

Subject	State Route 4 (e) Widening Project – Somersville Road to SR 160 (Project 1407) – Amendment #2 to Consultant Services Agreement No. 204 with TY Lin for Final Design (PS&E) Services
Summary of Issues	<p>In April 2006 the Authority entered into Consulting Agreement No. 204 with TY Lin International to provide final design services for what was initially conceived at that time as the interim (median widening only) Segment 3 of the SR 4 (e) Somersville Road to SR 160 Project – A Street to Route 160 section. Subsequently, in June 2007 the contract was amended to reflect additional scope relative to providing a wider median for future transit and to design the ultimate facility.</p> <p>A second amendment is now requested to cover additional services to prepare the final design for the eBART bridge structures at A Street and Cavallo Road in the median of SR4, and associated median barrier retaining walls. BART has requested that the Authority’s freeway design consultant team provide these services so that the final design can be closely coordinated with the adjacent freeway structures. The cost of these services will be covered by RM-2 funds, earmarked for the eBART extension.</p>
Recommendations	Staff recommends that the Authority authorize the Chair to execute Amendment No. 2 to Contract No. 204 with TY Lin International to increase the budget by \$530,000 for a new not-to-exceed amount of \$11,330,000.
Financial Implications	This amendment will be funded by RM-2 funds earmarked for eBART.
Options	The Authority could elect to not amend TY Lin’s agreement for additional design services for the eBART structures however, project coordination between the freeway and eBART projects may be jeopardized.
Attachments	<ul style="list-style-type: none"> A. Amendment No. 2 to Agreement No. 204 B. Historical Summary of Contract Amendments for Agreement No. 204 C. Amendment Scope and Fee Request from TY Lin, dated March 26, 2008.
Changes from Committee	

Background

The SR 4 (e) Somersville to Route 160 Widening Project is divided into three segments. In April 2006, the Authority entered into Agreement No. 204 with TY Lin International for final design services for the easternmost segment (Segment 3), which covers the portion of the freeway from A Street to Route 160. At that time, TY Lin was requested to design an interim (median widening only) project, due to limited funds available for the project. In June 2007, the contract was amended to cover additional services related to the decision to provide a wider median for future transit and to design the ultimate facility.

BART is currently performing preliminary design and environmental clearance for the eBART extension project. It has become clear that the design of the transit structures in the median of SR4 need to be

closely coordinated with the freeway structures because the transit and highway bridges are immediately adjacent to each other. Therefore, BART has requested that the Authority's freeway final design consultant complete the final design for the eBART structures in tandem with the freeway design.

BART staff have reviewed and concurred with this amendment request. This amendment will be funded by RM-2 (see *proposed* Resolution #08-06-P, agenda item 14.2).

CONTRA COSTA TRANSPORTATION AUTHORITY
Agreement No. 204
With
TY Lin International
For
Route 4 (east) Widening – Somersville Road to SR 160

AMENDMENT No. 2

WHEREAS, the Contra Costa Transportation Authority and TY Lin International entered into Agreement No. 204 on April 19, 2006 and

WHEREAS, the Agreement provided for a subsequent amendment, should the Authority decide to proceed with final design of the ultimate project, rather than the interim, and

WHEREAS, Amendment No. 1 to Agreement No. 204 was approved on June 20, 2007 to increase the scope and compensation limit of the agreement, modify overhead rate and revise milestone schedule and extend the terms of the agreement related to additional services to include a wider median for future transit and design of the ultimate facility; and

WHEREAS, the parties now wish to modify the scope of services and compensation limit to include additional design services for the eBART structures in the median, now therefore be it

MUTUALLY AGREED:

- (1) that Article III of the Agreement is amended to increase the not to exceed amount by \$530,000 for a new Total Compensation Limit of \$11,330,000; and
- (2) that the attached scope of services from TY Lin International, dated March 26, 2008 is made part of Exhibit B, Scope of Services; and

In witness whereof, the parties hereto have executed this Amendment 1 to Agreement No. 204 effective as of the 16th day of April 2008.

