



Environment
Canada

Environnement
Canada

Assets, Contracting and Environmental Management
Corporate Services Branch
351 Saint-Joseph Boulevard
Gatineau, Quebec
J8Z 1T3

March 14, 2014

Solicitation number K2A52-13-9104

PROJECT TITLE: Improving the scientific estimate of mortalities from bird-window collisions in Toronto

Dear Madam/Sir:

Environment Canada has a requirement for the services described in the attached "Terms of Reference". We are, as a result, soliciting proposals to perform this work.

If you are interested in providing these services, you must submit **three (3) copies of your technical proposal, two (2) copies of your completed signed Offer of Service, and two (2) copies of the former public servant certification** no later than **15:00 (local time) on April 4, 2014** to the following office:

**Environment Canada (BIDS)
Mailroom
171 Jean-Proulx
Gatineau, Quebec
J8Z 1W5**

in accordance with the following procedures:

1. Identify the solicitation number **K2A52-13-9104** on the outside of all proposal/courier envelopes.
2. Include the following in your proposal, in sufficient detail for evaluation purposes:
 - (a) a brief statement indicating your understanding of the work;
 - (b) a summary of your related experience;

- (c) a listing of staff (professional, technical, administrative, sub-contractors) who will be assigned to the work, and their respective personal résumés;
 - (d) an explanation of the intended approach and/or methodology; and
 - (e) contingency plans to be implemented in the event assigned staff become unavailable during the period of the contract.
3. Environment Canada requests that bidders provide their bid in separately bound sections as follows:

SECTION I: SUBMIT THREE (3) HARD COPIES OF YOUR TECHNICAL PROPOSAL;

SECTION II: SUBMIT TWO (2) SIGNED HARD COPIES OF THE OFFER OF SERVICE (WHICH REPRESENTS THE FINANCIAL BID).

SECTION III: SUBMIT TWO (2) SIGNED HARD COPIES OF THE FORMER PUBLIC SERVANT CERTIFICATION.

Prices must appear in the Offer of Service (Financial Bid) only. No prices must be indicated in any other section of the bid. Offer of Service must be signed.

Bids must be submitted only to Environment Canada's Mailroom by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted to Environment Canada by facsimile or e-mail will not be accepted.

**All questions concerning this project shall be submitted in writing by
e-mail: shawn.davis@ec.gc.ca**

Yours sincerely,

Shawn Davis
Procurement and Contracting Officer
Materiel and Contract Management Branch

Attachments:

Offer of Service
Former Public Servant Certification
Mandatory Proposal Instructions
Terms of Reference
Evaluation Grid

MANDATORY PROPOSAL INSTRUCTIONS

- 1. Receipt**

The specified office will receive the sealed proposals (including the Offer of Service) or revisions up until the time and date specified in the letter of invitation.

Environment Canada shall no longer accept the Offer of Service/technical portion of the bidders' proposals by facsimile or by electronic mail.
- 2. Unacceptable Proposals**

Proposals received after the closing date and time will not be considered **and will be returned unopened.**

Proposals **NOT** submitted with duly completed Offer of Service forms in the format specified by the Department will not be accepted.

Incomplete proposals will be considered non-responsive and rejected.

Any Offer of Service that exceeds the stated ceiling or maximum price, if any, shall be considered non-responsive and rejected.

Any Offer of Service not signed in accordance with the letter of invitation shall be considered non-responsive and rejected.
- 3. Acceptance**

The Department will not necessarily accept the lowest or any of the proposals submitted.
- 4. Completion**

The Offer of Service form must be completed and submitted in the format presented by the Department.

Proposals must be submitted in accordance with these instructions and those contained in the letter of invitation.

It is the proposer's responsibility to ensure his/her complete understanding of the requirements and instructions specified by the Department. Enquiries concerning this solicitation must be submitted in writing to the contracting authority (Shawn Davis) no later than five (5) working days prior to the bid closing date specified herein to allow sufficient time to provide a response.
- 5. Reference**

The Department of Environment reserves the right, before awarding the Contract, to require the Contractor to submit such evidence of qualifications as it may deem necessary, and will consider evidence concerning the financial, technical and other qualifications and abilities of the contractor.



