Establishment

As an option, the resident engineer completes and submits this form to the Division of Construction to document the levels of authority consulted. For details on the use of this form refer to Section 5-4, “Disputes,” of this manual.

Form CEM-6209 Elevation of a Dispute

As an option, the resident engineer completes and submits this form to the Division of Construction to assist in defining the dispute prior to elevating it to the next level. For details on the use of this form refer to Section 5-4, “Disputes,” of this manual.

Form CEM-6301 Contract Acceptance

The resident engineer uses this form to document acceptance and the various quantities delivered by the contract. Instructions are on the back of the form. For details on the use of this form refer to Section 3-710, “Acceptance of Contract,” of this manual.

Form CEM-6302 Final Materials Certification

The resident engineer uses this form to document that tests on acceptance samples indicate the materials incorporated in the construction work, and the construction operations controlled by sampling and testing, were in conformity with the authorized plans and specifications.

Form CEM-6303 Final Acceptance Checklist for Federal-Aid High-Profile Projects

The resident engineer uses this form to document project status for FHWA and to help with the final vouchering process once the final estimate is produced.

Form CEM-9001 Construction Manual Proposed Change

Caltrans personnel may use this form to submit a recommendation for a change to the *Construction Manual*. Forms should be sent to the Division of Construction, publications unit.

Form OFG-1 Oversight Engineer’s Preconstruction Checklist

The resident engineer uses this form to document contacts within the local agency where the work is being performed. For further details on use of this form, refer to Section 3-106A, “Checklists,” of the *Oversight Engineer Field Guidelines*.

Form OFG-2 *Local Agency and Oversight Engineer Preconstruction Conference Checklist*

The resident engineer uses this form to document general project conditions at the preconstruction meeting with the contractor. For details on use of this form, refer to Section 3-106A, "Checklists," of the *Oversight Engineer Field Guidelines*.

Form OFG-3 *Oversight Engineer Contract Provisions Checklist*

The resident engineer uses this form to document state and federal requirements with the contractor. For details on use of this form, refer to Section 3-106A, "Checklists," of the *Oversight Engineer Field Guidelines*.

Form OFG-4 *Oversight Engineer's Construction Contract Administration Verification Checklist*

The resident engineer uses this form to document the contract administration activities required on the project. For details on use of this form, refer to Section 3-106A, "Checklists," of the *Oversight Engineer Field Guidelines*.

Form OFG-5 *Federal-Aid Projects*

The resident engineer uses this form to document federal-aid requirements for the project. For details on use of this form, refer to Section 3-106, "Contract Records and Oversight Engineer Files," of the *Oversight Engineer Field Guidelines*.

Form OFG-6 *Final Acceptance Checklist for Caltrans Oversight Projects*

The resident engineer uses this form to document that all required procedures have been performed on the project. For details on use of this form, refer to Section 3-106, "Contract Records and Oversight Engineer Files," of the *Oversight Engineer Field Guidelines*.

5-101C Materials Engineering and Testing Services Forms

Office of Structural Materials, under Materials Engineering and Testing Services (METS), is responsible for TL forms. They may be ordered by stock number from district warehouses or stockrooms. Find forms without stock numbers on the Office of Structural Material's intranet website.

http://onramp.dot.ca.gov/hq/esc/mets/structure_materials/index.shtml

Form TL-0015 Quality Assurance-Nonconformance Report

METS uses this form when METS personnel discover that structural material or quality control procedures do not meet specific contract requirements. METS sends a copy to the resident engineer.

Form TL-0016 Quality Assurance-Nonconformance Resolution

METS uses this form to document the resolution to an outstanding Form TL-0015. METS sends a copy to the resident engineer.

Form TL-0028 Notice of Materials to Be Inspected at the Jobsite

METS uses this form to assign inspection duties. METS sends a copy to the resident engineer.

Form TL-0029 Report of Inspection of Material

METS uses this form to confirm that material has been inspected, to which the inspector has attached inspection release tags or other means of identification. METS sends a copy to the resident engineer, who compares it with inspection tags or markings on delivered materials.

Form TL-0038 Inspection Request Form

METS uses this form to document requests by the vendor or fabricator for bid items that require inspection.

Form TL-0101 Sample Identification Card

Use this form to submit samples to METS or district materials laboratories for testing materials other than field samples of concrete (compressive strength) and cement samples.

Form TL-0502 Field Sample of Portland Cement Concrete Sample Card (Stock #7541-6018-8)

Use this form to submit compressive strength samples of concrete. Refer to Section 6-3, "Field Tests," of this manual for details on marking of samples.

Form MR-0518 Job Cement Samples Record (Stock # 7541-6019-0)

Use this form to submit cement samples for testing. Instructions for the use of this form are found in Section 6-2, "Acceptance of Manufactured Material and Sampling Methods," of this manual.

Form TL-0608 Notice of Materials to be Furnished

METS uses this form to inform all parties that METS will inspect and release material before it's sent to the job site. TL-0038, "Inspection Request Form," is included with the TL-0608 that is sent to the vendor and fabricator.

Form TL-0624 Inspection Release Tag

When a METS Inspector has inspected material, the inspector will attach this form with lot numbers, inspector's initials, and date of inspection. For materials where it is not practicable to attach tags, the inspector will mark lot numbers on the material in lieu of attaching the tags.

Form TL-0625 Materials Suitability Tag

METS uses this form as part of the blue tag process to verify that a quality assurance inspector has inspected the material and released it to the job site. The blue tag attached to the material includes the contract number, state lot number, blue tag number, inspector's initials, and date of inspection. For materials where it is not practicable to attach tags, the inspector will mark lot numbers of materials in lieu of attaching the tags.

Form TL-0649 Inspector's Report of Material on Hand

METS uses this form to verify that material has been inspected and is in acceptable condition. Refer to Section 3-9, "Measurement and Payment," of this manual for details.

Form TL-3096 Pavement Core Record

Use this form to record the data on cores that are taken to determine pavement thickness. Refer to Section 4-40, "Portland Cement Concrete Pavement," of this manual for details.

Form TL-6013 Materials Suitability Documentation Report

METS structural material representative, in consultation with the resident engineer and design staff as needed, completes this form as part of the blue tag process. The form documents the decision to release material that is tagged with TL-6025 and is listed in TL-6014.

Form TL-6014 Materials Suitability Report

This form is completed by the METS quality assurance inspector and is used to list the material to be released with TL-0625. The report includes material description, blue tag number, and description of conformance.

Form TL-6037 Fabrication Progress Report

METS uses this form to notify resident engineers of progress being made on fabrication of various items. Refer to Section 3-9, "Measurement and Payment," of this manual for details.

5-101D Other State Forms

Following is a list of state forms used in contract administration that are not issued by the Division of Construction or METS. The following forms are available on the Caltrans Electronic Forms System's intranet website:

http://cefs.dot.ca.gov/forms/index.html

Form DPD-3013 Request for Construction Staking (Stock #7541-4542-7)

The contractor uses this form to request construction staking. The resident engineer and the survey party chief add information to the request. It serves as a record of construction staking and any charges to the contractor for restaking. For information on construction surveys and use of the form, refer to Chapter 12, "Construction Surveys," of the *Caltrans Surveys Manual*.

Form LA-17 Report of Chemical Spray Operations

The contractor uses this form to submit the required weekly pesticide application report. Refer to Section 4-2003C (2), "Pesticides," of this manual for details.

5-101E Traffic Operations Forms

The following forms from the Division of Traffic Operations are used to change clearances or bridge weight rating, and are located at:

http://www.dot.ca.gov/hq/traffops/permits/

Form TR-0019 Notice of Change in Clearance or Bridge Weight Rating

Use this form to report permanent changes to vertical or horizontal clearance for vehicular traffic or permanent changes in bridge permit ratings on divided roadways. Refer to Section 3-705B, "Clearance and Bridge Permit Rating Changes (Permanent)," of this manual for details.

Form TR-0020		*Notice of Change in Vertical or Horizontal Clearance*

Use this form to report permanent changes to vertical or horizontal clearance for vehicular traffic. Refer to Section 3-705B, "Clearance and Bridge Permit Rating Changes (Permanent)," of this manual for details.

Form TR-0029		*Notice of Change in Clearance or Bridge Weight Rating*

Use this form to report permanent changes to vertical or horizontal clearance for vehicular traffic or permanent changes in bridge permit ratings on undivided roadways. Refer to Section 3-705B, "Clearance and Bridge Permit Rating Changes (Permanent)," of this manual for details.

5-101F Federal Forms

Following is a list of some federal forms that are used in contract administration. Obtain the forms from the United States Department of Transportation, Federal Highway Administration's website:

http://www.fhwa.dot.gov/

Form FHWA-1391		*Federal-Aid Highway Construction Contractors Annual EEO Report*

The contractor must submit this form on all federal-aid contracts over $10,000. All subcontractors on federal-aid projects whose subcontracts exceed $10,000 must also submit the form. Contractors and subcontractors report project employment data for the last full week of July on the form.

Form DOL SF-308		*Request for Wage Determination and Response to Request*

Request wage rate determinations for federal-aid contracts by using this United States Department of Labor form. Obtain the form from the United States Department of Transportation, Federal Highway Administration's website:

http://www.dol.gov/whd/programs/dbra/sf308.htm

5-102 Organization of Project Documents

5-102 Organization of Project Documents

5-102A General

This section describes the uniform filing system for organizing project records and reports. The system uses numbered categories for filing project documents. Use the uniform filing system on all projects.

There are 63 categories in the filing system. There are several unassigned categories. Use them for project documents that do not fit in assigned categories. If necessary, divide a category into subcategories.

Assign the appropriate category numbers to documents filed at a separate location (such as a field office hanging file). The filing system will then be correct when records are brought together after project completion.

Obtain preprinted category labels, stock number 7690-0150-6, from the district warehouse.

5-102B Indexing

Use a category index, similar to the sample shown at the end of this section, or an index of categories that is supplied with the labels, for each project. Post the index in a prominent location.

When the location of a category is separate from the main file, indicate its location on the index under the appropriate heading.

5-102C Description of Categories

The discussion below describes the documents that should be included in each category and, for some categories, a recommended order of the documents in the categories.

Category 1 Project Personnel

Include all personnel related records in this category. Suggested subcategories are listed below. On smaller projects, some of the listed subcategories may be combined when the amount of detail shown is not warranted.

- Form CEM-0101, "Resident Engineer's Report of Assignment."
- Attendance Report.
- Overtime Records.
- Monthly Time Sheets.
- Overtime Requests and Authorizations.
- Absence Requests.
- Personnel Transfer Records.
- Personnel Roster.
- Travel Expense Claims and Records.
- Individual Personnel File. Use this for a file on each individual containing emergency telephone numbers, experience or training records, among other things.

Category 2 Project Office Equipment and Supplies

In this category, file those documents relating to equipment and supplies. Include records of equipment and supplies that have been received or returned. The subcategories listed below outline the scope of this category.

- Equipment Inventory
- Shipping Records (related shipping and receiving records should be stapled together)
- Receiving Records
- Transfer Requests
- Local Requests
- Automotive Records
- Cash Expenditure Vouchers

- Purchase Orders
- Bills of Lading

Category 3 *Equipment and Personnel Cost Reports*

In this category, file construction engineering cost reports.

Category 4 *Service Contracts*

In this category, file those documents related to the project office utilities and services. File requests for service along with all correspondence relating to project office service contracts in an appropriate subcategory. File the receiving records for bills for utilities and services in a "date received" sequence.

It is recommended that a separate subcategory be used for each company or each service agreement. File purchase orders for supplies in Category 2, "Project Office Equipment and Supplies."

The subcategories that may be included in this category are as follows:

- Rent
- Electricity
- Gas
- Telephone
- Water
- Additional service agreements, as required

Do not confuse this category with Category 16, "Utility Agreements," Category 17, "Utility Work Performed," or a subcategory of Category 52, "Charges to Contract Allotment." These are part of the project's construction operations. Category 4 includes only those transactions connected with the resident engineer's office.

Category 5 *General Correspondence*

In this category, file those letters that do not relate to any other category or subcategory in use. File correspondence concerning a subject that directly relates to some other category in that category. For example file correspondence developed in connection with a change order in the change order category file.

File correspondence in any subcategory in chronological order.

When the volume of correspondence builds up, segregate and divide it into more detailed subject subcategories. When appropriate, transfer correspondence from Category 5 to a more specific category. For example, a property owner may object to certain conditions on the project. After considerable correspondence, the resident engineer writes a change order to solve the problem. At this point, the resident engineer should transfer all of the correspondence related to the change order to the change order category file.

A letter might cover subjects in different categories. When the letter relates directly to two subjects, file a copy in each category or cross-reference to the location of the original. Cross-referencing need be only a note describing the letter filed in the appropriate category.

The following are examples of the subcategories in Category 5. The number of subcategories will depend on the volume of correspondence. Show all subcategories in the index.

- To district office.
- From district office.
- To contractor.
- From contractor.
- Property owners.
- Utility companies.
- Any additional subcategories that may be required depending on the volume of the correspondence.

Category 6 *Safety*

File project documents relating directly to safety in this category. Suggested subcategories are shown below:

- Employee Safety.
- Contract Documents Relating to Safety.
- Correspondence with the Division of Occupational Safety and Health (Cal/OSHA).
- A copy of the contractor's Code of Safe Practices in use for the project.

Category 7 *Public Relations*

File the various documents covering the subject of public relations in this category.

Category 8 *Construction Surveys*

Use this category for filing all survey documents that do not directly or solely relate to another category.

File Form DPD-3013, "Request for Construction Staking," in this category. Create subcategories for requests on which staking has been completed and for those where staking has not been completed. Cross-file staking requests that include restaking charges in Category 54, "Deductions from Payment to Contractor."

Category 9 *Welding*

In this category, file documents relative to welding in accordance with instructions in Section 180, "Welding," of the *Bridge Construction Records and Procedures* manual.

Category 10 *Extra Category Number*

Use this extra category number for project documents that do not fit in presently established categories. When used, enter the name of the category on the index sheet.

Category 11 *Information Furnished at Start of Project*

In this category, file documents related to planning, design, contract funding, advertising, and opening bids. Do not file documents in this category that apply solely or directly to other established categories. This category should contain the following items. Create subcategories as necessary because of the volume of documents.

- Project Report
- Preliminary Report
- Project Expenditure Authorization (including Supplemental Allotments)
- Detailed Estimate of Project Cost
- Notice of Award of Contract
- Bid Summary Sheets
- Federal Detail Estimate
- Executed Contract, Special Provisions, and Plans
- Notice of Approval of the Contract.
- Environmental Permits
- Encroachment Permits and Cooperative Agreements
- Bidder Inquiry Information

Category 12 *Contractor*

Use this category to file the various documents that the contractor is required to submit. Do not use it for general correspondence or documents appropriate to another specific category. The following subcategories suggest the scope of the category:

- Contractor's organization including the designation of the contractor's authorized representative as required by Section 5-1.16 [5-1.06], "Representative," of the *Standard Specifications*.
- Contractor's equipment list.
- Contractor's borrow agreements.
- List of subcontractors and other project documents concerning subcontracting.
- Shop plans, if not filed under another appropriate category.
- Falsework plans.
- Insurance documents as required in Section 7-1.05, "Indemnification," and Section 7-1.06 [7-1.12], "Insurance," of the *Standard Specifications*.

Category 13 *Signs and Striping*

In this category, file all documents related to signing, delineation, and handling public traffic during construction. Suggested subcategories are listed below.

- Layout of Construction Signs
- Detour Design, Striping, and Signing
- Traffic Striping Diagrams

Category 14 *Photograph Records*

File routine photographs and their identification in this category. File photographs relating to claims in Category 62, "Disputes." It is a good practice to take photographs on a monthly basis to document the work during construction. Maintain videotapes and digital photo files in an organized manner. Note the location of these items in this category file.

Suggested subcategories for this category are:

- Before Construction
- During Construction
- After Construction

Category 15 Accidents

In this category, file documents related to accidents. Subcategories may include:

- Caltrans Employee Accident and Injury Reports
- Caltrans Vehicle Accident Reports
- California Highway Patrol Accident Reports
- Local Police Accident Reports
- Records and Investigations of Public Traffic Accidents
- Records and Investigations of Contractor Accidents

Category 16 Utility Agreements

In this category, file those documents that relate to work to be done to utility facilities in connection with the project.

