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**City of Las Cruces**<sup>®</sup>  
 PEOPLE HELPING PEOPLE

**Council Action and Executive Summary**

Item # 6      Ordinance/Resolution # 11-12-404

For Meeting of \_\_\_\_\_  
 (Ordinance First Reading Date)

For Meeting of February 21, 2012  
 (Adoption Date)

**TITLE:** A RESOLUTION APPROVING AN INDEFINITE QUANTITY, INDEFINITE COST CONTRACT FOR VECTOR AND PEST CONTROL SERVICES PRICE AGREEMENT AWARDED TO ENTOMOLOGY CONSULTANTS, LLC OF LAS CRUCES, NM FOR A FOUR (4) YEAR TERM CONDITIONED UPON ANNUAL RENEWALS AND PENDING APPROVED BUDGETS.

**PURPOSE(S) OF ACTION:**

To award contract.

<b>COUNCIL DISTRICT: All</b>		
<b><u>Drafter/Staff Contact:</u></b> Mark Johnston	<b><u>Department/Section:</u></b> Parks & Recreation	<b><u>Phone:</u></b> 541-2550
<b><u>City Manager Signature:</u></b> 		

**BACKGROUND / KEY ISSUES / CONTRIBUTING FACTORS:**

Staff members from the Parks and Recreation Department and the Purchasing Section developed a Request for Proposal (RFP) for the provision of vector and pest control services. The City received one proposal in response to the RFP. Entomology Consultants, LLC, a locally owned sole proprietorship, submitted all required information. The submittal was reviewed by staff and scored according to predetermined criteria. Entomology Consultants, LLC received excellent marks across the board.

The pricing agreement will provide City-wide control of mosquitoes and other pests such as Africanized bees and fire ants. The contract is estimated at \$95,000 per year including New Mexico GRT.

**SUPPORT INFORMATION:**

1. Resolution.
2. Exhibit "A", Vendor's proposal response.
3. Exhibit "B", Purchasing Manager's Request to Contract.

(Continue on additional sheets as required)

**SOURCE OF FUNDING:**

<b>Is this action already budgeted?</b>	Yes	<input checked="" type="checkbox"/>	See fund summary below
	No	<input type="checkbox"/>	If No, then check one below:
	<i>Budget Adjustment Attached</i>	<input type="checkbox"/>	Expense reallocated from: _____
		<input type="checkbox"/>	Proposed funding is from a new revenue source (i.e. grant; see details below)
		<input type="checkbox"/>	Proposed funding is from fund balance in the Fund.
<b>Does this action create any revenue?</b>	Yes	<input type="checkbox"/>	Funds will be deposited into this fund: in the amount of \$_____ for FY__.
	No	<input checked="" type="checkbox"/>	There is no new revenue generated by this action.

**BUDGET NARRATIVE**

N/A

**FUND EXPENDITURE SUMMARY:**

Fund Name(s)	Account Number(s)	Expenditure Proposed	Available Budgeted Funds in - Current FY	Remaining Funds	Purpose for Remaining Funds
Parks & Recreation A&G Purchased Services General	10383010- 722190	\$95,000	\$164,678	\$69,678	Other contracted services.

**OPTIONS / ALTERNATIVES:**

1. Vote "Yes"; this will approve the pricing agreement for vector and pest control services with Entomology Consultants, LLC.
2. Vote "No"; this will not approve the pricing agreement for vector and pest control services, RFP process will need to be repeated and City will not have vector and pest control services.
3. Vote to "Amend"; and provide changes required.
4. Vote to "Table"; and provide staff with further direction.

**REFERENCE INFORMATION:**

N/A

**RESOLUTION NO. 11-12-404**

**A RESOLUTION APPROVING AN INDEFINITE QUANTITY, INDEFINITE COST CONTRACT FOR VECTOR AND PEST CONTROL SERVICES PRICE AGREEMENT AWARDED TO ENTOMOLOGY CONSULTANTS, LLC OF LAS CRUCES, NM FOR A FOUR (4) YEAR TERM CONDITIONED UPON ANNUAL RENEWALS AND PENDING APPROVED BUDGETS.**

The City Council is informed that:

**WHEREAS**, mosquitoes are recognized as a serious public health hazard and as vectors in the transmission of disease such as West Nile Virus; and

**WHEREAS**, a qualifying Request for Proposal (RFP) for Vector and Pest Control Services was received from Entomology Consultants, LLC; and

**WHEREAS**, a balanced, environmentally responsible mosquito control program will address citizen concerns and promote public health; and

**WHEREAS**, funding for services is provided in the FY 2011/2012 Parks and Recreation Department budget; and

**NOW, THEREFORE**, be it resolved by the governing body of the City of Las Cruces:

**(I)**

**THAT** the vendor's proposal response attached hereto as Exhibit "A" is approved and a contract for vector and pest control services is hereby awarded to Entomology Consultants, LLC of Las Cruces, NM for a four (4) year term conditioned upon annual renewals and pending approved budgets, in the amount estimated to be \$95,000 including New Mexico GRT.

(II)

THAT the Purchasing Manager is authorized to contract with Entomology Consultants, LLC as outlined in the signed Exhibit "B", Purchasing Managers Request to Contract Form, attached hereto.

(III)

THAT City staff is hereby authorized to do all deeds necessary in the accomplishment of the herein above.

DONE AND APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2012.

APPROVED:

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

VOTE:

Mayor Miyagishima: \_\_\_\_\_  
Councillor Silva: \_\_\_\_\_  
Councillor Smith: \_\_\_\_\_  
Councillor Pedroza: \_\_\_\_\_  
Councillor Small: \_\_\_\_\_  
Councillor Sorg: \_\_\_\_\_  
Councillor Thomas: \_\_\_\_\_

(SEAL)

Moved by \_\_\_\_\_

Seconded by \_\_\_\_\_

APPROVED AS TO FORM:

  
\_\_\_\_\_  
City Attorney

**RFP COMPLIANCE DECLARATION**

**RFP TITLE:** Vector & Pest Control Services Price Agreement  
**RFP NO.:** 11-12- 404  
**DUE DATE/TIME:** December 28, 2011 / 4:00 p.m.

In compliance with the requirements of this RFP, I, the undersigned, offer and agree to furnish any or all materials and/or services to the City of Las Cruces within the time agreed.

