



Topic: **Authority Board Agenda Item 5-4.8**

2020 February 26

Subject: **Contract Amendment for Professional Services (AECOM)**

Requested Action:

Consider approval of contract amendment to increase the budget to the AECOM contract (Attachment A).

Detailed Description/Background:

AECOM has been providing support to the Authority's Value Planning task. The Authority has requested additional support to complete the task. The proposed amendment would increase the AECOM contract budget by \$20,000 to \$2,553,454.

Prior Action:

November 21, 2019: Approved a recommendation to the Project Authority to approve a modification to the AECOM contract period of performance by extending the contract from December 31, 2019 through June 30, 2020 with no change in cost.

July 19, 2019: Approved a recommendation to the Authority Board to extend the AECOM contract from July 31, 2019 through December 31, 2019.

February 21, 2019: Approved a recommend to the Authority Board to extend the AECOM contract from March 31, 2019 through July 31, 2019.

October 18, 2018: Approved a recommendation to the Authority Board to postpone or cancel the evaluation of submittals for Service Area H (Engineering Services).

Fiscal Impact/Funding Source:

No change to the approved Amendment 1B total budget.

Staff Contact:

Joe Trapasso

Attachments:

Attachment A – AECOM Contract Amendment 13



**SITES PROJECT AUTHORITY
CONTRACT AMENDMENT**

Consultant: AECOM Technical Services, Inc.

Contract:

Sites Project Authority Consulting Agreement with AECOM dated November 2, 2015

Contract Amendment No. 13:

This contract amendment adds additional scope of work and increases the budget.

Scope of Work:

AECOM has been providing engineering support to the Authority's Value Planning task on the subject contract. The scope of work of this task has been increased requiring additional support from AECOM. The complete revised AECOM Value Planning scope of work is attached.

Budget:

The AECOM contract ceiling is increased by \$20,000 with this amendment to complete the attached Value Planning scope of work. This additional budget increases the contract budget ceiling to a not to exceed amount of \$2,553,454.

AECOM

SITES PROJECT AUTHORITY

Signature

Signature

Printed Name

Printed Name

Date

Date

AECOM Amendment 13 Attachment



Working Draft AECOM Amendment 1B Engineering Value Planning Scope of Work

1.0 Value Planning Refinements

1.1 Evaluate Potential Cost Reduction Measures Identified at December 16, meeting

1.1.1 Develop Conceptual Level Cost for an Alternative Pumping from Funks Reservoir Directly into Sites Reservoir

This measure would involve two diversions: 1) A diversion from the TRR on GCID all the way into Sites Reservoir; and 2) A diversion of water from the T-C Canal at Funks Reservoir all the way into Sites Reservoir. The approach would be to route one-half of each diversion through each of the I/O tunnels. This would be costed as a new alternative (e.g., Alternative 7b). This would be a class 5 cost estimate.

1.1.2 Develop Cost Estimates for Bridges Associated with Different Size Reservoirs

Bridge alternatives will be evaluated that have deck elevations associated with the height required for 1.3 and 1.0 MAF reservoirs. In some cases, this is likely to include accessing the east abutment of the bridge via a tunnel through the ridge to reduce the volume of an open cut required through the ridge for an access road.

1.1.3 Formulate and Evaluate Construction and Permanent Road Connections

Alternative road connections will be formulated and evaluated to identify the preferred road/bridge connections to be included in the preferred project. It will identify the pros and cons associated with bridge versus roads, potential for phasing, public safety, acceptability, maintenance and costs.

1.2 Evaluate Preliminary Alternatives (Excluding Stony Creek)

1.2.1 Formulate and Evaluate Additional Alternative(s)

The preliminary alternatives identified in the 16 December Workshop will be reviewed for completeness. Additional alternatives will be formulated reflecting additional cost reduction measures, as appropriate. The level of evaluation will be consistent with that used in the October 14, 2019 memorandum.

tober 14, 2019 memorandum will be updated to include the additional

1.2.2 Establish Decision Support Framework

Provide input working with the Authority and Participants to establish a decision support framework for differentiating between alternatives and selecting the tentatively preferred project. The framework will follow techniques presented in the document entitled "Trade-Off Analysis Planning and Procedures Guidebook", USACE; IWR 2002. Decision support criteria, metrics and weighting were established reflecting key project attributes and their relative importance to the participants.

1.2.3 Screen Preliminary Alternatives and Select up to three for Refinement

The decision support framework will be applied to the preliminary alternatives. Up to three alternatives will be selected for refinement.