OFFER OF SERVICE

1. **Offer submitted by:** (Print or type complete business or corporate name, address, telephone number, fax number)

Tel. No. _____ Fax. No. _____

E-Mail _____

2. I (We), the undersigned, hereby offer to Her Majesty the Queen in Right of Canada, as represented by the Minister of Environment, to furnish all necessary expertise, supervision, materials, equipment and other things necessary to complete, to the entire satisfaction of the Minister or his/her authorized representative, the work as described in the Solicitation package according to the terms and conditions of the Department's service contract for the following prices:



2.1 Professional Services:

The following is a breakdown of the Professional Services (show fee structure all-inclusive of profit and overhead).

<u>Category of Personnel</u>	<u>Per Diem Rates</u>	<u>Number of Days Assigned</u>	<u>Total</u>
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2.2 Administrative Expenses:

(Courier, long distance calls, reproduction, etc.).

\$ ____ N/A ____

2.3 Travel Expenses:

Reimbursable at cost in accordance with the attached Travel Directive, to a financial limitation of

\$ ____ N/A ____

My/Our estimate for travel expenses is based upon the following anticipated travel requirements:

**2.4 TOTAL PROPOSAL PRICE
(Canadian Currency)**

\$ _____
(Total of 2.1 + 2.2 + 2.3 above)

+ G.S.T. \$ _____

TOTAL: \$ _____



3. I (We) agree that the Offer of Service will remain firm for a period of one hundred and twenty (120) calendar days after the tender closing date.
4. Payment for professional services and associated costs will be effected upon completion of each phase, submission of invoices detailing the work completed to date and upon confirmation by the departmental representative of the services rendered/deliverables received.

Claims for travel and accommodation expenses will be reimbursed at cost, in accordance with the Travel Directive, after they have been submitted with the aforementioned invoices and supported by receipts, vouchers, or other appropriate documents.

5. I (We) agree to submit herewith the following:
 - (a) a PROPOSAL to undertake the work, indicating an understanding of the objectives and responsibilities, a methodology and a time schedule as it relates to the requirements;
 - (b) a CORPORATE RESUME indicating relevant experience, the proposed personnel for the work team including their curriculum vitae;
 - (c) a list, if applicable, of SUBCONTRACTOR(S) including full names and addresses, portion(s) of work to be subcontracted and relevant firm experience;
 - (d) a duly completed OFFER OF SERVICE, **in two copies (2)**.
 - (e) a duly completed former public servant certification, **in two copies (2)**.
6. It is a condition that during the term of the contract all persons engaged in the course of carrying out this contract shall conduct themselves in compliance with the principles of the Conflict of Interest and Post-Employment Code for Public Office Holders. Should an interest be acquired or seem to cause a departure from the principles, the contractor shall declare it immediately to the departmental representative.

OFFERS WHICH DO NOT CONTAIN THE ABOVE-MENTIONED DOCUMENTATION OR DEVIATE FROM THE PRESCRIBED COSTING FORMAT SHALL BE CONSIDERED INCOMPLETE AND NON-RESPONSIVE AND SHALL BE REJECTED.

Dated this day of , 2014, at in the province of

by: (Signing Officer) Print & Sign

Title

Former Public Servant Certification – Competitive Requirement

Contracts with former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts with FPS, bidders must provide the information required below.

Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the [Financial Administration Act](#), R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a. an individual;
- b. an individual who has incorporated;
- c. a partnership made of former public servants; or
- d. a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means, a pension or annual allowance paid under the [Public Service Superannuation Act](#) (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the [Supplementary Retirement Benefits Act](#), R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the [Canadian Forces Superannuation Act](#), R.S., 1985, c.C-17, the [Defence Services Pension Continuation Act](#), 1970, c.D-3, the [Royal Canadian Mounted Police Pension Continuation Act](#), 1970, c.R-10, and the [Royal Canadian Mounted Police Superannuation Act](#), R.S., 1985, c.R-11, the [Members of Parliament Retiring Allowances Act](#), R.S., 1985, c.M-5, and that portion of pension payable to the [Canada Pension Plan Act](#), R.S., 1985, c.C-8.

Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes** () **No** ()

If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

- a. name of former public servant;
- b. date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with [Contracting Policy Notice: 2012-2](#) and the [Guidelines on the Proactive Disclosure of Contracts](#).