I further certify that this company has not been debarred, suspended, or otherwise made ineligible for participation in Federal Assistance programs under Executive Order 12549 Debarment and Suspension as described in the Federal Rules and Regulations.

Receipt of Addenda Nos.:  is hereby acknowledged (where none received, place a zero in this space)

Company Name and Address:

Entomology Consultants LLC

598 Canyon Point

Las Cruces, NM 88011



Authorized Signature

Matthew D. Lee

Typed or Printed Name

Medical Entomologist / member / manager  
Title

Telephone number (575) 639-3897 Fax number \_\_\_\_\_

Services will be completed within 1 days after contract execution.

E-Mail Address entconsultants@hotmail.com Las Cruces Business License 4140

NM In-State Preference (If applicable)

State of Incorporation \_\_\_\_\_ Number \_\_\_\_\_ (If applicable)

Federal I.D. number 452-49-0513 (SSN) New Mexico CRS number 03-116819-00-1

**THIS FORM MUST BE COMPLETED AND INCLUDED WITH PROPOSAL  
FAILURE TO INCLUDE WILL SUBJECT RESPONSE TO REJECTION**

**LAS CRUCES IN-CITY LOCAL PREFERENCE CERTIFICATION FORM**

Bid/Proposal No.: 11-12-404

Business Name: Entomology Consultants LLC

**Business Location:**

Address: 598 Canyon Point

City: Las Cruces

Zip Code: 88011

Current City of Las Cruces Business Registration number: 4140

Expiration date: 07/31/12

**Business Type:**

Corporation -- Indicate state of incorporation: State: \_\_\_\_\_

Partnership -- Indicate "general" or "limited": \_\_\_\_\_

Sole Proprietorship

Individual

**Basis for Preference: (CHECK ONE ONLY)**

Ten (10) or more of the business' employees are residents of the City or 25% or more of the business' employees are residents of the City, whichever is greater.

The business is a corporation with 25% of its employees being residents of the City.

The business is a partnership with residents of the City owning a majority beneficial interest in the partnership.

The business is a sole proprietorship owned by a resident of the City.

**CERTIFICATION:** I hereby certify that the information which I have provided on this form is true and correct, that I am authorized to sign on behalf of the business set out above, and if requested by the City will provide, within 10 days of the request, the necessary documents to substantiate the information provided on this form.

By: Matthew D. Lee Title: member/manager Date: 12-23-11

**THIS FORM IS REQUIRED WITH RFP RESPONSE TO OBTAIN LOCAL PREFERENCE**

**ENTOMOLOGY**  
**CONSULTANTS**

LLC



**City of Las Cruces**

**Vector & Pest Control Service Price Agreement**

**RFP NO: 11-12-404**

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## **CRITERIA 1. TECHNICAL APPROACH**

### **Integrated Mosquito Management Services**

The primary focus of vector control is the prevention and control of arbovirus diseases through an integrated approach. A fully Integrated Mosquito Management program will be developed and implemented by Entomology Consultants LLC with the primary objective of inhibiting mosquito larvae development to minimize the need for ULV fogging with insecticides to control adult mosquitoes; providing control in a safe, efficient, and economic manner while preventing damage to humans, wildlife, and the environment. This management program will comprise a balanced use of biological/biochemical, cultural, mechanical, and chemical procedures which are environmentally compatible providing a cost-effective level of disease-vectoring mosquito suppression.

### **INCREASED MANAGEMENT AND DISEASE SUPPRESSION**

Entomology Consultants LLC specializes in thorough management of larval breeding sites found on publicly owned property to prevent adult hatches and subsequent proliferation of biting, and potentially disease spreading adult mosquitoes into inhabited areas. The cultivation of the use of Codes Enforcement agencies within our current client's municipalities has significantly increased private property reduction of larval breeding sites.

Entomology Consultants LLC has developed an adult mosquito monitoring system through the extensive use of CDC light traps, Gravid traps, resting boxes, and backpack aspirator surveys to provide area specific treatment of adult populations before complaint calls arise. Over 90% of the areas treated by Entomology Consultants LLC are dictated by our in-house adult surveillance activities, the remaining 10% originate from our mosquito hotline calls. All fogging missions will be mapped with satellite tracking technology to provide detailed log of night operations (CLC properties treated and time of treatment) allowing CLC officials to know exactly when and what areas have been fogged.

Extensive utilization of adult surveillance allows for proper taxonomic identification of mosquito species allowing the differentiation between nuisance and disease-vectoring species and which type of water they breed in.

The utilization of the RAMP (Rapid Analyte Measurement Platform) equipment used in our private laboratory will allow for next day confirmation of mosquito pools which are positive with West Nile Virus. This rapid turnaround allows for immediate adulticiding of positive mosquito populations and fast press releases to the taxpayers. Entomology Consultants LLC is the only company within the State of New Mexico with this equipment and technology.

### **INCREASED PUBLIC RELATIONS**

Entomology Consultants LLC has monopolized the usage of newspaper and television in providing information to the public in mosquito related matters. The benefits of having a university- degreed and experienced Medical Entomologist as a spokesperson for our current clients has brought greater attention to the seriousness of vector borne disease and continued public outreach to the taxpayers. With today's emerging technology and increased taxpayer demands, a program run by scientists highly benefits our clients.

**The implementation of an Integrated Mosquito Management Program will be accomplished in three key stages:**

1. Surveillance
2. Larval mosquito control
3. Adult mosquito control

#### **I. Surveillance**

The foundation for any successful mosquito management program is the surveillance and mapping of areas which are conducive to species of mosquitoes which have a high vectoral competency and that have most likely played roles in West Nile, Western Equine Encephalitis, and Saint Louis Encephalitis virus circulation (specifically *Culex* and *Aedes* spp. of mosquitoes including *Cx quinquefasciatus*, *Cx restuans*, *Cx tarsalis*, *Aedes albopictus*, *Aedes vexans* and *Aedes aegypti*). Surveillance provides the earliest evidence of virus transmission as well as information regarding potential mosquito vector species including species which could be bridge vectors (day biting species, *Aedes* spp.) Control measures to mitigate high numbers of disease vectoring mosquitoes can be tailored to the specific species of mosquitoes determined through surveillance techniques, allowing for increased control and cost effectiveness.