Create subcategories for the various utility companies. Set up second-level subcategories when required by the number of documents. The following are examples of subcategories within this category:

- 16.1.1 PG&E Co.—Agreements
- 16.1.2 PG&E Co.—Relocations
- 16.1.3 PG&E Co.—Encroachment Permit
- 16.2 AT&T Co.
- 16.3 Southern Pacific RR Co.

Category 17 Utility Work Performed

In this category, file daily reports and other records of utility facility work. Create the same primary subcategories as those used in Category 16.

Create second level subcategories when required by the number of documents and the amount of work. For example, where the work would develop daily reports and receiving records of only one utility relocation, these documents could be kept in one subcategory in chronological order. When the same utility company has more than one relocation, a more detailed breakdown is advisable.

Category 18 Agreements

In this category, file agreements (except utility agreements) with third parties or other state or county agencies. The number and levels of subcategories will depend upon the agreements and the nature and extent of the work involved. A list of suggested subcategories follows:

- Right-of-Way Agreements—Without Obligations
- Right-of-Way Agreement—With Obligations

- Forest Service Agreements
- Borrow Agreements (between Caltrans and owner)
- Disposal Agreements (between Caltrans and owner)
- Service Agreements (these are utility service agreements such as for highway lighting)
- Disposal Permits
- Records of Royalty Payments
- Encroachment Permits

File an encroachment permit relating to a utility facility agreement under Category 16, "Utility Agreements." File an encroachment permit relating to a right-of-way agreement in this category.

Where there are several right-of-way agreements requiring some degree of control, such as right-of-way agreements with obligations, maintain a summary to show the status of these agreements. An example of the status summary headings is shown below:

- The agreement number.
- The location of work to be performed.
- A brief description of work to be done and by whom.
- When the work is completed.
- The change order number if the required work is being done by change order.

Category 19 *Hazardous Waste and Hazardous Materials*

File any information regarding the discovery and removal of hazardous waste in this category.

Category 20 *Water Pollution Control Plan or Stormwater Pollution Prevention Plan*

File all correspondence regarding water pollution control plans (WPCP) or stormwater pollution prevention plans (SWPPP) in this category. A list of suggested subcategories follows:

- Authorized WPCP or SWPPP
- Amendments to WPCP or SWPPP
- Notification of Construction
- Correspondence
- Inspections by Contractor
- Inspections by Caltrans
- Notices of Noncompliance
- Annual Certification of Compliance
- Notice of Completion of Construction

Category 21 *Construction or Maintenance Zone Enhanced Enforcement Program*

File documents relating directly to the Construction Zone Enhanced Enforcement Program (COZEEP) in this category. Suggested subcategories are shown below:

- Form CEM-2103, "COZEEP/MAZEEP Cancellation Form"
- Form CEM-2102, "COZEEP/MAZEEP Task Order"
- Form CEM-2101, "COZEEP Daily Report"

Category 22 *Traffic Management Information*

Use this category to file information related to traffic management. Possible subcategories include:

- Contractor lane closure requests
- Lane closure requests submitted to the traffic management center
- Authorized lane closures
- Contractor contingency plans
- Traffic count data

Category 23 *Extra Category Number*

Use this extra category number for project documents that do not fit in presently established categories. When using an extra category, enter the category number and title in the index.

Category 24 *Disadvantaged Business Enterprises and Disabled Veteran Business Enterprises*

Use this category for the following:

- Disadvantaged business enterprises (DBE) and disabled veteran business enterprises (DVBE) correspondence.
- The contractor's DBE/DVBE utilization plan.
- DBE and DVBE substitution requests and approvals.
- DBE and DVBE monthly reports.
- Form CEM-2402(F), "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors."
- Form CEM-2403(F), "Disadvantaged Business Enterprises (DBE) Certification Status Change."
- Form CEM-2404(F), "Monthly DBE/UDBE Trucking Verification."
- Other DBE and DVBE related documents.

Category 25 *Labor Compliance and Equal Employment Opportunity*

In this category, file required labor compliance and equal employment opportunity information. Refer to Sections 8-1, "Labor Compliance," and 8-2, "Equal Employment Opportunity," of this manual for details.

Category 26 *Progress Schedule*

In this category, file the progress schedule, critical path method submittals, and other related information.

Category 27 *Weekly Statement of Working Days*

In this category, file Form CEM-2701, "Weekly Statement of Working Days." Also file correspondence relating to contract time in a subcategory of this category.

Category 28 *Weekly Newsletter*

In this category, file periodic newsletters and reports that are prepared during the project. Include those weekly reports of a general nature pertaining to the progress of the contract.

Category 29 *Materials Information and Preliminary Tests*

In this category, file materials information and preliminary test reports. Suggested subcategories follow:

- Materials information
- Report of foundation investigation
- Report of tests on aggregate base (preliminary tests)
- Report of tests on aggregate subbase (preliminary tests)

Category 30 *Basement Soil Test Results*

In this category, file basement soil test results taken to determine structural section adequacy (taken during design phase).

Category 31 *Notice of Materials to Be Used*

In this category, file Form CEM-3101, "Notice of Materials to Be Used." Create a system for checking that notices have been received.

Make Form CEM-3101s that contain information for structure items available for use by the structure representative. Consider filing the Form CEM-3101 listing structure items in a separate subcategory of this category.

Category 32 *Notice of Materials to Be Inspected at the Jobsite*

In this category, file Form TL-0028, "Notice of Materials to be Inspected at the Jobsite."

Category 33 *Notice of Materials to Be Furnished*

In this category, file Form TL-0608, "Notice of Materials to Be Furnished."

Category 34 *Treated Base*

In this category, file documents for cement-treated base, cement-treated permeable base, and asphalt-treated permeable base. Do not include those documents that are to be filed in other specific categories such as 37 and 48.

Use subcategories similar to the examples shown below. Create a numbering system that identifies the category, item, and subcategory. For example, 34.26.3 indicates: Category 34 "Treated Bases"; 26 is the contract item number of the material and identifies the subcategory; 3 is the second level subcategory identifying the particular document.

- 34.26.1 Mix design data, cement-treated base
- 34.26.2 Plant records, cement-treated base
- 34.26.3. Spread records, cement-treated base
- 34.27.1 Mix design data, cement-treated permeable base
- 34.27.2 Plant records, cement-treated permeable base
- 34.27.3 Spread records, cement-treated permeable base
- 34.28.1 Mix design data, asphalt-treated permeable base
- 34.28.2 Plant records, asphalt-treated permeable base
- 34.28.3 Spread records, asphalt-treated permeable base
- 34.4 Certificates of compliance for materials used in treated bases

Category 35 *Hot Mix Asphalt*

In this category, file documents related to hot mix asphalt, except those to be filed in other specific categories such as in 37 and 48. Following are suggested subcategories:

- Form CEM-3501, " Hot Mix Asphalt Production Report"
- Form CEM-3502, "Hot Mix Asphalt Placement Report"
- Form CEM-3511, "Contractor Job Mix Formula Proposal"
- Form CEM-3512, "Contractor Hot Mix Asphalt Design Data"
- Form CEM-3513, "Caltrans Hot Mix Asphalt Verification"
- Certificates of compliance for materials used in hot mix asphalt

Category 36 *Concrete (other than structure items)*

In this category, file documents related to concrete. Do not include documents that are to be filed in other specific categories such as 37, 43, and 48. For structure items, the project documents are to be filed in Category 43. Refer to the *Bridge Construction Records and Procedures* manual for details. Following are suggested subcategories for this category:

- 36.1 Portland cement concrete pavement.
- 36.1.1 Mix Designs.
- 36.1.2 Plant Records.
- 36.1.3 Certificates of Compliance for materials used in concrete pavement.
- 36.2 Portland cement concrete, Class A Structure and minor concrete.
- 36.2.1 Mix Designs.
- 36.2.2 Plant Records.
- 36.2.3 Certificates of compliance for materials used in Class A structure concrete and minor concrete.

Category 37 *Initial Tests and Acceptance Tests*

In this category, file initial tests and acceptance tests. File documents in each subcategory chronologically unless there is a specific reason for doing otherwise.

Use subcategories similar to the examples shown below. Create a numbering system that identifies the category, item, and subcategory. For example, 37.21.3 indicates: Category 37 “Acceptance Tests”; 21 is the contract item number of the material and identifies the subcategory; and 3 is the second level subcategory identifying the particular test result.

- Form CEM-3701, “Test Results Summary”
- Form CEM-3702, “Relative Compaction Summary”
- Form CEM-3703, “Caltrans Production Start-Up Evaluation”
- Embankment

  37.10.1 Relative Compaction
- Structure Backfill

  37.14.1 Sand Equivalent

  37.14.2 Relative Compaction
- Aggregate Subbase

  37.21.1 Relative Compaction

  37.21.2 Moisture

  37.21.3 Sieve Analysis

  37.21.4 Sand Equivalent

  37.21.5 Record of Thickness
  (summarized in the order that the measurements are made)
- Aggregate Base

  37.22.1 Relative Compaction

  37.22.2 Moisture

  37.22.3 Sieve Analysis

  37.22.4 Sand Equivalent

  37.22.5 Record of Thickness
  (summarized in the order that the measurements are made)
- Hot Mix Asphalt

  37.31.1 Aggregate Gradation

  37.31.2 Asphalt Binder Content

  37.31.3 Maximum Theoretical Density (%)

  37.31.4 Sand Equivalent (min)

  37.31.5 Stabilometer Value (min)

  37.31.6 Air Voids content

  37.31.7 Crushed Particles

  37.31.8 Moisture Content

  37.31.9 Los Angeles Rattler

  37.31.10 Fine Aggregate Angularity

  37.31.11 Flat and Elongated Particle

  37.31.12 Voids in Mineral Aggregate

37.31.13 Voids with Asphalt

37.31.14 Dust Proportion

37.31.15 Smoothness

37.31.16 Asphalt Binder

37.31.17 Asphalt Rubber Binder

37.31.18 Asphalt Modifier

37.31.19 Crumb Rubber Modifier

37.31.20 Certificates of Compliance for Materials Used in Hot Mix Asphalt

- Portland Cement Concrete Pavement

37.42.1 Sand Equivalent

37.42.2 Cleanness Value

37.42.3 Sieve Analysis

37.42.4 Modulus of Rupture

37.42.5 Penetration Values

37.42.6 Cement Content

37.42.7 Profilograph Summary

37.42.8 Coefficient of Friction

37.42.9 Other related items

Bills of lading and copies of sample identification tags may be filed in this category temporarily and discarded when their respective test reports are filed.

File test results for items assigned to Office of Structure Construction personnel in this category in accordance with instructions contained in the *Bridge Construction Records and Procedures* manual.

Category 38 *Quality Control and Quality Assurance*

In this category, include all documents relating to quality control and quality assurance. Create a subcategory system to include the following:

- Forms CEM-3801, "Request for Assignment of Inspectors, Samplers, and Testers" and Form CEM-3802, "Quality Control Inspector Affidavit of Proficiency."
- Form CEM-3803, "Hot Mix Asphalt Daily Summary of Quality Control."
- Form CEM-3804, "Hot Mix Asphalt Inspection and Testing Summary."
- Copies of related correspondence.

Category 39 *Materials Testing Qualification of Employees*

In this category, file copies of certifications of the employees performing acceptance tests.

Category 40 *Field Laboratory Assistant Reports to Resident Engineer*

In this category, file chronologically any reports made out by the project's materials tester. For more than one type of report, such as a report and a summary form, provide separate subcategories.

Category 41 Report of Inspection of Material

In this category, file the following forms:

- Form TL-0015, “Quality Assurance-Nonconformance Report”
- Form TL-0016, “Quality Assurance-Nonconformance Resolution”
- Form TL-0029, “Report of Inspection of Material”
- Form TL-6013, “Material Suitability Documentation Report”
- Form TL-6014, “Material Suitability Report”
- Form TL-0624, “Inspection Release Tag”
- Form TL-0625, “Materials Suitability Tag”
- Form CEM-4101, “Materials Release Summary”
- Form CEM-4102, “Material Inspected and Released on Job”

Create subcategories within Category 41 for each contract item requiring inspection at the source by a METS inspector. Place a summary sheet (use Form CEM-4101, “Materials Release Summary”) in each subcategory containing the date of inspection, quantity inspected, cumulative quantity, and lot numbers. The summary sheet documents that materials used in the work have been inspected.

Staple Form TL-0624, “Inspection Release Tag,” removed from materials received on the project, to Form TL-0029, “Report of Inspection of Material,” on a letter-size sheet of paper and file it in the appropriate subcategory. The sheet should include the name of the engineer who removed it and the date removed. When lot numbers are marked on the items, note the observed lot number on the related Form TL-0029.

Form TL-0625, “Materials Suitability Tag,” should be attached to the TL-6014, “Materials Suitability Report,” received from METS and filed.

When the Form TL-0029 includes material for more than one item, include a reference on the summary sheet showing the file location of the TL-0029.

File test reports (usually on Form CEM-4102, “Material Inspected and Released on Job”) that cover material sampled on the job in lieu of source inspection in the appropriate subcategory of this category, not in Category 37.

File reports of inspection or certificates of compliance for materials assigned to the structure representative in this category in accordance with instructions contained in *Bridge Construction Records and Procedures* manual.

Category 42 Material Plants

In this category, file Form CEM-4202, “Material Plant Safety Checklist” and all other project documents pertaining to material plant inspections.

Category 43 Concrete and Reinforcing Steel

In this category, file documents relative to concrete and reinforcing steel in accordance with instructions in the *Bridge Construction Records and Procedures* manual.

Category 44 Recycle Materials and Diversion of Solid Waste

In this category, file a completed copy of Form CEM-4401, “Solid Waste Disposal and Recycling Report.” The contractor completes Form CEM-4401 and the resident engineer reviews the form within the reporting time constraints. The use of this form is described in Section 7-109, “Solid Waste Disposal and Recycling Reporting,” of this manual.

Category 45 Resident Engineer’s Daily Reports

In this category, file Form CEM-4501, “Resident Engineer’s Daily Report/Assistant Resident Engineer’s Report” and the structure representative’s daily report.

Category 46 Assistant Resident Engineer’s Daily Reports

In this category, file Form CEM-4601, “Assistant Resident Engineer’s Daily Report.”

Subcategories may be used. They may vary depending on the complexity of the project and the desires of the district. The resident engineer and the structure representative must agree on the subcategories before the start of work. Follow the procedures described below to establish the subcategories.

1. Reports Covering Contract Items

   Create a subcategory for each major operation so that all items affecting the major operations are grouped together. An example of a system for a relatively large project follows on the next page.

   Modify the above breakdown to conform to the size and nature of the project. Make the breakdown narrow enough so that reports covering any particular contract item may be obtained with ease. Review the breakdown to ensure it includes all contract items.

   Make as many daily reports as necessary to cover all contract item work in the appropriate subcategories.

   As indicated in the example below, set up a separate subcategory for each structure.

Category and Subcategory Number		Contract Items Involved in the Operation
46.1	Chronological	All
46.2	Clearing and Grubbing	5
46.3	Roadway Excavation, Ditch Excavation Aggregate Subbase	8,13,11,15,22
46.4	Salvage Fence, Fence Gates	2,78,79,80
46.5	Guard Railing, Markers, Barricades	1,4,82,83,87
46.6	AB, CTB	23,24
46.7	Hot Mix Asphalt Slurry Seals, Dikes	28,29,30,31,32
46.8	Concrete Paving	35,36,37
46.9	Curbs and Sidewalks, Slope Paving, Curb Drains, Spec. Gutter Drains	73,74,76,77
46.10	Minor Str., Precast MH and DI, Reinf. Steel, Misc. Iron and Steel	42,69,70,46,75
46.11	RCP, CMP, SSP Arch, Drainage Gates, Under/Down Drain, Str Exc., Str. Backfill	9,11,58
46.12	Preparing Slopes, Straw	16,17,18,19,20
46.13	Permanent Signing	52,53,54,55
46.14	Hwy. lighting and sign illumination	88
46.15	Finishing Roadway	21
46.16	Structure #1	89,90,91
46.17	Structure #2	89,90,91

2. Reports Covering Extra Work

   Pending receipt of the contractor's billing, file chronologically the original and one copy of Form CEM-4601, "Assistant Resident Engineer's Daily Report," covering extra work in a subcategory of this category. After receiving the change order bill report and approving payment, record the change order bill number on both copies of the daily report covering the extra work. Keep one copy of the daily report in this chronological file and use it to detect future billings for the same work. File the second copy with the daily extra work report in Category 49.

