



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government
Services Canada/Réception des soumissions
Travaux publics et Services gouvernementaux
Canada

1713 Bedford Row

Halifax, N.S./Halifax, (N.É.)

B3J 1T3

Nova Scotia

Bid Fax: (902) 496-5016

REQUEST FOR PROPOSAL DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du

fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Atlantic Region Acquisitions/Région de l'Atlantique
Acquisitions

1713 Bedford Row

Halifax, N.S./Halifax, (N.É.)

B3J 3C9

Nova Scot

Title - Sujet Chedebuctou Range Lights	
Solicitation No. - N° de l'invitation F6839-176051/A	Date 2017-09-06
Client Reference No. - N° de référence du client F6839-17-6051	
GETS Reference No. - N° de référence de SEAG PW-\$HAL-321-10184	
File No. - N° de dossier HAL-7-79060 (321)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-10-17	Time Zone Fuseau horaire Atlantic Daylight Saving Time ADT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Baurin, Bruno	Buyer Id - Id de l'acheteur hal321
Telephone No. - N° de téléphone (902) 496-5345 ()	FAX No. - N° de FAX (902) 496-5016
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF FISHERIES AND OCEANS SEE HEREIN ST JOHNS NEWFOUNDLAND & LABRADOR A1C5X1 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée See Herein	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

PART 1 - GENERAL INFORMATION	2
1.1 SECURITY REQUIREMENTS	2
1.2 STATEMENT OF REQUIREMENT	2
1.3 DEBRIEFINGS	2
PART 2 - BIDDER INSTRUCTIONS	2
2.1 STANDARD INSTRUCTIONS, CLAUSES AND CONDITIONS	2
2.2 SUBMISSION OF BIDS	2
2.4 APPLICABLE LAWS	3
PART 3 - BID PREPARATION INSTRUCTIONS	3
3.1 BID PREPARATION INSTRUCTIONS	3
PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION.....	4
4.1 EVALUATION PROCEDURES	4
4.2 BASIS OF SELECTION	4
PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION	4
5.1 CERTIFICATIONS REQUIRED WITH THE Bid	5
5.2 CERTIFICATIONS PRECEDENT TO CONTRACT AWARD AND ADDITIONAL INFORMATION.....	5
PART 6 - RESULTING CONTRACT CLAUSES.....	5
6.1 SECURITY REQUIREMENTS	5
6.2 STATEMENT OF REQUIREMENT	5
6.3 STANDARD CLAUSES AND CONDITIONS	5
6.4 TERM OF CONTRACT.....	6
6.5 AUTHORITIES	6
6.6 PAYMENT	7
6.7 INVOICING INSTRUCTIONS	7
6.8 CERTIFICATIONS AND ADDITIONAL INFORMATION.....	7
6.9 APPLICABLE LAWS	8
6.10 PRIORITY OF DOCUMENTS	8
6.11 SACC MANUAL CLAUSES	8
ANNEX "A"	9
STATEMENT OF REQUIREMENT	9
ANNEX "B"	36
TECHNICAL COMPLIANCE FORM	36
ANNEX "C"	39
BASIS OF PAYMENT	39
ANNEX "D".....	33
SITE LOCATIONS.....	33
ANNEX "E".....	36
SITE PHOTOS.....	36

PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement applicable to the Contract.

1.2 Statement of Requirement

Department of Public Works and Government Services on behalf of the Canadian Coast Guard has a requirement for the supply of eight (8) LED range lights, in accordance with the Requirement described at Annex "A". Site Locations are identified in Annex "D" and Sample Site Pictures can be viewed in Annex "E".

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

1.4 Trade Agreements

The requirement is subject to the provisions of the North American Free Trade Agreement (NAFTA), and the Canadian Free Trade Agreement (CFTA).