#### **A. Larval and Pupal Surveillance**

1. All areas in the City of Las Cruces which provide potential aquatic larval habitat for mosquitoes including catch basins, floodwater sites, drainage ditches, sewage treatment plant, storm sewers, retention and detention sites, irrigation ditches, artificial containers, and ponds will be surveyed and mapped utilizing GPS instrumentation and imputed into GEO PRO data management system. Potential breeding sites located on private commercial properties which provide public access (i.e floodwater detention ponds in parking areas) will be included. Areas of private properties (non-accessible to the public) which are creating breeding habitat for mosquitoes (tire collections, abandoned swimming pools, continual standing water with emergent vegetation) will be brought to the attention of the City of Las Cruces to discuss means of mitigation along with cooperating codes enforcement from city and county where property is located.
2. Breeding sites will be mapped according to GIS coordinates and recording of the following information shall be required:

Date Sampled, GIS coordinates, Site Description, Size, Larval Presence/Absence, Species, Developmental Stage, Vegetation Densities, Treatments Applied.

#### **B. Adult Mosquito Surveillance**

The monitoring of adult mosquito populations by means of CO<sub>2</sub> baited CDC mini-light traps, Gravid Traps, EVS Traps, Ovi-traps, resting boxes, back pack aspirators, sweep net samples of vegetation, and landing rate counts will be used to determine population densities, identification of nuisance and vector species, and treatment thresholds. Complete taxonomic lab services shall be provided by Entomology Consultants LLC in our private laboratory.

1. Areas within the city limits shall be monitored on a weekly basis via a network of light traps and gravid traps to effectively monitor adult population densities. The network of traps will allow for continuation of a database allowing for the spatial and temporal evaluation of changes in mosquito population size and monitor the presence of disease vectoring species.
2. Light trap placement will be installed in those areas deemed productive from surveillance of breeding habitats, proximity to sensitive areas, and secure from theft. Placement and quantity of traps will be sole discretion of Entomology Consultants LLC.
3. Trapping frequency will be one night per week during the season. Additional nights shall be added based upon discretion of Entomology Consultants LLC to provide additional data when deemed necessary. Traps will be deployed between the hours of 4:00 and 9:00 p.m. and collected the next day between 6:00 and 10:00 a.m. Data collected from each night of trapping shall include taxonomic identification and quantity of disease vectoring female mosquitoes. Trap nights will be chosen by Entomology Consultants LLC to correspond with control measures. Trapping will begin in June and continue through November.
4. Nuisance complaints received by the City of Las Cruces Mosquito Hotline will be investigated and assessment of the need of trap placement on candidate properties will be made. All calls/ emails shall be addressed within 48 hours of receipt.
5. Other adult mosquito population surveillance methods will include backpack aspirators and/ or sweep net sampling of vegetation surrounding breeding sites, landing rate counts, and resting box counts to supplement light trap counts when deemed necessary by Entomology Consultants LLC.

### **C. Encephalitis Virus Surveys**

1. Entomology Consultants LLC will provide the City of Las Cruces with Encephalitis Virus surveys conducted in cooperation with the New Mexico Department of Health and the Center for Disease Control (CDC) for the testing of female disease vectoring species for West Nile Virus, Western Equine, and Saint Louis Encephalitis. This will allow for the City of Las Cruces to inform the staff and students of the presence of arboviruses in a timely fashion. A full Research/ Taxonomic Lab in-house equipped with a RAMP (Raid Analyte Measurement Platform) allow Entomology Consultants LLC next day results on West Nile Virus analysis. The supernatant will be sent to the New Mexico Dept of Health for second confirmation on any positive pools. Only disease vectoring species will be tested. Approximately 100 cards per contract year will be provided to the City of Las Cruces by Entomology Consultants LLC.
2. Frequency of testing shall occur once every two weeks, beginning in March through November. All potential vector species from the current trap week will be identified, properly preserved, packaged, and sent to the lab for analysis for Saint Louis Encephalitis and Western Equine Encephalitis (State funding required) after samples have been run on the RAMP for West Nile Virus.

## **II. Larval Mosquito Control**

The brain of an integrated mosquito management program is the surveillance element, while the heart of the program is the reduction of larval populations before emerging to adults to minimize the need for ULV fogging. The integrated approach of controlling mosquitoes in a safe, efficient, and economical manner begins with

larval and pupal control measures. The GIS mapping of all permanent, semi-permanent, and problem floodwater areas will result in efficacious and economic mosquito larval control. Each potential breeding site will be evaluated upon its size, relative distance to sensitive areas of human/ equine inhabitation, duration and viability of breeding, species specific habitat (floodplain areas for *Aedes* and *Anopheles* spp. or containers for *Culex* spp.), and amount of organic matter. These and other considerations must be established before determining which product is to be utilized and how often it must be applied. The ability to control costs, effective use of man power, and providing efficacy are all factors which make up a larval control program.

1. Mapped breeding sites will be checked on a basis determined by their productivity and which type of larvacide is applied.
2. Determination of mosquito species, stage of development (crucial for efficacy), and longevity of pool (how many days of control are necessary in regards to length of pool time pool will contain water) will determine which type of larvacide will be used and its frequency of application. The economics and subsequent efficacy of a particular larvacide are determined by cost/ acre/ day of control/ labor hour.
3. The application schedule for larvaciding is based upon integrated mosquito management programs need of control, duration of control necessary and environmental factors such as photo degradation from UV light (Vectolex WSP will give longer residual in a storm drain than in an open air detention pond). Some applications will be targeted towards multiple broods at 30 -150 day residual. Application schedules are dictated by the environmental conditions, not a cook book. Larvacides to be used (but not limited to): Altosid (all formulations), Vectomax, Vectolex, Aquabac, Agnigue, Fourstar briquettes, Natular, and gambusia fish.
4. Application records will be kept for each individual site. Site ID, product applied, EPA registration number, percent concentration, and amount applied, size of treatment area, and life stage of target pest will be recorded. Labels and MSDS sheets of all products used will be on file at City of Las Cruces department overseeing the contract. Records shall be provided to CLC based upon written request.

### **III. Adult Mosquito Control**

Ground ULV application of selected products made in accordance to Integrated Mosquito Management guidelines, with the goal of protecting human/ mammal populations and the environment while economically reducing, nuisance and disease vectoring adult mosquitoes to tolerable levels.