   Change order bills for material should show the date the material was supplied or placed and referenced to the invoice so that the particular material may be readily identified. Keep a summary of invoices paid and use it as a check against duplicate payment.

The specific system used for filing resident engineer's and assistant resident engineer's daily reports is optional (except for extra work). However, Category 45 and 46 must be used and the file index must clearly show the specific system being used.

Category 47 Drainage Systems

To maintain a record of contract items for drainage systems, use Form CEM-4701, "Drainage System Summary."

Use a Form CEM-4701 for each drainage system shown on the drainage quantity plan sheet. The preliminary work required to set up each system summary includes entering the contract number, the system number, planned station and description of the system, and the preliminary or planned quantities which are entered from the drainage quantity plan sheet.

The assistant resident engineer describes progress on each drainage system in the daily report and enters estimates of work completed on the "Progress Record" portion of the drainage system summary.

Enter the quantity of work completed during an estimate period or near the end of the estimate period for each item in the "Estimate of Work Completed" portion of the drainage system summary. The quantities of work completed may then be entered on Form CEM-6004, "Contract Transactions Input," and paid on the next estimate. Use the extra column next to the item quantity column to identify the Form CEM-6004 page and line number where the quantity was entered. After all items for a particular drainage system have been calculated and checked, the final quantities are entered in the row labeled, "Actual Q."

To keep track of and reduce the number of drainage system summaries that have to be checked at the end of each estimate period, divide the category into the following subcategories:

- 47.1 Before Work Starts
- 47.2 Staked and Being Worked On
- 47.3 Drainage System Complete, Final Quantities Not Complete
- 47.4 Final Quantities Completed

Example:

47.1 Before Work Starts

Place the preliminary drainage summaries in this subcategory in numerical order. Each drainage system summary will remain in this subcategory until work starts on that system.

47.2 Staked and Being Worked On

When a drainage system is staked, transfer the drainage summary sheet from index 47.1, "Before Work Starts," to index 47.2, "Staked and Being Worked On." Transfer the individual quantity calculation sheets with the drainage summary.

47.3 Drainage System Complete, Final Quantities Not Complete

After all work is completed on a particular drainage system, transfer the summary sheet with its calculation sheets to this subcategory. Removing the summary from the preceding index (47.2, Staked and Being Worked On), precludes having to go through completed structure summaries at the end of each estimate period when making entries of work completed. Determination of pay quantities should be made as soon as possible after work on the system is complete.

47.4 Final Quantities Completed

After all quantity calculations for a drainage system are completed and the adjusted quantities entered into the project record, transfer the summary sheet and its calculation sheets to this subcategory.

Since all drainage quantity calculation sheets will remain filed in Category 47, some item-numbered folders in Category 48 may have no documents.

Category 48 *Bid Item Quantity Documents*

In this category, file source documents supporting contract item quantities. List the subcategories in Category 48 by contract item number order. Identify individual calculation sheets for the various contract items in the following manner. A quantity sheet with the number 48-14-2 indicates that it is sheet number 2 covering contract item number 14 and filed in Category 48, “Bid Item Quantity Documents.” Some drainage item quantity documents may be filed in Category 47.

Category 49 *Change Orders*

In this category, file change orders and supporting documents in numerical order. Subcategories of this category are change order numbers in numerical order.

Contained within each subcategory are:

- The Form CEM-4900, “Change Order,” Form CEM-4903, “Change Order Memorandum,” and any accompanying correspondence.
- Form CEM-4901, “Change Order Input.”
- Daily change order bills and reports matched with assistant resident engineer’s daily reports

Two additional subcategories may be:

- The Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership) book(s) applicable to the contract.
- Equipment rental rates and memos covering rates not shown in the Labor Surcharge and Equipment Rental Rates Book.

Category 50 *Adjustment in Compensation Calculations*

In this category, file project documents and calculations to support adjustments in compensation.

After a change order is written, the supporting project documents may be transferred to the change order file or remain in this category. Provide cross references between categories 49 and 50 when the supporting documents and calculations remain in Category 50.

List the subcategories under this category by contract item numbers.

Category 51 *Materials on Hand*

In this category, file Form CEM-5101, “Request For Payment for Materials on Hand,” the related evidence of purchase, and any other project documents supporting material on hand payments.

Category 52 *Charges to Total Contract Allotment*

In this category, file the documents related to and supporting charges to the contract allotment for materials and services supplied by Caltrans.

Divide the category into the subcategories indicated below:

- Department-Furnished Material and Expenses.

In this subcategory, file the contractor's letters requesting delivery of Department-furnished materials. Also, file the receiving records or other records of material furnished by Caltrans. When Department-furnished material is received as evidenced by a shipping record and a receiving record, file the related shipping and receiving records together.

- Service Contracts.

  In this subcategory file, supporting documents and records of project related services. These are not the service contracts connected with the project office.

Category 53 *Credit to Contract*

In this category, include a subcategory to keep a record of any salvaged or surplus material. Also set up a subcategory for copies of daily extra work reports which cover repair of damage to state property by third parties (refer to "Reports of Damage to State Highway Property" in the *Caltrans Safety Manual*).

Credit received for salvaged or surplus material or repair of damage is not applied to the contract allotment and the project is not given credit for any additional money to spend.

Category 54 *Deductions From Payment to Contractor*

In this category, file documents related to deductions from payments to contractors. Possible subcategories include the following:

- Royalties on material.
- Materials bought for the contractor by Caltrans.
- Laboratory testing done for the contractor (refer to Section 6, Control of Materials," of the *Standard Specifications*).
- Engineering and inspection charged to the contractor (refer to Section 3-506, "Lines and Grades," of this manual for restaking charges).
- Costs of damaged or missing state-owned signs.
- Railroad flagging charges.
- Noncompliance with the equal employment opportunity provisions of the contract.
- Liquidated damages (refer to Section 3-908, "Deductions," of this manual).
- Any other deductions (refer to Section 3-9, "Measurement and Payment" of this manual).

Categories 55 *Partnering*

This category is for filing all documents related to partnering meetings, workshops, and evaluations. Subcategories may include:

- Form CEM-5501, "Partnering Facilitator Evaluation—Kick-Off"
- Form CEM-5502, "Partnering Facilitator Evaluation—Close-Out"

Categories 56 through 58 *Extra Category Numbers*

These are extra numbers that may be used for project documents that do not fit in presently established categories. When used, enter them on the index sheets.

Category 59 Bridge Estimate Data

In this category, file the bridge estimate data as covered in the *Bridge Construction Records and Procedures* manual.

Category 60 Contract Administration System Inputs and Reports

This category contains documents resulting from the contract administration system. Possible subcategories are:

- Form CEM-6002, "Contract Administration System (CAS)—Report Requests"
- Form CEM-6003, " Progress Pay—Estimate Project Initiation or Update"
- Form CEM-6004, "Contract Transactions Input"

The following contract administration system reports are cumulative, usually requested after each progress estimate payment using CEM-6002. Only the most current results need to be retained.

- Status of Contract Items
- Project Record Item Sheets
- Status of Change Orders
- Change Order Master Listing

Category 61 Estimate and Project Status

In this category, file monthly Project Record—Estimate Request documents. The suggested subcategories of this category are:

- Project Contingency Fund Status
- Estimate

The following documents may be filed by estimate number in numeric order:

- Form CEM-6101, "Project Record—Estimate Request"
- Estimate Verification Form
- Progress Payment Voucher
- Estimate Processing Results
- Project Record-Estimate and Project Status

Category 62 Disputes

In this category, file notes, photographs, information, and other project documents that may be necessary to establish facts with respect to a dispute. Include any documents that may be related to a dispute in this category or briefly describe and cross-reference them.

Number notices of potential claims in chronological order. These numbers may then be used for subcategories.

The scope of this category may vary considerably, depending upon the nature and circumstances of the dispute. The following types of documents indicate the type of information that should be included:

- Form CEM-6201, "Notice of Potential Claim"

- Acknowledgment of the contractor’s dispute
- Disputes Review Board Agreement
- Contractor’s claim for a time extension (cross-reference to Category 27)
- Acknowledgment of the contractor’s claim for time extension
- Other correspondence relating to disputes
- Photographs pertaining to disputes

Category 63 *Project Completion Documents*

In this category, file documents related to the completion of the project. The following are suggested subcategories:

- Form CEM-6301, “Contract Acceptance”
- Form CEM-6302, “Final Materials Certification”
- Punchlist

5-102D Category Numbers and Headings

Category No.	**Heading**
1	Project Personnel
2	Project Office Equipment and Supplies
3	Equipment and Personnel Cost Reports
4	Service Contracts
5	General Correspondence
6	Safety
7	Public Relations
8	Construction Surveys
9	Welding
10	(Extra category number)
11	Information Furnished at Start of Project
12	Contractor
13	Signs and Striping
14	Photograph Records
15	Accidents
16	Utility Agreements
17	Utility Work Performed
18	Agreements
19	Hazardous Waste and Hazardous Materials
20	Water Pollution Control Plan or Stormwater Pollution Prevention Plan
21	Construction Zone Enhanced Enforcement Program
22	Traffic Management Information
23	(Extra Category Number)
24	Disadvantaged Business Enterprises and Disabled Veteran Business Enterprises

Category No.	Heading
25	Labor Compliance and Equal Employment Opportunity
26	Progress Schedule
27	Weekly Statement of Working Days
28	Weekly Newsletter
29	Materials Information and Preliminary Tests
30	Basement Soil Test Results
31	Notice of Materials to Be Used (CEM-3101)
32	Notice of Materials to be Inspected (TL-0028)
33	Notice of Materials to be Furnished (TL-0608)
34	Treated Base
35	Hot Mix Asphalt
36	Concrete (other than structure items)
37	Initial Tests and Acceptance Tests
38	Quality Control Quality Assurance
39	Materials Testing Qualifications of Employees
40	Field Laboratory Assistant Reports to Resident Engineer
41	Report of Inspection of Material
42	Material Plants
43	Concrete and Reinforcing Steel
44	Recycle Materials and Diversion of Solid Waste
45	Resident Engineer's Daily Reports
46	Assistant Resident Engineer's Daily Reports
47	Drainage Systems
48	Contract Item Quantity Documents
49	Change Orders
50	Adjustment in Compensation Calculations
51	Materials on Hand
52	Charges to Total Contract Allotment
53	Credit to Contract
54	Deductions from Payment to Contractor
55	Partnering
56-58	(Extra category numbers)
59	Bridge Estimate Data
60	Contract Administration System Inputs and Reports
61	Estimate and Project Status
62	Disputes
63	Project Completion Documents

5-102E Alphabetical Listing Of Categories

Heading	Category No.
Accidents	15
Adjustment of Compensation Calculations	50
Agreements	18
Assistant Resident Engineer’s Daily Reports	46
Basement Soil Test Results	30
Bridge Estimate Data	59
Change Orders	49
Charges to Total Contract Allotment	52
Concrete and Reinforcing Steel	43
Concrete (other than structure items)	36
Construction Surveys	8
Construction Zone Enhanced Enforcement Program	21
Contract Administration System Inputs and Reports	60
Contract Item Quantity Documents	48
Contractor	12
Credit to Contract	53
Daily Reports, Assistant Resident Engineer’s	46
Daily Reports, Resident Engineer’s	45
Deductions from Payment to Contractor	54
Disadvantaged Business Enterprises and Disabled Veterans Business Enterprises	24
Disputes	62
Drainage Systems	47
Estimate and Project Status	61
Equipment and Personnel Cost Reports	3
Extra Categories	10, 23, 56, 57, 58
Field Laboratory Assistant Reports to Resident Engineer	40
General Correspondence	5
Hazardous Waste and Hazardous Materials	19
Hot Mix Asphalt	35
Information Furnished at Start of Project	11
Initial Tests and Acceptance Tests	37
Labor Compliance and Equal Employment Opportunity	25
Materials on Hand	51
Material Plants	42
Materials Information and Preliminary Tests	29
Materials Testing Qualifications of Employees	39
Notice of Materials to be Furnished (Form TL-0608)	33

Heading	Category No.
Notice of Materials to be Inspected (Form TL-0028)	32
Notice of Materials to Be Used (Form CEM-3101)	31
Partnering	55
Photograph Records	14
Progress Schedule	26
Project Completion Documents	63
Project Office Equipment and Supplies	2
Project Personnel	1
Public Relations	7
Quality Control Quality Assurance	38
Recycle Materials and Diversion of Solid Waste	44
Report of Inspection of Material (TL-0029)	41
Resident Engineer's Daily Reports	45
Safety	6
Service Contracts	4
Signs and Striping	13
Traffic Management Information	22
Treated Base	34
Utility Agreements	16
Utility Work Performed	17
Water Pollution Control Plan or Stormwater Pollution Prevention Plan	20
Weekly Newsletter	28
Weekly Statement of Working Days (Form CEM-2701)	27
Welding	9

5-103 Contract Administration System

5-103 The Contract Administration System

5-103A General

This section describes the contract administration system, sometimes referred to as "the progress pay system." The primary purpose of this computer system is to help administer Caltrans construction projects. Various functional units within the Division of Construction update and maintain records on individual contracts in the contract administration system from the award and approval of the contract through to the completion and final payment.

The contract administration system is one of three subsystems of the Project Information System and Analysis (PISA). The three PISA subsystems that make up the primary computer system that Caltrans uses for tracking contract capital costs are: planning and design, bidding and award, and project construction. In essentially a straight line, each module of PISA passes data to the next module as a project progresses from conception to completion. Refer to Figure 5-1.1, "Contract Administration System, Systems Interface," for a general overview of how the contract administration system relates to the other components of the Caltrans computer system used for tracking and paying contract capital costs.

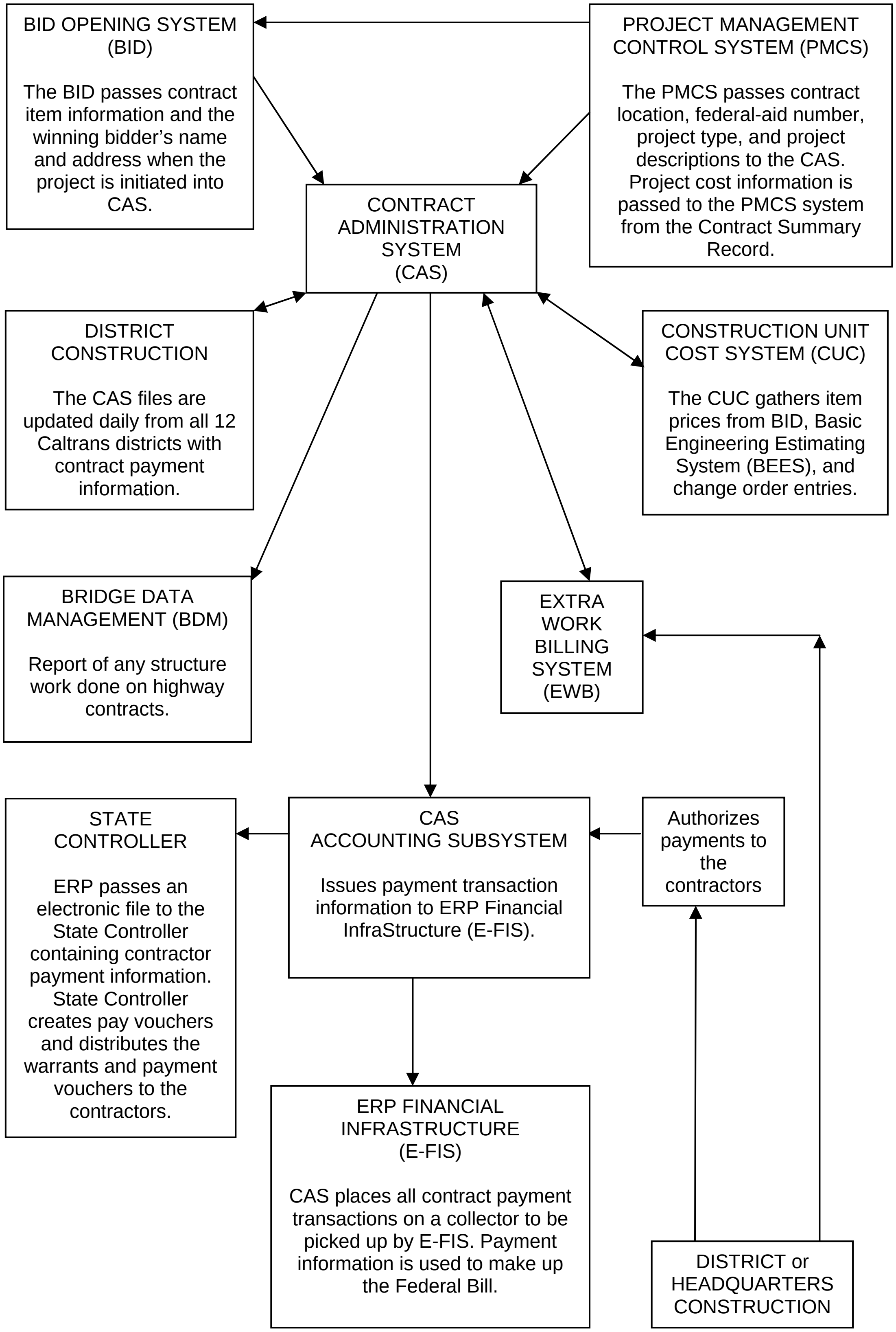
The contract administration system is also composed of separate modules, each of which accomplishes a distinct function. The following are the most common of the contract administration system's many modules:

- Project initiation and update
- Contract transactions
- Change order
- Daily extra work report
- Project record estimate
- Reports
- Online update and inquiry

Resident engineers use these modules to do the following:

- Account for quantities from source documents
- Account for change orders and payments for extra work
- Determine the status of the projects' financing
- Authorize payments to contractors

Figure 5-1.1 Contract Administration System, Systems Interface



5-103B Project Initiation and Update

5-103B (1) Major and Minor A Contracts

When Caltrans has determined the lowest responsible bidder, the Office of Office Engineer will transfer project data from the bid opening system to the contract administration system. Usually, this data transfer will occur before awarding the contract and before determining the total allotment. When this information about the award and total allotment becomes available, the Division of Construction will then update the computer file (by adding to or changing existing information).

