



Construction Management and Administration Guide

Version 1.0 - JUNE 17, 2019



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Construction Management and Administration Guide

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Acronyms and Definition of Terms

A&E	Architectural and Engineering
AAA	Advertise, Award, and Administration
Alameda CTC	Alameda County Transportation Commission
Cal-OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
Commission	Alameda CTC's governing body
CCO(s)	Contract Change Order(s)
CFR	Code of Federal Regulations
CM	Construction Management
CMAG	Construction Management and Administration Guide
CMT	Construction Management Team
CMPM	Construction Management Project Manager
DBE	Disadvantaged Business Enterprise
DBELO	Disadvantaged Business Enterprise Liaison Officer
DRB	Dispute Review Board
DVBE	Disabled Veterans Business Enterprise
EEO	Equal Employment Opportunity
LAPM	Caltrans Local Assistance Procedures Manual
LBCE Program	Local Business Contract Equity Program
LBE	Local Business Enterprise
NOC	Notice of Completion
NOCC	Notice of Construction Completion
NTC	Notice to Contractor
NTP	Notice to Proceed
OE	Office Engineer
PE	Professional Engineer (licensed)
PIO	Public Information Officer
PPC	Alameda CTC Programs and Projects Committee
PS&E	Plans, Specifications and Estimates
QAP	Quality Assurance Program
QMP	Quality Management Plan (also referred to as Quality Assurance Plan)
RE	Resident Engineer
SBE	Small Business Enterprise
SLBE	Small Local Business Enterprise

Caltrans Oversight Engineer: A Caltrans employee who performs independent quality assurance of the activities being performed by the resident engineer, the local agency structure representative, and others assigned to a construction project. The Oversight Engineer is the local agency's primary Caltrans contact. The Oversight Engineer ensures compliance with applicable state and federal regulations, contract requirements, Caltrans standards and practices, encroachment permit, and cooperative agreement requirements.

Construction Manual: The Caltrans Construction Manual used as a resource for all personnel engaged in contract administration. The manual establishes policies and procedures for the construction phase of Caltrans projects.

Contingency: A budgeted line item in a construction contract, established in the Resolution to Award, which sets aside funds to pay for unforeseen construction issues that may arise.

Contractor: The Prime Contractor responsible for the construction of a project.

Construction Allotment: The total budgeted (funded) amount established to Award a construction contract. The Construction Allotment is equal to the total of bid items (contractor's total bid amount) + Supplemental Work Funds + Owner-Furnished Materials + Contingency.

Cooperative Agreement (Co-Op): A formal, legally binding contract between (or among) agencies. Cooperative agreements outline responsibilities and respective obligations (including cost sharing) of the participants. This contract may address more than just the project construction. Cooperative agreements and maintenance or ownership obligations are required when exchanges of funds or commitments of resources occur.

Owner-Furnished Materials: Materials to be furnished by the owner(s) and provided to the contractor for use or installation in a construction contract. Owner-furnished materials are not part of the contractor's bid, but they are included in the total construction allotment for a project.

Partnering: A relationship between the owner and the contractor, formed in order to effectively complete the contract to the benefit of both parties. Through trust, cooperation and teamwork, the goal is to resolve conflicts at the lowest possible level.

Staff Report: The Staff Report is the document used by Alameda CTC staff to request an action by the Commission. It may be used to request approval of contracts, change orders, co-op agreements, and contract amendments, and to officially establish or change a policy or procedure.

Supplemental Work: The anticipated work within the scope of the project which is included in the engineer's estimate for a project to cover work of such an uncertain nature that is cannot be quantified as a contract bid item.

References and Guiding Documents

The advertisement, award, and administration of construction contracts and project closeout shall be performed, at a minimum, in accordance with the applicable provisions of the following documents;

Local:

- Local and/or Regulatory Agency Permit Requirements
- Project Special Provisions & Project Plans (PSP & PP)
- **Alameda CTC Administrative Code**
- **Alameda County Transportation Commission Cost Estimating Guide**
- **Alameda CTC Local Business Contract Equity Program**

State:

- **California Public Contract Code**
- **California Prevailing Wage Determinations**
- **Cal-OSHA**
- **Caltrans Local Assistance Procedures Manual (LAPM)**
- **Caltrans Standard Specifications & Plans (SS & SP)**
- **Caltrans Traffic Manual**
- **Caltrans Manual of Uniform Traffic Control Devices (MUTCD)**
- **Caltrans Construction Manual**
- **Caltrans Guide to Project Delivery Work Plan Standards, Office of Statewide Project Management Improvements**

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1. Introduction - Background

Alameda CTC, as the successor to three previous agencies: Alameda County Transportation Authority (ACTA), Alameda County Transportation Improvement Authority (ACTIA) and Alameda County Congestion Management Agency (ACCMA), is a joint powers agency which plans, funds and delivers a broad spectrum of transportation projects and programs to enhance mobility throughout Alameda County,.

Alameda CTC also serves as the Managing Agency for the Sunol Smart Carpool Lane Joint Powers Authority (Sunol JPA) which was created in February 2006 to plan, design and construct, and then administer the operation of a value pricing HOV program on the Sunol Grade segment of Interstate 680 in Alameda and Santa Clara Counties.

Alameda CTC directly implements and oversees the delivery and management of regionally significant, multi-jurisdictional, and complex capital projects in Alameda County through various phase of delivery from scoping through construction. To deliver its construction program of projects, Alameda CTC retains the services of qualified firms to provide professional support services including design, construction management, surveying and other required expertise.

In the past few years, significant new sources of funding have become available for transportation including Senate Bill 1 (April 2017) which is anticipated to provide \$54 billion in state funding over the next decade and Regional Measure 3 (June 2018) which is estimated to generate \$4.45 billion for transportation capital investments over a 25-year period. Coupled with local sales tax measure funds, these funds will create opportunities for many Alameda County projects to be constructed in the immediate future.

To ensure the effective and efficient delivery of Alameda CTC’s construction program and to allow Alameda CTC to accept and apply external funds for construction, it is necessary to have documented agency construction administration procedures. The Alameda CTC Construction Management and Administration Guide (CMAG) as presented is built upon the guides from Alameda CTC’s predecessors (ACCMA Construction Contract Administration Guide, January 2002, and Draft ACTIA Construction Contract Administration Procedures) and incorporates clarifications and Best Management Practices (BMPs) and reflects changing policies, laws and procedures.

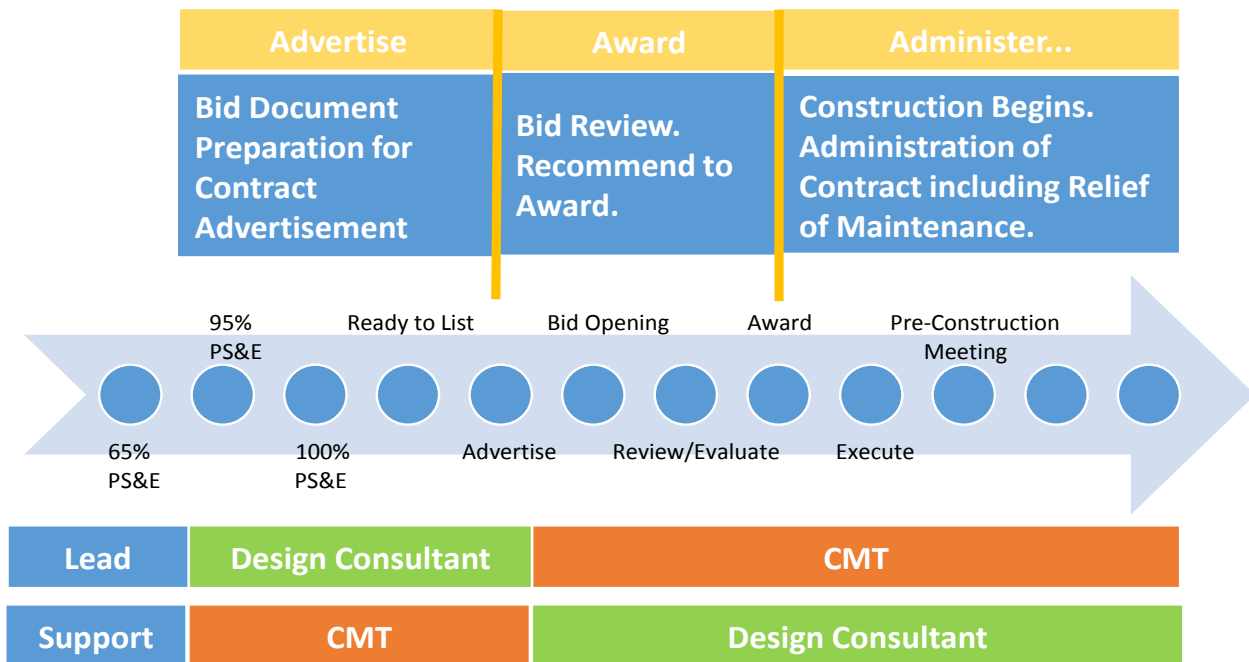


Figure 1: Project Delivery Schedule from Design to Construction. Refer to Section 1.2.

1.1 Purpose

This Construction Management and Administration Guide (CMAG) documents Alameda CTC's procedures for the preparation of project documents for advertising, awarding and administering construction contracts; including contract acceptance and closeout requirements. The CMAG will assist Alameda CTC and its agents to effectively and efficiently administer construction projects implemented by Alameda CTC from bidding document preparation to contract closeout.