#### **A. Ground Based ULV Applications**

1. The application of adulticides for mosquito control will be concentrated in areas which provide breeding/ harborage sites for adult mosquito populations. Treating "hot spots" will reduce adult dispersal into public and residential areas. General adulticiding (large area) is performed only in the instances of high mosquito annoyance and in the case of outbreak of vector-borne disease.
2. Thresholds for ULV treatments will be based on trap captures from light trap, gravid trap, and/ or landing rate counts made within the CLC properties. Nightly average trap captures of 60 nuisance species, or 8 vector species will warrant ULV applications within the specified flight range of the species and its proximity to sensitive areas. Landing rates of 12 nuisance mosquitoes per minute or 6 disease vectoring species per minute will trigger thresholds for ULV treatment. Hot spots comprised of harborage areas and breeding sites will be fogged to reduce adult pressure down to a tolerable level. Other means of adult sampling methods may be

included to determine areas needing treatment. TREATMENT THRESHOLDS SHALL BE DISCUSSED WITH CLC TO DETERMINE APPLICATIONS.

3. Treatment areas within the city will be designated by streets, subdivisions, or other general areas. This will allow for effective treatments due to wind direction.
4. Frequency of applications shall occur specifically on Wednesday and Sundays will be designated as ULV adulticiding nights. All applications will be based upon need and surveillance information, rather than a prophylactic application. During times of high annoyance from adult populations and continued adverse weather, an additional night of the week shall be added, again based upon need as determined by Entomology Consultants LLC.
5. Due to the crepuscular nature of disease- vector mosquitoes (especially *Culex* spp.), ULV treatments shall be applied during the greatest hours of activity which occurs between the hours of 8:00 p.m. (dusk) and 12:00 midnight with little work being done in the early morning hours. Rotator cup CDC light traps will determine peak flight times for various species.
6. Entomology Consultants reserves the right to cancel any ULV applications without notice to City of Las Cruces due to adverse weather conditions such as: strong winds over 10 mph, heavy rain, and thermal inversion layer (if air at 25- 30 feet is colder than at ground level, ULV fog will travel straight up in the air resulting in an ineffective treatment). Scheduled ULV treatment will be postponed until the hours of 4:00 to 5:30 a.m. weather permitting. If weather conditions do not become favorable, the scheduled fogging will be pushed to the next scheduled night of the same week.

## **B. Special Event ULV and Barrier Applications**

1. ULV applications will be performed for outdoor special events such as festivals, major evening sporting events, and speaking events at no extra charge to City of Las Cruces. Four days prior written (email) notice is required with no exceptions.
2. ULV applications will be made the evening prior to the event, in the general area surrounding the event.
3. Barrier treatments, utilizing a motorized back pack mister/ ATV mounted mister, to surrounding vegetation and other mosquito harborage areas utilizing a residual product (Suspend SC) will be made if the event is held in a small outdoor setting, providing 3-12 days residual control depending on environmental factors.

## **C. Emergency ULV Applications**

1. In the advent of a mosquito vectored disease outbreak confirmed by State Health Officials or the CDC, an emergency plan and budget must be enacted to allow for general adulticiding, to take place as soon as possible in the complete area surrounding the origination of the incidence.

Entomology Consultants LLC will work with City of Las Cruces and the New Mexico Department of Health on determining the extent of control/ suppression measures necessary.

Emergency adulticiding will result in a separate charge, aside from the normal contract charge for vector control services, based upon linear mile fogged.

#### **D. Mosquito Hotline**

1. The continuation of the City of Las Cruces Mosquito Hotline shall remain in effect with all calls being forwarded via e-mail to Entomology Consultants LLC on a daily basis. All requests for service due to nuisance activity or standing water complaints will be addressed through property investigations and phone consultations by Entomology Consultants LLC personnel. All field investigations where direct contact is made with complainant, signed documentation consisting of an incidence report will be made and signed by the complainants and Entomology Consultants LLC investigator. Documentation of field investigations will be provided to CLC officials via email within 48 hours of initial contact with complainant. Any belligerent complainants shall be handled exclusively by CLC staff (2011 Brown Farm incident).
2. All complaint calls will be addressed within 48 hours of receipt by Entomology Consultants LLC in the order of severity.
3. Addition of an area due to complaint calls will be made to the ULV list if the criteria is met based upon surveillance. No adulticide application will be made due client demands without justifiable thresholds being met (danger of violating NPDES requirements from EPA resulting in financial penalty).

#### **E. ULV Fogging Methods and Materials**

Entomology Consultants LLC utilizes the most state of the art application equipment available within the market place. Current equipment includes two DynaFog L-30's and one BeecoMist Pro 25 Foggers which are electric rotary atomizers producing consistent droplet size uniformity and stealth operation. Ground based adulticide operations conducted via truck and ATV mounted equipment can effectively apply up to 1,044 acres per hour or 8,352 acres per night with current personnel and equipment (based upon 10 mph @ 300 foot swath width x three trucks). Applications of EPA and State approved adulticide products will be made, which have very little to no odor when applied, and LD 50's of over 5,000 mg/kg to minimize risk. These materials have excellent environmental assessments and are not corrosive to automobile paint. Setback restrictions from fish bearing water ways will be respected in terms of material label restrictions.

1. Discretion of adulticide materials applied and percent concentrations will be made solely by Entomology Consultants LLC based upon efficacy, resistance management, and label restrictions on areas of application. The primary adulticides used by Entomology Consultants LLC will be Permethrin based due to the non-restricted use labeling and broad label usage. Other active ingredients such as Efenprox (Zenivex) and Sumithrin (Anvil) may be substituted due to resistance management strategies. Products commonly used by Entomology Consultants LLC but not limited to:
  - Anvil 10, Zenivex E4 (non-crop areas only until crop label approval in mid-2012), Kontrol 30-30, Suspend Sc (barrier treatments)
2. Efficacy Trials will be performed throughout the season utilizing caged, field collected, mosquito populations to determine the efficacy of materials and rates currently used in management program. This is a key component of Entomology Consultants LLC Resistance Management Program.

