Ecological Conservation &Management, Inc.

July 25, 2011

Joddi Leipner
Senior Engineering Environmental Planner
Santa Barbara County Public Works
Resource Recovery and Waste Management
130 E. Victoria Street, Suite 100
Santa Barbara, California 93101

Subject: Baron Ranch Restoration Project – Phase III Request for Professional Services

Dear Ms. Leipner,

Ecological Conservation & Management, Inc. (ECM) appreciates the opportunity to provide our approach and cost for the Baron Ranch Restoration Project – Phase III (Project). ECM has prepared this proposal for the County of Santa Barbara (County), Public Works Department, Resource Recovery and Waste Management Division (RRWMD) following the guidelines provided in your email.

ECM is a recently established California corporation whose principals have extensive experience in the management, monitoring, and conservation of California natural resources. Our staff has direct experience with the Baron Ranch Restoration and the Tajiguas Landfill Reconfiguration projects. As Vice President for Natural Resources at AECOM, Mr. Tito Marchant directed all technical work from 2007 until December 2009. During this period and under his direct oversight, AECOM completed the Biological Assessment, all regulatory permits and supporting documents including the California Red-legged Frog Management Plan, the Baron Ranch Restoration Plan and the implementation of Phase I of the restoration effort including riparian and wetland habitats.

Over the last year, ECM implemented, maintained and monitored the Phase II – Southern Coast Live Oak Riparian Woodland. Over 10,000 trees have been installed on approximately nine (9) acres. The project included designing and installing a drip and overhead irrigation system that was adjusted many times to meet water conservation goals and adequate plant growth. Our latest estimate of survivorship is greater than 95 percent for all plant species, plants are growing vigorously, and there hundreds of native plant seedling that have naturally colonize large areas of the restoration. ECM takes pride in the work we do and appreciate the opportunity to partner with the County on these complex and important projects.

To provide the most competitive budget, our proposal includes 2009 labor rates as in the Phase II contract (FY 2010). This includes a much reduced rate for Mr. Tito Marchant, Principal Ecologist. Mr. Marchant standard hourly rate for FY 2011 is $135 – the rate used for Phase III is $95 per hour. Using these lower rates will result in over $20,000 in savings to the County. It is important to note that thus far during Phase II Mr. Marchant has spent approximately 20 percent more hours than included in our budget at no additional cost to the County. It is this level of commitment to the project and quality of work that makes ECM a unique company and your trusted partner. Moreover, ECM has proportionally reduced nearly all tasks in Phase III maximizing economies of scale due to our current work at Baron Ranch. Within the Scope of Work and where appropriate, we have noted these efficiencies and comparisons with Phase II.

ECM will use its home-base crew and will continue to use a Santa Barbara based crew who has been trained to work with native plant restoration. Likewise, ECM will continue to work closely with Ag Services staff at Baron Ranch so that agricultural and restoration programs are successfully executed and managed.

We look forward continuing our working relationship and we assure you we will make this new phase another success story. You have our commitment that we will always be looking for and finding solutions that are practical and cost effective. Our approach as presented in this proposal has taken into account the information provided by the County, our recent experience with Phase II and the current economic challenges the County faces.

If you have any questions or comments regarding our scope and budget, please do not hesitate contacting me via phone at (858) 842-7344 or via email at: Tito.Marchant@ecologicalconservation.biz

Sincerely,

Tito Marchant
Principal Ecologist

Ecological Conservation & Management, Inc.

BARON RANCH RESTORATION PHASE III

SCOPE OF WORK

PROJECT UNDERSTANDING

Phase III of the Baron Ranch Restoration Project (Project) involves the restoration of 8 acres of Southern Coast Live Oak Riparian Woodland including installation and establishment of 8,000 trees and shrubs. This 8-ac area will be made up of smaller polygons along Arroyo Quemado and the adjacent orchards depending on habitat suitability and agricultural value. Orchard tree density varies among these polygons with some polygons having a dense canopy of avocado or cherimoya trees and others being relatively denuded of vegetation. The County has retained Santa Barbara Natives Nursery to provide approximately 6,200 plants. In addition, approximately 1,800 container plants are being grown at Baron Ranch by Ecological Conservation & Management (ECM) under its current contract. Therefore this scope of work does not include any cost for plant material. Following the recommendations of the Baron Ranch Restoration Plan and because Phase III will have a one-year contract only, this scope of work does not include seeding. Seeding, if necessary, should be conducted in spring of 2013.