TY Lin International

**CONTRA COSTA TRANSPORTATION
AUTHORITY**

Thomas Wintch
Vice President

David E. Hudson, Chair

Robert K. McCleary, Executive Director

**Historical Summary of Contract Amendments
CT 204, TY Lin International**

Date	Contract Amendment	Amount of Amendment	Total Contract Amount	Description
Apr 19, 2006	Original Contract	\$ -	\$ 2,400,000	Provide final design (PS&E) documents for the SR4 East Widening: Somersville Road to Route 160 --- Segment 3: From Lone Tree Way/A Street to Route 160 - 6-lane interim project. Contract provided provision for future amendment to provide additional design services for the ultimate 8-lane facility, pending available funding.
Jun 1, 2007	Amendment No. 1	\$ 8,400,000	\$ 10,800,000	Amend contract to provide Final Design (PS&E) documents for the ultimate 8-lane facility. The interim project is no longer being pursued, given additional funding now available and the direction to not preclude transit in the median. Amendment No. 1 includes revised scope, schedule, budget, and a modification to TY Lin's overhead multiplier.
Apr 16, 2008	<i>Proposed</i> Amendment No. 2	\$ 530,000	\$ 11,330,000	Amendment #2 is to cover additional design services for the eBART median structures per BART's request. Amendment is funded with RM-2 funds.

**STATE ROUTE 4 WIDENING PROJECT
FROM 2000 FEET WEST OF “A” STREET TO STATE ROUTE 160**

SCOPE OF WORK – AMENDMENT # 2

TO THE AGREEMENT BETWEEN
CONTRA COSTA TRANSPORTATION AUTHORITY
and
T.Y. LIN INTERNATIONAL

MARCH 26, 2008

AUTHORIZATION OF SERVICES
FOR
ADDITION OF TWO eBART GRADE SEPARATION AERIAL STRUCTURES
AND CONCRETE BARRIER RETAINING WALLS TO
STATE ROUTE 4 WIDENING SEGMENT 3 PS&E PACKAGE

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PROJECT DESCRIPTION

The project scope is the preparation of final plans, specifications and estimate for the construction of two eBART Grade Separation Aerial Structures within the median of SR4 at “A” Street /Lone Tree Way and Cavallo Road, and Concrete Barrier Retaining Walls between eBART and SR4. These improvements will be added to the Segment 3 PS&E package currently under development.

GENERAL ASSUMPTIONS REGARDING PROJECT SCOPE

- eBART/SR4 Grade Separation Aerial Structures are to be designed in accordance with “eBART SR4 Median Grade Separation Structures Aerial Structure Design Criteria – Structural Draft dated December 19, 2007” with the following exception:
 - BART Facilities Standards will not be part of the design criteria for eBART Grade Separation Aerial Structures.
- Seismic design will be according to Caltrans Seismic Design Criteria 1.4 and the eBART Grade Separation Aerial Structures are classified as an Ordinary Standard bridge.
- Structural Special Provisions will be using latest version of Caltrans SSPs for structural elements.
- The plans will be prepared to Caltrans bridge detailing standards using Microstation.
- “A” Street – Lone Tree Way eBART aerial structure is a two-span Cast-In-Place Prestressed concrete box girder bridge with single column or two columns bent and 200 foot in length.
- Cavallo Road eBART aerial structure is a simple span Cast-In-Place Prestressed concrete box girder bridge and 130 foot in length. The structure will be constructed above finished grade and lower into place after falsework removal.
- Concrete Barrier Retaining Walls between SR4 and eBART will be standard retaining wall on spread footing and the details will be provided by BART. No special retaining wall design (e.g. pile footing) is required.
- Stray current corrosion design is not included in this scope of services.
- eBART tracks alignment and profile will be provided by BART.
- Approval of Structure Type Selection for “A” Street – Lone Tree Way and Cavallo Road aerial structures, and Concrete Barrier Retaining Walls from Caltrans will be obtained by BART.
- CONSULTANT shall prepare Bridge foundation reports and Log of Test Boring for each of the structures in this amendment.
- All Caltrans, BART and other agency standard policies to be used are those in effect as of March 2008. Subsequent revisions thereto may result in additional scope of work and corresponding negotiated budget revisions.
- CONSULTANT shall prepare the PS&E package for the PROJECT in US Customary (English) units.