1.2.4 Refine Engineering Evaluation of Selected Alternatives Presented

A refined appraisal level engineering analyses of the additional alternatives will be completed. Aspects of the previous value planning engineering evaluations warrant refinements reflecting better topographic information, risks, costs and contingencies. This effort will include:

- Providing input in establishing participant demand/delivery schedule. This effort is led by Jacobs operations
- Providing input in establishing deliveries and conveyance capacities reflecting coordinated operations and delivery schedules. This effort is led by Jacobs operations
- Identifying preferred location, alignment and facilities for pumping from reregulating reservoirs into Sites Reservoir. These will be in the vicinity of Funks Creek, Willow Creek, and Hunters Creek,
- Providing input in coordinating with Counties regarding proposed alignments of conveyance facilities alignments. This effort will be led by the Authority.
- Refining real estate costs in coordination with the Authority.
- Refining contingencies for new facilities reflecting the standards of AACE.

- Refine cost estimates.

The evaluation will include a description of the proposed facilities, preliminary drawings with facility layouts, a class 5 cost estimate, a brief discussion of constructability, construction scheduling considerations, and a list of potential mitigation concerns.

1.3 Formulate and Evaluate Stony Creek Alternative

1.3.1 Assess Potential Diversion from Stony Creek

The potential for diversions that may be obtained from Stony Creek will be assessed. It will include:

- Assessing timing, magnitude and duration of flood flows, AECOM
- Providing input for assessing timing, magnitude and duration of flows available for diversion from Stony Creek. This effort will be led by Jacobs operations.
- Evaluate timing of TCC and GCC Sacramento River diversions and available canal capacity for Stony Creek diversions, AECOM

1.3.2 Complete Cursory Assessment of Potential location and facilities for Diversion from Stony Creek

A cursory engineering assessment will be made regarding the alternative means of diverting water from Stony Creek will be made. The results will help inform the decision as to whether or not this alternative warrants further study. It will include:

- Assess potential for using an inflatable dam to divert into the TCC
- Assess potential for using a Rainey Collector to divert into the TCC
- Assess potential for using Orland Unit Water User's Association facilities to divert into the TCC
- Identify preferred location and facilities.

1.3.3 Determine if Further Study of Stony Creek is Warranted, Value Planning Group

Review findings of 1.3.1 and 1.3.2 with Value Planning Group and obtain direction on next steps.

1.3.4 If Appropriate, Complete Engineering Evaluation of Stony Creek Diversion

If judged appropriate, an appraisal level engineering evaluation will be completed for this alternative. It will include:

- Establishing deliveries and conveyance capacities reflecting coordinated operations and delivery schedules, Jacobs operations
 - Incorporating the potential mitigation costs into the analyses, environmental team to provide cost
- Complete an appraisal level engineering assessment of the Stony Creek Diversion will be conducted. The evaluation will include a description of the proposed facilities, preliminary drawings with facility layouts, a Class 5 cost estimate, a brief discussion of constructability, construction scheduling considerations, and a list of potential mitigation concerns.

1.4 Coordinate with the Repayment Analyses

Engineering input will be provided to support the repayment analyses for the selected alternative. The repayment analyses will be conducted by others.

1.5 Coordinate with the Environmental/Permitting Assessment

Engineering input will be provided to support the environmental/permitting assessment for the selected alternatives.

1.6 Coordinate with the Risk Assessment

Engineering input will be provided to support the risk assessment for the selected alternatives.

1.7 Complete Screening of Selected Alternatives

Apply the decision support framework and screening criteria. Compare and contrast alternatives to assist the Reservoir Committee and Board in identifying their preferred project.

1.8 Prepare Sites Project Alternatives Appraisal Report

1.8.1 Prepare Staff Final Draft Report

Take the lead in preparing the final staff draft report, with input from the technical leads, presenting methodologies and findings by March 9, 2020. This will be required in order to review with the Value Planning Group around March 10th, the Reservoir Committee on March 19th and the Authority Board on March 25th.

1.8.2 Prepare Final Report

Take the lead in addressing comments and finalizing the appraisal report, with input from the technical leads, by April 6th, for approval by the reservoir Committee on April 17th and the Authority Board on April 22nd.

1.9 Attend Meetings/Workshops

Attend meetings and workshops to present value planning related efforts.

1.10 Assist in Developing Amendment 2 Work Plan

Assist in developing the engineering scope, schedule and level of effort required for the Amendment 2 Work Plan. This will include providing input on strategies and interrelationships between disciplines.