1.2 Roles and Responsibilities

The following summarizes the roles of the various participants in the administration of Alameda CTC construction projects. The optimum time to have the CMT services available is before the 95% PS&E milestone such that the Constructability Review may be adequately performed.

- The Commission establishes and maintains policies and programs supporting the development of capital projects in cooperation with local, regional, state, and federal agencies.
- The Executive Director or designee is responsible for executing all funding agreements and contracts and is the representative of Alameda CTC to the Commission. The Executive Director designates the following responsibilities: Commission Engineer and authorized delegates of the Commission Engineer and Agency's DBE Liaison Officer.
- The Commission Engineer, signs plans for conformance with project requirements and design exceptions, certifies the utilities and right-of-way, and approves contract change orders (CCOs) and other documents.
- Authorized delegates of the Commission Engineer, signs plans for conformance with project requirements and design exceptions, certifies the utilities and right-of-way, and approves CCOs and other documents. Any other delegations must be specifically authorized in writing.
- The Disadvantaged Business Enterprise Liaison Officer (DBELO) is responsible for implementing the requirements contained in the DBE Implementation Agreement for Local Agencies between Caltrans and Alameda CTC. The DBELO will have direct independent access to the Executive Director concerning DBE matters.
- The Employee in Responsible Charge for a particular phase or project is the Director of Project Delivery or other delegated staff.
- The Director of Project Delivery (Construction) oversees Alameda CTC's Construction Program.
- The Alameda CTC Contract Administrator is the Alameda CTC staff person who performs public contract administration duties including solicitation of administration, professional, and construction contractor services; assists in negotiating contracts and contract language; oversees and manages invoices; and monitors contract compliance.
- The Alameda CTC Project Manager is responsible for the delivery of a specific capital project or phase thereof. This position may be either a staff person or a consultant.
- The consultant Construction Management Team (CMT) will provide all construction management services necessary to assist the Alameda CTC Project Manager administer the construction of a specific project. During the design phase, and as required by Alameda CTC, the CMT may provide constructability review, independent cost estimates, outreach support, and risk monitoring documentation. On large complex projects, a Construction Management Project Manager (CMPM) may be provided by the CMT to oversee and be responsible for assisting with the advertisement, award, and administration of the construction contract and act as liaison between the CMT and Alameda CTC. A sample scope of services is provided in Appendix A.
- The Design Consultant serves as the Engineer of Record for a specific project and will provide design services during construction, complete as-built plans, and R/W documentation.

- Alameda CTC's Legal Counsel (Legal Counsel) is responsible for the legal review of processes, procedures and all related contracts associated with the construction administration of Alameda CTC projects.

Specific responsibilities for the various roles in construction contract administration are further described below.

1.3 Review and Updates

This guide is intended as a living document to be updated periodically to incorporate revisions, clarifications, and changing policies, laws, and procedures. The Executive Director is authorized to make changes to ensure compliance with contracting laws and as may be required to allow Alameda CTC's ability to accept external funds on its construction projects.

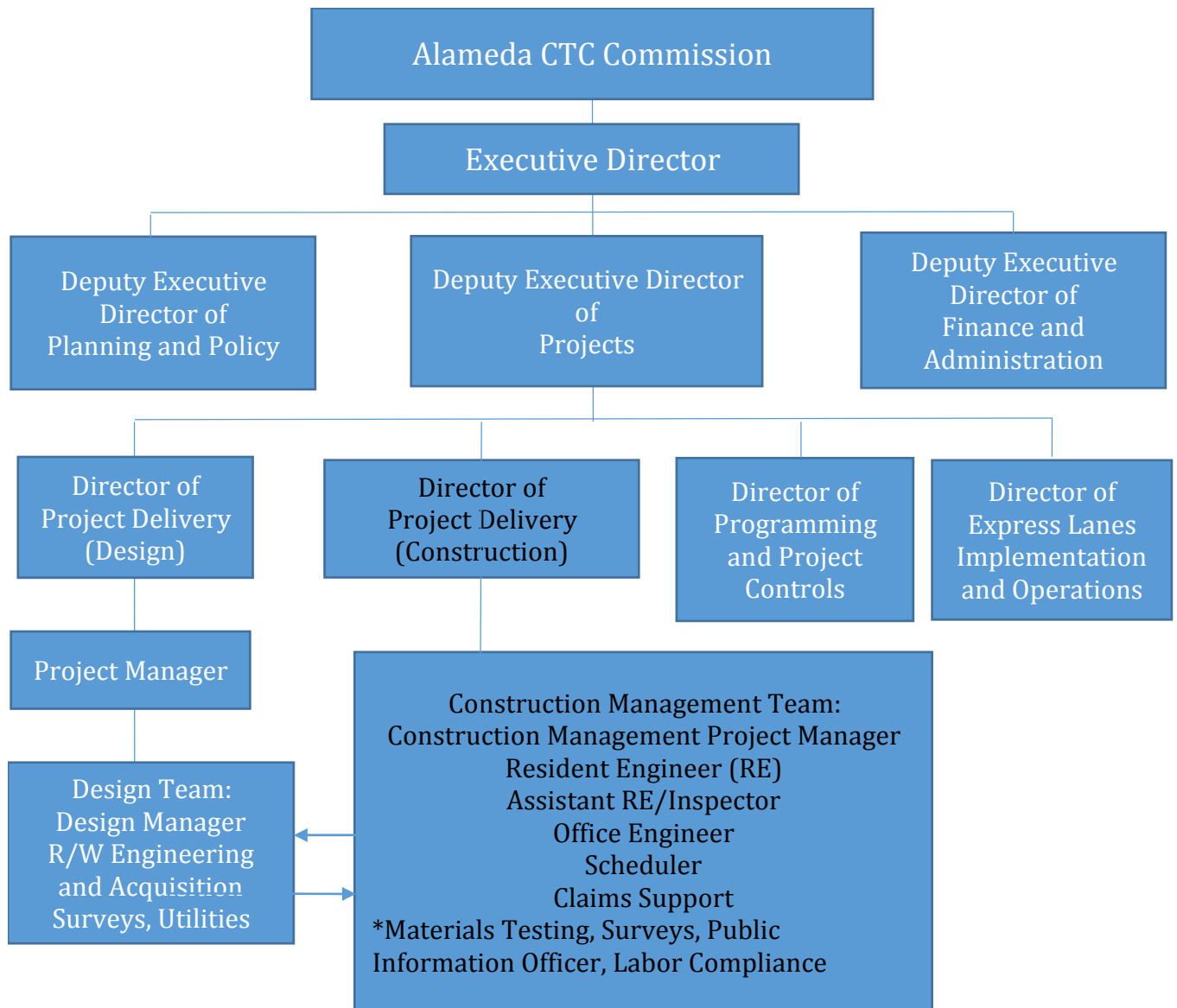


Figure 2: Organization

**May be performed under separate contract (s) or by Alameda CTC staff to most effectively deliver the project.*

2. Contract Advertisement

The CMT shall adhere to the applicable rules and regulations listed in Chapter 15, "Advertise and Award Project," of the Caltrans Local Assistance Procedures Manual (LAPM) including the following requirements set forth in this section.

2.1 Bidding Document Preparation

The Design Consultant, in coordination with the CMT, will prepare the bid documents, including project plans and specifications, based upon Alameda CTC's standard forms or other supplied materials. The Alameda CTC PM is responsible for the management of this effort and the administration of the design consultant's design services during construction phase.

The bid documents shall conform to the requirements of the funding sources, incorporate the appropriate provisions from the Caltrans Division of Local Assistance "Sample Boilerplate Contract Documents," and include the Alameda CTC LBCE Program or DBE goals as applicable. When the Alameda CTC LBCE Program is not required, the use of LBEs and SLBEs shall still be encouraged. For details and discussion on DBE considerations, refer to LAPM Section 9.

The need for a constructability and biddability review of the bid documents by the CMT will be considered by the Alameda CTC PM on a project by project basis. The Alameda CTC PM shall determine if all the constraints have been cleared and the funding in place to designate the project "Ready to List" (RTL). Constraints include items such PS&E complete, Right of Way (R/W) certification, permits obtained, and funding authorizations in place. Funding for each project may vary and all funding shall be authorized prior to the advertisement of the project.

The Alameda CTC Contract Administrator shall confer with the CPM to determine how many sets of bidding documents will be needed to advertise the project and the price for each set.

2.1.1 Contractor Outreach

Depending on the complexity and schedule of the project, general economic conditions, or other factors (such as specialty work or funding utilization goals) which may be considered as potential impacts to the competitive bidding process or to the number of potential bidders, the Alameda CTC PM may elect to conduct a contractor outreach session prior to advertising. The Alameda CTC PM in coordination with the CMT will coordinate the process for notifying the construction community of the event and perform the overall coordination of the outreach session.

2.2 Contract Advertising and Bidding

The Alameda CTC PM shall ensure that the Commission has authorized the agency to advertise and publicly open all bids received prior to advertising a contract for award. Any additional approvals from funding agencies must also be secured prior to advertisement.