Entomology Consultants, LLC will not treat private grounds and residences (i.e. backyards, large commercial areas with no public access) due to nuisance calls. Only the public areas and roads will be avenues of treatment within the area comprising the City of Las Cruces. Canal and drain areas belonging to irrigation districts will be treated with consent from the irrigation district to City of Las Cruces and Entomology Consultants LLC. Setback restrictions of navigable and fish bearing waterways will be respected in terms of material label restrictions and all areas of organic certified crops will be determined by Entomology Consultants, by notification of the New Mexico Organic Commission, to prevent any problems associated with ULV applications around such described areas.

The guarantee of 100% protection from vector born disease is not implied nor expressed in any manner by Entomology Consultants to City of Las Cruces or its staff and students. Entomology Consultants LLC is engaged in the business of mosquito management and abatement, and has not been retained to eradicate the mosquito population in any particular area. There are severe and sometimes fatal consequences of mosquito bites which may be transmission of serious diseases such as West Nile Virus, Dengue Fever, Western Equine Encephalitis, Saint Louis Encephalitis, Malaria, other Encephalites, and dog heartworm. Because Entomology Consultants LLC has not been retained to eradicate the mosquito population, Entomology Consultants LLC can make no warranty, representation or guarantee, of any type, about the existence of mosquito borne diseases in the geographic area of the proposed area of contracting, or the potential for human or animal infection, either before, during or after completion of the Entomology Consultants LLC mosquito management services.

Entomology Consultants LLC will not be liable for any general, special, incidental, or consequential damages for loss, damage or expense including but not limited to sickness, injury or death, loss of livestock or animals, or loss of profits from any farming or ranching operations, retail trade operations of any type from the mosquito management services provided by Entomology Consultants, LLC.

### **Trade Secret/ Intellectual Property Protection**

Entomology Consultants LLC has developed any proprietary mosquito management system by which all information developed for the implementation and completion of our Integrated Mosquito Management Services is the foundation which certainly separates us from our potential competitors.

This system and the accompanying compilation of information are critical to the success of our business and more importantly falls under the protection of the "Trade Secret" Statutes. By definition, a trade secret consists of any formula, pattern, physical device, idea, process or compilation of information that both: provides the owner of the information with a competitive advantage in the marketplace and is treated in a way that can reasonably be expected to prevent the public or competitors from learning about it, absent improper acquisition or theft. Trade secrets often protect valuable technical information that cannot be sheltered under other forms of intellectual property law. All data involving program implementation and management is considered Intellectual Property and Trade Secrets of Entomology Consultants LLC. No dispersal (written or otherwise) of application, management, or surveillance information created during the course of the contract period shall be distributed to any individuals or companies wanting to contract with CLC for the purpose of providing CLC with similar service.

### **CRITERIA 2. KEY PERSONEL**

Entomology Consultants LLC is a full service company specializing in Integrated Pest Management services in the field of Medical Entomology (integrated mosquito management) for cities, municipalities, and private properties; Forensic Entomology (medico-legal/ death investigation) consulting and research for law enforcement agencies in the Southwestern USA; Contract Research and Development of numbered compounds pertaining to medical, structural, and turf/ornamental pests for basic manufacturers in EPA Region 6.

### **License**

New Mexico Department of Agriculture- NMCA 52888 categories 1A, 1B, 3A, 3B, 7B, 7D, 8 (public health), 9, and 10

### **Associations/ Memberships**

- American Mosquito Control Association (AMCA)
- Society of Vector Ecology (SOVE)
- Entomological Society of America (ESA)
- West Central Mosquito and Vector Control Association (WCMVCA)
- Northwest Mosquito and Vector Control Association (NMVCA)
- North American Forensic Entomology Association (NAFEA) founding member

### **Matthew D. Lee**

Medical Entomologist

### **Credentials:**

Bachelors of Science, Entomology. New Mexico State University. Awarded 1994.

Masters of Agriculture, Economic Entomology. New Mexico State University. Awarded 1996.

### **Areas of Competence:**

**Direct:** Over fifteen years' experience as professional credentialed entomologist. Applied/research experience in public health- vector control, with strong background in the epidemiology of arbovirus (arthropod born virus) transmission, pesticide efficacy trials, insect taxonomy, insect sampling/surveillance methodology, resistance management, pesticide application technology, equipment calibration, large scale program implementation, cultural/ mechanical/ chemical control measures, toxicology and environmental fate, public relations, GPS/GIS systems, and statistical analysis.

**Indirect:** Currently working in the fields of forensic entomology, urban entomology, and agronomic entomology in the capacities of expert witness, research and development, and consulting.

**Responsibilities:** Responsible for program implementation, adulticide applications, larvacide application, spatial analysis of mosquito species and their distribution, taxonomy of disease and nuisance species, public relations, liaison to NM Department of Health and Environment. Time Involvement- 100%

### **Larry L. Lee**

Field Technician/ Applicator- Vector Management Experience: 6 Years

**Responsibilities:** Field operations including larval surveillance and control, adult surveillance and control, complaint investigation, trapping regimes, equipment

maintenance and calibration, GPS mapping and site evaluation, Bio-Assay testing of adult populations for resistance management, pesticide usage reports. Time Involvement- 100%

**Stephanie A. Lee**, B.S. Agriculture, NMSU

Surveillance/ Lab Specialist- Vector Management Experience: 8 Years

Responsibilities: Distribution and deployment/collection of CDC light and Gravid traps, complaint investigation, larval breeding site surveillance, data base, logistics, RAMP testing of mosquito populations for WNV. Time involvement- 40%

**Justin Atma**

Field Technician - Vector Management Experience: 1 year

Responsibilities: larval/ adult surveillance, larvacide and adulticide applications. Time Involvement- 100%

**CRITERIA 3. PRINCIPAL MEMBER/OFFICER RESPONSIBLE FOR ADMINISTRATION OF CONTRACT AND IN DIRECT CHARGE OF THE WORK UNDER CONTRACT**

Matthew D. Lee, Medical Entomologist/ Owner- Entomology Consultants LLC

598 Canyon Point

Las Cruces, NM 88 011

(575) 639-3897

License: New Mexico Department of Agriculture- NMCA 52888 categories 1A, 1B, 3A, 3B, 7B, 7D, 8 (public health), 9, and 10

**Project Time Schedule**- January through December- 12 month service contract. See figure 1.

**Operational/ Management Approach:** Scientific based field operations as described in criteria 1 to include the proactive management of medically important arthropods (mosquitoes, ants, bees) in such a manner as to provide an overall reduction of arbovirus presence within the confines of the City of Las Cruces. Mosquito management services are biologically driven and cannot be broke down into direct hourly labor cost, unless one is able to predict weather, biological propensities of the pest, and human exposure.