- Construction support services are not included in this scope of services for the PROJECT.

GENERAL SCOPE OF SERVICES REQUIRED

The CONSULTANT shall perform work necessary to produce final plans, specifications/special provisions, construction quantities and cost estimates to add the two eBART Grade Separation Aerial Structures and Concrete Barrier Retaining Walls to the final plans, specifications and estimate of Segment 3 widening contract, in accordance with this scope of services. The CONSULTANT shall be responsible for amending or supplementation of accompanying documents specified in this scope of services for the additional improvements described in this amendment.

The additional design effort will include structure design generally consisting of bridge and retaining wall design that are required to complete the project.

All structures submittals (plans, calculations, reports and associated documents) shall include evidence of quality assurance and quality control (QA/QC) reviews. The CONSULTANT will be required to submit a QA/QC program to CCTA for review and approval. Major quality control reviews and procedures shall be identified which are specific for the project.

For the consultant work effort, the CONSULTANT shall be familiar with and responsible for providing and performing the following tasks:

TASK 1: PROJECT MANAGEMENT

Task 1 includes Project Management required to add the two eBART Grade Separation Aerial Structures and Concrete Barrier Retaining Walls to the existing PS&E package.

01110 – General Project Management

Scope of Services

- Update Project Work Plan based on improvements added to PROJECT, that includes the scope, schedule and budget for each subtask.

Deliverables

- Updated Project Work Plan

01120 – Project Administration, Execution and Coordination

Scope of Services

- Additional project management and coordination of CONSULTANT staff, including management review of deliverables, to provide deliverables that adhere to the project scope and schedule, within the budgeted amounts
- Update project schedule, using Microsoft Project, including milestones through construction phase

Deliverables

- Revised Project Schedule & Budgets

01160 - Quality Assurance/Quality Control

Scope of Services

- Quality Assurance reviews of each submittal to ensure that the PQCP was executed in advance of the CONSULTANT's submittal for the additional improvements.

Deliverables

- Documentation of QA/QC completed by who and when and update schedule of future reviews by CT/CCTA.

TASK 4: 35% PLANS AND ESTIMATE

This task includes the work involved with reviewing the Structure Type Selection Reports prepared by BART, attending coordination meetings with BART and CCTA, attending Structure Type Selection Meeting with BART, CCTA and Caltrans.

04140 - 35% Bridge and Wall Plans

Scope of Services

- Review Structure Type Selection Reports prepared by BART
- Attend various coordination meetings with CCTA and BART
- Attend Structure Type Selection Meetings with BART, CCTA and Caltrans

TASK 5: PREPARE 65% PLANS, SPECIFICATIONS & ESTIMATE

This task includes the work involved in the preparation of 65% Bridge and Retaining Wall plans based on the approved Type Selection Report.

05140 - 65% Bridge and Wall Plans

Assumptions

- Bridge designs will be performed in accordance with "eBART SR4 Median Grade Separation Structures Aerial Structure Design Criteria – Structural Draft dated December 19, 2007". The plans will be prepared to Caltrans bridge detailing standards

Scope of Services

- Complete design plans and calculations for the "A" Street/Lone Tree Way and Cavallo Road Grade Separation Aerial Structures
- Complete design plans and calculations for Concrete Barrier Retaining Wall plans

Deliverables

- 65% Bridge and Retaining Wall plans to Caltrans OSFP and BART for review

05180 – Perform 65% QA/QC Review

Scope of Services

- Perform QA/QC review for 65% Bridge and Retaining Wall plans, in accordance with the Project Quality Control Plan established in Task 01160.