The County requested ECM to provide a scope and budget for this project including the implementation and the maintenance and monitoring for one year. The end of the contract is assumed to be on December 31st 2012. For the purpose of this scope of work, ECM assumes a project start date of October 15th 2011. The County has noted that if an award is made to ECM for Phase III, the current contract for Phase II will be amended. As such, this scope of work and budget assumes that invoicing will be submitted monthly on a percent complete basis and this project will also have a lump-sum agreement.

TASK 1 IMPLEMENTATION

Site Preparation

Under this task ECM proposes to: 1) delineate areas for restoration of Southern Coast Live Oak Riparian Forest totaling eight (8) acres; 2) implement orchard tree pruning and thinning within the designated restoration areas as needed. Ag Services staff at Baron Ranch will assist ECM on the completion of this task; and 3) implementation of site preparation activities including removal of non-native plants and debris from the restoration areas. A map showing location and acreage of the resulting polygons will be submitted to the County for approval prior to the initiation of restoration activities

Mr. Marchant will work with County and Ranch staff to identify areas that hold the least agricultural value while also providing suitable conditions for target plant community. Once polygons have been established, acreages confirmed, and County has approved all restoration areas, Mr. Marchant will identify and tag trees that need to be pruned and/or thinned. Subsequently, ECM crew will proceed to cut branches on selected trees to allow for a small tractor to move around and in between orchard

trees. Chain saws will be used to cut branches from trees and into smaller pieces that will be left onsite to be used to slow water in gullies and decrease erosion as done in Phase II. Site preparation will also include removal of trash and debris, and removal and control of non-native species.

ECM has allocated four (4) days for Mr. Marchant and eight (8) days for crew to complete the above mentioned work.

Planting and Irrigation System Installation

ECM proposes to follow the planting guidelines based on the Baron Ranch Restoration Plan and the experienced gained during implementation of Phase II of the project. ECM will use a hydraulic-powered auger with a large bit for digging holes for trees. Digging large holes with an auger aerates soil, significantly improves water percolation and makes the construction of a large basin much easier. As needed, ECM will import soil with higher nutrient content and/or better drainage property as it was done during Phase II. This methodology, while being labor intensive, proved to be crucial in the success of Phase II.

Planting will be done in sections so that once a section is completed the irrigation pipes from the main line will be installed and tested before moving into the next section. Each section will be approximately two (2) acres. This proposed approach fulfills several objectives: it ensures that plants are watered soon after planting, that the system is working as designed, and it allows the tractor to move freely around the planting area and without breaking irrigation pipes and sprinkles or drip system.

ECM will inspect the existing irrigation system with Ag Services staff to determine point of connections for the different planting sites as well as to determine water pressure at different points. ECM will determine the number of plants to be installed at each site and determine the number and location of sprinkle heads and/or drip system. The irrigation system will be similar to that previously installed during Phase II of the project and will provide the flexibility needed for the different plant species and heterogeneity of each planting site.

ECM will provide a ninety (90) day warranty from the time of installation for all planted containers. ECM plans to begin implementation on October 15th 2011 and be completed by December 15th 2011.

TASK 2 MAINTENANCE

Maintenance activities will primarily involve weeding and maintenance of the irrigation system. Maintenance will be directed by Mr. Marchant and will take place after the horticultural visits. Based on our experience at Baron Ranch we expect infestations of poison hemlock, sweet fennel, castor bean, tobacco tree, common mallow and mustard species to be the primary non-native plants of concern. These plants will be controlled with herbicide early on their development and hand pulled later in the season as the density of these plants decreases. No invasive plant species will be allowed to set seed within the restoration areas. Maintenance activities will begin immediately after project implementation on or about December 15th 2011. Maintenance will be provided for one year – from

December 15th 2011 until December 31st 2012. ECM will likely spend more time during the spring and early summer than fall and winter and thus the level of effort will not be even throughout the 12-month maintenance period.

ECM plans to aggressively and timely control weeds to keep them under control. ECM will also take advantages of our current work at Baron Ranch to provide adequate maintenance at a reduced cost to the County. ECM has included approximately 35 days of maintenance for the 12-month maintenance period in the proposed budget. As a comparison, ECM has spent on average eight (8) days a month since December 2010 (approximately 56 days thus far) maintaining irrigation systems, controlling weeds, and repairing early damage from winter storms.