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2017-04-27) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days
Insert: 90 days

2.1.1 SACC Manual Clauses

B1000T (2014-06-26) Condition of material – Bid

2.2 Submission of Bids

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted by facsimile to PWGSC will not be accepted.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than seven (7) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Nova Scotia.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that Bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid (one hard copy)

Section II: Financial Bid (one hard copy)

Section III: Certifications (one hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, Bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

In their technical bid, Bidders must submit in accordance with the Substantiation of Technical Compliance Form - Annex B.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment - Annex C.

3.1.1 Exchange Rate Fluctuation

[C3011T](#) (2013-11-06), Exchange Rate Fluctuation

3.1.2 SACC Manual Clauses

Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

- As fully detailed in Annex A

4.1.2 Financial Evaluation

SACC Manual Clause [A0220T](#) (2014-06-26), Evaluation of Price

4.2 Basis of Selection

4.2.1 Basis of Selection – Mandatory Technical Criteria

SACC Manual Clause A0031T (2010-08-16), Basis of Selection – Mandatory Technical Criteria

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, if **applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid, but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real procurement agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

6.2 Statement of Requirement

Department of Public Works and Government Services on behalf of the Canadian Coast Guard has a requirement for the supply of eight (8) LED range lights, in accordance with the Requirement described at Annex "A". Site Locations are identified in Annex "D" and Sample Site Pictures can be viewed in Annex "E".

6.3 Standard Clauses and Conditions

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

6.3.1 General Conditions

[2010A](#) (2016-04-04), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Delivery Date

Delivery requested is twelve (12) weeks after award. Please provide best delivery date: _____

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Bruno Baurin
Title: Supply Officer
Public Works and Government Services Canada
Acquisitions Branch
Atlantic Region
Address: 1713 Bedford Row
Halifax, Nova Scotia
B3J 1T3
Telephone: 902-496-5345
Facsimile: 902-496-5016
E-mail: Bruno.baurin@pwgsc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.5.2 Project Authority

The Project Authority for the Contract is:

Name:
Title:
Organization:
Address:

Telephone:
Facsimile:
E-mail address:

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.3 Contractor's Representative- Bidders to complete

Name:
Title:
Organization:
Address:

Telephone:
Facsimile:
E-mail address:

6.6 Payment

6.6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a "firm price" as specified in Annex C for a cost of \$ _____. Customs duties are included and applicable taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.6.2 Limitation of Price

SACC Manual clause C6000C (2011-05-16) Limitation of Price

6.6.3 Single Payment

SACC Manual clause H1000C (2008-05-12) Single Payment

6.7 Invoicing Instructions

The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

Invoices must be distributed as follows:

The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

6.8 Certifications and Additional Information

6.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

6.9 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Nova Scotia.

6.10 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the general conditions 2010A (2016-04-04), General Conditions – Goods (Medium Complexity);
- (c) Annex A, Requirement;
- (d) Annex B, Technical Compliance Form;
- (e) Annex C, Basis of Payment;
- (f) Annex D, Site Locations;
- (g) Annex E, Sample Site Pictures;
- (h) the Contractor's bid dated _____

6.11 SACC Manual Clauses

G1005C	2016-01-28	Insurance
B7500C	2006-06-16	Excess Goods
D9002C	2007-11-30	Incomplete Assemblies

6.12 Inspection and Acceptance

The Project Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

6.13 Shipping Instructions - Delivery at Destination

Goods must be consigned to the destination specified in the Contract and delivered DDP Delivered Duty Paid; Canadian Coast Guard, Fisheries and Oceans, 50 Discovery Drive, Dartmouth, Nova Scotia, B2Y 3Z8 Canada, Incoterms 2010 for shipments from commercial contractor.

ANNEX "A"

STATEMENT OF REQUIREMENT

1. **Background Information:** As part of the World Class Tanker initiative, the Canadian Coast Guard is in the process of refurbishing and updating to all Aid to Navigation infrastructure requirements within the Chedebuctou Bay waterway near Port Hawkesbury, Nova Scotia.