Work Force Reduction Program

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of a work force reduction program? **Yes** () **No** ()

If so, the Bidder must provide the following information:

- a. name of former public servant;
- b. conditions of the lump sum payment incentive;
- c. date of termination of employment;
- d. amount of lump sum payment;
- e. rate of pay on which lump sum payment is based;
- f. period of lump sum payment including start date, end date and number of weeks;
- g. number and amount (professional fees) of other contracts subject to the restrictions of a work force reduction program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including the Goods and Services Tax or Harmonized Sales Tax.

Certification

By submitting a bid, the Bidder certifies that the information submitted by the Bidder in response to the above requirements is accurate and complete.

Signed

Date

Terms of Reference - (K2A52-13-9104)

Improving the scientific estimate of mortalities from bird-window collisions in Toronto

Intellectual Property

The Crown has determined that any intellectual property arising from the performance of the Work under the Contract will vest in Canada, on the following grounds:

6.4 Where the main purpose of the Crown Procurement Contract, or of the deliverables contracted for, is:

6.4.1 To generate knowledge and information for public dissemination;

Purpose:

To allow Environment Canada to better target conservation actions for migratory birds through improving our scientific estimate of mortalities from bird-window collisions in Toronto by estimating the proportion and types of buildings that are covered by existing surveys, and estimating the detectability of dead birds with respect to levels of scavenging and searcher efficiency.

Background:

Newly-published Environment Canada research indicates that mortality of birds from collisions with windows is the second largest source of human induced bird mortality in Canada.¹ Environment Canada's mandate to protect and conserve migratory birds under the *Migratory Birds Convention Act* means that we are exploring the best ways to manage and mitigate this source of bird mortality. This necessitates having precise information to help us understand where to best target conservation actions.

The data that contributed to the current mortality estimate is accurate enough to give us a broad sense of the scale of the bird mortality caused by buildings. The estimate is largely based on data collected by the Fatal Light Awareness Program (FLAP) in Toronto, which uses volunteers to collect injured and dead birds killed by collision with buildings. However, Environment Canada requires the collection and analysis of additional data in order to generate more accurate estimates than can be obtained with the existing data and protocols. Specifically, supplemental information must be collected

¹ Machtans, C. S., C. H. R. Wedeles, and E. M. Bayne. 2013. A first estimate for Canada of the number of birds killed by colliding with building windows. [Avian Conservation and Ecology](#) 8(2): 6.

on searcher effort and efficiency, area available and area searched, and scavenging rates in order to improve the accuracy of existing estimates.

In particular, this additional information differs from the data that has been collected to date using FLAP's existing field protocol, as it is designed to cover a more representative cross-section of tall buildings in an urban core (rather than just the buildings that are known to be of significant threats to birds, which are the locations where FLAP collects its information in Toronto). This is a clear information need that is explicitly addressed in the recently published scientific paper on bird mortality from buildings in a discussion of next steps to better improve our estimates of the level of mortality:

"We suggest that the following are the most pressing needs for gathering data to calibrate future estimates: ...Sampling studies of mortality at tall buildings and in urban cores designed to include buildings with a variety of architectural features and buildings not thought to be predisposed to causing mortality, including standardizing search effort."

Improved information generated from this work will allow Environment Canada to target conservation messaging broadly to Canadians, and specifically compliance promotion and Beneficial Management Practices outreach to the owners/managers of buildings that pose the greatest risk to migratory bird conservation. Additionally, it will improve our understanding of the species composition of mortality from buildings, allowing Environment Canada to take targeted action to address situations that are particularly high risk for at-risk species, including those migratory birds listed under the *Species at Risk Act*.

Scope:

The scope of this study is to collect and analyze new field data on building types and their distribution in Toronto in relation to the subset of buildings already sampled by the existing field protocol (which has been developed and implemented by FLAP). Additionally, it includes collecting and analyzing new field data on rates of detection of birds killed from building collisions in Toronto (from scavenging and searcher efficiency). This information will provide additional parameters that can be used to refine estimates of the mortalities from bird-window collisions in Toronto, and will allow Environment Canada to more effectively target conservation actions to deliver on our mandate under the *Migratory Birds Convention Act*.