**Services/ Tasks to be provided:**

- GIS Mapping- complete GIS mapping of all publicly accessible breeding sites within city limits.
- Larval Surveillance- evaluation of all publicly accessible breeding sites within city limits.
- Adult Surveillance- CDC light trap, gravid trap, ovi-trap, and aspiration of adult mosquitoes for population densities to aid in determining adulticide mission thresholds and arbovirus testing.
- Larval Management- Implementation of larvicide program on a proactive basis to publicly accessible sites within city limits, providing significant reduction in adult mosquitoes.
- Adult Management- Adulticide missions carried out based upon adult surveillance data, threshold based management. Resulting in reduced arbovirus presence and comfort.

- **Vegetation Removal-** remove of dead and live vegetation from select breeding sites, providing sunlight penetration resulting in quicker dissipation of standing water. CLC responsible for weed management within ponding areas.
- **Arbovirus Screening/ Testing-** Lab analysis of disease vectoring species with RAMP for West Nile Virus, with approximately 100 cards provided under contract year.
- **Ant Surveys-** Surveillance of city owned properties for the early management of fire ant colonies and their management.
- **Bee Removal-** removal of imbedded/ swarms of potential Africanized honey bees from city properties.
- **Report writing-** Composing monthly reports and year-end final report for Vector Task Force meetings and NPDES year-end reporting requirements.

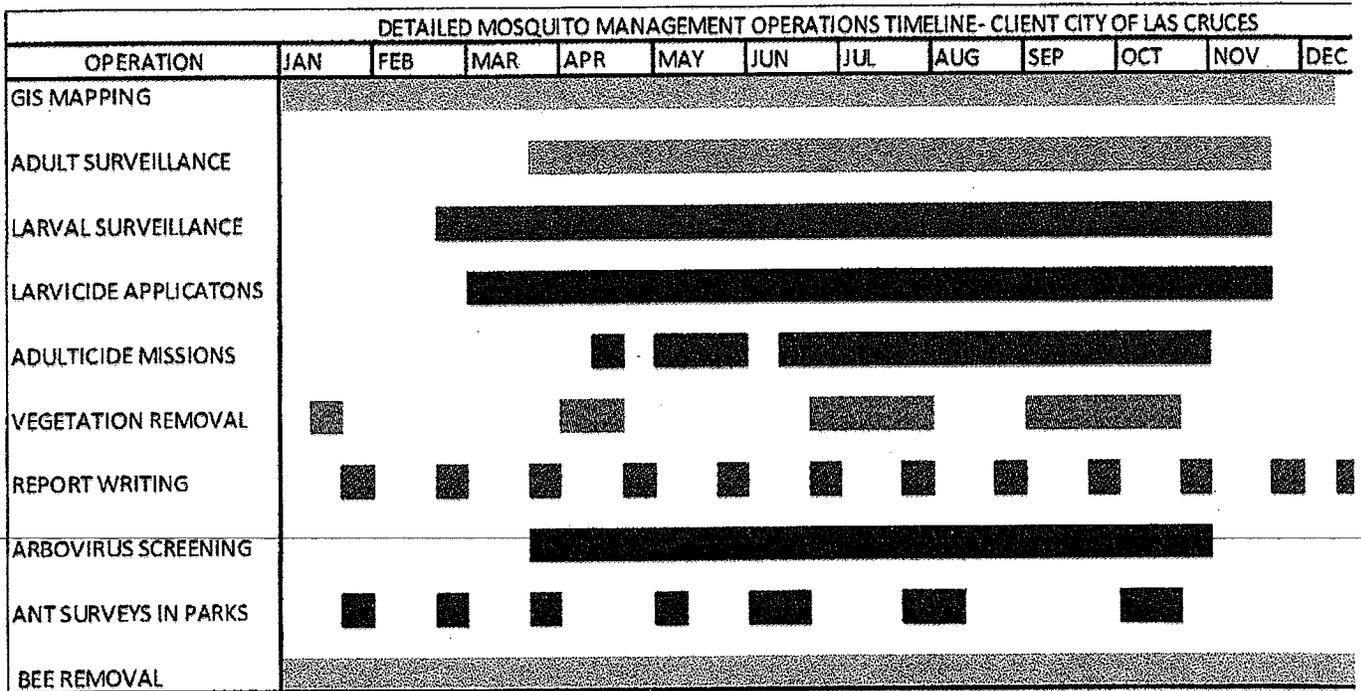


Figure1. Detailed operations for mosquito management program- Client: City of Las Cruces

**CRITERIA 4. CLIENT/ CONTRACT REFERENCES**

**Town of Mesilla - Integrated Mosquito Management Program**

Initiated a complete arbovirus disease management program, which has been awarded to Entomology Consultants LLC for the past nine years, current contract for 2012 season.

Contact: Debbie Lujan

Public Works Director  
 2231 Avenida de Mesilla  
 Mesilla, NM 88046  
 dlujan@comcast.net  
 (575) 524- 3262

Town of Mesilla

**Village of Hatch- Integrated Mosquito Management Program**

Initiated a complete arbovirus disease management program, which has been awarded to Entomology Consultants LLC for the past eight years. 2003- 2011.

Contact: Mayor Judd Nordyke  
Village of Hatch  
Po Box 220  
Hatch, NM 87937  
mayor@villageofhatch.org  
(575) 267-5216

**City of Deming- Integrated Mosquito Management Program**

Initiated a complete arbovirus disease management program, which has been awarded to Entomology Consultants LLC for the past eight years. 2003-2011

Contact: Aaron Sera  
City Manager  
City of Deming  
PO Box 706  
Deming, NM 88031  
asera@cityofdeming.org  
(505) 546- 8848

**Las Cruces Public Schools- Integrated Mosquito Management Program**

Initiated a comprehensive program to provide comfort and control of both disease and nuisance species of mosquitoes on all LCPS properties over the past six years.  
Awarded 4 year management contract: 2011-2014.