The main goals that this modernization project targets are:

- Revision of the current Aids to Navigation's Level of Service;
- Increase the reliability and the efficiency of the network by using the LED technology;
- Reduce downtime and response time;
- Reduce operating costs;

2. Requirements

The Canadian Coast Guard (CCG) wishes to enter into a contract for acquisition of eight (8) LED (light emitting diode) Aid to Navigation range lights for installation by CCG personnel. The sites that these lights will be installed at are listed as follows and meet or exceed the requirements within this document;

▪ Cahill Rock Front Range	LL#694.4
▪ Cahill Rock Rear Range	LL#694.5
▪ Eddy Point Front Range	LL#689.3
▪ Eddy Point Rear Range	LL#689.4
▪ Middle Melford Front Range	LL#690.4
▪ Middle Melford Rear Range	LL#690.5
▪ Balache Point Front Range	LL#701
▪ Balache Point Rear Range.	LL#702

3. Mandatory Technical Specifications

Mandatory technical requirements consist of two components.

The first includes standards for navigation lights and the second the technical requirements to meet the level of service required by the Programs depending on the site where they will be installed.

1. Cahill Rock Front Range – LL# 694.3

ID	Specification Description		Requirement or Value
A.1.01	Recommendation IALA, Guideline December 2008		E-200 series
A.1.02	Recommendation IALA Guideline , Rhythmic Characters, June 2012		E-110
A.1.03	System power consumption (Watts)	The bidder must provide the max power consumption of the proposed system (including all electronic components)	
A.1.04	Color		Green
A.1.05	Bulb type		LED
A.1.06	Rhythmic Character	Time ON	Fixed
A.1.07		Time OFF	N/A
A.1.08	Period of annual operation		365 days per year
A.1.09	Period of daily operation		24 per day
A.1.10	Input voltage		12 Vdc or 24Vdc
A.1.11	Synchronisation		No Requirement
A.1.12	Candelas reduction at night		No Requirement
A.1.13	Target Candelas (Cd)	Minimum	38,937 cd
A.1.14	Vertical divergence (°)	Minimum	3°
A.1.15	Horizontal divergence (°)	Minimum @ 50% of Maximum candelas	10°
A.1.15	Markings	Required	The Lantern shall be identified with the following information, on a name plate and always visible. Permanently engraved or chemically printed <ol style="list-style-type: none"> 1. Manufacturer Name 2. Date of Manufacturing 3. Model Number 4. Serial number 5. Rated Voltage/Amperage All markings shall be legible for the entire lantern service life.
A.1.16	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.
A.1.17	Bird deterrent Required	Required	The lantern shall have an effective means of restricting the ability of birds to roost on the lantern.
A.1.18	Sighting mechanism	Required on delivery	Sighting scope or any components for the horizontal adjustment of the light beam shall be provided.
A.1.19	Service Life	Minimum	10 years, based on year-round operation
A.1.20	Photometric curves	Required on delivery	The photometric curves shall be provided.

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

A.1.21	Warranty	Minimum	Full 5-year warranty including parts, labor and shipping
A.1.22	Operating Temperature	Range	-40°C to +55°C
A.1.23	Wind	Speed	Up to 160 km/hour
A.1.24	Ice accumulation	Thickness	Up to 40 mm
A.1.25	Immersion	Minimum	IP 66
A.1.26	Programming/hardware	Required on delivery	All software, hardware and/or remote control required to program and troubleshoot issues shall be provided with the delivery of lantern.
A.1.27	User manuals	Required on delivery	User/programming and installation manuals shall be provided with the lantern.
A.1.28	Maintenance schedule	Required on delivery	A maintenance schedule shall be provided.
A.1.29	Spare parts list	Required on delivery	A spare parts list shall be provided
A.1.30	Original LED lantern design		The lantern must not be a previous lantern version with bulbs converted to LED.

