

ATTACHMENT 4

Budget

A project budget was prepared by Provost & Pritchard Consulting Group in accordance with engineering standard cost estimating procedures. A summary of all estimated costs for each task is provided in **Appendix 4.1**. The task list in **Appendix 4.1** is similar to the list in the schedule and work plan. More detail is provided in the attached backup documentation.

Cost information was obtained from the following:

- Bid canvass for similar project in the area (see **Appendix 4.2**)
- Contractors
- RS Means (an online construction cost database)
- Geotechnical sub-consultant (**Appendix 4.3**)
- Biological sub-consultant (**Appendix 4.4**)
- Labor compliance sub-consultant (**Appendix 4.5**)
- Provost & Pritchard’s past project experience

The budget includes an engineer’s opinion of probable cost along with estimates of consultant costs for administration, planning, design, engineering, environmental documentation, construction contracting, environmental compliance, and construction administration (organized by task). Direct project administration costs are also provided for the Kern County Water Agency (Agency). The Agency will also play a role in design review, environmental documentation, permitting and construction monitoring. Detailed project budget tables are included at the end of this Attachment.

The cost estimate included in this application is believed to be reasonable because the budget was based on actual costs from recent similar projects completed within the region.

Below are discussions on some details of the budget according to the six budget categories listed in the Proposal Solicitation Package.

CATEGORY (A) – PERSONNEL SERVICES

Relevant Tasks

Labor costs only in the following tasks:

Task 1 – Direct Project Administration

Task 2 – Labor Compliance

Task 3 – Reporting

Task 4 – Land Purchase/Easements

Task 5 – Assessment and Evaluation

Task 6 – Final Design

Task 7 – Environmental Documentation

Task 8 - Permitting

Task 9 – Construction Contracting

Task 12 – Construction Administration

Task 13 – Public Outreach

Discussion: Personnel Services include labor costs for the Grantee, the Agency to assist their consultant with project administration, perform design review, secure temporary easements, lead environmental documentation efforts, assist with bid evaluation, and provide on-site construction monitoring. Estimated hours, billing rates, and costs for these services is documented in **Appendix 4.6**

CATEGORY (B) – LAND/EASEMENT ACQUISITION

Relevant Tasks:

Task 4 – Land Purchase/Easements

Discussion:

No land purchases will be required for the project. The District is currently identifying locations for temporary construction easements on vacant parcels for equipment storage and earth stockpiles. It is estimated that 15 acres will be required. One potential area has been identified and more will be explored. All the potential locations are on nearby industrial land with estimated values of \$10,000/acre. Based on Agency staff experience for similar properties, the cost for the easements is estimated at 10% of \$10,000/acre (value of land) for 15 acres for a total of \$15,000. Salary costs to help secure the easement are included in Category A – Personnel Services.

CATEGORY (C) – GRANTEE EXPENSES

Relevant Tasks

Reimbursable costs only for the following tasks:

Task 1 – Direct Project Administration

Task 2 – Labor Compliance Program

Task 3 – Reporting

Task 4 – Land Purchase / Easements

Task 7 – Environmental Documentation

Task 12 – Construction Administration

Task 13 – Public Outreach

Discussion: Grantee Expenses include direct and reimbursable costs for the Grantee, the Agency. These include costs for document reproduction, office expenses, materials, etc. These are documented in **Appendix 4.6**.

CATEGORY (D) – EQUIPMENT

Relevant Tasks:

None

Discussion:

Equipment costs are for individual pieces of equipment that cost greater than \$5,000. There will be no equipment purchases that exceed \$5,000 for this project.

CATEGORY (E) – PROFESSIONAL AND CONSULTANT SERVICES

Relevant Tasks:

Task 1 – Direct Project Administration

Task 2 – Labor Compliance Program

Task 3 – Reporting

Task 5 – Assessment and Evaluation

Task 6 – Final Design

Task 7 – Environmental Documentation

Task 8 – Permitting

Task 9 – Construction Contracting

Task 10 – Construction

Task 11 – Environmental Compliance/Mitigation/Enhancement

Task 12 – Construction Administration

Discussion:

Fees are included for a lead civil engineering consultant and subconsultants for labor compliance, geotechnical investigations, biological surveys, and construction testing. The estimated hours, billing rates, subconsultant estimates and overall fees are documented in **Appendix 4.6**.

The budget includes time for Agency’s engineering consultant for direct project administration costs including conference calls, meetings and meeting minutes, subconsultant management, coordination with stakeholders, overall project coordination, project reporting, payment requests, contract management, and general correspondence with the Department of Water Resources.

The budget also includes \$11,250 for a Labor Compliance Program, which was based on a direct quote of \$2,250/month from a Labor Compliance Subconsultant for a similar project in the area (see **Appendix 4.5**). It is estimated that their services will be needed for five months.