The CPM shall prepare a Notice to Contractors (NTC) and will publish the NTC to the applicable bid boards, news publications, and Alameda CTC's website. Contractors from prior outreaches or from other related interest lists shall receive notice by email that the NTC has been published. The NTC should include the time, date, and location of a Pre-Bid Conference (see 2.2.2), if applicable. See Appendix F for a sample template. The advertisement period officially starts on the first date of such publication.

2.2.1 Bidding Document Distribution

The NTC shall include instructions to prospective bidders for obtaining the bid documents from Alameda CTC. The CPM shall review the current Alameda CTC approved list of builders exchanges and plan rooms (refer to Appendix E) and if the list does not adequately address the

project needs, obtain approval from the Alameda CTC PM for additional listings. The CMPM shall issue sets of the bid documents to builder's exchanges and plan rooms at no cost. NTC will accompany the bid document to the builder's exchanges and plan rooms. If bid documents are issued through local print services, the Alameda CTC Contract Administrator will coordinate with the print service to record the contact information of all purchasers of the bid documents. The Alameda CTC Contract Administrator, in coordination with the CMPM, shall maintain a current listing of all plan holders of record.

2.2.2 Pre-Bid Conference

The Alameda CTC PM will determine the need for the Pre-Bid Conference and whether attendance will be required in order to submit a bid. The purpose of a Pre-Bid Conference is to direct attention to any critical aspects of the project, to allow those prospective bidders to ask questions and to gauge contractor interest in the project. Low attendance at the Pre-Bid Conference may indicate a need for additional outreach efforts to ensure a sufficient number of bids are received. Minutes of the Pre-Bid Conference will be prepared (including the meeting sign-in sheet) will be provided to all attendees and all plan holders of record and also posted on the Alameda CTC website.

Considerations for a Mandatory Pre-Bid (MPB) may include: as a race-neutral measure for federally funded projects or unique features of a site or project that requires a site visit. The Alameda CTC PM will coordinate with the Alameda CTC Contract Administrator and CMT to conduct the Pre-Bid Conference.

For additional considerations and planning for a MPB, refer to Caltrans Mandatory Pre-Bid Guide (http://www.dot.ca.gov/obeo/docs/MPB_Guide.pdf).

2.2.3 Bidder Inquiries

The Alameda CTC Contract Administrator will be the single point of contact for bidder inquiries throughout the advertising period. The NTC will include specific instructions for submitting bidder inquiries. Bidder inquiries will be accepted no later than 5 p.m. six working days prior to bid opening date.

The Alameda CTC Contract Administrator will provide the bidder inquiries to the CMPM, who will work with the Design Consultant to develop a response for the Alameda CTC PM. The Alameda CTC PM will seek input and approval from Legal Counsel and then provide the approved response to the Alameda CTC Contract Administrator for distribution. The Alameda CTC Contract Administrator, in consultation with the CMPM, will ensure that all bidder inquiries and responses are recorded and transmitted to all plan holders of record generally not less than 5 p.m. four working days prior to bid opening. The intent of this requirement is to provide the bidders sufficient time to respond and/or address the bidder inquiries or to postpone the bid submittal, if necessary.

2.2.4 Addenda

If matters or questions arise during the advertisement period that are deemed to require clarifications of the bidding documents, the CMPM, with appropriate assistance from the Design Consultant, will prepare an addendum for the Alameda CTC PM to review. Once the Alameda CTC PM and Legal Counsel have reviewed and are satisfied with the addenda, it will be transmitted to the Commission Engineer for approval and signature. The Commission Engineer will provide the approved addenda to the Alameda CTC Contract Administrator who will then issue to all plan holders of record and post it on the Alameda CTC website. Addenda should generally be issued no later than 5 p.m. four working days prior to bid opening.

2.2.5 Bid Submittal and Receipt

The NTC will instruct bidders to submit their sealed bids to the Alameda CTC Contract Administrator at the Alameda CTC offices during normal business hours and prior to the time specified. The Alameda CTC will not accept bids after the specified time. The Alameda CTC Contract Administrator will be responsible for safeguarding all accepted bids. As bids are received, they shall be logged in and stamped with the time and date and assigned a bid number or ID. The bids shall be retained in a secure place until the designated time when they are publicly opened. Negotiation with contractors during the period following the opening of bids and before the award of contract shall not be permitted.

2.3 Bid Opening

The Alameda CTC Contract Administrator will oversee the public opening of all bids at the time and location stated in the Notice to Contractors. Changes, if any, to the originally specified bid opening time or location will only be made by addendum. All bids received in accordance with the terms of the advertisement shall be publicly opened and announced by total amount. If any bid received is not read aloud, the name of the bidder and the reason for not reading the bid aloud shall be publicly announced. The Commission Engineer shall adhere to the rules and regulations as listed in Chapter 15, "Advertise and Award Project," of the Caltrans LAPM related to the bid opening of construction contract bids. A bid summary will be prepared by the CMPM. A sample bid summary is shown in Appendix F.

2.3.1 Collection of Bid Escrow Documents

If the Contract Specifications require Escrow Bid Documents, the lowest three bidders shall be required to submit their Escrow Bid Documents. These documents shall be collected by the Alameda CTC Contract Administrator and/or the CMPM at the time of bid submittal.

2.4 Bid Analysis

Following the bid opening, the CMPM will check on the status of all bidders' contractor licenses and ensure that the bids are analyzed for irregularities (e.g., errors, discrepancies, and omissions), as well as conformance with Alameda CTC's LBCE Program or the Caltrans DBE requirements as applicable and other funding agency's policies included in the bid documents. The CMPM shall use Caltrans LAPM Form 15-I to determine if the bidder's proposals are responsive.

If any bid contains irregularities which could affect the determination of the lowest responsible and responsive bidder, the CMPM will notify the Alameda CTC PM and the Commission Engineer. Legal Counsel will be consulted to provide a recommendation to the Commission Engineer, who will make the final determination with respect to accepting or rejecting the bid. For more detailed discussion on additional considerations, refer to LAPM Sections 15.5 and 15.6.

2.5 Bid Rejection

Upon completion of the bid analysis, the Commission Engineer may recommend the rejection of any or all bids. In addition to rejection for non-responsiveness, this may occur, for instance, if all bids greatly exceed the Engineer's Estimate or there is only one bid. The Commission Engineer, in consultation with Legal Counsel, may determine that rejection of any or all bids is in Alameda CTC's best interest. The Commission Engineer will advise the Executive Director of the staff recommendation. Information and recommendations for next steps shall be presented to the Programs and Projects Committee (PPC) and the Commission for approval.

2.6 Notice of Intent to Award

Following the bid analysis, the CMPM will prepare a "Notice of Intent to Award" letter to all bidders for the Commission Engineer's signature. This Notice formally notifies all bidders of Alameda CTC's intent to award the construction contract to the apparent responsible and responsive low bidder and delivery of the Notice marks the beginning of the Bid Protest period. This Notice must be provided to all bidders in accordance with the timelines required by the Bid Protest Procedure included in Appendix B and sufficiently in advance of the target award date.

2.7 Bid Protests

Any prime bidder may submit a Bid Protest within five (5) working days after the bid opening date as specified in the Alameda CTC's Bid Protest Policy available in Appendix B. Bid Protests will be considered and processed in accordance with this Policy. Any Bid Protest which fails to meet the deadlines or criteria set forth in the Policy will be rejected as required by the Policy.

3. Contract Award and Execution

The CMT shall adhere to the applicable rules and regulations listed in Chapter 15, "Advertise and Award Project," of the Caltrans Local Assistance Procedures Manual including the following requirements set forth in this section.

3.1 Contract Award

Following the completion of the bid analysis and resolution of any bid protests or irregularities, the CMPM will prepare a Draft Staff Report for the Alameda CTC PM and Commission Engineer reviews, recommending that the Commission approve the award of the contract to the lowest responsible responsive bidder. The Draft Staff Report will state the contract amount and will authorize the Executive Director to execute the contract in accordance with Section 3.2. The Draft Staff Report also will recommend authorizing the Executive Director to prepare and sign any other documents necessary to execute the contract and discuss the status of the project budget and the construction allotment.

The award of the contract will be placed on the upcoming PPC agenda and, provided the PPC recommends award, the matter will be agendaized for the upcoming Commission meeting. However, in the event that the bid analysis and resolution of irregularities cannot be concluded prior to the PPC meeting, staff may bring the contract award item directly to the Commission, or if previously authorized, to the Executive Director.

3.2 Contract Execution

Once the Commission has awarded the contract, the Alameda CTC Contract Administrator, in coordination with the CMPM, will prepare a Notice of Award letter to the selected contractor for the Commission Engineer's signature. This letter will include instructions for the contractor to submit any additional required information, including but not limited to insurance certificates and endorsements, within a specified time frame in order to facilitate the execution of the construction contract.

The Alameda CTC Contract Administrator, with assistance from the CMT, will review all documents submitted by the contractor. When all requirements have been satisfied, the Alameda CTC Contract Administrator will route the contract for approval. Once the contract is fully executed, the Alameda CTC Contract Administrator will distribute the fully executed originals and copies of the contract.

4. Post Award

Post award is defined as the tasks to be performed after award and before and including Notice to Proceed (NTP).

The Alameda CTC Contract Administrator is responsible for ensuring bid security documents are returned to all bidders at the appropriate time.

