

May10, 2012

Stanislaus County Department of Public Works  
Attn: Ms. Laurie Barton, PE  
Deputy Director of Engineering and Operations  
1716 Morgan Road  
Modesto, Ca 95354

**Subject: North County Corridor – Contract Amendment # 4**

Dear Ms.Barton:

The North County Corridor Expressway Authority (NCCTEA) approval is requested for Contract Amendment # 4 as outlined below. This amendment incorporates additional project work required relative to environmental technical studies and traffic analyses. These scope changes will require an increase to the project budget. This letter provides our scope for the amended contract work with the revised budget for each work task that will be merged with our original scope of services.

In project execution, the following items of work detailed below resulted in extra work and cost. All the extra work was anticipated with certain probability by the project team when developing the scope of the project, but were of such characteristics that it could not have been quantified. These issues were shown on the Project Risk Matrix and stated in the project assumptions when the original scope of work was approved under Amendment #2 in August 2010, and carried forward in Amendment #3 approved last year. The Consultant team and North County Corridor Transportation Expressway Authority staff worked diligently and minimized the magnitude of incurred costs wherever possible.

With the Caltrans' directions to conduct Protocol Level environmental surveys for inclusion in the Draft Environmental Document, the NCCTEA staff's desire to evaluate possibilities for further screening of Alternatives, the recent strategy to include detailed project level studies on all initial construction phase (Phase I) alternatives, identification of a potential Hybrid Alternative, efforts to seek extension to the Permission to Enter (PTE) private properties for environmental surveys, etc. have resulted in additional scope. This amendment request only incorporates the work involving the following:

1. Additional Environmental Work (WBS 165.15)
  - a. California Tiger Salamander 2012 Aquatic Surveys for March/April/May 2012 Season
  - b. Vernal Pool Branchiopod Surveys for the June – September 2012
  - c. Botanical Blooming-Season Surveys for April – August 2012
2. Additional Traffic Work
  - a. Planning level Traffic Analysis for one Hybrid Alternative from SR99 to SR120
  - b. Traffic Analysis for two additional first phase Alternatives (ICP – now being called Phase 1) approximately from McHenry Avenue to SR 120 termini

### 3. Coordination of the additional Environmental and Traffic scope of work

It is our intent that Jacobs will present an Amendment request to the NCCTEA staff to formalize the additional work that is currently on-going for the items mentioned in the above paragraph that are not covered in this amendment.

The following sections briefly summarize the above three items. The first two items are being performed by the sub consultants previously approved by the NCCTEA for the type of work being proposed. A more detailed scope of work for these two items can be found in the attached scope of work document provided by these sub consultants.

#### 1. **Additional Environmental Work (WBS 165.15)**

Per the assumption stated in the original scope for WBS 165.15 Biological Studies, under page 52, bullet #6, no protocol level surveys were included in the original scope. As the number and location of the alignments could not be anticipated when preparing the original scope, it was assumed that the work would only involve habitat-level surveys to identify and map the plants and wildlife species within the project area. This amendment addressed the protocol level surveys for specific special-status plants and wildlife species. Caltrans is currently reviewing a list of special-status species with potential habitat in the project vicinity and may require further surveys for species such as Swainson's hawk, burrowing owl and San Joaquin kit fox. If additional surveys are required by Caltrans a subsequent amendment will be provided.

##### (a) **California Tiger Salamander (CTS) 2012 Aquatic Surveys for March/April/May 2012 Season:**

Caltrans has directed the project team to conduct protocol surveys for CTS in all areas of potential habitat within the entire study area, of all the alternatives from SR 99 to SR 120. This survey needs to be conducted in three different time periods, consisting of two aquatic surveys conducted during the breeding season (characterized by an annual average rainfall of 70% or more between September 1 and April 1), and one upland survey conducted in the intervening winter. The aquatic surveys must be conducted monthly in March, April and May, while the upland survey occurs between September and March. This amendment only includes one breeding season survey (March – May 2012). As instructed by the NCCTEA staff, a separate authorization will be sought to amend the scope of work for the upland survey (September 2012 – March 2013) and the second breeding season survey (March – May 2013).

This survey has resulted in additional cost of **\$54,020** to the budget.

##### (b) **Vernal Pool Branchiopod Surveys for the June – September 2012 Dry Season:**

Caltrans has directed the project team to conduct protocol surveys for special-status vernal pool branchiopod species in all areas of potential habitat within the entire study area of all alternatives from SR 99 to SR 120. This survey needs to

be conducted in either two wet seasons within a five- year period or two consecutive seasons (one wet and one dry season). The dry season surveys are conducted typically between June and September. The wet season survey would start as early as November and continue through May. This amendment only includes the dry season survey. As instructed by the NCCTEA staff, a separate authorization will be sought to amend the scope of work for the wet season surveys.

This survey has resulted in additional cost of **\$64,127** to the budget.

(c) Botanical Blooming-Season Surveys for April – August 2012 Spring & Summer Season:

Caltrans has directed the project team to conduct botanical surveys beyond the habitat-level surveys included in the originally approved scope. These surveys are required in the blooming season for rare plants whose habitat is present within the project area. Spring blooming season surveys would occur in April and May 2012, while Summer blooming season surveys would occur in July and August. This amendment includes both the Spring and Summer surveys. However, due to the lack of sufficient rain this year, Caltrans has required the project team to conduct a second set of Spring and Summer surveys in 2013, pending sufficient rainfall next year. As instructed by the NCCTEA staff, a separate authorization will be sought to amend the scope of work for the second set of surveys in 2013.