Assessment and Evaluation is set to be completed by January 2015. Survey time has been estimated for conducting a thorough topographic and boundary survey. Geotechnical work will consist of soils analysis, slope stability analysis, and earthwork recommendations for the canal. Project design work has been estimated based on

experience with canal lining projects in the Central Valley. Permitting includes a Stormwater Pollution Prevention Plan, Dust Control Plan, and Indirect Source Review preparation costs by a consultant. **Appendix 4.3** includes a proposal for geotechnical investigations. **Appendix 4.3** includes a proposal for biological services. The biological proposal covers CVC Pool No. 8 (proposed project) and Pool No. 7 (not part of proposed project). The fee for Pool No. 8 would be half of the total value quoted for both pools.

Permit fees are included for the Stormwater Pollution Prevention Plan, Dust Control Plan and Indirect Source Review. The value of the fees was estimated based on the size of the project, and a consultant's experience with these permit fees on other projects.

For Construction Administration, the budget includes time for the engineering consultant to perform construction staking and construction administrative tasks; and a soils testing firm will conduct compaction/materials testing. All surveying and construction estimates are based on prevailing wages. Construction monitoring will be performed by Agency staff (see Category A – Personnel Services)

Based on a review of potential environmental issues, no environmental mitigation, compliance or enhancement is expected to be necessary. However, \$20,000 is included in the budget to account for unforeseen or unexpected measures. This will also cover SWPPP/DCP monitoring and reporting as well as a biological pre-construction review and tailgate training with the Contractor.

CATEGORY (F) – CONSTRUCTION/IMPLEMENTATION COSTS

Relevant Tasks:

Task 10 – Construction

Discussion:

Provost & Pritchard estimated construction quantities using earthwork modeling software and cross sections were developed for determining lining areas. Costs were estimated using the bid estimates from similar projects (**Appendix 4.2**), and preliminary budget data from a local contractor. Construction is estimated to be \$3.33 million (as itemized in **Appendix 4.7**). With the large volume of materials on this project, costs can vary significantly between different suppliers and costs can increase or decrease over a short period of time; therefore a 20% contingency was included for the project.

Administrative Costs

Administrative costs are included in portions of Categories A, C and E. They are also limited to Tasks 1 through 3. The Budget Summary (**Appendix 4.1**) shows that these three tasks total \$100,710, which is less than 3% of the total project budget. This satisfies the criteria that administrative expenses be less than 5% of the total project

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cost. The Agency is the lead agency for the project. Agency staff have administered several similar projects, and believe that their estimate of administrative expenses is accurate.

Legal Costs

Legal services are anticipated to be necessary for contract management, easement acquisition and awarding construction contracts. These are all included in Category C – Personnel Services.

Mileage and Travel Costs

The cost estimate does not include mileage, per diem or travel costs. Any such costs will be borne directly by the Agency.

Construction Implementation Contingency

The construction cost estimate includes a 20% contingency. This contingency is considered appropriate for the feasibility-level design (15% plans) and accounts for uncertainty in dimensions, uncertainty in design, allowance for neglected items, and uncertainty in regulatory requirements.

The budget is summarized in **Table 4.1** below according to the six cost categories in the Proposal Solicitation Package. Refer to **Appendix 4.1** for a summary of costs by Task.

Table 4.1 - Project Budget Summary

Category	Line Item	Requested Grant	Cost Share	Total
a	Personnel Services	\$0	\$101,796	\$101,796
b	Land Easement Acquisition	\$0	\$15,000	\$15,000
c	Grantee Expenses	\$0	\$1,100	\$1,100
d	Equipment	\$0	\$0	\$0
e	Professional and Consultant Services	\$0	\$380,740	\$380,740
f	Construction/Implementation Costs	\$2,500,000	\$830,000	\$3,330,000
	Total	\$2,500,000	\$1,328,636	\$3,828,636

Cost Share

The Agency has adequate funds to cover the project cost share of \$1.3 million. **Attachment 4.8** includes selected pages from the most recent Comprehensive Annual Financial Report completed for the Agency. The report shows that Agency has ‘Cash in bank and on hand’ of \$4.02 million in addition to some other assets, and can meet the local cost share.

Post Construction Monitoring

Costs are not included for post-construction monitoring since they will take place after the project is completed and the grant contract is finalized. Agency already performs monitoring in the canal and monitoring the effectiveness of the project will require little additional effort.

Post Construction Maintenance

Agency will be responsible for post construction maintenance. Agency already maintains the earthen canal and expects that maintaining a concrete canal will require less effort since earth canals require frequent maintenance for erosion and have a higher risk of canal breaching.

Project Scaling

Agency would be willing to accept partial funding in the event that the full requested funding is not available. A smaller project could include canal lining from the upstream end of Pool No. 8 to the siphon under the Calloway Canal. At this location the canal lining would be 5,160 lineal feet and the estimated cost would be \$3.6 million. This represents about 80% of the overall project. For this smaller project Agency would request \$2 million in grant funding.

Appendices

- 4.1 – Summary of Estimated Costs
- 4.2 – Canvass of Bids for Similar Project
- 4.3 – Proposal for Geotechnical Investigation
- 4.4 – Proposal for Biological Services
- 4.5 – Proposal for Labor Compliance Services
- 4.6 – Estimate of Grantee and Consultant Fees
- 4.7 – Engineer’s Opinion of Probable Construction Cost
- 4.8 – Kern County Water Agency Comprehensive Annual Financial Report (Cost Share Documentation)