The CMT shall adhere to the applicable rules and regulations listed in Chapter 16, "Administer Construction Contracts," of the LAPM including the following requirements set forth in this section.

4.1 General

Once the construction contract has been awarded, the CMT has the primary responsibility to administer the construction contract, which includes providing individuals or team members to serve as a Resident Engineer (RE), office engineer (OE), construction surveyors, materials testers, and field inspection staff, as necessary.

The RE will be responsible for setting up the document control and filing system and will also be the focal point of all communications.

The CMT will monitor and verify that all insurance, bonds, and other materials required of the contractor are submitted in a timely manner and are kept current and will be responsible for monitoring the contractor's labor compliance practices. The CMT will communicate the status of the above to the Alameda CTC Contract Administrator.

Following contract award and through contract acceptance, the CMT will be Alameda CTC's primary interface with the contractor. All routine communications with the contractor will be through the CMT, led by the RE. The CMT will coordinate with surveyors, materials testers, and with other stakeholders and project participants, as necessary. The CMT shall also perform a Pre-Construction Survey of the project site to confirm site conditions prior to start of work. This includes documenting the pre-existing conditions of all facilities that have the potential to be affected by the Contract Work. The Pre-Construction Survey may include but is not limited to written descriptions and photographs and/or videotapes that are to supplement pre-construction documentation. The CMT shall follow the rules and regulations listed in Chapter 16, "Administer Construction Contracts," of the Caltrans LAPM, as applicable, and/or other local jurisdiction requirements, if appropriate.

4.2 Pre-Construction Conference

Once the contract has been executed, the Commission Engineer, in coordination with the Alameda CTC PM and the Alameda CTC Contract Administrator, will authorize the RE to issue a Notice of Pre-Construction Conference to the Contractor. The Notice of Pre-Construction Conference may be included in the Notice of Award.

The purpose of the Pre- Construction Conference is to ensure that the contractor is well informed regarding important contract issues, submittals, sanctions for non-compliance with local, state, and federal requirements and other specific project concerns. The Resident Engineer will lead the discussion, and at a minimum, address the following topics: Safety, EEO, Labor Compliance, Subcontracting, Environmental Mitigation requirements, and any potential traffic or pedestrian handling issues. The RE will prepare and distribute the minutes of the meeting within one week of the Pre- Construction Meeting.

4.3 Notice to Proceed

The Alameda CTC Contract Administrator, with concurrence from the Commission Engineer and the Alameda CTC PM, will authorize the RE to issue an NTP to the contractor. The NTP will establish the start date for construction and the projected completion date based upon the number of

allowable days stated in the contract (the basis to calculate any liquidated damage penalties). The contractor is expected to start work within the timeframe specified in the contract.

4.4 Prepare Quality Management Plan

Prior to the start of construction, the CMT will utilize the Alameda CTC's Quality Assurance Program (QAP) as a guide to develop a project specific Quality Management Plan (QMP). The QMP shall be submitted to the Commission Engineer for review and approval.

5. Construction Phase

The CMT shall adhere to the rules and regulations listed in Chapter 16, "Administer Construction Contracts," of the Caltrans LAPM, as applicable, including the following:

5.1 General

During the construction phase, Alameda CTC's responsibilities under the construction contract will be administered and/or monitored primarily by the CMT. The CMT shall develop a communication plan to ensure stakeholders are kept informed and issues are addressed in a timely manner.

Partnering is encouraged, whether formal or informal, on all projects. Formal partnering can be most effective on large or complex projects that require the careful coordination of construction activities between groups of stakeholders, with potentially competing goals and objectives, to obtain the project results desired. If formal partnering is employed on a project, all partnering costs are shared equally between Alameda CTC and the contractor. The Alameda CTC PM will determine if formal partnering is warranted.

5.2 Construction Progress Meetings

The CMT will conduct weekly Construction Progress Meetings with the contractor, Alameda CTC PM and affected agency/jurisdiction stakeholders, as appropriate. Other members of the project team will be included on an "as needed" basis. The objective of these meetings is to keep the project on track by reviewing the schedule, coordinating upcoming work, update status on submittal and RFIs and resolving issues as quickly and economically as possible.

5.3 Progress Payments and Reporting

The contractor shall submit a request for payment with all supporting documentation on a monthly basis. Upon review, verification and approval, the RE will prepare and submit a construction progress payment estimate (PPE) request to the Alameda CTC PM in the format shown in Appendix F for approval. Unless otherwise specified in the contract, upon the RE's determination that the contractor's PPE request is complete, Alameda CTC shall issue payment within 30 days.

The CMT will prepare a monthly status report which includes 1) status of the construction contract and work completed 2) anticipated major activities in the month ahead 3) each CCO approved since the last report with a cost of \$50,000 or greater or a time extension greater than 20 working days or 10% of the original contract time, whichever is greater; number of working days by reason of weather do not apply; 4) the overall status of CCOs; and 5) the status of the project budget. See Appendix F for a report sample and log of approved, submitted and anticipated CCOs. The CMT will also provide the Alameda CTC PM with a cash flow projection through the completion of the project and will manage construction risks through active monitoring and reporting of construction risks listed on the project's risk register.

5.4 Public Outreach

When deemed appropriate by the Alameda CTC PM, the CMT will provide a public outreach program which may include, the establishment and monitoring of a hotline; flyer mail-outs notifying nearby residences and businesses of changes in traffic flow, detours, lane closures, night work and overall status of the project; press releases to describe the general progress of work; and community meetings to address specific construction impacts and concerns. Each project will require public outreach tailored to the project's scope, location and impact on the community.

5.5 Alameda CTC Notification of Extraordinary Circumstances

In the event of a significant safety event, such as an unforeseen utility issue, private property encroachment, or other issues of public safety or concern, the CMT will notify the Commission Engineer immediately of the incident and will email and provide hard copies of any incident reports to the Commission Engineer, as soon as they are available. The CMT will keep the Commission Engineer apprised of the progress of resolution, as appropriate. Verbal notification is acceptable; however, must be followed with formal written communications and documentation. If the media becomes involved, all dealings with the media will in accordance with Alameda CTC procedures for dealing with the media.

5.6 Contract Change Orders

CCOs will be negotiated in compliance with the contract and the specifications.

The RE will submit with each CCO, a CCO Memorandum which contains a more complete discussion of the issue and its ramifications. The memorandum is intended for interagency use and should be sufficiently detailed to explain and justify the change and such that an auditor should be able to read and independently understand the reasons for the work and the reasonableness of the compensation and time adjustments.

The Alameda CTC PM will review the CCO and CCO Memo and certify that there is sufficient funding within the construction allotment for the CCO. In addition to approval by the Commission Engineer, approvals, concurrence, or notifications may be required from funding and/or permitting agencies. A sample of the CCO and CCO memo are shown in Appendix F.

5.7 Resolution of Disputes

If a dispute arises, the process for resolution of the claim will be in accordance with the contract language and the special provisions. Alameda County Transportation Commission will make every effort to resolve claims fairly and expeditiously. The Alameda CTC has the option of considering one or more claims resolution processes for inclusion in the contract documents:

1. Caltrans claims resolution process
2. Mediation
3. Arbitration
4. Dispute Review Board

Some of the above processes are explained in detail in the Caltrans Construction Manual, Section 5-4 "Disputes".

5.8 Authorized Budget Amount Increases

The CMT will be responsible for maintaining records of the actual or expected costs of all approved, pending and potential CCOs and all potential claims and trend information to forecast potential overruns in budget or schedule. On a monthly basis, the CMT will report to the Alameda CTC PM the expected combined cost of these items and the base contract.

The CMT will be held accountable to the construction capital contingency established at the time of award. When the Estimate at Completion exceeds 10% of the construction allotment, the CMPM shall notify the Alameda CTC PM and provide a plan to bring the project within cost or recommend an increase to the allotment. In the event project contingencies are inadequate, the Alameda CTC PM shall inform the Commission and provide details on options available to complete the project.

5.9 Construction Staffing

Based on the size and complexity of the project, the Alameda CTC PM shall determine the staffing required to effectively manage the project.

Typically, a project will have a CMPM, an RE, an Assistant RE, an OE, and at least one inspector. For smaller projects, some roles may be combined as follows: CMPM/RE and Assistant RE/OE/Inspector.

At the discretion of the Alameda CTC PM, any or all of the roles on a project may be deemed non-essential and eliminated or reduced to part-time support.

5.10 Materials Testing

Alameda CTC does not have in-house resources for testing and inspection of materials. Provision of such services and requirements of the QAP (Appendix C) must be arranged prior to advertising a project and addressed appropriately in the construction documents.

5.11 Surveying

Construction activities may require coordination with the Design Consultant to capitalize on work products that could be used for the closeout of the Project.

6. Construction Close-Out

The CMT shall adhere to the applicable rules and regulations listed in Chapter 17 "Project Completion" of the Caltrans LAPM including the following:

6.1 Safety Review

Near the completion of the project prior to acceptance, a review of the project will be held with the focus on safety issues associated with the newly constructed facility. The review will be led by the RE and may include the Design Consultant, and other representatives from the facility owners (e.g. Caltrans, Cities, Operators, Utilities, etc.). Items of concern that the parties agree need to be addressed will be documented and resolved to the satisfaction of all parties.