Immediately after the new contract information in the computer file has been transferred from the bid opening system, the data is available to the district for processing. The district must then update the file with district information such as the resident engineer's name and address, the bridge representative's name, and the project's password. To perform the update, the district uses Form CEM-6003, "Project Pay—Estimate Project Initiation or Update" which is explained in more detail under the heading "Filling Out Form CEM-6003," below.

The result of the district's file update will be a dummy Form CEM-6101, "Project Record—Estimate Request," and a contract contents report, which lists contract items. The form and report should be checked thoroughly and any discrepancies brought immediately to the attention of the Division of Construction progress pay coordinator.

During a contract's life, the contractor may request a local address change or a legal name style address change. The district must maintain the accuracy of local address information in the contract administration system using Form CEM-6003, "Project Pay—Estimate Project Initiation or Update." The State Controller mails progress payment checks to the legal name style address. Only the Division of Construction's progress pay coordinator is authorized to make changes to the legal name style address from Form CEM-1202, "Contractor Action Request—Change of Name/ Address—Assignment of Contract Monies," verified by the resident engineer with the Division of Construction field coordinator's concurrence.

5-103B (2) Emergency Contracts in Excess of Minor B Limits

Payment for all emergency contracts estimated at greater than the minor B contract limit in construction cost are to be paid through the contract administration system (CAS). As of January 1, 2012, the minor B limit is $270,000. This limit is evaluated and re-established every 2 years.

The district performs the initial setup of emergency contracts in CAS using the *Emergency Force Account (EFA) Contract Initiation Instructions in CAS (Contract Administration System)*. The headquarters estimate desk performs the final setup steps. Entering the emergency contract in CAS is typically performed after the "Confirmation of Verbal Agreement" has been issued, but prior to the contract being authorized. This allows the contractor and the engineer to begin processing change order billings. Progress estimates are not to be requested until confirming the contract has been authorized and the E-FIS contract document has reached the final stage.

To establish a contract in CAS, a minimum of one contract item must be used. This is typically covered by establishing the one item for the amount of the contract payment bond. In order to process change order billings, CAS requires at least one change order be issued. The change order is administrative only, and issued for the total of the construction authorization, less the value of the bid item(s), less $15,000. Establishing the change order for this amount provides protections to ensure change order billings are not authorized for more than the available funds.

5-103B (3) Completing Form CEM-6003, "Project Pay—Estimate Project Initiation or Update"

The purpose of Form CEM-6003 is to add new information, or to change information, in the computer file. The computer program will accept such changes only for contracts in your own district.

Except for the "Project Key," complete only the data fields that you wish to update. The computer program will ignore blank fields and will place the data from the completed fields in the file whether or not such information is already on file. Fields left blank on the input form do not change what is in the file.

Ensure the data you enter on the form conforms to these rules, listed by data field as follows:

5-103B (3a) Project Key

Enter the letter "U" under "FB," and in the remaining spaces, enter the district and contract number.

5-103B (3b) Card Type C05 (each field is independent and can be updated separately)

For the following data fields under card type C05, do the following:

- Resident engineer's phone number.
- Responsible unit: Though the current financial system (E-FIS) now uses a 4-digit source unit value, enter the prior financial system (TRAMS) 3-digit source unit value. The responsible unit may range from 501 to 545. Warning: Until this number is in the computer file, progress pay estimates cannot be processed.
- Date work started: Enter the date the contractor began work on the job site. If work has not begun, leave this field blank and submit an update when work begins.
- Estimated date for completion: Enter your best estimate, not the calculated completion date. When progress estimate requests are submitted, this date is updated.
- Password: Use of this feature is optional. Enter any combination of six characters. The characters may be alphabetic, numeric, or one of the following special characters: *, /, =, (,), +, -, @, #, %, &. Once established, this password is required when you file, among other things, contract item payments, using Form CEM-6004, "Contract Transactions Input." The password will restrict access to the computer files.
- Suspension or reactivation: If a contract is suspended, enter the date of suspension and "S" in the "SR" column. When the suspended contract is reactivated, enter the date of reactivation and "R" in the "SR" column. You only have 30 calendar days from the suspension or reactivation date to enter this information into the computer.
- Plant establishment: If the project requires retentions be held at 5 percent for the contract's life, enter an "X" in the "PE" column. Current legislation prohibits retentions on all state and federally funded contracts through January 1, 2020.

- First Chargeable Working Day: Enter the date that contract time begins, usually 15 calendar days after the approval date. This is the date used to calculate the number of working days that determine satisfactory progress and the percent of time elapsed.

5-103B (3c) Card Type C06 to C08

Resident engineer's mailing address: On the first line, enter the resident engineer's last name first, followed by a comma. Then enter a space and the first name, followed by a space and middle initial (SMITH, John C.). On the second and third lines, enter the mailing address of the construction field office. Warning: The computer program treats all three lines as a single "data field." If you need to change this field, you must reenter all three lines.

5-103B (3d) Card Type C09 to C14

Only the Division of Construction progress pay coordinator can change the legal name style address in the contract administration system.

To change the contractor's local address, enter the contractor's name on line C09, and as necessary, continue the name on lines C10 through C12. Leave unused lines blank.

Enter the contractor's local address on lines C13 and C14. Also enter the contractor's local phone number on line C14.

Warning: You must enter the entire name and address each time you wish to update any or all of these lines. You cannot update a single line.

5-103B (3e) Card Type C15

For the following data fields under card type C15, do the following:

- Structure representative's name: If the contract requires structure work, enter the structure representative's name even if it is the same name as the resident engineer's. Enter only the last name and first initial (SMITH, J.)
- Structure responsible unit: Though the current financial system (E-FIS) now uses a 4-digit source unit value, enter the prior financial system (TRAMS) 3-digit source unit value. The unit may range from 550 to 599.
- Original authorized amount for structure work: At the contract's start, the resident engineer and the structure representative must determine the initial value of the required structure work. This value should include any portion of the contract item for mobilization that will be claimed as structure work. Warning: If this amount is not on file, the Office of Structure Construction cannot obtain any reports for this contract.
- Structure mobilization percentage: Enter, to the nearest whole percent, the portion of the contract item for mobilization that will be claimed as structure work.
- Structure completion: Enter a "C" to indicate the completion of structure work.

5-103B (4) Processing

The contract administration system analyzes the changes made to the computer file and does the following:

- The contract administration system notes whether the district is updating the "Responsible Unit" field for the first time. If so, the contract administration system prints a dummy Project Record—Estimate form and a Contract Contents Report.

- If this update is not the first update, the contract administration system prints only the first page of the Contract Contents Report. The contract administration system prints the dummy Project Record—Estimate form only if the contractor's name and address field has been changed.
- The contract administration system also prints a listing of update requests, which is a summary report of all fields that have been updated in this run.

5-103C Contract Transactions

The majority of all data submitted to the contract administration system will be contract transactions from the resident engineer on Form CEM-6004, "Contract Transactions Input." Contract transactions are divided into the following three categories:

- Contract item transactions: These consist of five types of transactions that refer to contract items.
- Miscellaneous transactions: These consist of four types of transactions to handle general project needs.
- Change order transactions: These consist of three types of transactions that refer to change orders.

The Contract Transaction Processing Module processes this total of 12 transaction types. Together with the services that the CCO and DEWR Processing Modules perform, these modules are sufficient to generate contract records that provide control of progress payments and track the financial status of the contract.

5-103C (1) Transaction Types

The following describes, by category, the 12 possible transaction types:

5-103C (1a) Contract Item Transactions

The contract administration system provides five different ways to refer to a contract item in Form CEM-6004, "Contract Transactions Input." Another way is by including the item as part of a change order. This will cause the authorized quantity to be adjusted automatically. Thus, you do not have to account for status changes due to change orders. You can reference contract items through the following contract item transactions:

- Contract item payment: Make item payments by posting line entries to Form CEM-6004 in any random order. Indicate bridge items by entering "B" in the proper column. If you use the report titled *Bridge Quantities by Structure*, you will also need to enter the structure number in accordance with instructions in Volume I, Section 6, of the *Bridge Construction Records and Procedures* manual. Refer to Example 5-1.2, Contract Transaction Input, Line 01.
- Contract item quantity balance: You may adjust the authorized quantity if necessary by submitting quantity balances as line entries on Form CEM-6004. You might need to make this type of transaction for various reasons. For example, a need might exist because of an incorrect engineer's estimate for a contract item that would have a major impact on the contingency balance. This transaction type adjusts the authorized final cost for your project, as shown in the later discussion of progress pay estimates. Refer to Example 5-1.2, Line 02.
- Contract item anticipated change: This transaction gives the engineer a method to allocate project funds to a specific contract item based on knowledge of anticipated

additional or decreased work. Such transactions affect the estimated final quantity for the item and also the estimated final cost for the project. The effect of these transactions is cumulative. If additional work is authorized by change order, a reversing entry is necessary. Refer to Example 5-1.2, Line 03.

- Contract item final balance: When work is completed on a contract item, you should enter this fact into the system. This entry will mark the item in the computer file as "Complete." On all subsequent progress pay estimates, the authorized quantity and the estimated final quantity will default to the amount paid to date, thus automatically balancing out the item. Additional item payments may be made, and the system will continue to balance the contract items. Refer to Example 5-1.2, Lines 04 and 05.
- Contract item final balance ("Reopen"): This transaction allows you to reverse the status of the contract item from "Complete" to "Active." For example, you would use "Reopen" to change an incorrect entry that showed the item was complete. Refer to Example 5-1.2, Line 06.

5-103C (1b) Miscellaneous Transactions

The four transaction types listed below comprise "miscellaneous transactions," the second category of contract transactions:

- Anticipated change: Use this transaction to record anticipated additional or decreased work when it is not possible or desirable to tie the anticipated change to a specific contract item or change order. These transactions are not cumulative and will affect the project's estimated final cost only on the next progress pay estimate to be generated. Refer to Example 5-1.2, Line 07.

  These transactions are placed in the computer file, and their sum will appear on the next progress pay estimate that generates payment. If the next estimate is a supplemental progress pay estimate, only enter material on hand payment requests if the material on hand payment request was mistakenly omitted from the previously run progress pay estimate.
- For more information about materials on hand, refer to Section 3-9, "Measurement and Payment," of this manual. Refer to Example 5-1.2, Line 08.
- Department-furnished materials allotment transfer: Use this transaction to increase or decrease the value of the Department-furnished materials allotment for your contract. The construction allotment will automatically adjust. To increase the Department-furnished materials allotment, enter a positive number. (This type of entry will decrease the contingency balance.) Refer to Example 5-1.2, Line 09.
- Total allotment changes: Use this transaction to enter into the system any supplemental allotment that increases (or decreases) your contract's total allotment. The total allotment in the computer file will adjust automatically as will the construction allotment. The construction allotment is defined as the total allotment less the Department-furnished materials allotment. Refer to Example 5-1.2, Line 10.

5-103C (1c) Change Order Transactions

The three transaction types listed below comprise "change order transactions," the final category of contract transactions:

- Change order anticipated change: This transaction has the same effect as does the contract item anticipated change except that a change order is being changed. Refer to Example 5-1.2, Line 11.
- Change order final balance: This transaction has the same effect as does a contract item balance. When work on a change order is finished, mark it "Complete" by entering this transaction. As with contract items, additional change order bills may be paid, and the system will continue to balance the change order. Refer to Example 5-1.2, Line 12.
- Change order final balance ("Reopen"): This transaction allows you to reverse the status of the change order from "Complete" to "Active." Refer to Example 5-1.2, Line 13.

5-103C (2) Completing Form CEM-6004, "Contract Transactions Input"

The resident engineer will use Form CEM-6004 more often than any other form in the contract administration system. Page 2 of the form provides instructions for completing it, and this section contains a completed sample of the form. Refer to Example 5-1.2, "Contract Transaction Input."

We cannot overemphasize the importance of legible entries that conform to the instructions for completing the form. Also, because of the high volume of transactions, make your entries on Form CEM-6004 as soon as the information becomes available. Partially filled pages are acceptable.

The sample form in this section shows some transactions. Note that leading zeros are not required in the numeric fields and that the plus sign is not required in the +/- columns. The following instructions are for the fields common to all transactions:

- Enter the district, contract number, password (if used), and page number. When assigning a page number, be careful because duplicate numbers will cause all transactions on the page to be rejected. You must complete these fields.
- Enter the posting date.
- Enter the source document description. If the transaction type refers to a project source document, (for example, a calculation sheet or a scale sheet), enter into the form's description column an adequate description of the source document. The source document must cross reference to Form CEM-6004. Post the page number, line number, and posting date from Form CEM-6004 to the source document. Refer to Example 5-1.1, "Quantity Calculation," for a typical source document.
- Note: The last six characters of the source document description can be the structure number if this item concerns structure work. Refer to Example 5-1.2, Line 01.
- Mark the structure field with the character "B" if this transaction concerns "structure work." Otherwise, leave the space blank. If you use the report titled *Bridge Quantities by Structure* you will also need to enter the structure number in accordance with the instructions in Volume I, Section 6, of the *Bridge Construction Records and Procedures* manual.

The form's remaining fields are divided into two sections, "Contract Item Entries," and "All Other Entries." If you make any entry in one or more fields of one of the sections, all fields in the other section must be left blank. A single line entry cannot serve double duty.

5-103C (2a) Contract Item Entries

Each type of contract item transaction has its own format. Fill in the various fields as shown on page 2 of Form CEM-6004. The following are the rules for making contract item entries:

- Quantity balance transactions:
    1. Lump sum items cannot be quantity balanced. If you attempt to quantity balance them, the transaction will be rejected.
    2. If the quantity balance is greater than the bid quantity, a warning message is issued.
    3. If the value of the quantity balance exceeds $100,000, a warning message is issued.
    4. The new authorized quantity is calculated. If it is negative, the transaction will be rejected.
    5. If the new authorized quantity is less than the total payment for the next estimate, a warning message is issued. Take appropriate action on this warning, such as estimating the final quantity and inputting the increase, covering the increase by change order, or requesting the computer to final balance the item. Such action is necessary to keep the project's status of funds current.
- For item final balance and item final balance ("Reopen"), the item status is set to "Complete," or "Active," respectively. The system does not check to see if the item is a lump sum item or a final pay item.
- Item anticipated quantity change:
    1. If the anticipated quantity change is greater than the bid quantity, a warning message is issued.
    2. If the value of the anticipated quantity change exceeds $100,000, a warning message is issued.
    3. A new estimated final quantity is calculated. If this estimated final quantity is negative, a warning message is issued.
    4. If the new estimated final quantity is less than the total payment for the next estimate, a warning message is issued.
- Item payment:
    1. Any transactions for the item "Mobilization" are rejected.
    2. Any transactions for a void item will be rejected.
    3. If the payment quantity is greater than the bid quantity, a warning message is issued.
    4. If the value of the payment quantity exceeds $100,000, a warning message is issued.
    5. The new total payment for the next estimate is calculated. If the total is negative, the transaction is rejected. (Negative transactions under "This Estimate" will be accepted.)