2. Cahill Rock Front Range – LL# 694.4

ID	Specification Description		Requirement or Value
A.2.01	Recommendation IALA, Guideline December 2008		E-200 series
A.2.02	Recommendation IALA Guideline , Rhythmic Characters, June 2012		E-110
A.2.03	System power consumption (Watts)	The bidder must provide the max power consumption of the proposed system (including all electronic components)	
A.2.04	Color		Green
A.2.05	Bulb type		LED
A.2.06	Rhythmic Character	Time ON	10 second
A.2.07		Time OFF	1 second
A.2.08	Period of annual operation		365 days per year
A.2.09	Period of daily operation		24 per day
A.2.10	Input voltage		12 Vdc or 24Vdc
A.2.11	Synchronisation		No Requirement
A.2.12	Candelas reduction at night		No Requirement
A.2.13	Target Candelas (Cd)	Minimum	43,094 cd
A.2.14	Vertical divergence (°)	Minimum	3°
A.2.15	Horizontal divergence (°)	Minimum @ 50% of Maximum candelas	10°
A.2.15	Markings	Required	The Lantern shall be identified with the following information, on a name plate and always visible. Permanently engraved or chemically printed <ol style="list-style-type: none"> 1. Manufacturer Name 2. Date of Manufacturing 3. Model Number 4. Serial number 5. Rated Voltage/Amperage All markings shall be legible for the entire lantern service life.
A.2.16	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.
A.2.17	Bird deterrent Required	Required	The lantern shall have an effective means of restricting the ability of birds to roost on the lantern.
A.2.18	Sighting mechanism	Required on delivery	Sighting scope or any components for the horizontal adjustment of the light beam shall be provided.
A.2.19	Service Life	Minimum	10 years, based on year-round operation
A.2.20	Photometric curves	Required on delivery	The photometric curves shall be provided.

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

A.2.21	Warranty	Minimum	Full 5-year warranty including parts, labor and shipping
A.2.22	Operating Temperature	Range	-40°C to +55°C
A.2.23	Wind	Speed	Up to 160 km/hour
A.2.24	Ice accumulation	Thickness	Up to 40 mm
A.2.25	Immersion	Minimum	IP 66
A.2.26	Programming/hardware	Required on delivery	All software, hardware and/or remote control required to program and troubleshoot issues shall be provided with the delivery of lantern.
A.2.27	User manuals	Required on delivery	User/programming and installation manuals shall be provided with the lantern.
A.2.28	Maintenance schedule	Required on delivery	A maintenance schedule shall be provided.
A.2.29	Spare parts list	Required on delivery	A spare parts list shall be provided
A.2.30	Original LED lantern design		The lantern must not be a previous lantern version with bulbs converted to LED.

3. Middle Melford Front Range – LL#690.3

ID	Specification Description		Requirement or Value
A.3.01	Recommendation IALA, Guideline December 2008		E-200 series
A.3.02	Recommendation IALA Guideline , Rhythmic Characters, June 2012		E-110
A.3.03	System power consumption (Watts)	The bidder must provide the max power consumption of the proposed system (including all electronic components)	
A.3.04	Color		Green
A.3.05	Bulb type		LED
A.3.06	Rhythmic Character	Time ON	Fixed
A.3.07		Time OFF	N/A
A.3.08	Period of annual operation		365 days per year
A.3.09	Period of daily operation		24 per day
A.3.10	Input voltage		12 Volts dc or 24Volts dc
A.3.11	Synchronisation		No Requirement
A.3.12	Candelas reduction at night		No Requirement
A.3.13	Target Candelas (Cd)	Minimum	14,144 candela
A.3.14	Vertical divergence (°)	Minimum	3°
A.3.15	Horizontal divergence (°)	Minimum @ 50% of Maximum candelas	14°
A.3.15	Markings	Required	The Lantern shall be identified with the following information, on a name plate and always visible. Permanently engraved or chemically printed <ol style="list-style-type: none"> 1. Manufacturer Name 2. Date of Manufacturing 3. Model Number 4. Serial number 5. Rated Voltage/Amperage All markings shall be legible for the entire lantern service life.
A.3.16	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.
A.3.17	Bird deterrent Required	Required	The lantern shall have an effective means of restricting the ability of birds to roost on the lantern.
A.3.18	Sighting mechanism	Required on delivery	Sighting scope or any components for the horizontal adjustment of the light beam shall be provided.
A.3.19	Service Life	Minimum	10 years, based on year-round operation
A.3.20	Photometric curves	Required on delivery	The photometric curves shall be provided.