6.2 Substantial Completion and Final Inspection

When the contract work nears substantial completion, the RE will schedule a final inspection of the project. Participants, at a minimum, will include the Alameda CTC PM, CMT, the jurisdiction(s) with the ultimate ownership/maintenance/operations responsibilities, and the contractor. The RE will develop a punch list and transmit it to the contractor with copies to all participants and interested stakeholders. All items on the punch list must be addressed prior to contract acceptance.

6.3 Project Acceptance and Final Payment

Once the contractor has satisfactorily completed all punch list items and has completed all project closeout requirements in accordance with the contract, the RE will notify the Alameda CTC PM. The

RE in coordination with the Alameda CTC PM, will confirm that the contract work has been completed to the satisfaction of the affected agencies, and request a relief of maintenance and closeout with the permitting agencies. On larger more complex projects, relief of maintenance may be granted by a jurisdiction as major milestones are completed. No further actions will proceed towards project closeout until the project is formally accepted in writing by all the permitting agencies. The RE, in conjunction with the contractor, will then prepare and forward the final pay request to the Alameda CTC PM for processing and final payment. The final payment should also include the appropriate final utilization reports (e.g. SBE, LBE, DBE, etc.) as may be required by the funds used for the contract. Prior to recommending final payment to the prime contractor, the Alameda CTC PM will consult with the Commission Engineer and/or legal counsel to ensure all matters are fully resolved.

The Alameda CTC Contract Administrator will review the contract to ensure that all contractual obligations have been met. Upon completion of all reviews, the CMT will prepare a Staff Report recommending contract acceptance by the Commission.

6.4 Release of Retention

Within ten days following notice to the Contractor that Alameda CTC has accepted the contract work as complete, the Alameda CTC Contract Administrator will record a Notice of Completion (NOC) with the County Recorder.

At the expiration of the statutory period, following publication of the NOC, if no Stop Notices have been filed against the project, the Commission Engineer will authorize the release of the contractor's retention, in accordance with the specifications. The contractor can request release of retention in a phased fashion for the Commission Engineer's consideration. If any liens have been filed, the Commission Engineer, will authorize the release of the contractor's retention less the amount of all liens and will refer the matter to the Alameda CTC's Legal Counsel for resolution.

6.5 Project Completion Report

At the conclusion of the project, the CMT will prepare and submit a Project Completion Report, in accordance with the LAPM and all applicable closeout forms and documentation.

The CMT will also prepare closeout submittal binders with all project related files, documents, warranties, guarantees, installation manuals, operating manuals, and keys and provide the binders to the appropriate jurisdiction stakeholders and/or facility maintenance staff. All project documents shall be transferred to Alameda CTC within 90 days of acceptance of the Project Completion Report.

The above project documentation shall be stored in accordance with Alameda CTC's Retention Policy.

7.0 Project Closeout

The Alameda CTC PM with assistance from the Design Consultant and CMT will ensure that all project close-out activities are completed, including but not limited to:

1. Completion of As Built plans
2. Report of Final Expenditures
3. R/W acceptance
4. Permit compliance and certification
5. Documentation of Lessons Learned

Appendix A - Sample CM Scope of Work

Services related to Construction Administration

CONSULTANT shall generally provide resources to ensure projects are constructed in accordance with the Plans, Specifications, and Estimates (PP&E) and compliance with laws, funding requirements, and other project constraints. Anticipated resources include Resident Engineer, Assistant Resident Engineer, Office Engineer, Qualified Inspectors (e.g.: Materials, Electrical, Structural, Roadway), Scheduler, Public Information Officer, Construction Staking, Materials Inspection, and Claims Expert to effectively administer the project through completion of the project.

1. Perform field inspection activities, monitor contractor's performance and enforce all requirements of applicable codes, specifications, and contract drawings.
2. Perform all construction administrative activities, including correspondence, construction phase records (e.g. diaries, requests for information, notice of potential claims, statement of working days, project photos), accounting and document control.
3. Manage job site safety.
4. Review and monitor the construction schedule. Develop alternative schedules to expedite the work, monitor and evaluate the contractor's progress, and evaluate construction claims.
5. Review submittals (e.g. falsework, detours and staging plans) from the contractor and oversee the submittal process including obtaining necessary approvals from the designer and other impacted stakeholders as may be required (e.g. Caltrans, jurisdiction, permit agencies).
6. Evaluate, negotiate, recommend, and prepare change orders.
7. Prepare and recommend progress payments.
8. Perform Labor Compliance and Field Reviews to ensure compliance. May also include Review of Contractor's Certified Payroll, Labor interviews, etc.
9. Ensure contractor's compliance with the requirements of the state and local agencies, including encroachment permits, business licenses, regulations, etc. Provide proactive on-site coordination with utility owners (e.g. PG&E, AT&T, and UPRR) and construction contractors. Coordinate installation and testing services with the utility owners and contractors, as needed.
10. Implement Alameda CTC's QAP and ensure all reports, calculations, measurements, test data and other documentation on forms specified by or otherwise acceptable to Caltrans and Alameda CTC.
11. Schedule, manage, perform and document all field and laboratory testing services. Material testing shall conform to the requirements and frequencies as defined in the Caltrans Construction Manual and the Caltrans Materials Testing Manuals.
12. Provide final inspection services, including testing and installed facilities.
13. Provide specialty material testing and source inspection & testing required for materials and equipment manufactured off-site.

14. Prepare the red-lined as-built plans and ensure that the red-line changes are incorporated by the design engineer into the final electronic version of the as-built plans.
15. Procure agency-furnished items to minimize schedule and cost impacts to the project.
16. Obtain and manage storage, control inventory, and release of materials to contractors in a secure and timely fashion.
17. Perform project closeout activities, including preparation of the final construction project report, and filing of the notice of completion as necessary.
18. Host and/or facilitate meetings including preparation of all materials and staffing as may be required (e.g. Contractor progress meeting, Partnering Sessions, Stakeholder progress meetings and/or field visits, resource agency site visits, and outreach to impacted property owners/communities).

Equipment/Tools/Supplies/Facilities/Special Considerations

1. As may be required, secure a facility and all necessary equipment (e.g. copier, desks), nearby the project site to accommodate the CMT. This may be considered as reimbursable other direct costs if not already included in CONSULTANT overhead.
2. CONSULTANT shall provide the necessary equipment, tools and supplies to provide the required services. This may include cell phones, laptops, vehicles equipped for construction activities, laths, manuals, office supplies, safety gear, etc. These may be considered as reimbursable other direct costs if not already included in CONSULTANT overhead.
3. As may be required, CONSULTANT shall secure special permits, fees, and insurance to access worksite (e.g. Union Pacific Railroad).

Availability: The CMT shall be generally accessible during Alameda CTC's hours of operation and as dictated by the Contractor's activities which may be conducted at night and during weekends and/or holidays.

Appendix B: Alameda CTC Bid Protest Procedure

1. Bid Protest Procedure

1.1 Application

The Bid Protest Procedure shall apply to Bid Protests, as such term is defined herein, relating to all contracts for construction of public works projects and associated procurements that are to be awarded by the Alameda County Transportation Commission (Alameda CTC) by competitive sealed bid.

1.2 Definitions

For the purpose of this procedure, the following definitions apply:

- a) "Alameda CTC" means the Alameda County Transportation Commission, which is located at 1111 Broadway, Suite 800, Oakland, CA 94607.
- b) "Bid Protest" means a protest filed by a Bidder on a contract in accordance with the provisions of this Policy, which protest (i) claims that one or more Bidders on the contract should be disqualified or rejected for any reason; (ii) contests an Alameda CTC staff recommendation to award the contract to a particular Bidder; or (iii) contests an Alameda CTC staff recommendation to disqualify or reject the Protesting Bidder. Only a Bidder on a Contract or such Bidder's authorized representative may file a Bid Protest.
- c) "Bidder" means any person or firm that submits a bid on a Contract.
- d) "Contract" means any applicable contract as described in Section 1 of this Policy.
- e) "Protested Bidder" means a Bidder on a Contract which the Bid Protest claims should be disqualified or rejected.
- f) "Protesting Bidder" means a Bidder on a Contract, or such Bidder's authorized representative, who files a Bid Protest on the Contract in accordance with the provisions of this policy.
- g) "Working day" means a regular working day, excluding Saturdays, Sundays and holidays observed by the Alameda CTC.

1.3 Notice Procedures

All notices and other communications required or desired to be given under this Policy shall be in writing and shall be deemed duly given: (a) when delivered, if personally delivered to the recipient; (b) on the first working day following delivery to an overnight delivery service (e.g., FedEx), provided delivery is confirmed by the delivery service; and (c) on the earlier of actual receipt or two (2) working days following deposit in United States registered or certified mail, postage prepaid and return receipt requested, addressed to the parties as set forth below.

Additionally, in the case of notices sent by Alameda CTC, notices shall also be deemed duly given when transmitted by facsimile during normal business hours, provided such facsimile device is capable of generating a written confirmation of such transmission and receipt and an original is deposited in first class mail, postage prepaid, within one (1) working day thereafter addressed as set forth below.

Notices addressed to the Alameda CTC under this Procedure must be addressed and delivered to the Alameda CTC as provided below:

BID PROTEST – CONTRACT NUMBER
c/o Alameda CTC Contract Administrator
Alameda County Transportation Commission
1111 Broadway, Suite 800, Oakland, CA 94607

Notices sent to any bidder under this Procedure shall be sent to the notice or business address and facsimile number set forth in such bidder's bid package. Any bidder may change its address for notices by giving written notice to the Alameda CTC in the manner set forth above.