Objectives:

Determine the area searched by volunteers under the existing field protocol that was used to generate the existing estimate of bird mortality from tall buildings, including

details on locations, types and features of buildings that are searched. Existing data and protocols often only include building addresses and lack any other ancillary information about the area that was searched compared to the total area that could be searched.

Determine the detectability of dead birds from scavenging losses and searcher efficiency in the areas surveyed by conducting a field experiment with a new protocol. No information of this nature is being collected currently and it requires a specialized scientific design outside the scope of existing field protocols.

Statement of Work:

The Contractor must complete the following tasks:

Task 1: Enumeration of the area searched under the existing field protocol that has been developed and run by FLAP including noting which buildings are searched, which façades of those buildings are searched under, and which buildings are not searched. This would be a daily tally tied to hours of search effort at each location. Building details (height and other parameters) would be included in the data file for this effort.

Task 2: Enumeration of the architectural features of each searched building that prevents birds from being found. This includes elevated ledges, inaccessible low rooftops surrounding higher buildings or other similar areas unavailable for searchers. This differs from #1 above as it is measure of searchable area per searchable building as opposed to searched buildings compared to unsearched buildings.

Task 3: A new experiment to determine the losses of carcasses due to scavenging in the area covered by the existing field protocol.

Task 4: A new experiment to determine the efficiency of searchers at discovering carcasses in the area covered by the existing field protocol.

The work is to be conducted in 2 migration periods (Spring 2014 & Fall 2014).

Information from FLAP that the contractor requires to conduct any parts of Tasks 1 through 4 will be made available by Environment Canada as a result of a licencing agreement to be established with FLAP.

Project Description and Deliverables:

The Contractor must provide the following deliverables:

Deliverable 1: Work plan and experimental design for approval, including copies of applicable permits for the work.

Deliverable 2: Draft results and evaluation of designs after first sampling period in Spring 2014.

Deliverable 3: Revised experimental design, if applicable, for approval.

Deliverable 4: Report with data and final results.

Data to be provided in MS Excel or MS Access format, including a full description of any numerical or letter codes used. Reports to be provided in MS Word format.

Schedule:

Deliverable 1 is due 3 weeks prior to starting any sampling.

Deliverable 2 is due within 2 months of the completion of first sampling period.

Deliverable 3 is due July 15, 2014.

Deliverable 4 is due within 3 months of the completion of the last sampling period.

Milestone Payment:

33% of the total professional fees will be paid following the completion, submission and acceptance of Deliverable 1.

33% of the total professional fees will be paid following the completion, submission and acceptance of Deliverable 2.

34% of the total professional fees will be paid following completion, submission and acceptance of Deliverables 3 and 4.

Project Cost:

- Environment Canada has established funding for this project at a maximum amount of \$45,000.00 excluding applicable tax.

Total value of contract not to exceed \$45,000.00 (excluding applicable tax).

This covers the period from date of award to January 30, 2015.

Submission of Proposals:

The proposal should describe in sufficient detail the technical qualifications and relevant experience of the contractor and key professional staff and sources of reference data/information.

Proposal should outline the following at a minimum;

- Proposed approach and explicit experimental design for each of the 4 numbered tasks above. Sample size recommendations for the #3 and #4 tasks above.
- Surveyor roles and effort (person days) in each of the same requirements.

Contractors are responsible for obtaining any permits required for this study.

The proposal should include technical, cost and company expertise components which respond to the following requirements:

1. Technical Component

The proposal should include a statement of understanding, which should not exceed one page in length, of the work to be undertaken and why it has been requested. The proposal should present a work plan and describe how the contractor would carry out the tasks to achieve the project objectives.

The contractor should include with the proposal the methodology that will be used to conduct the bird carcass persistence and detectability component, and the component on building (number and features) survey coverage.

2. Cost Component

The cost quotation must identify the level of effort and estimated cost for each task in the work plan, the estimated cost of professional and support personnel, materials, equipment communications and supplies.

The total cost of this project shall not exceed \$45,000.00 (excluding applicable tax).