Contact: Bob Stout  
Physical Plant Director  
LCPS Physical Plant  
1400 Hernandez  
Las Cruces, NM 88001  
bstout@lcps.k12.nm.us  
(575) 527- 5800

**New Mexico State University- Integrated Mosquito Management Program**

Initiated a complete arbovirus disease management program for the main campus and all off campus agriculture properties. Awarded to Entomology Consultants LLC for the past three years.

Contact: Bud Jones  
NMSU Grounds Director  
MSC 3545

PO Box 30001  
 Las Cruces, NM 88003  
 raljones@ad.nmsu.edu  
 (575) 932-9747

### **City of Las Cruces- Integrated Mosquito Management Program**

Initiated a complete arbovirus disease management program, which has been awarded to Entomology Consultants LLC for the past eight years. Awarded multiple contracts for seasons 2003-2011.

Contact: Mark Johnston  
 Facilities/Parks Director  
 City of Las Cruces  
 700 Main  
 Las Cruces, NM 88001  
 mjohnston@las-cruces.org  
 (575) 541-2651

## **CRITERIA 5. EQUIPMENT AND RESOURCES**

Equipment and Facilities currently owned and used in Integrated Mosquito Management Program Service.

### **Research and Development/ Diagnostic Laboratory**

1200 square foot laboratory, including insect rearing rooms, treatment rooms, full taxonomic lab setup, fume hood and office.

### **Equipment Storage/ Shop**

1200 square feet of equipment storage and chemical lockup.

### **Surveillance Equipment**

- CO2 baited CDC light traps (34)
- Gravid traps and incubation solution (24)
- Ovi-Traps (30)
- 6 volt gel-cell batteries and Battery Charger (58)
- Dissecting microscope (2), field macrocope (2), and hand lens (10)
- Back Pack aspirator (1)
- Sweep nets (3)
- Garmin GPS (3)
- Custom Computer Vector Mapping Program
- Collection vials and other miscellaneous equipment
- Standard 350ml dippers for larval sampling (12)
- Digital Camera (3)

**-RAMP-** WNV analytical equipment including pipets, centrifuge, and vortex mixers

### **Larval Control Equipment**

**-Polaris Ranger (1)-** equipped with high visibility green strobe light, fully equipped with DynaFog Mini- light ULV fogger with Slinger Attachment for granular larvacides. A 100# spreader attachment. Dipper's. Liquid sprayer system. ATV will be clearly marked with company logo, NM CA #, and licensed. Capable of applying granular larvacides at a rate of 24.2 acres treated per hour.

**-Polaris Sportsman (2)-** Equipped with custom granular larvacide applicator and liquid spray system.

**-Maruyama MD 155DX backpack mister/duster (2) -** for power applications of granular and liquid products over large areas.

**-Agnique Sprayer (2) -** providing exact metering of product application based on area calculations.

**-Solo backpack (3)-** application of liquid formulations (Agnique).

**-50 Gallon Electric Power Sprayer with 150 feet of hose (1)-** Vectolex WSP applications

**-GEO PRO DATA BASE MANAGEMENT**

### **Adult Control Mosquito Equipment**

**-Pro Mist 25 HD Electric ULV fogger by BEECOMIST (1)-** Noise level of 80db.. Extremely quiet operation compared to gas powered units.

**-Curtis DynaFog L-30 ULV fogger (2)-** Noise level of 72db.

**-Curtis DynaFog Mini-Lite ULV fogger (1)-** Mounted on ATV for small scale, confined areas, and tread-lightly areas such as athletic fields.

**-Solo Backpack Mister (2)-** for Special Events barrier treatment applications.

**-A-1 Mistblower (1)-** 20 gallon tank. ATV mounted providing rapid barrier treatments on large scale.

**-Kestral 1000 Wind Meter (3)**

**-VWR Digital Thermometer (3)**

**-GPS Hand-held Units (3)**

**-Laptop and tablet Computers (3)-** Field data collection services with cellular internet cards.

**-Rotator droplet analyzer (2) and slides-** Field calibration for droplet size analysis

**-Vehicles (4) -** 3 application trucks and 1 surveillance truck

**-Trailers (2)-** 12 foot and 20 foot equipment trailers

**TOTAL EQUIPMENT VALUE EXCLUDING VEHICLES (TRUCKS), TRAILERS, LAB, AND SHOP \$58,321**

### **ATTACHMENTS-**

1. NMDA Certified Applicators License
2. City of Las Cruces Business License
3. Liability Insurance Certificate

NEW MEXICO DEPARTMENT OF AGRICULTURE  
**Pesticide Applicator License**

This person has met the licensing requirements for the type of license and the pest control categories shown.

COMMERCIAL APPLICATOR Expires Dec 31 of  
MATTHEW LEE 2011  
ENTOMOLOGY CONSULTANTS  
LLC

Lic. No. 52888  
Categories 1A 1B 3A 3B 7A 7B 7C 7D 8 9 10

Questions? Contact NMDA 575-846-2134.



**CITY OF LAS CRUCES**  
P.O. BOX 20000  
LAS CRUCES, NEW MEXICO 88004

**2012 - 07**

Type  
HOME OCCUPATION REGISTRATON

Number  
4140

Issue Date  
09/20/2011

Expires

**07/31/2012**

**\*\* NOTICE \*\***

This license becomes null & void if ownership, business name or address is changed. Licensee must apply within 10 days of such changes for transfer. Fees may apply. All applicable building & zoning regulations pertaining to business location must be followed.