2.4 Form of Bid Protest

Any Bid Protest shall be in writing and shall provide the name, address, telephone number, and facsimile number of the Protesting Bidder and shall identify the Contract to which the Bid Protest pertains, including the Contract number and the date that bids for such Contract were received by the Alameda CTC. The Bid Protest shall identify and explain the factual and legal basis for the protest, and shall include by attachment to the Bid Protest, any written material that the Protesting Bidder wishes to have considered in connection with the protest. Any Bid Protest that fails to meet these requirements shall not be considered.

2.5 Submission of Bid Protest to the Alameda CTC

Any Bid Protest must be received by the Alameda CTC no later than 4:00 PM on the fifth (5th) working day following receipt by the Protesting Bidder of written notice from the Alameda CTC's issuance of the Notice of Intent to Award. Bid Protests received by the Alameda CTC after the deadline or which do not otherwise comply with the requirements of this procedure shall not be considered. Bid Protests shall be submitted to the contact and address specified in Section 3, Notice Procedures (except as may otherwise be stated in the Notice of Intent to Award the Bid).

2.6 Investigation by Staff

If a Bid Protest is properly filed, Alameda CTC staff will promptly provide a copy thereof to the Protested Bidder. The Commission Engineer, the Alameda CTC Project Manager, the Alameda CTC Contract Administrator and the Construction PM will thereafter review the facts and circumstances of the protest. Upon request from staff, each Bidder shall promptly provide additional information necessary for staff to conduct its review of the Bid Protest. Staff may, but shall not be obligated to, hold a meeting or meetings in order to obtain additional information and to seek to resolve the matter. In such event, staff shall give notice to the Protesting Bidder and the Protested Bidder, indicating the time and place of the meeting, which notice may be provided by facsimile. If the Protesting Bidder fails to attend any meeting following not less than three (3) working days' notice, the Bid Protest will be deemed withdrawn and shall no longer be considered by the Alameda CTC.

2.7 Response to Bid Protest

At the conclusion of its review, the Alameda CTC Contract Administrator, in coordination with the Alameda CTC PM and Construction Project Manager, will provide the Protesting Bidder and the Protested Bidder written notice of the staff's recommendation with respect to the Bid Protest, which notice will include a statement of staff's recommendation and a clear explanation. The notice may be given by facsimile. No later than 4:00 P.M. on the third (3rd) working day following the date such notice is received, if either Bidder has an objection to the recommendation, such Bidder shall provide written notice to the Alameda CTC requesting a hearing on the Bid Protest. If no such notice is

received, the recommendation of the staff shall be deemed accepted by the parties, and the recommendation shall be forwarded to the Alameda CTC Commission for action.

If a request for hearing is received in accordance herewith, the matter shall be referred to a Bid Protest Panel consisting of three persons knowledgeable with respect to matters related to public contracts and bid protests, and at least one person shall not be Alameda CTC staff. The Executive Director shall select the panel members and designate one panel member as the Chair. The Executive Director will endeavor to pick panelists that do not have, or have not had, financial interest or employment with either the Protesting Bidder or Protested Bidder within the past 5 years. The Chair of the panel shall promptly convene the panel to hear the Bid Protest. The Protesting Bidder and the Protested Bidder shall be provided a minimum of five (5) working days' notice of the time and place of the hearing.

The Bid Protest and staff's recommendation regarding the Bid Protest shall be submitted to the Panel for consideration at the hearing. Following the hearing, the Panel shall do one of the following:

- a) Accept the recommendation of staff as submitted,
- b) Amend the staff recommendation, or
- c) Recommend the rejection of all Bids.

The decision of the Panel is final with respect to the disposition of the Bid Protest. The Panel's recommendation will be forwarded to the Commission. Thereafter, the Alameda CTC Commission's role is limited to either awarding the contract as recommended by the Panel or rejecting all Bids.

Appendix C: DBE Review Process

The Employee in Responsible Charge will evaluate the GFE for any of the three apparent low bidders that did not achieve the DBE goal specified in the contract. A report shall be prepared in the format and instructions contained in **Exhibit 9-E “Sample Evaluation of Good Faith Efforts”** of the LAPM. The report shall be reviewed and approved by the Alameda CTC Executive Director or designee.

Administrative Review and Reconsideration

If it is determined that the apparent successful bidder has failed to meet the DBE goal and the GFE requirements, the apparent successful bidder will have the opportunity for administrative reconsideration in accordance with 49 CFR 26.53 as follows:

1. The apparent successful bidder must provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so within five working days of notification by Alameda CTC that it has failed to meet the GFE requirements.
2. The reconsideration will be made by Alameda CTC staff designated by the Executive Director that did not take part in the original determination that the apparent successful bidder failed to meet the goal or make adequate good faith efforts to do so.
3. The apparent successful bidder will have the opportunity to meet in person with the reviewer to discuss the issue of whether it met the goal or made adequate good faith efforts to do so.
4. The apparent successful bidder will be provided a written decision on reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so.
5. The written decision on reconsideration is deemed final and not appealable as a Bid Protest or in any other form.

Appendix D: Alameda CTC Quality Assurance Program



Quality Assurance Program

1.0 Purpose

This Quality Assurance Program (QAP) is a sampling, testing and inspection program that will provide assurance that the materials and workmanship incorporated into the Alameda County Transportation Commission (Alameda CTC) street and highway construction projects are in conformance with the contract specifications.

The main elements of the QAP are procedures for:

- Inspection of workmanship and materials
- Acceptance Testing (AT)
- Independent Assurance Sampling and Testing (IAST)
- Testing of Manufactured Materials

This QAP will guide the development of a project specific QAP for each construction contract administered by the Alameda CTC. This QAP should be updated every five years or more frequent if there are changes to the testing frequencies or to the tests themselves. Changes to this QAP required by state and federal regulations shall be deemed incorporated herein.

2.0 Applicability

Alameda CTC administered projects that are:

2.1 On- National Highway System (NHS) projects are governed by Caltrans QAP detailed in the following manuals and guides:

- **Construction Manual**
- **Construction Manual Supplement for Local Agency Resident Engineers**
- **Local Agency Structure Representative Guidelines**
- **Independent Assurance Manual**

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

2.2 Off-NHS, federally funded projects are governed by the procedures in this QAP. Its use is mandatory for Federal-aid projects and is recommended for other Alameda CTC street and highway projects. This local QAP is based upon the requirements for local QAPs contained in the aforementioned Section 16.11. Federally funded projects that mix on-and-off-NHS sites will utilize the Caltrans QAP.

3.0 Responsibilities of Implementation

This QAP does not supersede any provisions in the technical specifications. The Alameda CTC Project Manager, with assistance from the Alameda CTC's Consultant Construction Management Team, will ensure that a project specific QAP is prepared and on file for the project.

The Resident Engineer (RE) will ensure that the correct criteria is used as specified in the contract and that any changes must be reflected in an approved CCO.

The Commission Engineer will ensure that Alameda CTC project delivery staff and consultants apply this QAP and that the QAP is updated as required and fulfills the requirements stated in Chapter 16 – Administer Construction Contracts of the Caltrans Local Assistance Procedures Manual (LAPM) that each local agency must adopt a QAP that has been reviewed by the Caltrans District Local Assistance Engineer for federal-aid projects off the National Highway System. Caltrans will not process a Request for Authorization for Construction without verification of an adopted QAP.

4.0 Testing Required

This local QAP describes procedures for three types of required testing, described as follows:

- a. Acceptance Testing – procedures for regular testing of materials entering a construction project to verify that the materials, or products, comply with contract specifications or standards.
- b. Independent Assurance Sampling and Testing – procedures to verify that acceptance testing is being performed correctly by:
 - 1) Verifying that equipment used for acceptance is properly calibrated and in good working condition.
 - 2) Witnessing sampling and testing by the Acceptance Tester.
 - 3) Splitting material samples and comparing the test results between the Acceptance Tester and Independent Assurance Sampler and Tester.
- c. Testing of Manufactured Materials – procedures for inspecting, accepting and testing of manufactured and prefabricated materials either by source inspection, job site inspection, or certificate of compliance.

5.0 General Procedures and Requirements

Sampling and testing shall follow these general procedures:

- 5.1 **Construction Documents.** Alameda CTC does not have in-house resources for testing and inspection of materials. Provision of such services and requirements of this QAP must be arranged prior to advertising a project and addressed appropriately in the construction documents.

5.2 **Sampling and Testing Options.** Alameda CTC may select from the following sources to perform sampling and testing:

- Another agency's laboratory
- Caltrans' laboratory
- Private consultant laboratory

Non-Caltrans laboratories shall have a QAP that meets LAPM-16.11 requirements.

5.3 **Engineering Charge.** All laboratories shall be under the responsible engineering management of a California registered professional engineer who shall certify results of tests performed under his/her supervision.

5.4 **Contractor Influence.** The contractor shall not select or exercise any authority over the laboratory utilized.