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

A.3.21	Warranty	Minimum	Full 5-year warranty including parts, labor and shipping
A.3.22	Operating Temperature	Range	-40°C to +55°C
A.3.23	Wind	Speed	Up to 160 km/hour
A.3.24	Ice accumulation	Thickness	Up to 40 mm
A.3.25	Immersion	Minimum	IP 66
A.3.26	Programming/hardware	Required on delivery	All software, hardware and/or remote control required to program and troubleshoot issues shall be provided with the delivery of lantern.
A.3.27	User manuals	Required on delivery	User/programming and installation manuals shall be provided with the lantern.
A.3.28	Maintenance schedule	Required on delivery	A maintenance schedule shall be provided.
A.3.29	Spare parts list	Required on delivery	A spare parts list shall be provided
A.3.30	Original LED lantern design		The lantern must not be a previous lantern version with bulbs converted to LED.

4. Middle Melford Rear Range – LL#690.4

ID	Specification Description		Requirement or Value
A.4.01	Recommendation IALA, Guideline December 2008		E-200 series
A.4.02	Recommendation IALA Guideline , Rhythmic Characters, June 2012		E-110
A.4.03	System power consumption (Watts)	The bidder must provide the max power consumption of the proposed system (including all electronic components)	
A.4.04	Color		Green
A.4.05	Bulb type		LED
A.4.06	Rhythmic Character	Time ON	Fixed
A.4.07		Time OFF	N/A
A.4.08	Period of annual operation		365 days per year
A.4.09	Period of daily operation		24 per day
A.4.10	Input voltage		12 Volts dc or 24Volts dc
A.4.11	Synchronisation		No Requirement
A.4.12	Candelas reduction at night		No Requirement
A.4.13	Target Candelas (Cd)	Minimum	15,553 candela
A.4.14	Vertical divergence (°)	Minimum	3°
A.4.15	Horizontal divergence (°)	Minimum @ 50% of Maximum candelas	14°
A.4.15	Markings	Required	The Lantern shall be identified with the following information, on a name plate and always visible. Permanently engraved or chemically printed <ol style="list-style-type: none"> 1. Manufacturer Name 2. Date of Manufacturing 3. Model Number 4. Serial number 5. Rated Voltage/Amperage All markings shall be legible for the entire lantern service life.
A.4.16	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.
A.4.17	Bird deterrent Required	Required	The lantern shall have an effective means of restricting the ability of birds to roost on the lantern.
A.4.18	Sighting mechanism	Required on delivery	Sighting scope or any components for the horizontal adjustment of the light beam shall be provided.
A.4.19	Service Life	Minimum	10 years, based on year-round operation
A.4.20	Photometric curves	Required on delivery	The photometric curves shall be provided.

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

A.4.21	Warranty	Minimum	Full 5-year warranty including parts, labor and shipping
A.4.22	Operating Temperature	Range	-40°C to +55°C
A.4.23	Wind	Speed	Up to 160 km/hour
A.4.24	Ice accumulation	Thickness	Up to 40 mm
A.4.25	Immersion	Minimum	IP 66
A.4.26	Programming/hardware	Required on delivery	All software, hardware and/or remote control required to program and troubleshoot issues shall be provided with the delivery of lantern.
A.4.27	User manuals	Required on delivery	User/programming and installation manuals shall be provided with the lantern.
A.4.28	Maintenance schedule	Required on delivery	A maintenance schedule shall be provided.
A.4.29	Spare parts list	Required on delivery	A spare parts list shall be provided
A.4.30	Original LED lantern design		The lantern must not be a previous lantern version with bulbs converted to LED.