Deliverables

- Memorandum from QA/QC review engineer outlining findings and issues.

05190 – Submit 65% PS&E Package

Scope of Services

- Submit 65% Bridge and Retaining Wall plans to BART, Caltrans OSFP, CCTA, City of Antioch, and other reviewing agencies for review and comments.

Deliverables

- 6 sets half-size Bridge and Retaining Wall plans to Caltrans OSFP, 5 sets to BART, and 2 sets each to CCTA, City of Antioch, and other reviewing agencies.
- 4 copies of Draft Foundation Report to Caltrans OSFP, 1 copy each to BART and CCTA.

TASK 6: PREPARE 95% PLANS, SPECIFICATIONS & ESTIMATE

This task includes the complete design of all of the structures included in this amendment.

06100 - Review 65% Comments

Assumptions

- Written comments include comments from BART, Caltrans and CCTA

Scope of Services

- Distribute comments to appropriate team members
- Assess comments and resolve conflicting comment

Deliverables

- Correspondence required to resolve conflicting comments

06140 - 95% Bridge and Wall Plans

Scope of Services

- Complete independent design check on the “A” Street/Lone Tree Way and Cavallo Road Grade Separation Aerial Structures
- Complete independent design check on Concrete Barrier Retaining Walls
- Complete design calculations based on independent design check comments
- Revise Bridge and Retaining Wall plans based on 65% review comments
- Submit Bridge and Retaining Wall Plans to Caltrans OSFP and BART for review

Deliverables

- 95% Bridge Plans and Retaining Wall Plans to Caltrans OSFP and BART for review
- 1 set of Bridge design and independent check calculations to Caltrans OSFP and BART

06160– Draft Final Project Special Provisions

Assumptions

- Project to be advertised by CCTA

Scope of Services

- Edit Standard Special Provisions (SSPs), using latest version of Caltrans SSPs for structural elements.

Deliverables

- Draft Structural Standard Special Provisions to Caltrans OSFP and BART

06170 – Draft Final Engineer’s Estimate

Assumptions

- Project to be advertised by CCTA

Scope of Services

- Complete Quantity Calculations and Check Quantity Calculations and Marginal Cost Estimate based on 95% Bridge and Retaining Wall plans

Deliverables

- 1 set of Marginal Cost Estimate and Summary Sheets to Caltrans OSFP and BART

06180 – Perform 95% QA/QC Review

Scope of Services

- Perform QA/QC review for 95% PS&E package, in accordance with the Project Quality Control Plan established in Task 01160.

Deliverables

- Memorandum from QA/QC review engineer outlining findings and issues.

06190 – Submit 95% PS&E Package

Scope of Services

- Submit 95% Bridge and Retaining Wall Plans, Marginal Cost Estimate and Summary sheets, Draft Final Structural Special Provisions and Response to 65%

- comments to BART, Caltrans, CCTA, the City of Antioch, and local agencies for review and comments.
- Prepare response to 65% comments

Deliverables

- 13 sets half-size Bridge and Retaining Wall plans to Caltrans OSFP, 5 sets to BART, and 2 sets each to CCTA, City of Antioch, and other reviewing agencies.
- 5 copies of Final Foundation Report to Caltrans OSFP, 1 copy each to BART and CCTA.
- Response to 65% comments

TASK 7: PREPARE 100% PLANS, SPECIFICATIONS & ESTIMATE

This task involves incorporating and responding to CCTA and Caltrans comments on the 95% PS&E package to complete PS&E package.

07100 - Review 95% Comments

Assumptions

- Written comments include comments from BART, Caltrans, City of Antioch and CCTA.