This survey has resulted in additional cost of **\$74,928** to the budget.

## **2. Additional Traffic Work (WBS 160.10)**

- a. Planning Level Traffic Analysis for one Hybrid Alternative from SR99 to SR120  
During the course of the project development - through engineering analysis, land use pattern analysis and public comments - it became evident that a potential Hybrid of Alternative Alignment #1 and Alternative Alignment #2, which would potentially serve the community well, could be studied.. Though the overall foot-print of the alternatives will remain the same as already identified, the alignment created by mixing a portion of Alternative #1 with Alternative #2 could result in a traffic pattern that is different from those compared to Alternatives 1 & 2. Therefore, this Hybrid Project Alternative needs to be analyzed independently from other alternatives.

The project was originally scoped to perform traffic analysis on three Project Alternatives and a No-Build Alternative. After the final screening of alternatives for further study, the team identified six distinct Project Alternatives (1A, 2A, 1B, 2B, 1C, 2C) for traffic analysis. However, the consultant team assumed that traffic sensitivity analysis can be performed to prove that Project Alternatives B & C can be represented by one analysis, resulting in just four analyses runs

comprising 1A, 2A, 1B/1C and 2B/2C. Thus, through Amendment #3, the traffic analysis scope was revised from the original “three Project Alternatives plus a No-Build” to “four Project Alternatives plus a No-Build”. Since that amendment was approved, the team successfully completed the sensitivity analysis to prove that the analysis is only required for four Project Alternatives plus a No-build.

Combining the need for a Hybrid Project Alternative analysis with the originally assumed four Project Alternatives plus a No-build, the project will now have traffic analysis for five Project Alternatives and a No-build alternative. The scope of analysis for the Hybrid Project Alternative will be the same as that identified for the other Project Alternatives identified in the original contract.

b. Traffic Analysis for two additional first phase Alternatives (ICP – now being called Phase 1) approximately from McHenry Avenue to SR 120 termini

The original approved scope involves analyzing three Phase-1 Project Alternatives and a No-Build Alternative. As described in the previous section, after the screening of alternatives for further study, three termini were identified at the east end of the project – resulting in the possibility of six Phase-1 Project Alternatives plus a No-Build Alternative. With the addition of a Hybrid Phase-1 Project Alternative being now identified through this amendment, it would have resulted in seven Phase-1 Project Alternatives plus a No-Build Alternative. Note that it is not possible to optimize the scope by combining the eastern two alternatives, as the team successfully did for the Planning Level Traffic Analysis described in the previous section, since the Phase-1 analysis involves a more refined project level analysis.

However, in an attempt to optimize the scope, the project team is now attempting to screen out at least one of the three termini at the east end of the project. If successful, this would result in Four Phase-1 Project Alternatives, one Hybrid Phase-1 Project Alternative, plus a No-Build Alternative. Though there is a risk that still exists that Caltrans may not approve screening out the alternatives at this phase of project development (thus resulting in schedule delay & cost increase), the team is proceeding with this approach based on the data we have thus far. It is anticipated that the team will have a final result on the screening within a couple of months.

The scope of work for the two additional Phase-1 Project Alternatives will be the same as that assumed for the three Project Alternatives specified in the original scope.

The traffic analysis for items 2(a) and 2(b) described above has resulted in an increase of **\$102,060** to the budget.

3. Coordination of the additional Environmental and Traffic scope of work

The additional work scope in the environmental analysis and traffic analysis being performed by the sub-consultants will be coordinated with Caltrans, and

their work products reviewed by the Jacobs team, as envisioned in the original contract.

These items have resulted in an increase of \$330,002 to the budget.

**Summary and Approval Request:**

The NCCTEA approval is requested for Contract Amendment # 4 to incorporate the additional work as described in this request, bringing the total increase of the requested amendment #4 to **\$330,002**.

The following table provides a summary of the costs:

Item Description	Item #	Sub Total	Total
<b>Sub Consultants</b>			
CTS Surveys - ICF	1a	\$ 54,020	\$ 193,075
Branchiopod Surveys - ICF	1b	\$ 64,127	
Botanical Surveys - ICF	1c	\$ 74,928	
Traffic Analysis - Fehr & Peers	2a & 2b	\$ 102,060	\$ 102,060
<b>Jacobs Engineering</b>			
Mark up on Sub Consultant cost @5%		\$ 14,757	\$ 34,867
Coordination of tasks	3	\$ 20,110	
<b>Grand Total</b>			<b>\$ 330,002</b>

In addition, I would like to point out an administrative error that crept into the contract totals when the last amendment was processed. The number for the contract amount before Amendment #3 was transposed incorrectly to \$8,847,383, instead of the correct number of \$8,847,838. I request that this error be corrected in the upcoming Board item.

Total Contract Amount prior to Amend #3	\$ 8,847,838
Amount added in Amendment #3	\$ 221,382
Correct contract amount as of last Amendment	\$ 9,069,220
Current Amendment #4 Request	\$ 330,002
Revised Contract amount after approval	\$ 9,399,222

Should you have any questions, please contact me at 916-799-6779 or at kris.balaji@jacobs.com.

Sincerely,



Kris Balaji, P.E., PMP  
Project Manager

#### Attachments

1. ICF Scope & Fee dated May 9, 2012
2. Fehr & Peers Scope and Fee dated May 9, 2012
3. Jacobs spreadsheet with back up data