6. If the contract item is a lump sum item and the total payment for the next estimate would exceed 100 percent, the transaction is rejected.
7. If the contract item is not a lump sum item, the new total payment for the next estimate is compared to 125 percent of the bid quantity and the authorized quantity. Warning messages are issued if the total payment is more than one or both of these.

If the system issues any warning or rejection messages while it processes transactions for a contract item, the complete status of the item will be printed on the Contract Transactions Input Edit report before the system begins processing the next contract item. Use this printout to determine the reason the system issued the message.

- Percentages for lump sum quantity payments must be expressed as decimals. Only three decimal places are available. If 5 percent is to be paid, it must be entered as 0.050; (5.00 is 500 percent).

5-103C (2b) Miscellaneous Transactions

The following are the rules for making miscellaneous transactions:

- Anticipated changes:
  1. If the amount anticipated exceeds $100,000, a warning message is issued.
  2. If the amount anticipated exceeds 10 percent of the construction allotment, a warning message is issued.
- Material on hand payments:
  1. If the amount exceeds $100,000, a warning message is issued.
  2. If the amount is negative, a warning message is issued. (The system assumes that this is a correcting entry to a previous transaction accepted by the system and not yet processed for payment.)
  3. A total is calculated for payment for the next estimate. This is the sum of all transactions since the last estimate. If the total is negative, a warning message is issued.
- Department-furnished materials allotment transfer:
  1. If the amount of the transfer exceeds $100,000, a warning message is issued.
  2. A new total is calculated for the Department-furnished materials allotment. If it is negative, the transaction is rejected.
- Total allotment changes:
  1. If the amount exceeds $100,000, a warning message is issued.
  2. If the amount exceeds 10 percent of the total allotment, a warning message is issued.
  3. If the amount of the change is negative, a warning message is issued.
  4. A new total allotment is calculated. If the amount is negative, the transaction is rejected.
  5. If the new total allotment is less than the total paid to date on the last estimate, a warning message is issued.

5-103C (2c) Change Order Transactions

The following are the rules for change order transactions:

- For the change order anticipated change, the new estimated final cost is computed for the change order and reported. The system does not do any checking.
- Change order final balance and final balance ("Reopen"):
  1. The change order status is set to "Complete," or "Active," respectively. The system does not do any checking.
  2. For a change order final balance ("Reopen"), the word "Reopen" must be left-justified.

5-103C (2d) General

The Contract Transactions Processing Module will sort your transactions into order, will edit each transaction for reasonableness and conformance to this manual, and will either accept or reject each transaction. From this processing, the system will issue a report titled "Contract Transactions Input Edit." This report will list the disposition of each line entry that you submitted. A comprehensive set of warning messages exists. Do not ignore warning messages on the report.

Do not use the same page and line numbers again.

You will find a summary on the last page of the Contract Transactions Input Edit report. The summary lists each Form CEM-6004 page that was processed and the numbers of transactions on that page that were accepted, for which warnings were issued, or that were rejected. Any missing line numbers on the page (breaks in the sequence of line numbers) will be printed. Use this list to ensure that all the transactions were entered into the system.

Examine the remainder of the report. You must respond to rejected entries and possibly to warnings.

5-103C (2e) Audit Trail

In any accounting procedure, it is necessary to link transactions to the specific source documents that generate the transactions. This linking is called an audit trail. Change orders and daily extra work reports carry unique identifying numbers that contract administration system uses in its processing. Here, a good audit trail is automatic. However, contract transactions are different since there is no automatic reference to a unique source document.

The contract administration system provides methods of cross-reference. You are responsible for an adequate audit trail. Note that Form CEM-6004 is an intermediate document in this respect.

Example 5-1.1 Quantity Calculation

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
QUANTITY CALCULATIONS
CEM-4801 (REV 11/1992) CT# 7541-3520-0

JOB STAMP	ITEM	FILE NO.
07-1381U4 07-LA-210-47.5/57.3 Fed. No.: None	8 Temp. Railing (Type K)	48-8-2
	LOCATION Ramp 3	SEGREGATION YES ☐ NO ☐
	CALC. BY I.M. Engineer	DATE
	CHK. BY U.R. Wright	DATE

Field Measurement:
Field Counted: ✓
Final Pay Item:

Estimated Quantity: 400
Unit of Measure: linear feet
Unit Price: $25.00
75% = 300
125% = 500

Remarks or Other Calculations:

200 linear feet placed on 5-03-01 at Maple Street onramp ✓

Material Inspection/Release: Certificates of compliance obtained on 4-29-01

PAY THIS ESTIMATE: 200 ✓
PREVIOUS PAID: 100 ✓
TOTAL TO DATE: 300 ✓

POSTED BY	DATE	POSTED TO
Office Engineer	08/08/2008	CEM-6004, page 4, line 5

Example 5-1.2 Contract Transaction Input

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
CONTRACT TRANSACTIONS INPUT
CEM-6004 (Rev. 10/1983) CT#7541-3515-0

DIST: 07 | CONTRACT NO.: 1381U4 | PASSWORD: | CASØAT | PAGE NO. 004

LINE NO.	DATE MO.	DATE DAY	SOURCE DOCUMENT DESCRIPTION	BRIDGE	CONTRACT ITEM ENTRIES ITEM NO.	+ -	QUANTITY (UNITS)	CODE	ALL OTHER ENTRIES CCO NO.	+ -	AMOUNT($)	TYPE	ENT BY	✓ BY
01	05	19	48-14-17	b	014		1,273 000						Time	URW
02	05	19	MAIL BOX ON ELM ST		028		15 000	Q					Time	URW
03	05	19	ANT. ELIM. AC ON FL		038	-	1,500 000	A					Time	URW
04	05	19	BAL. COMPL. ITEM 6		006			F					Time	URW
05	05	19	48-8-2		008		152 400						Time	URW
06	05	19	RESTORE STATUS		039		REOPEN	F					Time	URW
07	05	19	REV GRADE FR2 LINE								15,000 00	ANT	Time	URW
08	05	19	51-4-2								2,174 37	MHS	Time	URW
09	05	19	52-4-1								2,000 00	SFM	Time	URW
10	05	19	11-3-1								315,000 00	TAC	Time	URW
11	05	19	DELET DRAINAGE						029		10,000 00	ACC	Time	URW
12	05	19	BAL. COMPL. CCO 18						018			BAL	Time	URW
13	05	19	RESTORE STATUS						005		REOPEN	BAL	Time	URW
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Refer to Section 5-103C(1) for a description of transaction types.

IN CASE OF QUESTION CONTACT: NAME PHONE

VERIFY

93 95689

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

5-103C (3) Computer Processing

The contract item totals listed below are kept for contract work and also for structure work so that the totals can be reported separately when appropriate. Records of the financial status of the contract items are maintained as follows:

- Bid quantity: This quantity cannot be changed.
- Authorized quantity: This item is the total of the bid quantity and the algebraic sum of the quantity changes due to change orders that have been filed.
- Authorized quantity: This item is the total of the authorized quantity and the algebraic sum of the quantity balances that the engineer entered.
- Anticipated final quantity: This item is the total of the authorized quantity and the algebraic sum of the anticipated quantity changes that the engineer entered.
- Item status flag: This flag is a file mark that indicates whether a contract item is "Active," "Deleted," or "Completed."

<u>5-103D Change Orders</u>

The contract administration system maintains separate records for each authorized change order on a project. As each change order is authorized, it must be entered into the contract administration system through the use of Form CEM-4901, "Change Order Input."

The method of entering each change order into the system may vary from district to district, but can be done as follows:

- The resident engineer writes a change order and completes Form CEM4901. For approval procedures, refer to Section 5-3, "Change Orders," of this manual. The approval date must be entered on Form CEM-4901, and the Form CEM-4901 data is then entered into the contract administration system.
- The result of entering the form data for each change order will consist of a change order report and a disposition report.
- The resident engineer should review the change order report and correct any errors. The contract administration system automatically makes the following changes to the contract records:
    1. The authorized final cost, the estimated final cost, the authorized contingency balance, and the estimated final contingency balance are adjusted to new values.
    2. The totals for changes in extra work, adjustment of compensation, and contract items are adjusted to new values.
    3. Each affected contract item will have the authorized quantity adjusted to reflect the change.
- Immediately after Form CEM-4901 has been processed, the contract administration system will accept change order bills and anticipated changes that refer to the change order.
- When the contract administration system processes a supplemental change order, the daily extra work reports in the holding file (due to insufficient funds in the original change order) will be made available for payment.

5-103D (1) Completing Form CEM-4901, "Change Order Input"

Use Form CEM-4901 to perform the following functions:

- File a new change order in the computer file.
- Update (change existing information) a change order in the computer file.
- Replace a filed change order with another change order.
- Delete a change order from the computer file.

Completing the form depends on which of the above functions you desire.

5-103D (1a) File

Enter the contract and change order numbers at the top of the form. The original change order is supplement "zero"; enter the zero on the form. Ignore the function and override boxes at the top of the form.

The remainder of the form is divided into five sections labeled "Card Type 1," "Card Type 2," "Card Type 3," "Card Type 4," and "Card Type 5." Complete only those sections that are applicable.

Card Type 1: This section is required. Complete each entry in the section. If the entry for the field "Net Money Change This CCO" is zero, enter $0.00. The field "Time Extension Days" should include the number of working days added (or deleted), zero (0), or be coded "DEF" (instead of a number) if the change order was written with a deferred time adjustment clause. Enter a category code on every change order. Left-justify this code.

Card Type 2: If extra work or adjustment of compensation is not part of your change order, leave these fields blank. Otherwise, define the payment method by making three entries for each change:

- Make the first entry by checking either the "EW" or "AC" box to indicate extra work or adjustment of compensation.
- Make the second entry by choosing one of the "FA," "LS," or "UP" boxes to indicate whether payments will be made by force account, lump sum, or unit price.
- Make the third entry by entering the dollar amount of the change (increase or decrease).

If multiple items of work in the change order are using the same pay method, they must be totaled. Also, you can enter each pay method only once per change order. If there is more than one type of extra work or adjustment of compensation on the change order, continue making successive line entries.

Card Type 3: If you have no changes for contract item prices, do not complete this section of the form. Otherwise, furnish the item number and increase or decrease the quantity for each changed item.

Card Type 4: If all or part of the work to be done under the change order is structure work, enter the net dollar amount involved. This amount will contribute to the change order changes line of the structure totals shown on the next estimate.

If this section of the form does not apply or the amount is zero, leave the section blank.

Card Type 5: This section is required.

For federal participation, enter the FHWA funding participation determination on every change order. If participation is in part, indicate the breakdown for participation-in-part funding.

For federal segregation, if more than one funding source exists, show the percentage allotted to each federal funding source.

5-103D (1b) Update

Use this function in the following way to replace any incorrect information in Card Type 1 or Card Type 4:

- Enter the contract and change order numbers.
- Place the letter "U," in the function box at the top right of the form.
- Enter the correct information in the appropriate fields. All information in Card Type 1 is always required.
- Leave all other fields on the form blank.
- The module for processing change orders will identify the fields that you have completed and will change this information in the computer file.

5-103D (1c) Replace

If a change order has been stored with incorrect information that cannot be corrected by the update function, use the replace function in the following way:

- Complete the entire form exactly as you would for the file function, using correct information.
- Place "R," in the function box at the top right of the form.

The module for processing change orders will replace the data stored in the computer file with the new change order.

If payments have already been recorded against a payment method that you are trying to eliminate, it is not possible to immediately replace an old change order with a new one. The same holds true if the payment to date exceeds the authorized amount. In these cases, the system requires that you do the following:

- Enter corrections for the change order bills that reverse payments to date to zero for the particular method of payment to be eliminated. For payments exceeding the authorized amount, enter corrections for the change order bills to reduce payments below the authorized amount.
- Submit the replace request.
- After the change order has been replaced, reenter the change order bills that were reversed. When possible, use the update function instead of the replace function.

5-103D (1d) Delete

You can eliminate a change order from the computer file as follows:

- Enter the contract and change order numbers.
- Place the letter "D," in the function box at the top right of the form.

As with the replace function, a change order cannot be deleted until all payments have been reduced to zero through correcting entries on the daily extra work reports.

5-103D (2) Edits

The following lists some of the edits that a change order must pass through before the system will accept it:

- The change order number and the change order supplement number must be filled in or the change order will be rejected.
- The change order description cannot be blank, or the change order will be rejected.
- The net change amount cannot exceed the construction allotment. If the net change amount does exceed the construction allotment, the system will issue a warning message but will still file the change order.
- The approval date must be after the bid opening date and less than or equal to "today's" date; otherwise, the change order will be rejected.
- If the time extension days exceed 10 percent of the working days in the contract, the system issues a warning message but will still file the change order.
- If any payment method appears more than once on the input cards, the order will be rejected.
- If you enter any contract item change for a void item, the system will reject the change order.
- Lump sum items may appear on change orders only as a deletion of that item. Any increase or decrease in a lump sum item will be rejected.
- You can enter a contract item on a change order as an increase and also as a decrease. If the item appears a third time, the system will reject the change order.
- If the contract item "mobilization" appears on a change order, the change order will be rejected.
- If the quantity change entry for a contract item exceeds the bid quantity, a warning message will be issued.
- The net dollar amount for the structure work on the change order must be greater than the sum of the negative changes and less than the sum of the positive changes, or the change order will be rejected.
- The net dollar change for the change order must equal the sum of the dollar amount in Card Type 2 and the extended dollar amounts for the quantities in Card Type 3, or the change order will be rejected.
- If the change order is already on file, the system will reject this duplicate entry. Additionally, if this change order's number exceeds by five the largest change order number on file, or if the supplement's number is more than two above the latest supplement on file for this change order, the system will reject the change order. However, if you checked the override field on the input field, the system will bypass such responses.
- If the contract is completed, a warning is issued.

If you request the replace or delete function, more extensive processing is done. The system checks to see if it can maintain the payment to date under a payment method.

If the system cannot maintain the payment to date in this way, it rejects the request to replace or delete. A rejection notice is generated along with an explanation of what must be done to resolve this unacceptable situation.

The following is an example of this type of problem:

- A change order is entered for extra work at force account and accepted by the system.
- Subsequently, change order bill payments are recorded against the change order.
- A request is entered to delete the change order from the computer file. In this case, the system will reject the delete request because the payment method would be eliminated. There are no other supplements to this change order. The system requires that entries to correct change order bills be to reverse payments to date to zero. In such a case, the system would accept a delete request. In the more complicated cases where supplements to a change order exist, the system makes similar demands.

At this point, the processing of the change order is complete. However, when a supplemental change order is processed, the daily extra work reports in the holding file (due to insufficient funds in the original change order) will be made available for payment. The system produces a report, called a "DEWR Release From the Holding File." This report shows the action the system took.

5-103E Change Order Billing

This module's purpose is to compute the amount of payment for extra work performed under a change order. This includes the following:

- Editing input information
- Retrieving and updating the change order
- Performing logic edits
- Conducting audit checks
- Performing computations
- Filing the change order bill for payment
- Producing an edit report and daily extra work report

In addition to these functions, this module allows for entering corrections to filed change order bills. Change order bills or corrections to filed change order bills will not be rejected because of insufficient funds (subject to the limitations in Section 3-904, "Payment for Extra Work," of this manual). Instead, the system will place the change order bills or the corrections to filed change order bills in a holding file to await the resident engineer's further action. Usually, the resident engineer must write a supplemental change order to provide additional funds; the supplemental change order will make the appropriate change order bills available for payment.

Use Form CEM-4902, "Extra Work Bill (Short Form)," to enter basic information related to extra work performed under a change order. The following describes the procedures for obtaining the information from the contractor, entering the information into the computer, and producing the daily extra work reports.

5-103E (1) Preparing Form CEM-4902, Extra Work Bill (Short Form)

The contractor may enter change order bills on the Form CEM-4902, "Extra Work Bill (Short Form)." Or, if more entries are required for equipment, labor, or material, the contractor must use the four part forms CEM-4902A, CEM-4902B, CEM-4092C, and CEM-4902D.