3. Company Expertise Component

The proposal should identify:

- The professional staff to be assigned to the project and their expected contribution to the project,
- Staff experience directly relevant to the work,

- Relevant company experience directly related to the work (for prime and sub-contractors)

Proposal Evaluation Criteria

The Bidder with the highest combined rating for technical (70%) and price (30%) will be recommended for award of the contract (scores to be determined using Equation 1 below. If no acceptable bids are received, Environment Canada has the right to not award this contract.

Any relevant information to enable Environment Canada to adequately score the proposal based on the criteria listed below must be included.

	Point-Rated Criteria	Maximum Score	Score
1. RELEVANT EXPERIENCE OF CONTRACTOR WITH HUMAN-RELATED BIRD MORTALITY MONITORING OR RESEARCH IN CANADA (MAX. 40 POINTS)	R1. Does the contractor have sufficient experience to deliver on the Objectives and the Statement of Work? <ul style="list-style-type: none"> • Experience with any type of bird mortality research or monitoring through documented research or professional activities (studies, manuscripts, reports, contracts, volunteer activity). <ul style="list-style-type: none"> ○ More than 3 years ○ 1- 3 years ○ < 1 year ○ None • Specific experience with bird-window collision science or monitoring. • Previous working relationship with volunteers and/or staff in the Fatal Light Awareness Program in Toronto • Demonstrated experience designing and analyzing a scientific experiment in field ecology (as evidenced by peer-reviewed 	Max. 40 points (Weight 40%) 10 points 7 points 3 points 0 points 5 points 5 points 15 points	

	<p>papers or technical reports).</p> <ul style="list-style-type: none"> ○ More than 5 ecological studies completed ○ 1-5 studies completed ○ No designed field ecological studies previously completed <ul style="list-style-type: none"> ● Study lead has demonstrated statistical analysis experience or proposal has a statistician/analyst included. 	<p>7 points</p> <p>0 points</p> <p>5 points</p>	
2. TECHNICAL APPROACH AND DESIGN (MAX. 20 POINTS)	<p>R2. Are the technical approach and statistical design well defined and appropriate for delivering on the Objectives and the Statement of Work?</p> <ul style="list-style-type: none"> ● Bidder's proposal demonstrates a clear methodology. ● Bidder's proposal demonstrates clear strategies to deal with assumptions and projections of take in a defensible manner. ● Bidder's proposal clearly describes study designs for each of the 4 components (1 point per component) ● Bidder's proposal suggests sample sizes with an appropriate rationale (actual design and required sample sizes will be determined after award). 	<p>Max. 20 points</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p>	
3. WORKPLAN AND TIMELINE (MAX. 10 POINTS)	<p>R3. Does the contractor have available capacity to ensure the delivery of the Objective and Statement of Work according to a clearly articulated workplan and timeline?</p> <ul style="list-style-type: none"> ● Contractor has staff available and timeline aligned with window for this project, including time for permits and review of study design. Work plan clearly articulated with major steps and estimates for each part and the estimates appear reasonable. ● Contractor has staff available and timeline aligned with project, but on-time delivery is 	<p>Max. 10 points</p> <p>10 points</p> <p>5 points</p>	

	<p>not evident or exact schedule/work plan is not clear.</p> <ul style="list-style-type: none"> No work plan articulated or work plan is poorly planned and allocated. 	0 points	
Total Points		70 points	

Equation 1:

$$\text{Total Points} = \frac{\text{Bidder's Rated Score}}{\text{Highest Bidder's Rated Score}} \times 70 + \frac{\text{Lowest Bidder's Price}}{\text{Bidder's Price}} \times 30$$

Example:

Bidder	Bidder's Rated Score	Bidder's Price	Points for Technical/ Management Components	Points for Price	Total Points
Bidder A	70	\$30,000	$(70 \div 90) \times 70 = 54.4$	$(30,000 \div 30,000) \times 30 = 30$	$54.4 + 20 = 74.4$
Bidder B	85	\$40,000	$(85 \div 90) \times 70 = 66.1$	$(30,000 \div 40,000) \times 30 = 22.5$	$66.1 + 15 = 81.1$
Bidder C	90	\$35,000	$(90 \div 90) \times 70 = 70$	$(30,000 \div 35,000) \times 30 = 25.7$	$70 + 17.1 = 87.1^*$

*In this example, Bidder C will be recommended for award of the contract.