5.5 **Certification of Laboratory Personnel.** The certification requirements of LAPM-16.11 shall apply. Generally:

- Current certification is required for the following sampling and testing personnel: construction management/inspection, local agency, and consultant laboratory.
- For on-NHS projects, certification shall be a "Certificate of Proficiency for an Acceptance Tester" (MR-0111), issued to an individual by the Caltrans District Materials Engineer or his designee, based either on Caltrans training, or on submittal of evidence of non-Caltrans training, experience or certification such as the "National Institute for Certification in Engineering Technologies" (NICET).

For off-NHS projects, certification of personnel for AT and IAST shall be either Caltrans (MR-0111 or MR-0100), NICET, or certificate with equivalent information as found on form MR-0111.

- Certificates for personnel on a project shall be retained in the Resident Engineer's (RE) project files.

5.6 **Laboratory Equipment Calibration.** Alameda CTC shall obtain documentation of consultant laboratory's calibration of its equipment in accordance with LAPM-16.11 and nationally recognized calibration standards. The laboratory is responsible for performing the calibrations and providing such records to Alameda CTC. Calibration records shall be provided to the Caltrans District Materials Engineer upon request.

Calibration of laboratory equipment and field test equipment (e.g. sand cones, scales, moisture test, slump cones, air meters) shall occur prior to use on a construction project and on regular, appropriate intervals not exceeding one year.

5.7 **Cost Recovery.** Materials testing and sampling costs are eligible to be charged to the construction engineering phase of the project.

- 5.8 **Buy America Certification.** Steel and iron products incorporated into the project must comply with Buy America requirements of the Code of Federal Regulations.
- 5.9 **Compliance.** Failure to comply with the local agency QAP may result in loss of Federal funds.
- 5.10. **Records.** Alameda CTC's and CMT's QAP material records of samples and tests, material releases, and certificates of compliance for a project shall be incorporated into the RE's project file. For Federally funded projects, records must be available for inspection by Caltrans and FHWA for a period of three years after the date of the last reimbursement received.
- 5.11 **Project Certification.** Upon project completion, the RE shall complete and sign a "Materials Certificate" (Caltrans LAPM Exhibit 17-G). The Certificate shall be submitted to the Caltrans Local Assistance Engineer (for Federally funded projects) and retained in the project construction files. All non-conforming materials must be explained and justified on the Certificate.

6.0 Acceptance Sampling and Testing

- 6.1 **Definition.** Acceptance Testing ("AT") is defined as regular testing of materials entering a construction project to verify compliance with contract specifications or standards.
- 6.2 **Timing.** Sampling should begin as soon as materials are placed on a project. Testing should be performed promptly to enable data evaluation and necessary measures to be taken by the RE and contractor.
- 6.3 **Test Methods.** Both California and American Society of Testing and Materials (ASTM) test methods are acceptable.
- 6.4 **Frequency.** Sampling and testing shall occur in accordance with Caltrans "Frequency Tables" (LAPM Exhibit 16-R), except as modified in writing by the Agency Engineer for a specific project. The tables are intended as a guide; the actual quality of materials tested may justify decreasing or increasing the frequency of subsequent similar samples and tests.
- 6.5 **Tests to be Performed.** The tests to be performed shall be in accordance with Caltrans "Sampling and Testing Frequency Table" (LAPM Exhibit 16-R), and the Caltrans Standard Specifications as modified by the project Special Provisions, or as modified by an approved CCO.
- 6.6 **Test Result Reporting Guidelines.** Results should be submitted to the RE within three (3) working days of sampling, or as directed by the construction schedule. Results may be expedited by using fax, telephone, or e-mail.
- 6.7 **Test Data and Summary Logs.** Acceptance Testing Results Summary Log (LAPM Exhibit 16-Z2) or a similar form shall be maintained by the RE for each test method performed more than once.

6.8 **Minor Quantities.** Relatively minor quantities of materials from a known, reliable source may be accepted without testing if:

- a. The Resident Engineer (RE) and/or the CMT performs visual examination of materials, or
- b. The manufacturer or supplier certifies that the materials furnished comply with specification requirements.

Such records of acceptance shall be placed in the RE's project files with related inspection notes.

Examples of maximum "minor quantities" include (from LAPM-16.11):

- Aggregates used for other than Portland Cement concrete: 100 tons per day or 500 tons per project.
- Bituminous mixtures (includes Hot Mix Asphalt): 50 tons per day (sample at Engineer's discretion if project total is less than 500 tons).
- Bituminous material (includes Asphalt): 100 gallons per project.

6.9 **Re-testing.** Failing test results require re-testing to isolate the failed area. The Log Summary shall cross-reference the retest to the initial failed test.

7.0 Independent Assurance Sampling and Testing (IAST)

7.1 **Definition.** The purpose of these procedures is to verify that Acceptance Testing is being performed correctly and reliably, and to ensure that equipment is properly calibrated and in good working condition.

7.2 **Applicability.** IAST procedures are required for Federally funded projects on and off the NHS system. For on-NHS projects, LAPM-16.11 procedures apply. For off-NHS projects, Alameda CTC Project Manager will verify that its consultant laboratory's QAP includes IAST procedures for "testing its own testers". IAST procedures are optional and may be required at the discretion of the Agency Engineer for non-Federally funded projects.

7.3 **IAST Testers.** Only persons holding an Independent Assurance Sampler Tester (IAST) Certificate (Caltrans Form MR-0100) may perform IAST. These may include individually certified laboratory personnel or testers. Testers shall be free of conflict of interest if also performing other testing work.

7.4 **Frequency of IAST.** The IAST frequency shall be as specified in the laboratory's QAP for each project where IAST is required.

8.0 Testing of Manufactured and Assembled Materials

8.1 **Definition.** This procedure provides methods for inspecting, accepting, and testing materials that are manufactured or prefabricated off the project site.

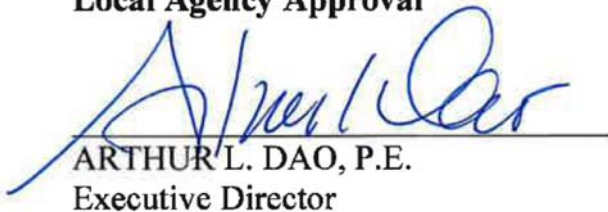
- 8.2 **Certificate of Compliance.** The Alameda CTC may accept manufactured products, materials, or assemblies if accomplished by a Certificate of Compliance, provided they do not involve structural integrity or public safety. Such Certificate shall be signed by the manufacturer and shall state that materials and workmanship conform to the specific project specifications.
- 8.3 **Source Inspection.** As an alternative to a Certificate of Compliance, Alameda CTC or Its CMT, may request Caltrans to do a Source Inspection in accordance with LAPM-16.11 procedures.
- 8.4 **Applicable Materials.** Contract documents shall specify which materials require a certificate of Compliance (or optional Source Inspection). Typical materials are listed in LAPM Exhibit 16-T.
- 8.5 **Responsibility.** The RE and/or CMT shall ensure that Certificates are furnished with material deliveries and are kept in the RE's project files.
- 8.6 **Documentation.** The certified material's lot number and project number shall be identified on the certificate and on lot tags or stenciled on the material. In addition, this data shall be referenced on the inspector's daily logs and laboratory reports.
- 8.7 **Re-testing.** Certified materials may be sampled and tested again on the job site and rejected for cause whether in place or not.

9.0 References and Guides

The following documents provide more detailed guidance and examples for consideration in the development of the project specific QAP:

- **Construction Manual, Chapter 6 – Sampling and Testing**
- **Construction Quality Assurance Program Manual**
- **Division of Construction Publications**
- **Office of Structural Materials - Local Agency Resources**
- **Office of Roadway Materials Testing Independent Assurance Program**

Local Agency Approval



ARTHUR L. DAO, P.E.
Executive Director

Alameda County Transportation Commission

Approved by Caltrans: September 2018

Appendix E – Builders Exchange Plan Room Listing

Alameda CTC advertises its construction opportunities with eBidBoard (www.ebidboard.com). Additionally, to ensure the broadest reach to contractors, including SBE/DBE/WBE, notifications will be sent to Builders Exchange Plan Room as listed below.

Builders Exchange Plan Room	Phone	Contact/Email
Contra Costa Builders Exchange 2440 Stanwell Dr., Suite B Concord, CA 94520	925-685-8630	April Hamilton Richard@beac.com
Builders Exchange Alameda County 3055 Alvarado Street San Leandro, CA 94577	510-483-8880 510-352-1509	Richard Owen Richard@beac.com
San Francisco Builders Exchange 850 So. Van Ness Avenue San Francisco, CA 94110	415-282-8220 415-821-0363	Deanna Johnson djohnsonsf@sbcglobal.net
Peninsula Builders Exchange 735 Industrial Road, Suite 100 San Carlos, CA 94070	650-591-4486 650-591-8108	Andrea Nettles Support@constructionplans.org
Builders Exchange Santa Clara 400 Reed Street Santa Clara, CA 95050	408-727-4000 408-727-2779	Kanani Fonseca plans@bxscoco.com
Marin Builders Association 660 Las Gallinas Avenue San Rafael, CA 94903	415-462-1220 415-462-1225	Diane Van Renselaar Charge to advertise - \$80/wk
Solano - Napa Builders Exchange 135 Camino Dorado Napa, CA 94558	707-255-2515 707-255-2749	Dave York planroom@snbe.com
Builders Exchange Sacramento 1331 T Street Sacramento, CA 95814	916-442-8991 916-446-3117	Cheryl Lynch yelenam@sacregionbx.com
Sacramento Builders Exchange 151 N. Sunrise Ave., Suite 511 Roseville, CA 95678	916-782-4762 916-782-4792	Rosie Kimes Closed office
Placer County Builders Exchange 10656 Industrial Ave., Suite 160 Roseville, CA 95678	916-771-7229 916-771-0556	Dianne Barnao planroom@placerbx.com
Builders Exchange Stockton 7500 West Lane Stockton, CA 95210	209-478-1005 209-478-2132	Janette Luna jluna@besonline.com
Valley Builders Exchange 1118 Kansas Avenue Modesto, CA 95351	209-522-9031 209-522-0616	Angelica Baca habowden@valleybx.com

Builders Exchange Plan Room	Phone	Contact/Email
McGraw Hill – Xerox 3315 Central Avenue Hot Springs, AR 71913	916-797-1006 626-226-4027	Sue Schoen dodge_reocwe@mcgraw-hill.com
iSqFt 325 W. Washington St., Ste. 2212 San Diego, CA 92103	800-364-2059 866-570-8187	Michael Huston California@isqft.com

This information is current as of the publication date.