The contractor initiates forms containing force account payment and submits them to the resident engineer. The resident engineer initiates forms containing payment at agreed prices. The backs of the forms contain the basic instructions for completing the forms. The following information supplements the instructions on the forms:

5-103E (1a) Basic Information (Title Page)

Do the following for the basic information:

- The change order number: Right-hand justify this number; for instance, change order 1 is 001, change order 10 is 010.
- Report number: The contractor should leave the report number blank. Duplicate numbers will be rejected (except for corrections to previous bills).
- Date performed: A separate change order bill must exist for each day on which force account work is performed (except for work done by a specialist). Enter the date the work was performed in these spaces. For change order bills covering invoices only, enter the date on which the material was used. If this entry is not practical, enter the current date. You must enter a date in this field. You may enter the acronym "VAR" in the date performed field if the pay method is lump-sum unit-price or if equipment and labor are not present on the bill.
- Date of report: Enter the date on which the report is prepared.
- Payment method: Ensure the method selected matches one of the methods authorized by the change order.
- Bridge: Place the letter "T" in this box if toll bridge work is involved and you want to apply a 10 percent markup to equipment and material and a 25 percent markup to labor.
- Fifty percent flagging: You must include on the change order bill the total hours spent on flagging because the computer will make payment of only 50 percent of the total. For flagging that is not subject to the 50 percent split, submit separate change order bills.
- Labor surcharge: The contractor should enter this surcharge as a whole number; for instance, "15 percent" is entered as "15." The contractor should obtain the applicable percent from the effective *Labor Surcharge and Equipment Rental Rates* (*Cost of Equipment Ownership*) book. This surcharge is for regular hours. The system will apply the overtime surcharge based on the regular hour surcharge.
- Work performed by: This field should contain the name of the organization (the contractor, subcontractor or other) that performed the work. If the change order bill is for an invoice only, enter the name of the organization to which the invoice was addressed. Submit a separate daily change order bill for each organization's work.

5-103E (1b) Equipment

Do the following for equipment:

- Equipment identification number: Enter this number (required.) It can be any number that the contractor assigned to the equipment for specific identification.
- Equipment description: Enter the description, which consists of four items: the "Class," "Make," "Code," and "Attach" (attachments). The equipment description must come from the applicable *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book. Make a copy of this publication available to

the contractor. You can obtain from the Division of Construction's website a listing of miscellaneous equipment, for equipment not shown in the *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book.

- For equipment that is neither in *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book nor available from the website's miscellaneous listing, the contractor must request a rate from the resident engineer. The resident engineer will obtain an authorized rate from the Division of Construction's rental rate engineer.
- Equipment for which a change order has established the rental rate will not have an equipment description and must be included as a unit price payment on the material charges portion of Form CEM-4902, lines 24–33 of the daily extra work report.
- The following explains the procedures for "Class," "Make," "Code," and "Attach," within equipment description:
  1. Class: This portion of the equipment description will be found in the *Labor Surcharge & Equipment Rental Rates (Cost of Equipment Ownership)* book under the heading for a particular class. For instance, after "Hydraulic Cranes and Excavators, Crawler Mounted," you will find the class "HCECL."
  2. Make: For the equipment illustrated under "Class" above, you will find the "Make" portion of the equipment description in the left-hand column. For instance, after "Bantam," you will find the make "BANT."
  3. Code: For the equipment illustrated under "Class" and "Make" above, you will find the "Code" portion of the equipment description in the "Code" column. For instance, after "Model C-266," you will find the code "0680."
  4. Attach: You will find this portion of the equipment description in the front of the Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership) book. The rate for the equipment under "Class," "Make," and "Code" above includes all attachments and accessories. Therefore, leave this column blank.

Enter all equipment descriptions beginning at the left of each field. Include all letters, numbers, dashes, or other symbols as they are shown in the *Labor Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book.

- Regular hours for which payment is to be made: Enter the regular hours for which payment is to be made. Regular hours may not exceed 8 unless you are entering a daily rate item. If the date the work was performed is various, you may enter up to 99 in the regular hours field. Various is used for equipment at day rates.
- Overtime hours: Enter the overtime hours worked. Overtime hours may not exceed 16.

5-103E (1c) Other Expenses Subject to Labor Markup

This portion of the form is for travel expenses that cannot be entered as "Subsistence" under "Labor."

If the units and rate are already entered, the computer will calculate the amount. Otherwise, enter the amount, and this figure will be used.

Note: If you use the "Unit" and "Rate" fields, leave the "Amount" field blank. If you enter an amount in the "Amount" field, don't make an entry in the "Unit" and "Rate" fields.

5-103E (1d) Material or Work Done by Specialists, Lump Sum, or Unit Price Payments

The following explains the procedures for completing the Form CEM-4902 material section:

- Material: Note that the material entry will not be processed unless there is a value in both the "Units" and the "Unit Cost or Net Pay" fields. Do the following for material:
    1. Invoice date: Preferably, enter the date of the invoice to help in checking for duplicate billing. However, if entering the invoice date is not practical, enter the date the material was used.
    2. Invoice description: Enter a brief description of material.
    3. Units: Normally, enter the unit one (1.00) for materials used.
    4. Unit cost or net pay: In this column, enter the amount for which payment is due. Normally, this amount is the cost of the material plus tax, if applicable, less any discount offered.
- Work Done by Specialists: Enter this item in the same manner as described under "Material" above.
- Lump Sum: Follow the procedures below for this entry:
    1. Vendor name and invoice number: You do not need to make any entries in the vendor column or the invoice number column.
    2. Date: Enter the date the work was performed. When entering this date is not practical, enter the current date.
    3. Invoice description: Enter "per CCO No.__________."
    4. Units: Enter the units to be paid as a percentage of the lump sum amount, expressed in decimals. For instance, express 75 percent as 0.75. This figure must never exceed a total of 1.000.
    5. Unit cost or net pay: Enter the lump sum amount from the change order.
- Unit price payments: Enter this item in the same manner as described under "Lump Sum" above.
- Units: enter the number of units to be paid.
- Unit cost or net pay: enter the unit cost from the change order.

5-103E (1e) Signature of Prime Contractor's Representative

For all force account payments, the contractor or contractor's authorized representative must sign the change order bill. For agreed price payments, the signature is not required.

5-103E (2) Processing Form CEM-4902

The resident engineer receives Form CEM-4902, "Extra Work Bill (Short Form)," from the contractor, reviews the form, and if it is satisfactory, signs the change order bill and authorizes it for entry into the contract administration system. When reviewing the submitted change order bill, the resident engineer must be guided by the policy contained in Section 3-9, "Measurement and Payment," of this manual. The following explains how the system will process Form CEM-4902:

- You must request the contract administration system print a copy of the change order bill after it has been entered into the system before it will be paid.
- Computer programs will perform the following processes:
  1. Edit all information for acceptability. For example, numeric data must be in numeric form, or the program will issue a warning.
  2. Select information from the equipment database; for example, rates, descriptions, and attachments.
  3. Validate the contract number, change order number, report number, type of work (payment method), dates, corrections, labor surcharge, and equipment description.
  4. Audit right-of-way delay and the hours equipment and labor are used for work.
  5. Compute extensions, markups, and summaries.
  6. Ensure the authorized amount (for instance 100 percent or $15,000) is not exceeded.
  7. File a validated change order bill for payment at the estimate time.
  8. Produce a daily extra work report. This report will contain all the information as entered on the change order bill plus equipment descriptions, extensions, markups, total payment, and contract information.
  9. Produce an edit report. This report will contain processing results. These results are tabulated by change order within a contract. If the system rejects an entry, the rejection messages will be included on the daily extra work report. If the system accepts the change order bill, all warning messages will be contained on the edit report.
- After the reports have been printed and the district construction office has received them, the district will forward copies to the resident engineer. Daily extra work reports are printed in two parts, one for the contractor, one for the resident engineer.

5-103E (3) Corrections to Change Order Bills

You can make corrections to the change order bill after it has been entered into the system, but there is a limit of four corrections per change order bill. Refer to the *Entry of Extra Work Bills Manual (CASEWBM).*

5-103F Generating Estimates

CAS produces the following five types of estimates on demand:

- Monthly progress estimate
- Progress estimate after acceptance
- Supplemental progress estimate
- Semifinal estimate
- Final estimate

The resident engineer will regularly request the monthly progress and the progress after acceptance estimates while the remaining three types of estimates usually will be requested in cooperation with, or by, the district construction office.

Supplemental progress estimates may only be run between the completion of the monthly progress estimate run and the 15th of the following month.

Producing an estimate is completely automatic, based on data previously stored in the computer.

In addition, the contract administration system will produce two other types of estimates that do not generate payments. These estimates are simply statements of the current status of the computer files. The following are the two types:

- Status purpose only estimate
- Proposed final estimate

5-103F (1) Procedure

Before requesting the first monthly progress estimate, enter the date work started and the responsible unit on Form CEM-6003, "Progress Pay—Estimate Project Initiation or Update." The Division of Construction progress pay coordinator enters the approval date. If the approval date is not in the computer file, the system will reject the estimate request.

The procedure for processing an estimate involves the following steps:

- Preparing Form CEM-6101, "Project Record—Estimate Request," and verifying the estimate. Transmit these to the district office.
- Computer processes your estimate and prints the reports.
- The district construction office verifies the estimate results.
- Returning the estimate reports to the resident engineer.

The schedule for completing the pay process and making payment to the contractor is rigid. This rigid schedule means all people involved must adhere to their individual schedules. District construction offices will advise resident engineers of the schedules.

5-103F (1a) Preparing Form CEM-6101, "Project Record—Estimate Request"

To request an estimate, complete this form accurately in accordance with the following:

5-103F (1b) Estimate Parameters

For the estimate parameters follow the instructions below.

- Enter the contract number.
- Enter the estimate number. This number must be one greater than the last estimate that was successfully processed and paid.
- Enter the work period ending date in the estimate for the form's "Work Performed Through" field. For a progress estimate or a supplemental progress estimate, enter the 20th day of the month. For all other types of estimates, use the date of completion.
- If this is a monthly progress estimate, place an "X" in the matching box on the form; otherwise, leave the box blank.

- If this is a progress estimate after acceptance, place an "X" in the matching box on the form; otherwise, leave the box blank.
- Enter the estimated date of completion. This date should be the resident engineer's best estimate, not necessarily the computed date. If this estimate is not a progress estimate, enter the date of completion.
- Enter the values as of the "date work performed through" for chargeable working days, weather nonworking days, and authorized time extension days (change order) in the three matching fields of the form. As of February 16, 2012, "Other day" time extensions are no longer allowed, therefore do not increase this value to more than existed prior to this date. In most cases, this value should always be zero. The system will check the chargeable working days and weather nonworking days against the working days calendar and inform you of possible entry errors. However, it cannot check the two types of time extension days. These values affect the system's computation of percent time elapsed.
- If you have a landscape contract that is in the plant establishment period, check one of the two boxes to indicate whether progress is satisfactory or unsatisfactory. These boxes are not for highway contracts that contain "Type 2" plant establishment periods. If you are unsure of this status, contact the district construction office after reading the special provisions.
- The system determines whether contract progress is satisfactory or unsatisfactory. Occasionally, a situation arises where, even though progress is mathematically unsatisfactory, the resident engineer wishes to override the system and record satisfactory progress. To accomplish this override, place an "X" in the field, "Override Unsatisfactory Progress." Also see the second bullet below this one about projects with dual time limits.
- For some contracts, the standard manual formula does not apply for computing percent time elapsed. For such contracts, interpret the special provisions, and determine this percentage. Enter the percent in the box on the form; this will override the system's calculation.
- If you have checked "Override Unsatisfactory Progress" (see the bullet two up from this one that discusses overriding the system) or entered a number in percent time elapsed (see the previous bullet), enter a short explanation in the 25 spaces immediately below these fields on the form. Typical entries might be "CCO days pending" or "Nonstandard time format."
- If the estimate is a supplemental progress estimate, proposed final estimate, semifinal estimate, or final estimate, check the appropriate box. Note that on a supplemental progress estimate the date for "Estimate for Work Performed Through" and all of the working day information should be the same as the date for the last estimate.
- If this estimate is a rerun (a recalculation) of a prior successful estimate, check the recalculation box. Note that, if the last estimate processed was a status purpose only estimate, you are not rerunning an estimate this month; instead, you are trying to run the estimate that did not generate payment. Normally, the district office will enter requests to rerun an estimate.

5-103F (1c) Deductions

If you wish to take one or more deductions or to return one or more deductions from a prior estimate, enter them on Form CEM-6101, "Project Record —Estimate Request." If you wish to rerun an estimate or to pay an estimate after a status only estimate, you still must enter the deductions again because any deduction stored in the computer file and carrying this estimate number will be erased automatically. You can enter five types of deductions on this form. Each deduction entered requires an alpha code to be placed in the form's type field and an entry in the description field. Use a minus sign to take a deduction and a plus sign to return a previous deduction. The following lists the rules by type of description:

- Administrative deductions: Enter "ADM" in the type field. Both plus and minus deductions are allowed.
- Equal employment opportunity deductions: Enter "EEO" in the type field. Both plus and minus deductions are allowed, but plus deductions should be adjustments or reversals of deductions taken on prior estimates. If you wish to take an EEO deduction on this estimate, leave the amount field blank. The system will compute the deduction amount for you. Only one "blank" EEO deduction, normally entered by the labor compliance officer, can appear on the form. Note: The system will not accept EEO deductions if the contract item payment for this estimate is zero. It may be necessary to enter the minimum amount of $1000.
- Labor compliance violation deductions: The labor compliance officer usually makes these entries on the form. The officer will enter "LCV" in the type field. The rules for LCV deductions are identical to those for EEO deductions. Note: "LCV" deductions will not be taken if the contract item payment for this estimate is zero. It may be necessary to enter the minimum amount of $1000.
- Liquidated damages deductions: Enter "LIQ" in the type field. Both plus and minus deductions are allowed. Plus deductions reverse earlier deductions. Only use this type of deduction when liquidated damages are being assessed. If during the course of the work, the contractor's progress is unsatisfactory and has progressed to a point where a reasonably accurate estimate of possible liquidated damages can be made, make a deduction in lieu of any retention for unsatisfactory progress using an ADM in the type field with the text "Antic.Liq.Damages". Reverse the ADM when the actual liquidated damages are being assessed by using LIQ in the type field. Refer to Sections 3-806, "Liquidated Damages." and 3-908, "Deductions," of this manual for more detailed guidance.
- Other outstanding documents deductions: Enter "OOD" in the type field. If you wish to take this deduction, leave the amount field blank. The system will compute the amount for you. Take this deduction only once per contract. The system will maintain the correct deduction on subsequent estimates by generating "OOD" in the type field with a description, "MAINTAIN OOD DEDUCT." You can reverse the deduction at any time by entering a plus amount that exactly reverses the OOD deductions to date from the previous estimate. Negative OOD deduction amounts are never allowed on the input form.

After carefully preparing Form CEM-6101, "Project Record—Estimate Request," promptly send it to the district office. The specific deadline for submittal may vary by district.

5-103F (2) Computer Processing

Once you have made your entries on Form CEM-6101, "Project Record—Estimate Request," and transferred them to the computer, the system edits the estimates and then produces reports showing the results of the system's processing.

5-103F (2a) Estimate Edits

Once Form CEM-6101, "Project Record—Estimate Request," has been entered into the contract administration system, the system will do the following:

- Edit Form CEM-6101 for consistency with previous estimates and with the working days calendar stored in the computer.
- Identify and summarize all daily extra work reports entered in the system and eligible for payment since the last estimate.
- Identify and summarize all contract transactions entered in the system since the last estimate.
- Identify and balance the change orders that require balancing.
- Identify and balance the contract items that require balancing.
- Make calculations for the item "Mobilization" (if necessary), for the various deductions and retentions, for percent time elapsed, for percent complete, and for various status totals, such as authorized final cost. The system also determines whether the contractor's progress is satisfactory.
- Edit any deduction submitted for processing on Form CEM-6101, "Project Record—Estimate Request." Special attention is given to three of the deductions as follows:
  1. If the resident engineer has submitted an EEO deduction, the contract administration system computes the amount as 10 percent of the contract item payment on this estimate, or a minimum of $1,000 or a maximum of $10,000, and places the deduction on file.
  2. If the resident engineer has submitted an LCV deduction, the system performs the same calculation as for EEO deductions described above.
  3. If the resident engineer has submitted an OOD deduction, the system will compute the deduction under the following conditions:
     a. The contract has been completed, or retention is being reduced because the percent complete exceeds 95 percent. If one of these conditions is not met, the deduction will be rejected.
     b. The total of all OOD deductions from prior estimates must be zero, or the deduction will be rejected. An OOD deduction should be taken only once for a contract.
     c. If the first two conditions are met, the amount of the deduction is calculated as 5 percent of the total work completed to date less mobilization, or $10,000, whichever is less.
- Further deduction processing as follows:
  1. If the total to date for an OOD deduction is negative, the system will check whether the value has changed since the last estimate for total work completed to date less mobilization. If the value has changed, the system will generate a

new OOD deduction with a description, "MAINTAIN OOD DEDUCT," and an amount equal to the difference between the amount demanded by the formula and the amount of the total to date for this type of deduction. Thus, an OOD deduction, once submitted, will be maintained at the formula's value unless it is exactly reversed by a positive deduction entry on Form CEM-6101, "Project Record—Estimate Request."