Business Name: ENTOMOLOGY CONSULTANTS LLC  
598 CANYON POINT RD  
LAS CRUCES NM 88011

**\*\*\* POST THIS CERTIFICATE IN A CONSPICUOUS PLACE \*\*\***



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
11/10/2011

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

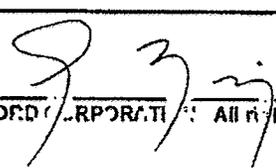
<b>PRODUCER</b> LIPCA INC PO BOX 80663 BATON ROUGE LA 70898-0663	<b>CONTACT NAME:</b> LIPCA Insurance Agency		
	<b>PHONE (A/C No, Ext):</b> 225-927-3283	<b>FAX (A/C No):</b> 225-927-3295	
<b>E-MAIL ADDRESS:</b> info@lipca.com			
<b>PRODUCER CUSTOMER ID#</b>			
<b>INSURED</b> ENTOMOLOGY CONSULTANTS LLC 598 CANYON POINT  LAS CRUCES NM 88011	<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC#</b>
	<b>INSURER A:</b> UNDERWRITERS AT LLOYD'S, LONDON		AA-1128987
	<b>INSURER B:</b>		
	<b>INSURER C:</b>		
	<b>INSURER D:</b>		
	<b>INSURER E:</b>		
<b>INSURER F:</b>			

**COVERAGES**                      **CERTIFICATE NUMBER:**                      **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL SUBROGATION WAIVED	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY		LLB-30-17-21507944-01	11/07/2011	11/07/2012	EACH OCCURRENCE	\$ 1,000,000
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY					DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 100,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR					MED EXP (Any one person)	\$ 5,000
	<input checked="" type="checkbox"/> \$1,000 Deductible					PERSONAL & ADV INJURY	\$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	\$ 1,000,000
<input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC		PRODUCTS - COMP/OP AGG	\$ 1,000,000				
	AUTOMOBILE LIABILITY					COMBINED SINGLE LIMIT (Ea accident)	\$
	<input type="checkbox"/> ANY AUTO					BODILY INJURY (Per person)	\$
	<input type="checkbox"/> ALL OWNED AUTOS					BODILY INJURY (Per accident)	\$
	<input type="checkbox"/> SCHEDULED AUTOS					PROPERTY DAMAGE (Per accident)	\$
	<input type="checkbox"/> HIRED AUTOS						\$
	<input type="checkbox"/> NON-OWNED AUTOS						\$
	UMBRELLA LIAB	<input type="checkbox"/> OCCUR				EACH OCCURRENCE	\$
	EXCESS LIAB	<input type="checkbox"/> CLAIMS-MADE				AGGREGATE	\$
	DEDUCTIBLE						\$
	RETENTION \$						\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	<input type="checkbox"/> Y/N				WC STATUTORY LIMITS	OTHER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under SPECIAL PROVISIONS below	<input type="checkbox"/> N/A				E.L. EACH ACCIDENT	\$
						E.L. DISEASE - EA EMPLOYEE	\$
						E.L. DISEASE - POLICY LIMIT	\$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

<b>CERTIFICATE HOLDER</b> NEW MEXICO DEPT OF AGRICULTURE AGRICULTURE & ENVIRONMENTAL GROUP PESTICIDE BUREAU PO BOX 30005 MSC 3AQ  LAS CRUCES NM 88003-8005	<b>CANCELLATION</b> SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE 
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COST PROPOSAL

RFP 11-12-404

**ENTOMOLOGY CONSULTANTS LLC**

A four year term contract, subject to yearly renewals, for the seasons 2012- 2015 will be provided as described in the pages of the technical proposal. Terms of payment shall be 12 equal payments per contract year, net 30 with 21% interest charged per annum on all late payments. City of Las Cruces shall be named additional insured upon contract award, with complete copy of liability policy delivered.

**General Services Provided Under Contract**

- Public Relations
- Geographic Information Systems (GIS)
- Computer Based Mapping of all Breeding Sites- GeoPro Database System
- Complete Weather Monitoring
- Monthly Mosquito Board Meetings
- Annual Year End Report/ Monthly Field Reports
- Larval Breeding Site Inspections
- Larvacide Application
- CDC Light Trap and Gravid Trap Surveillance Network
- Complete Taxonomy of all Species Caught
- RAMP Testing of West Nile Virus Vectoring Species- 100 Pools
- Adult Mosquito Complaint Investigations
- Ground ULV Adulticide Application with GIS Tracking
- Fire Ant Surveys/ Control with Advion Balt
- Africanized Bee Removal
- City of Las Cruces Named as Additional Insured

**TOTAL PROPOSED 2012 CONTRACT COST.... \$85,290.00 plus any applicable New Mexico State Gross Receipts Tax (City of Las Cruces GRT rate) per contract year. Passthrough price adjustments (increases in fuel, product, insurance costs) shall apply on a yearly basis after year one of contract.**

**Add-on Contingency Emergency Services (additional cost, provided upon request)**

- Emergency Wide Scale Ground ULV Adulticiding: \$55 per Linear Mile plus tax.
- Other pests which may plague the City of Las Cruces- priced upon request.

1. Direct Costs- \$20,000
2. Indirect Costs- \$9,000
3. Labor (hours) by major tasks- Field and lab hours: \$36,640 (1465.6 hours @ \$25/ hour)
4. Materials- \$15,750
5. Equipment- \$3,900
6. Sub consultants- \$0
7. Any other proposed costs that may be incurred by the city- \$0

# CITY OF LAS CRUCES

## PURCHASING MANAGER'S REQUEST TO CONTRACT

For Meeting of: February 21, 2012

Resolution No.: 11-12-404

### Contract Purchase For Vector and Pest Control Services Price Agreement

The Las Cruces City Council is provided the following information concerning this request:

**RFP SOLICITATION INFORMATION:**

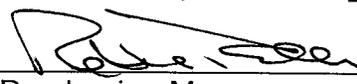
1. RFP No./ Due Date: RFP No. 11-12-404/December 28, 2011
2. Description: Vector and Pest Control Services Price Agreement
3. Using Department: Parks and Recreation
4. Number of Responses Accepted: One (1)
5. Award Recommendation To: Entomology Consultants, LLC of Las Cruces, NM
6. Total Award Amount: Indefinite quantity/cost
7. Contract Duration: Four years conditioned upon annual renewals  
and pending approved budgets

**LOCAL PREFERENCE FACTOR**

Local Preference Factor Applied Per LCMC §24-100	No	X	LCMC §24-100 not applicable to this solicitation
	Yes		Made A Difference To Awards(s) Made No Difference To Bid Award(s)

**PROCUREMENT CODE COMPLIANCE:**

The City of Las Cruces Procurement Code was administered in the conduct of this procurement and approval to purchase is hereby requested pursuant to **Section 24-92**.

  
 Purchasing Manager 11/31/2012  
Date

**CONFIRMATION OF FUND ENCUMBRANCE:**

REQUISITION or PURCHASE ORDER NUMBER:	TBD
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