



June 23, 2017

Ana Straabe  
Chief of Urban Projects & Watershed Planning Division  
Mountains Recreation and Conservation Authority  
Los Angeles River Center & Gardens  
570 W. Avenue 26, Suite 100

**Proposal for Additional Design and Construction Support Services:  
LOS ANGELES RIVER & CABALLERO CREEK CONFLUENCE PARK**

Dear Ms. Straabe,

Please accept our proposal for additional services for an expanded project for the Caballero Creek Confluence Park. We are submitting this proposal because the first contract for the design of the park was for limited implementation funds of approximately \$ 850,000 (see original proposal and Amendment 1). This allowed for a minimalistic design to meet the basic requirements of the available grant funding agreement with the State of California. The goal was to develop the park site with available funds and add further elements in the future. Hence, design and construction drawings for an expanded outdoor classroom structure, more developed park amenities, and most importantly, the wetland for habitat and interpretive activities were excluded from the initial design contract.

Through the design Development Process and in coordination with project partners the final design is now to include the original full design concepts with a maximized bioswale and wetland with a recirculating scheme where water is pumped from Caballero Creek and diverted from the street for use in maintaining the wetland and irrigating the park. The system relies on a grid-tied photovoltaic system to cover all energy requirements. An expansion of the original concept was to attempt to develop a watershed park that would not require additional water and energy from outside sources (“net-zero energy and water”).

An initial budget adjustment was taken during the design development process (Amendment 1) to provide the MRCA the required pre-design and design development for a proposal of an expanded project and to provide technical review by project partners. The resulting expanded design development package

describes the expanded portions of the project for which additional funding would be sought. This included a larger outdoor classroom structure, more accurate cost estimates, and the technical documentation of the hydrology and functioning of the park's water system. The budget of Amendment 1 was based on an original proposal written in 2011 for the full park design. Cost estimates are closely aligned with the first estimates of about \$2.0-2.5 million without contingencies contained in the original grant proposals of 2011.

The budget of Amendment 1 is now exhausted and BlueGreen is in the process of producing construction documents. Because the available budget is too small to complete the next phase we are submitting this proposal that outlines additional work required for the completion of the construction documents.

## SCOPE

### Construction Documents

Due to the increase of design elements within the park more staff time will be required to complete the set of drawings and specifications. In addition, more engineering will be required.

#### 7.1 Structural Engineering

The outdoor classroom structure and the construction of vaults for water extraction as well as the addition of several minor footings for an expanded landscape package require additional work by a structural engineer. The wetland extraction vaults and the outdoor classroom are elements that will have to be reviewed for B-permits. County/Army Corps review will have to be accomplished by issuing additional engineer-stamped review documents.

#### 7.2 Electrical Solar and Pump Controls

Adding in the grid-tied system and the recirculation pumps will require additional engineered controls. The original proposal and Amendment1 included only a basic park package with power supply and basic lighting.

#### 7.3 100% Construction Documents for all design components to date

Additional Landscape Architecture which includes a much larger amount of hardscape and amenities will require more staff time. The outdoor classroom structure and the wetland add substantial components of design that have to be carried through the entire process of construction document and specifications. It is anticipated that the specifications of the wetland system and higher-cost landscape architectural elements such as paving, boardwalk, and seating arrangements will add significantly more work for specifications.

### Note:

It should be noted that wetland and bioswale specifications are difficult to produce as they are a complex legal description of how to artfully use natural materials to build a wetland that looks and functions naturally. To accomplish this task, design time often exceeds the actual time for construction.

Since the City and State require a “public works bidding approach”, bidders with little or no previous experience are not capable of constructing this project unless substantial time is spent in the field with the contractor. We have in previous projects spent as much as 4 weeks writing specifications which contractors have refused to consult during construction. That has resulted in massive on-site meeting time to fend off change orders and explaining the content of the specifications to the contractor.

To build on our previous experiences we are proposing streamlined specifications and a much greater field support for construction by increasing the number of hours the geomorphologist spends with the contractor in the field as a construction supervisor. This approach saves a substantial amount of construction cost because tight supervision and assistance of the contractor during construction will avoid change orders which have previously been the result of the contractor having to redo work that “presumably” was correct. Pertaining to the proposed budget that means that construction support hours should not be reduced without also increasing the number of hours in the budget for writing more detailed specifications.

A secondary benefit of the transfer of hours to construction is the reduction of the overall planning budget, and the ability of reducing construction supervision/inspection budgets as BlueGreen would pick up these tasks for the duration of the wetland construction.

## EXCLUSIONS

1. Permitting and Plan Checks above the time and material work of the initial scope.
2. Permitting support to obtain Health Department clearance for the stormwater reuse portion of the project.
3. Additional Plan Checks for Structures such as shade structures and vaults in excess of the initial project.
4. Expanded Plan Checks, Reports and Meetings to clear Channel Alterations and construction of the extraction vaults
5. Any construction support such as submittals, RFIs, and field supervision for structures, wetlands, boardwalks and any other expanded landscape amenities.
6. Any post-construction support. This includes finalizing and maintaining health department clearance and providing support of any nature to troubleshoot and adaptively adjust the system for performance and reduction of Maintenance burden.

## FEE PROPOSAL

<b>Additional Work Tasks and Associated Fees</b>								
	Landscape Architect	Landscape Designer	Geomorphologist Principal	Engineer 1	Engineer 2			
<b>Hourly</b>	185	125	185	185	165			
<b>CDs</b>								
Structural Engineering					60	\$ 9,900.00		
Electrical Solar and Pump Controls				10	20	\$ 5,150.00		
Construction Documents	60	140	20	12		\$ 34,520.00		
<b>Total Additional</b>							<b>\$ 49,570.00</b>	
<b>Total Revised Project Budget</b>							<b>\$263,385.00</b>	

## BUDGET DISCUSSION

The proposed budget was produced by estimating the additional work required based on hourly fees. Compared to previous proposals there have been some shifts in funds, but the total budget is very similar to the original budgets produced in 2011 for the first grant proposal.

Original Project Budget 2011	\$310,000.00*
First Proposal 2011 (Design only)	\$269,290.00
\$850K Minimalistic Design	\$169,625.00
First Amendment (DD)	\$44,190.00
This Proposal	\$49,570.00
Total Revised Project Budget	\$263,385.00

Based on a 2.35-fold construction cost budget increase of this project we have a 1.55-fold increase of the design cost.

Thank you for accepting this proposal. Please call me at (323) 221-9500 or (323) 775-3292 (cell) if you have questions. You may also reach me at [kammerer@bluegreen.biz](mailto:kammerer@bluegreen.biz).

Respectfully submitted,



Martin Kammerer, Ph.D.  
Principal