2. For each type of deduction, you cannot give back more than has been taken. If you make this error, the estimate will fail. Messages are produced stating which deduction is in error.
3. At this point in the processing, the final values are computed for total work completed and total payment to the contractor. If there are "Limitation of Payment" dates and amounts in the special provisions for this contract, the Division of Construction progress pay coordinator will have entered them in the computer. The system will check the period ending date of this estimate and will generate or return any split-year-financing deductions that are necessary under the contract's terms.
4. If retention is being released on this estimate and the total to date for liquidated damages is zero, the system will issue a warning message.
5. The system automatically computes overbid item deductions as required. These deductions are taken and returned at the appropriate times.

- Make calculations for the progress payment voucher, including retentions and payments to escrow accounts.
- Determining the success of the estimate's processing.
- If processing is successful, the contract administration system prints your estimate.
- If this estimate is for a zero or negative progress payment, the system prints a status purpose only estimate.

1. If the total authorized final cost is greater than the construction allotment, the contract administration system will issue a severe warning.
2. If the total payment to date to the contractor on this estimate is greater than the construction allotment, the estimate will fail.

5-103F (2b) Estimate Output

Once CAS has processed the estimates, it produces the following reports:

- Schedule of extra work
- Schedule of deductions
- Project record estimate
- Project status
- Work done by office of structures
- Progress payment voucher

Only two copies of the estimate will be sent to the field, one for the resident engineer and one for the contractor. The contractor also must receive the first three reports listed above and the last report listed above.

In addition to the estimate documents listed above, the contract administration system also produces a report called "Estimate Processing Results." This report is the tool by which the resident engineer can check the "estimate package." This report has the following sections:

- Edit messages: The system can produce many possible messages. If the estimate is rejected, the exact reason will be found here. To assist in preventing overpayments, among other problems, warning messages have been set based on carefully chosen tolerances. Read these messages carefully.
- Transaction selection: The system will print a list of the exact pages and lines of contract transactions that were used to produce the estimate. This list enables you to verify that all the contract transactions you submitted were used to produce the estimate.
- Change order processing: This lists any balancing of change orders by the system. Occasionally, the list contains warning messages, too.
- Contract item processing: This part of the report does the same things as described in the bullet above, but for contract items instead of change orders.
- Contract transactions list: This list identifies all contract transactions used to generate your estimate. If you question any line item on the project record-estimate, examine the detailed records to see how the system derived its totals.
- Structure totals: This item summarizes all structure work the system found while processing the estimate.

5-103F (3) Potential Problems

For the unwary, several points in the estimate process can cause errors. These problems result from misunderstanding what constitutes an estimate and how the estimate number should be increased from estimate to estimate.

On the title page of the project record-estimate and in the estimate processing results, the system will print the type of estimate generated. If the estimate is one of the five types listed previously under the heading "Generating Estimates," a valid estimate was generated.

The progress pay system requires that the estimate number be increased only by valid estimates. Thus, if you request estimate number 3 to be processed, but the system generates a status purpose only estimate, a valid estimate was not generated. Request estimate number 3 again for the next estimate.

Another potential problem involves two types of contract transaction: materials on hand and anticipated changes. These transactions apply to a specific estimate period. If the estimate generated by the system is a status purpose only estimate, these transactions have not been "used." They will appear on the next valid estimate generated. If their appearance on the next estimate is not satisfactory, you must use reversing entries before requesting the next estimate from the system.

If the estimate has failed for any reason, the system will print, with one exception, as many of the estimate reports as possible to help you analyze the problem. The one exception, the progress payment voucher, is only printed for successful estimates that are eligible for payment according to the system's standards.

Processing the estimate is done by a series of computer programs that perform the following functions:

- Input edit of the CEM-6101, “Project—Record Estimate Request.”
- Select from the computer file the change order bills that will be used to generate this estimate.
- Select from the computer file the contract transactions that will be used to generate this estimate.
- Process the change orders.
- Process contract items.
- Process deductions.
- Conduct miscellaneous computations.
- Generate reports.

5-103G Approval of Estimates

The authorization of an estimate depends on the type of estimate being run. The following is the general outline and method for approving contract estimates.

5-103G (1) The Resident Engineer

After an estimate has been run, the resident engineer must authorize it before the process of payment is continued. To expedite payment, the resident engineer can authorize through a memo, form letter, or telephone call with subsequent written confirmation to the district office.

5-103G (2) The District Director

At the time the estimate was produced, so was Form FA 729A, “Progress Payment Voucher.” If the estimate is a final estimate, an individual who has been formally delegated by the district director to do so must sign the form.

5-103G (3) Flagging an Estimate for Payment

Flagging an estimate in the computer system for payment indicates that Form FA 729A has been verified andauthorized.

For payments on after-acceptance estimates, semifinal estimates, and final estimates, the Division of Construction progress pay coordinator must flag the estimates in the computer system for payment after the district’s flagging.

5-103H Reports Available Through the Contract Administration System

The CAS provides reports that must be requested specifically. Normally, resident engineers must request reports through the district construction office. Use Form CEM-6002, “Contract Administration System (CAS) Report Requests,” to obtain the reports. The following are the instructions for completing Form CEM-6002.

5-103H (1) District (XX) Estimate Status

This report, which is also available statewide, provides information on the pay status of each contract in the district. For each contract, the report includes the following:

- Contract number
- Date of last estimate processed (if there was one)
- Number of the estimate
- Number of days elapsed since the estimate was processed

- Type of estimate
- Pay status and date paid (if paid)
- Date on which the payment voucher was authorized
- Resident engineer's name and phone number
- Responsible unit
- Password

5-103H (2) Project Management

The project management report is for use by the district office and Division of Construction managers. This report consists of the following two separate reports that are produced whenever "Project Management" is requested.

5-103H (2a) The Project File Status Report

This report lists all contracts in the district (or statewide) that are on the computer's active list. For each contract, the report provides the following information:

- Contract number
- Status
- Date bids were opened
- Date of award
- Date of approval
- Date of acceptance
- Bid amount
- Name of contractor

After bid opening, projects are added to the list automatically. After the final estimate and approvals from the districts and the disbursing office, the Division of Construction removes the projects from the list.

5-103H (2b) The Exceptional Contracts Report

This report lists all contracts for which the following applies:

- More than 60 days have elapsed since the bid opening.
- More than 10 days have elapsed since the completion date and the contract needs an acceptance date.
- More than 45 days have elapsed since completion, but the proposed final estimates have not been run.
- More than 180 days have elapsed since completion, but the final estimates have not been run.

5-103H (3) District (XX) Project Status

This report is for use by construction managers. It lists all active contracts, and for each contract, provides the following information:

- Contract number
- Contractor's name and county-route-post mile

- Date of the last estimate
- Percent complete
- Percent of time elapsed
- Construction allotment
- Total amount paid to date
- Estimated final cost
- Estimated final contingency balance

5-103H (4) Progress Payment-Work Done by Office of Structure Construction (Copies)

This report is for use by the Office of Structure Construction. For details, refer to Volume I, Section 6, of the *Bridge Construction Records and Procedures* manual.

5-103H (5) Project Record-Estimate (Copies)

A request for estimate copies will produce all of the documents that were produced automatically during the previous estimate's run. Normally, therefore, you should not need to order copies through this program. For the estimate, the report contains the following information:

- Schedule of extra work
- Schedule of deductions
- Project record-estimate
- Project status
- Progress payment voucher

5-103H (6) Status of Contract Items

Normally, the district office requests this report monthly for all ongoing contracts. The report must be filed in Category 60, "Contract Administration System Inputs and Reports."

For this report, the system prints one line of information for each contract item and summarizes the net effect of all contract transactions that have been entered against the item. This report allows the resident engineer to review each item and determine whether quantity balances and anticipated changes, among other things, are necessary.

If any particular number on the report seems questionable, the project record item sheets provide supporting detail. For example, if the authorized quantity differs from the bid quantity, the project record item sheets describe, under the item number, any changes due to change orders.

When applicable, take particular care to flag an item "COMPLETE" (using the item final balance transaction on Form CEM-6101) so that an accurate project status will be produced. Remember, flagging an item "COMPLETE" does not mean that contract item transactions will no longer be accepted; it means only that you have commanded the system to keep the item in balance at all times.

5-103H (7) Project Record Item Sheet

Normally, the district office requests this report monthly for all ongoing contracts. The report must be filed in Category 60.

With the following exceptions, the project record item sheets list every contract transaction entered into the system since the beginning of the contract:

- Item and change order final balance transactions will appear only on the report following the next estimate. Thereafter, they are dropped from the report.
- Miscellaneous anticipated change transactions also appear only on the report following the next estimate.

The report lists the contract transactions, first by the estimate number on which they were paid, and then by the page and line number of the input form. The total to date will be printed.

This is a cumulative report. Do not retain previous issues of this report in the project files. However, one issue of the report, usually the one requested immediately after all final quantities have been paid, must be retained in the project's files.

5-103H (8) Status of Change Orders

Normally, the district office requests this report monthly for all ongoing contracts. The report must be filed in Category 60, "Contract Administration System Inputs and Reports."

This report is similar to the status of contract items, which allows the engineer to review each change order.

Use the report to determine when supplemental change orders will be necessary to complete the work. The report also facilitates a review of those change orders where a credit is due Caltrans.

When applicable, flag change orders "COMPLETE" (using the change order final balance transaction) so that an accurate project status can be produced. Similar to flagging a contract item, flagging a change order "COMPLETE" means only that you have commanded the system to keep the change order in balance at all times.

5-103H (9) Change Order Master Listing

Normally, the district office requests this report monthly for all ongoing contracts. The report must be filed in Category 60.

This report summarizes all change orders stored in the computer file. It also contains the change order time extension and change order category code. The report lists each individual supplement with all the information the system contains. Do not retain previous issues in the project's files. However, one issue, usually the one requested immediately after final payment has been made on all change orders, must be retained in the project's files.

5-103H (10) Bridge Quantities by Structure

This report is for use by Office of Structure Construction personnel. It is available on all projects for which Form CEM-6003, "Progress Pay-Estimate Project Initiation or Update," has been filed. The filing of this form indicates a structure work amount and structure numbers have been entered for the contract transaction in accordance with the instructions in Volume 1, Section 6 of the *Bridge Construction Records and Procedures* manual.

5-103H (11) District (XX) Status of Anticipated Changes

This report is for use by the district and Division of Construction managers.

5-103H (12) Project Record-Estimate (Dummy)

A request for this item will produce the same form that was produced automatically when Form CEM-6003, “Progress Pay-Estimate Project Initiation or Update” was filed.

This form is identical to a project record-estimate, except that it does not contain an estimate number or dates and no entries appear under “This Estimate” or “Total Estimate.” It is a blank estimate form, valuable only if it became necessary to make an estimate manually.

5-103H (13) Contract Contents Report

This report contains information that is currently in the file as a result of automatic entries or entries from Form CEM-6003 “Progress Pay-Estimate Project Initiation or Update.”

Most of the information in this report is included already in other reports and forms that are produced automatically. Therefore, you do not need to request it routinely.

5-103H (14) Contract Contents Report-Contract Item Records

This report provides the following information:

- Contract item number
- Contract item index number
- Item description
- Unit of measure
- Bid price
- Bid quantity
- Bid amount
- Amount overbid
- Void items
- Plant establishment items

Most of the information in this report is included already in other reports and forms that are produced automatically. Therefore, you do not need it for routine contract administration.

5-103H (15) Contract Contents Report-Contract Progress

For each contract item, this report includes a detailed analysis of the current and prior quantities and payment status. It also summarizes all other payments or deductions as well as data on contract time. The information in this report is included already in various other reports that are produced automatically. Therefore, you do not need it for routine contract administration.

5-103H (16) DEWRs in Holding File

This report lists change order bills that are in the holding file for all contracts in the district. If there are reports in the holding file, process supplemental change orders to provide additional funds. The system will then automatically release the bills for the next estimate.

5-103H (17) Daily Extra Work Report

Copies of daily extra work reports are produced under the procedure outlined earlier in this section under "Change Order Billing." You can obtain copies by using the second page of the report request form.

5-103H (18) Rental Rates and Codes for Miscellaneous Equipment

This report provides a listing of equipment codes and related descriptive information for equipment that is not included in the Labor *Surcharge and Equipment Rental Rates (Cost of Equipment Ownership)* book.

5-103H (19) Reports for the Office of Structure Construction

In addition to the reports discussed above, the contract administration system provides reports for the Office of Structure Construction. For details, refer to Volume I, Section 6, of the *Bridge Construction Records and Procedures* manual.

5-103I Field Audits by Accounting Office

In accordance with instructions from the Division of Administrative Services, personnel from the Accounting Office will periodically review record-keeping procedures for construction projects. The accounting reviewer will prepare a report of the findings, a copy of which will be sent to the deputy district director of construction and the resident engineer.

District construction must then report back to the Accounting Office, stating what actions it took in response to the report's recommendations. If the district's actions result in a dispute, the deputy district director of construction will resolve the dispute.

5-104 Final Construction Project Records

5-104 Final Construction Project Records

5-104A General

Construction project records consist of all material in the construction files, whether in the field office or the district construction office. This section contains guidelines for the disposition of construction project records after Caltrans makes the final payment. This section also provides guidelines for allowing public access to construction project records and for producing a set of as-built plans for each completed construction project. In addition to construction project records, the district keeps a project history file. When the construction project is completed, the resident engineer initiates assembly of the project history files by transmitting designated records to the district construction unit for compilation. The project history file is stored in a secure, central file location within the district. For information about the project history file, refer to Chapter 7, "Uniform File System," of the *Project Development Procedures Manual.* As part of the project history file, the construction records retention schedule is compiled with records that are retained permanently by the districts. For specific records stored in the records retention file, refer to Section 5-104C "Disposition of Construction Project Records."

5-104B Public Access to Project Records

The California Public Records Act permits anyone to obtain any written information relating to the conduct of the public's business that is prepared, owned, used, or retained by any state agency, regardless of the physical form or characteristic of the writing. Although the act includes exemptions for certain categories of records, most construction project records fall within the description of documents that must be produced upon proper demand. Except for preliminary drafts or notes that are not retained in the ordinary course of business, permanent project records that are reasonably identified are subject to inspection and copy.

Records exempt from disclosure include the following:

- Estimated project cost before bidding.
- Contract claim analysis.
- Personal information, such as home addresses, telephone numbers, medical records, and similar files, the disclosure of which would constitute an unwarranted invasion of personal privacy.
- Accident reports. If accident reports produced by another agency are requested, such as accident reports by the California Highway Patrol, refer the requester to the other agency.

If copies of payroll records are requested, refer to Section 7-1.02K(3) [*7-1.01A*], "Payroll Records," of the *Standard Specifications* for the procedures to follow.

Resident engineers should refer all requests for copies of any records to the district construction office and follow procedures established in the district for copying and charging for record copies.

Allow contractors and subcontractors to review records used to determine contract payment in the construction field office.

5-104C Disposition of Construction Project Records

District construction personnel who are responsible for the disposition of construction project records must coordinate their activities with the district records officer.