TASK 3 PERFORMANCE MONITORING & REPORTING

ECM's Restoration Project Manager will qualitatively and quantitatively evaluate project success in relation to the project performance criteria and submit annual reports documenting project progress. The monitoring program will focus on documenting the progress of the project including: native vegetation cover, nonnative vegetation cover, species diversity, and natural recruitment.

Monitoring will include horticultural and botanical inspections. Monthly horticultural monitoring visits will qualitatively assess the health of the plant material and the overall condition of the restoration site. Monthly emails will be sent to the County summarizing the results from these visits and will include directions for maintenance activities, recommendations, and a brief summary of existing conditions. Representative photographs will be included in these monthly emails. The plant material (container plants and seeded areas) will be inspected in order to characterize the growth and establishment of the plant material with emphasis placed on signs of stress, mortality, pathogens, or disease. The growth stage will also be described to record when and if installed species are flowering and setting seed. Similarly, evidence of natural recruitment will be recorded. Photopoints are landscape photographs taken at the same location overtime to document progress. Care will be taken to provide a consistent frame so that differences over time can be easily seen. ECM will establish six (6) to eight (8) photopoints throughout the restoration area. GPS coordinates will be taken of each photopoint.

Botanical monitoring will provide quantitative data concerning vegetative plant cover estimates, percent survival, and tree height to monitor changes in the restoration effort over time. Methods of survey will include point-intercept transects for estimating cover. Tree height will be calculated by measuring the tree height of at least 10 percent of all installed coast live oak trees in the southern coast live oak riparian forest and woodland areas. Average tree height for other species, including arroyo willow, narrow-leaved willow, and western sycamore will be based on sampling at least 20 percent of the installed trees per species. Monitored trees will be tagged and GPS coordinates taken. This data will provide a measurement of progress toward the success criteria. Botanical monitoring will be conducted during the growing season (between April and June). Sampling times shall be consistent from year to year. The monitoring data shall be included in the annual reports.

Annual reports will be concise and will include graphs, figures, photographs, and tables. Each report will summarize results from the qualitative and quantitative monitoring and outline the progress made toward meeting mitigation requirements, major problems and challenges faced during the year will be documented. Adaptive management strategies implemented, conclusions and future recommendations will also be provided. The report will also compare the current conditions to the required standards for the first year after restoration by the California Department of Fish & Game set forth in the permits documents. Deviations from standards, species substitutions, and overall differences between required and current conditions will be explained and as appropriate, recommendations included.

One annual monitoring report is included in this scope of work and budget and will be submitted by December 1st 2012. ECM will finalize the report within twelve (12) days based on one set of comments made by County staff. A final report will be submitted to the County no later than December 12th 2012.

ECM has included 140 hours of Mr. Marchant's time for this task. As a comparison, Phase II included 230 hours of Mr. Marchant's time for this task. ECM will take advantages of the synergies between Phase II and Phase III to substantially decrease the cost for this task.

Task 4 Restoration Plan Coordination, Management, & Quality Assurance

Restoration Plan Coordination

Tito Marchant has been working closely with RRWMD management staff, particularly with the County's Project Manager, Ms. Joddi Leipner, for the last four (4) years. We understand the importance of this project to the County and personally to Ms. Leipner. Prior to project implementation Mr. Marchant will visit the nurseries to inspect plants under propagation for this phase. After each nursery visit, Mr. Marchant will call or email Ms. Leipner and update her on the status of plants. Mr. Marchant will inspect all plants when delivered at Baron Ranch and accept only those that meet the requirements of the project and are pest free. In addition, Mr. Marchant will assist Ms. Leipner to plan for subsequent phases of the restoration program at Baron Ranch.

To keep the County and its Project Manager abreast of the progress being made, Mr. Marchant will be present during all construction activities and scheduled maintenance work during the first year. At the end of each week Mr. Marchant will email Ms. Leipner, a brief letter report with pictures summarizing the work done. Problems or important issues will be communicated immediately to Ms. Leipner via phone. Within six (6) weeks of the installation, ECM will certify in writing the successful completion of the project installation per the mitigation requirements and outline as-built conditions for the mitigation areas.