Appendix F – Sample Templates

Below is a list of sample forms to be utilized by Alameda CTC staff in construction contract administration:

- Notice to Contractors (NTC)
- Bid Summary
- Construction Progress Payment Request
- Construction Change Order Form
- Construction Change Order Memo
- CCO Log

NOTICE TO CONTRACTOR (NTC)



INVITATION FOR BID (IFB No. AXX-XXXX)

PROJECT NAME
PROJECT No. XXXX.XXXX
Federal Project No. XXXX

The Alameda County Transportation Commission (Alameda CTC) invites bidders to submit sealed bids for **PROJECT NAME** until 3 p.m. on **DAY DATE** at the Alameda CTC's offices (1111 Broadway, Suite 800, Oakland, CA 94607).

A pre-bid meeting will be held at the Alameda CTC's offices (1111 Broadway, Suite 800, Oakland, CA 94607) at **TIME a.m./p.m.** on **DAY DATE**. Attendance **is/is not mandatory**.

Contract documents and other reference documents are available through Alameda CTC's website at <https://www.alamedactc.org/get-involved/contracting-opportunities/>.

Click on the link under the **PROJECT NAME** section to access the documents from Construction Bidboard's on-line plan room (ebidboard). Prospective Bidders must acquire the Contract Documents at ebidboard via Alameda CTC's website link. **This project has an x% DBE/SLBE/LBE goal.** For additional information, please visit the Alameda CTC website or email NAME, Alameda CTC Contract Administrator, at xxxxxxx@alamedactc.org.

BID SUMMARY

BID TABULATION SUMMARY SHEET (SAMPLE)

Project Information: _____
 DIST-----CO-----RTE-----PM-----Agency

Federal Project Number: _____

Location: _____

Limits: _____

Bid Opening date: _____ Estimated Award date: _____		Engineers Estimate		Bidder # 1 Name		Bidder # 2 Name		Bidder # 3 Name	
Item #	Bid Item & Quantity	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost	Unit Price	Cost
Total Bid									

Distribution: For NHS projects: (1) Original-Caltrans DLAE, (2) Copy - Local Agency Project File
 For Non-NHS projects: None

CONSTRUCTION PROGRESS PAYMENT REQUEST

CMT LETTERHEAD
TRANSMITTAL MEMO

Date:
 To: Alameda CTC PM
 RE: Project Name
 Contract No./Federal No.
 Contractor Name/ Payment Request No. _____

I have reviewed the Progress Billing statement from Contractor for the period of DATE to DATE and verified the quantities are correct and substantiated. A summary of contract matters during this period is provided below.

Items	Verified	Issues	Resolution/Notes
Certified Payroll			
Safety Issues			
Safety Meetings			
Potential Claims			
Change Orders			
DBE/LBE			
Other			
Other			
Notes:			

I am recommending the payment be made as detailed in the attached Progress Pay Estimate Summary.

Resident Engineer

File:

Pay Estimate #1

PROJECT NAME
 Contract Number:
 Federal Number:
 Contractor:
 Pay Period:

Paid to date: _____
 Retention to date: _____
 Retention this period: _____
 Payment this period: _____

Item	Item	QTY	Units	Unit Price	Total	Previous		Completed to Date		Current	
						Qty	Amount	Qty	Amount	Qty	Amount
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

Total contract: \$ -

	\$ -
Less Retention (__%)	\$ -
Total Progress Payment	\$ -

Approved by: _____
 Resident Engineer

Date: _____



Alameda CTC Project Name

Contract No. _____

Federal Number: _____

CONTRACT CHANGE ORDER NO. #

Page # of #

To: _____, Contractor

You are hereby directed to make the herein described changes from the plans and specifications or do the following described work not included in the plans and specifications on this contract.

NOTE: This change order is not effective until approved by Alameda CTC.

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

Change requested by the [Contractor/Alameda CTC]

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

- a. Description of the work to be done
- b. Location and limits of the work
- c. Applicable specification changes and references to specifications
- d. Method and amount of payment
- e. Any adjustment to time of contract completion

For additional discussion and details, see LAPM Section 16.10 "Change Order (CO)".

Estimated Cost: \$ _____ [Increase/Decrease]

By reason of this order the time of completion will be adjusted as follows: **x days**

Submitted by: _____ Date: _____
[Resident Engineer]

Approval Recommended: _____ Date: _____
[Project Manager]

Approved _____ Date: _____
[Commission Engineer]

We, the undersigned contractor, have given careful consideration to the change proposed and hereby agree, if this proposal is approved, that we will provide all equipment, furnish all materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefore the prices shown above.

Accepted, Date _____ Contractor _____

By _____
Name Title Signature

If the contractor does not sign acceptance of this change order, his attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.



Alameda CTC Project Name
 Contract No. _____
 Federal Number: _____

CHANGE ORDER MEMORANDUM. #

Sheet # of #

TO:	[PROJECT MANAGER]		FILE:	
FROM:	[RESIDENT ENGINEER]			
CCO NO.	SUPPLEMENT NO.	CONTINGENCY BALANCE (including this change)		
##		\$ _____		
CCO AMOUNT	\$ _____ INCREASE <input type="checkbox"/> DECREASE <input type="checkbox"/>		CALTRANS APPROVAL REQUIRED?	YES <input type="checkbox"/> NO <input type="checkbox"/>
		IS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS?		YES <input type="checkbox"/> NO <input type="checkbox"/>
ORIGINAL CONTRACT TIME: _____ DAYS	TIME ADJUSTMENT THIS CHANGE: _____ DAYS	PREVIOUSLY APPROVED TIME ADJUSTMENTS: _____ DAYS	PERCENTAGE TIME ADJUSTED (including this change) _____ DAYS	TOTAL # OF UNRECONCILED DEFERRED TIME (Including this change) _____ DAYS

THIS CHANGE ORDER PROVIDES FOR (Add additional pages as needed):

In a few sentences, briefly state what the change order provides. Supplemental change orders should also include a description of the original change order.

- Explain the need for the change, including the contractual basis of the change.
- State the reasons a particular method of payment was chosen.
- If the ordered change causes any work character change, explain the reasons.
- State the extent of coordination and concurrence with others.
- For major changes on federal projects of division interest projects, indicate the date of discussion and concurrence, if any, by the FHWA engineer.
- If prior approval of the change order has been obtained, state the name of the person who granted prior approval and the date.
- For a change order that is to be unilaterally approved, explain why the contractor will not sign or why the contractor's signature is not required.
- Include justification for a time adjustment.
- Attach supporting documents [e.g. independent cost calculations and time impact analysis].

For additional discussion and details, see LAPM Section 16.10 "Change Order (CO)".



Alameda CTC Project Name

Contract No. _____

Federal Number: _____

CHANGE ORDER MEMORANDUM. #

Sheet # of #

CONCURRED BY:		ESTIMATE OF COST		
PROJECT MANAGER SIGNATURE	DATE		THIS REQUEST	TOTAL TO DATE
OTHER	DATE	ITEMS	\$ _____	\$ _____
		FORCE ACCOUNT	\$ _____	\$ _____
OTHER	DATE	AGREED PRICE	\$ _____	\$ _____
		ADJUSTMENT	\$ _____	\$ _____
OTHER	DATE	TOTAL	\$ _____	\$ _____
OTHER	DATE	<u>FUNDING SOURCE</u>	PERCENT	<u>AMOUNT</u>
COMMISSION ENGINEER SIGNATURE	DATE			
RESIDENT ENGINEER SIGNATURE	DATE			

FUNDING NOTES/COMMENTS:

By PM's signature above, PM certifies that there is sufficient funding within the authorized contract contingency for this CCO as estimated [see CCO log attached].

CCO LOG

PROJECT NAME
 CONTRACT NO.
 FEDERAL PROJECT NUMBER

CCO #	Desc	Requested Amount	CCO from Supp. Fund	Supplemental Balance	CCO from Contingency Fund	Contingency Balance	CCO Status
				\$1,000,000		\$2,000,000	
1							00/00/00 (A)
2							
3							
		\$ -	\$ -	\$ 1,000,000.00	\$ -	\$ 2,000,000.00	