The district construction office must establish a procedure for handling construction project records. This procedure must be in accordance with the statewide records retention schedule and achieve the following objectives:

- Relieve the resident engineer of the responsibility for storing the records before or at the time final payment is made.
- Avoid unnecessary long-term storage of duplicate copies.
- Before the records are destroyed, transfer material that has historical value to the project history file.
- Retain construction project records as follows:
  1. For projects that involve federal participation, retain the records for a minimum of 3 years after submission of the final voucher.
  2. For projects that do not involve federal participation, retain the records for a minimum of 3 years after the date on which the final estimate is scheduled for payment.
  3. For projects on which some legal question exists, such as a pending claim, a labor compliance case, or litigation, retain the records for 3 years after settlement. The district construction office must send a memorandum to the district records officer to hold these records until further notice.

When the district no longer needs the records in categories 1, 2, 3, 4, 7, and 28, destroy them. Do not retain them as part of the project construction records.

After records from the resident engineer's office are sent to the district construction office, eliminate duplicate records.

The construction records retention schedule lists the length of time certain files must be retained, as well as files that must be kept permanently in the project history files per federal requirements. The files that are retained permanently are listed below:

- Category 11—Project Information

  Detailed Expense of Project Cost
  Notice of Award of Contract
  Contract Special Provisions
  Notice of Approval of Contract
  Start of Work Notice
  Executed Contract
  Proposal and Contract Forms (Bonds)

- Category 12—Contractor

  Insurance for Contractors

- Category 14—Photograph Records/Videos

  Before Construction
  During Construction
  After Construction

- Category 16—Utility Agreements
- Category 18—Agreements

  Right-of-Way Agreements
  Forest Service Agreements
  Borrow Agreements (between state and owner)
  Disposal Agreements (between State and owner)
  Service Agreements (Service agreements charged to contract allotment)

- Category 19—Hazardous Waste/Materials Documentation
- Category 27—Progress Summaries

  Weekly Statement of Working Days (CEM-2701)

- Category 49—Change Orders

  Contract Change Orders (CEM-4900)
  Transmittal Memorandums (CEM-4903)

- Category 61—Project Costs

  Proposal Final Estimate
  Final Estimate
  Invoices and Receiving Records (if applicable)

- Category 63—Contract Acceptance Documents

  Contract Acceptance Recommendation
  Contract Acceptance (CEM-6301)

When records are sent from the district construction office to the State Record Center or to another district, prepare a transmittal list specifying the contents of each box. In a separate file in the district construction office, retain a copy of the transmittal list.

The *Bridge Construction Records and Procedures* manual should be referenced for bridge and structure's related records that are transmitted to the Office of Structure Construction at the completion of the project for permanent storage.

5-104D As-Built Plans

Districts are responsible for all as-built road plans, and the Office of Structure Design is responsible for all as-built structure plans. To handle as-built plans, use the following procedure:

The district design unit will give the resident engineer full-size prints of all road plans. Prints of structure plans will be supplied to the structure representative. The plans may also be transmitted in electronic form when field forces have the capability of computer-aided drafting and design (CADD). As-built information is recorded on the full-size drawings or recorded on a set of contract plans using CADD.

Each sheet of as-built plans must be clearly identified as such. All sheets upon which changes are made must contain the name of the resident engineer or structure representative.

5-104D (1) District Procedure on As-Built Plans

The district will maintain a set of original project plan sheets. Field changes will be made on full-size prints or in a field CADD system and afterwards transferred to the original CADD files in the district office. The set of plans, with changes delineated by the district design unit, becomes the as-built plans.

To attain uniformity in final project plans, include the following data on the as-built plans:

- Change order number.
- Revisions in alignment and right of way.
- Grade revisions in excess of 0.1 foot.
- Changes in length, size, flow line elevations, and station of culverts. When alternate types of culverts are permitted, show which alternate was used.
- Drainage changes.
- Location of sewers, conduits, and other features.
- Location of monuments, bench marks, freeway fences, and gates.
- Revision of typical cross sections.
- Changes in pavement lanes, tapers, ramps, frontage roads, road connections, driveways, sidewalks, islands, and median openings.
- Curb and gutter changes.
- Electrical conduits, pull boxes, and service points.

- Revision in location of utility crossings and irrigation crossovers.

Do not show the following on as-built plans:

- Construction quantities.
- Property fences.
- Miscellaneous small features, such as markers and delineators, which are readily changed by maintenance forces.

The resident engineer must complete the as-built plans as soon as possible after work is completed, but no later than 60 days after contract acceptance.

After the district design unit has completed the transfer of as-built information on the final as-built drawings, the unit will return the plans to the resident engineer for review and signature of final approval. For the processing and disposition of as-built plans after the construction review, refer to Chapter 15, "Final Project Development Procedures," of the *Project Development Procedures Manual*.

5-104D (2) Procedure on As-Built Plans for Bridges and Structures

The Office of Structure Construction must handle structure as-built plans in the following manner:

- From the resident engineer, obtain full-size prints of all sheets with "Structure" signature blocks. If these prints are not available from the resident engineer, the structure representative must contact the Office of Structure Design.
- The structure representative will make the as-built corrections to these prints and forward them to the Sacramento office of the Office of Structure Construction. These corrected prints must be forwarded to the Sacramento office as soon as possible after completion of the structures, but no later than 30 days after the completion of the project.
- For prints of projects consisting solely of roadside rests or maintenance facilities, the Sacramento office of the Office of Structure Construction must forward the prints directly to the Office of Structure Design, documents unit. All other projects must be forwarded to the Office of Structure Maintenance and Investigations, which determines which sheets should be microfilmed for the structure files. In identifying prints to be processed, the Office of Structure Maintenance and Investigations must include all sheets prepared by the Office of Transportation Architecture. This office will then forward all the prints to the Office of Structure Design, documents unit.
- Those prints not identified for filing by the Office of Structure Maintenance and Investigations will be forwarded to the appropriate district office for the preparation of as-built plan sheets. The Office of Structure Design will make the as-built corrections on the original plan sheets. If the original plan sheet is not presently stored in the Office of Structure Design, it may be obtained from the district.

On state projects that do not have a representative from the Office of Structure Construction, the resident engineer must make the as-built changes on the full-size prints bearing "Structure" signature blocks. As soon as possible after completion of the structures, forward the prints to the Office of Structure Construction in Sacramento. The procedure outlined above must then be followed.

When the corrections have been made, the as-built plan sheets will be forwarded to headquarters microfilm services unit for microfilming and distributing.

On projects funded by others, where the local entity or private entity is the sponsor, follow the procedure for as-built plans for bridges and structures described in the Office of Special Funded Projects' *Information and Procedures Guide* and the *Encroachment Permits Manual.*

For additional guidelines and details for completing structure as-built plans, refer to the *Bridge Construction Records and Procedures* manual.

5-104D (3)   Projects Not on State Highways

On all district-administered projects not on state highways, the information to be included on as-builts will remain the same as for contracts on state highways. The district will be fully responsible for completing as-built project plans and forwarding them to the local agencies. If the district desires for its own records, these plans may be sent to headquarters microfilm services unit for microfilming before being returned to the local government.

The engineer responsible for structure work will place as-built corrections on structure plans of all state and federally funded projects for local roads and streets. On Caltrans administered contracts, follow normal Caltrans procedures for processing these plans. On locally administered contracts, the engineer responsible for structure work will provide the Office of Structure Design, Local Assistance Section, a set of original tracings or duplicates of reproducible quality with as-built corrections. After microfilming, return these tracings or duplicates to the local agency.

Section 5 Emergency Contract Administration

This manual is being updated to reflect changes from the 2006 to the 2010 *Standard Specifications*. Bracketed section numbers refer to the 2006 *Standard Specifications*.

Section 5 Emergency Contract Administration

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5-501 General

5-501 General

An emergency contract is a G-11 resolution that is authorized by a director's order. A director's order is a document that approves the use of special authority, delegated by state law, to set aside normal contracting procedures so that Caltrans can quickly initiate and complete emergency work sooner than can be done under normal processes. The district maintenance unit has the responsibility to obtain a director's order for emergency work. Director's orders may also be obtained to prevent the imminent threat of catastrophic damage.

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

Currently, a district director can approve emergency contracts costing up to $270,000. For emergency work exceeding this threshold amount, the director or delegated deputy director has approval authority.

For guidelines on director's orders, supplemental director's orders, and supplemental funds, refer to the Caltrans Division of Maintenance intranet site at:

http://onramp.dot.ca.gov/hq/maint/orway/ha23/index.htm

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

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

This section provides guidelines to assist resident engineers in administering emergency force account (EFA) and emergency limited bid (ELB) contracts. The *EFA & ELB Desk Guide* is available to aid construction staff and is on the Division of Construction, Office of Contract Administration intranet site:

http://projdel.dot.ca.gov/construction/contractmanagement/cpm/EFA_ELB_guidelines.pdf

5-502 Emergency Force Account Contracts

5-502 Emergency Force Account Contracts

When time is of the essence to reopen a roadway or facility, or the need to prevent imminent failure exists, a "no-bid" (sole-source) emergency contract is allowed when covered by a director's order. The Division of Administration—Procurement and

Contracts (DPAC) typically prepares and executes these service contracts. The resident engineer becomes the contract manager on a force account contract once work begins.

Form ADM-0366, “Confirmation of Verbal Agreement for Rates and Conditions on Emergency Force Account Highway Projects,” is the document that allows the contractor to begin work with verbal approval.

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

5-503 Specifications

5-503 Specifications

The contract manager prior to the beginning of work will select the appropriate form depending on the federal funding status and if the project is an EFA or ELB. In the description portion of Form ADM-0366, add the following:

- A brief description of the work and estimated total cost.
- The location and limits of the work.
- The business enterprise participation goals, if required.
- The statement: “All work will be paid for in accordance with Section 9-1.04 [*9-1.03*], “Force Account,” of the Caltrans *Standard Specifications* dated [*year*] as amended by the attached provisions.”

Contact DPAC for boilerplate contract and sample provisions on emergency force account and emergency limited bid contracts.

5-504 Selection of Resident Engineer and Support Staff

5-504 Selection of Resident Engineer and Support Staff

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

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

5-505 Contractor Selection and Notification

5-505 Contractor Selection and Notification

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

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

- Availability of resources
- Mobilization response time
- Proven management abilities

- Current contractor’s license
- Corporate cooperation

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

When resource conflicts occur between ongoing and emergency work, and the selected contractor is the best for the emergency contract, district construction must determine the best course of action.

To avoid work conflicts, generally keep to a minimum the number of contractors; however, on large emergency contracts, multiple contractors may be necessary.

A representative from the Caltrans unit coordinating contractor selection will meet with a representative from the selected contractor to sign Form ADM-0366. A senior-level engineer or higher must also sign Form ADM-0366 when district construction coordinates the selection of the contractor.

5-506 Initial Stages of the Project

5-506 Initial Stages of the Project

A director’s order may take several days to obtain. However, in severe emergencies it is possible for the district maintenance unit to obtain verbal approvals by telephone in less than a day from the director or delegated deputy director.

While the director’s order is being obtained, representatives from the appropriate district units and divisions, such as district construction, maintenance unit, design unit, and environmental unit, should meet to discuss repair alternatives, cost estimates, and anticipated work duration.

The estimated cost and duration should be realistic. To cover unexpected situations, it is appropriate to place adequate cost and contingency time in the estimates.

During the initial meeting with the contractor, the resident engineer should discuss the scope of work, the proposed types of equipment and personnel, and expectations for performance.

Specifically document all discussions regarding safety. The discussions should include the nature of the operations, interaction with traveling public, worker fatigue, code of safe practices, and designation of the contractor’s safety officer. Top priorities are the safe passage of public traffic through or around the work and the safety of workers.

Develop a traffic management plan for the project.

5-507 Tracking Costs

5-507 Tracking Costs

The director’s order allows you to proceed with the emergency contract work. It describes the work’s scope and limits of the work, funding allocation, and duration. You are legally allowed to authorize fund expenditures up to the director’s order amount.

On emergency force account contracts, daily costs can be significant. Resident engineers or other project staff must include complete records of labor, equipment, and materials in the daily report. At the end of each shift, reach agreement with the contractor on this work. Make a daily estimate of costs based on the daily report. Encourage the contractor to submit a weekly bill itemizing labor, equipment, and material used on the contract.

During administration of an emergency force account or emergency limited bid contract, the resident engineer must ensure that the cost of work performed by the prime contractor and all subcontractors does not exceed available funding. The resident engineer authorizes only work within the general scope of the damage assessment form (USDOT/FHWA DAF) and forecasts expenditure of available funds to ensure work performed does not exceed funding of the director's order and any approved supplemental director's orders. Refer to Section 5-2, "Funds," for the G-11 additional funds process.

Use the extra work billing system to facilitate cost tracking. The project can be set up in Contract Administration System (CAS) after the approval of the confirmation of verbal agreement and prior to the contract approval, but progress pay estimates cannot be requested until the contract is approved in ERP Financial InfraStructure (E-FIS). EFA and ELB projects in CAS use the district and expenditure authorization (EA) rather than the DPAC contract number. Payment for all emergency contracts estimated at greater than the minor B contract limit in construction cost go through the CAS. Minor B contracts must have an EA ending in "5" in accordance with the Division of Accounting's *Accounting Manual*. Do not put phase 5 contract EAs into CAS. Receiving records are used to compensate emergency force account and emergency limited bid contract work for minor B contracts. The existing procedure for use of receiving records (Form FA-1226A, "Receiver") remains the same.

The Division of Construction, Office of Contract Administration website includes two new links to emergency contracting information—"Emergency Contracting (DPAC)," and "Emergency Contracting (Maintenance)":

http://pd.dot.ca.gov/construction/contractmanagement/cmpage.htm

http://admin.dot.ca.gov/pc/index.shtml

http://onramp.dot.ca.gov/hq/maint/orway/ha23/index.htm

The DPAC intranet website includes a progress tracking document named "EFA Status." The report shows progress of all EFA and ELB contracts, and includes the requisition number (RQS), EA, and DPAC contract numbers, as well as the name of the contract's analyst. The website also contains updated Form ADM-0366, emergency contract processing guidelines, and RQS number training:

http://admin.dot.ca.gov/pc/index.shtml

The Maintenance intranet website contains updated information about director's orders, supplemental director's orders, supplemental funds requests, damage assessment forms, and boilerplate state and federal emergency force account and emergency limited bid contracts:

http://onramp.dot.ca.gov/hq/maint/

For additional information on force account billing and record keeping, refer to Section 3-9, "Payment," of this manual.

5-508 Prosecution of the Work

5-508 Prosecution of the Work

The resident engineer must define the work to be done but only provide general direction for accomplishing the work. Generally, the contractor must select the means and methods to be used.

The following list contains items that the resident engineer must perform or of which the resident engineer must be aware:

- As the work progresses, work plans will probably need adjusting. If you believe the emergency work is not progressing as quickly as it should, seek management advice, and discuss with the contractor ways to increase production. Be innovative by using the following:
    1. Concurrent operations.
    2. Multiple shifts.
    3. Local material sites.
    4. Detours to limit the effects on traffic.
    5. Equipment and resources most appropriate for the changing circumstances of the work to be performed.
- Although cost effectiveness is always desirable, in some emergency situations production must predominate, sometimes requiring excess equipment to sit idle to gain overall production.
- Ensure that the means and methods the contractor proposes are safe and appropriate.
- To ensure that environmental mitigation, compliance requirements, and commitments are adhered to, always coordinate with your contractor selection coordinator, environmental-construction liaison, district or regional environmental office, and project manager.
- Continuously try to prevent improper storm water runoff. Some operations may have unavoidable sediment runoff. To ensure the timely involvement of regulatory agencies, have prior discussions with them, both during the emergency and in the future.
- The governor's emergency proclamation for a disaster may temporarily waive the regulations of the Surface Mining and Reclamation Act of 1975 (SMARA). This waiver is intended to allow Caltrans to use non-SMARA certified locations if no other option is available to reopen a closed facility during the height of an emergency. (Mining operations determined to be in compliance are listed on the AB 3098 SMARA Eligible List. Obtain this list from the Division of Construction or the Department of Conservation website:

    http://www.conservation.ca.gov/omr/ab_3098_list/Pages/Index.aspx

5-509 Functional Unit Support

5-509 Functional Unit Support

District management must assign a project manager to emergency contracts. The project manager will assist the resident engineer in coordinating support from other Caltrans units, other government agencies, the community, and legislators. To allow you more time to properly administer the contract, fully use the project manager and other appropriate units.

5-510 Public Relations and Communication

5-510 Public Relations and Communication

Caltrans management and the public need accurate project information. To provide this information, follow the guidelines and procedures in Section 1-2, "Public Relations," of this manual. When estimating completion dates, be realistically conservative.