Project Management

ECM was founded on the idea of eliminating unnecessary layers of management and overhead that overburden hourly rates and generally removes project principals for the day to day management that can make or break a project. Toward this end, Mr. Tito Marchant will serve as Program Principal but also as Project Manager based on both his technical expertise and experience working with the County

of Santa Barbara over the last three years. The County's project managers and accounting staff will have direct access to Mr. Marchant through cell phone and email to ensure a same day response. He will also personally oversee the allocation of staff and resources to meet the needs of the project.

Quality Assurance

ECM quality control plan involves a series of rigorous peer reviews by senior staff at all major milestones of the project. It is ultimately the responsibility of Tito Marchant, the Project Manager, to ensure that all the points of our quality control plan are addressed prior to submitting deliverables to the County. Tito will be supported by Julie Simonsen-Marchant to ensure: 1) that all the deliverables meet the specifications outlined in the scope of work; 2) the documents have been peer reviewed and technical edited; 3) that coordination with the resource agencies has been documented; 4) that all calculations recommendations have been verified; and that 5) appropriate client communication has occurred to ensure deliverable meets their expectations and does not generate any issues that have not previously been brought to the County.

Accounting

Mr. Marchant will be assisted by Julie Simonsen-Marchant, ECM treasurer and accountant. Project budget updates are generated on a weekly basis, including all hourly and project charges. In our experience timely accounting is mandatory to ensure that available funds are spent efficiently and that overruns are avoided. In addition, to reviewing weekly charges, Mr. Marchant will also be personally responsible for preparing all invoices and associated progress reports submitted to the County. Invoices will be submitted with percent complete estimates for each major task.

ECM has included 80 hours for this task or approximately 6 hours per month. As a comparison, Phase II included 144 hours per year. ECM has included the minimum hours for this task in an effort to reduce costs.

BUDGET	Labor Costs					Total	Direct Costs					Total	
Job Category	Principal Ecologist	Foreman	Crew Leader	Crew	GIS	Labor	Truck/day	Equipment/day			Supplies	Direct	Total
Rates	$95	$ 60.00	$ 45.00	$ 25.00	$ 65.00	Costs	$ 85.00	$ 250.00	$ 125.00	$ 40.00		Costs	Revenue
Site Prep	40	80	80		7	**$ 12,655.00**	$ 1,020.00		$ 500.00	$ 200.00	$ 250.00	**$ 1,970.00**	**$ 14,625.00**
Planting	120	280	280	1120		**$ 68,800.00**	$ 3,400.00	$ 3,000.00	$ 750.00		$ 850.00	**$ 8,000.00**	**$ 76,800.00**
Irrigation	30	90	90	160		**$ 16,300.00**	$ 1,020.00				$ 10,000.00	**$ 11,020.00**	**$ 27,320.00**
Maintenance													
Year 1 (Dec 11 - Dec 12)		350	350	350		**$ 45,500.00**	$ 2,975.00	$ 1,500.00	$ 2,250.00	$ 960.00	$ 4,800.00	**$ 12,485.00**	**$ 57,985.00**
Monitoring & Reporting													
Year 1 (Dec 11 - Dec 12)	140				20	**$ 14,600.00**	$ 1,020.00					**$ 1,020.00**	**$ 15,620.00**
Coordination & Management	80					**$ 7,600.00**						**$ - **	**$ 7,600.00**
	410	800	800	1630	27	**$ 165,455.00**	$ 9,435.00	$ 4,500.00	$ 3,500.00	$ 1,160.00	$ 15,900.00	**$ 34,495.00**	**$ 199,950.00**

SUMMARY COSTS PER TASKS

Task 1.- Implementation	$	118,745.00
Task 2.- Maintenance	$	57,985.00
Task 3.- Monitoring	$	15,620.00
Task 4.- Coordination & Management	$	7,600.00
	$	199,950.00

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RATE SCHEDULE FY 2011

LABOR RATES

Principal Ecologist $135

Senior Biostatistician $135

Biogeographer/GIS Analyst $65

Foreman $63

Word Processing $50

Senior Biogeographer $100

Senior Ecologist $100

Ecologist $70

Crew Leader $47

Crew $37

OTHER DIRECT COSTS

Mileage $0.56

Per Diem $135

Trucks 4x4 $90/day

EQUIPMENT

Spray Rigs: $250/day 500 ga; $125/day 250 ga

Water Trailer $150/day

Bobcat $600/day

GPS $100/day (sub-meter accuracy)

Weed cutters/Chain Saws $50/day