Scope of Services

- Distribute comments to appropriate team members
- Assess comments and resolve conflicting comments

Deliverables

- Correspondence required to resolve conflicting comments

07140 - 100% Bridge and Wall Plans

Scope of Services

- Revise Bridge and Retaining Wall plans based on 95% review comments

Deliverables

- 100% Bridge and Retaining Wall plans

07160 – Project Special Provisions

Assumptions

- Project to be advertised by CCTA

Scope of Services

- Revise Structural Standard Special Provisions (SSPs) per 95% review comments

Deliverables

- Final Structural Special Provisions edited in Caltrans standard special provision format to be included in the Final Project Special Provisions, as part of the 100% PS&E package.

07170 – Final Engineer’s Estimate

Assumptions

- Project to be advertised by CCTA

Scope of Services

- Update quantities and estimate from 95% and incorporate 95% review comments
- Quantities & estimate will be prepared in BEES format

Deliverables

- Final Marginal Cost Estimate and Summary Sheets.

07180 – 100% QA/QC Review

Scope of Services

- Perform QA/QC review for 100% PS&E package, in accordance with the Project Quality Control Plan established in Task 01160

Deliverables

- Memoranda from QA/QC review engineer outlining findings and issues.

07190 – Submit 100% PS&E Package

Assumptions

- Project to be advertised by CCTA

Scope of Services

- Submit 100% Bridge and Retaining Wall plans, Final Marginal Cost Estimate and Summary Sheets, Structural Special Provisions, Response to 95% comments to BART, Caltrans, CCTA, the City of Antioch, and local agencies for review and comments.
- Prepare response to 95% comments

Deliverables

- 13 sets half-size Bridge and Retaining Wall plans to Caltrans OSFP, 5 sets to BART, and 2 sets each to CCTA, City of Antioch, and other local agencies.
- 5 copies of Final Foundation Report to Caltrans OSFP, 1 copy each to BART and CCTA
- Electronic copies of all the final Bridge and Retaining Wall plans in Microstation format to Caltrans OSFP and BART
- Response to 95% comments

SR4 SEGMENT 3 BART STRUCTURES

	Sr. Bridge Engr.	Bridge Engr.	Structural Detailers		
Rate	\$ 220.00	\$ 140.00	\$ 110.00	Total Hours	Total Cost
35% PS&E					
1200 LF of Ret Wall	0	0	0	0	\$ -
"A" Street BART	8	0	0	8	\$ 1,760.00
Cavallo Road BART	8	0	0	8	\$ 1,760.00
Direct Expense					\$ -
Total Hours	16	0	0	16	\$ 3,520.00
65% PS&E					
1200 LF of Ret Wall	60	140	160	360	\$ 50,400.00
"A" Street BART	80	280	240	600	\$ 83,200.00
Cavallo Road BART	80	200	200	480	\$ 67,600.00
Bridge Specifications					\$ -
Estimate					\$ -
Direct Expense					\$ 200.00
Total Hours	220	620	600	1440	\$ 201,400.00
95% PS&E					
1200 LF of Ret Wall	60	100	40	200	\$ 31,600.00
"A" Street BART	80	240	40	360	\$ 55,600.00
Cavallo Road BART	80	200	40	320	\$ 50,000.00
Bridge Specifications	40			40	\$ 8,800.00
Estimate	24	80	80	184	\$ 25,280.00
Direct Expense					\$ 200.00
Total Hours	284	620	200	1104	\$ 171,480.00
100% PS&E					
1200 LF of Ret Wall	24	32	40	96	\$ 14,160.00
"A" Street BART	24	32	40	96	\$ 14,160.00
Cavallo Road BART	24	32	40	96	\$ 14,160.00
Bridge Specifications	24			24	\$ 5,280.00
Estimate	8	32		40	\$ 6,240.00
Direct Expense					\$ 200.00
Total Hours	104	128	120	352	\$ 54,200.00
Parikh Consultans					\$ 72,000.00
3% markup on Sub-consultant					\$ 2,160.00
Project Administration and Management (5%)					\$ 25,238.00
Grand Total	624	1368	920	2912	\$ 530,000.00

3/26/2008