5. Eddy Point Front Range – LL#689.3

ID	Specification Description		Requirement or Value
A.5.01	Recommendation IALA, Guideline December 2008		E-200 series
A.5.02	Recommendation IALA Guideline , Rhythmic Characters, June 2012		E-110
A.5.03	System power consumption (Watts)	The bidder must provide the max power consumption of the proposed system (including all electronic components)	
A.5.04	Color		Green
A.5.05	Bulb type		LED
A.5.06	Rhythmic Character	Time ON	10 seconds
A.5.07		Time OFF	1 second
A.5.08	Period of annual operation		365 days per year
A.5.09	Period of daily operation		24 per day
A.5.10	Input voltage		12 Volts dc or 24Volts dc
A.5.11	Synchronisation		No Requirement
A.5.12	Candelas reduction at night		No Requirement
A.5.13	Target Candelas (Cd)	Minimum	29,693 candela
A.5.14	Vertical divergence (°)	Minimum	3°
A.5.15	Horizontal divergence (°)	Minimum @ 50% of Maximum candelas	6°
A.5.15	Markings	Required	The Lantern shall be identified with the following information, on a name plate and always visible. Permanently engraved or chemically printed <ol style="list-style-type: none"> 1. Manufacturer Name 2. Date of Manufacturing 3. Model Number 4. Serial number 5. Rated Voltage/Amperage All markings shall be legible for the entire lantern service life.
A.5.16	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.
A.5.17	Bird deterrent Required	Required	The lantern shall have an effective means of restricting the ability of birds to roost on the lantern.
A.5.18	Sighting mechanism	Required on delivery	Sighting scope or any components for the horizontal adjustment of the light beam shall be provided.
A.5.19	Service Life	Minimum	10 years, based on year-round operation
A.5.20	Photometric curves	Required on delivery	The photometric curves shall be provided.

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

A.5.21	Warranty	Minimum	Full 5-year warranty including parts, labor and shipping
A.5.22	Operating Temperature	Range	-40°C to +55°C
A.5.23	Wind	Speed	Up to 160 km/hour
A.5.24	Ice accumulation	Thickness	Up to 40 mm
A.5.25	Immersion	Minimum	IP 66
A.5.26	Programming/hardware	Required on delivery	All software, hardware and/or remote control required to program and troubleshoot issues shall be provided with the delivery of lantern.
A.5.27	User manuals	Required on delivery	User/programming and installation manuals shall be provided with the lantern.
A.5.28	Maintenance schedule	Required on delivery	A maintenance schedule shall be provided.
A.5.29	Spare parts list	Required on delivery	A spare parts list shall be provided
A.5.30	Original LED lantern design		The lantern must not be a previous lantern version with bulbs converted to LED.

6. Eddy Point Rear Range – LL#689.4

ID	Specification Description		Requirement or Value
A.6.01	Recommendation IALA, Guideline December 2008		E-200 series
A.6.02	Recommendation IALA Guideline , Rhythmic Characters, June 2012		E-110
A.6.03	System power consumption (Watts)	The bidder must provide the max power consumption of the proposed system (including all electronic components)	
A.6.04	Color		Green
A.6.05	Bulb type		LED
A.6.06	Rhythmic Character	Time ON	Fixed
A.6.07		Time OFF	N/A
A.6.08	Period of annual operation		365 days per year
A.6.09	Period of daily operation		24 per day
A.6.10	Input voltage		12 Volts dc or 24Volts dc
A.6.11	Synchronisation		No Requirement
A.6.12	Candelas reduction at night		No Requirement
A.6.13	Target Candelas (Cd)	Minimum	43,728 candela
A.6.14	Vertical divergence (°)	Minimum	3°
A.6.15	Horizontal divergence (°)	Minimum @ 50% of Maximum candelas	6°
A.6.15	Markings	Required	The Lantern shall be identified with the following information, on a name plate and always visible. Permanently engraved or chemically printed <ol style="list-style-type: none"> 1. Manufacturer Name 2. Date of Manufacturing 3. Model Number 4. Serial number 5. Rated Voltage/Amperage All markings shall be legible for the entire lantern service life.
A.6.16	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.
A.6.17	Bird deterrent Required	Required	The lantern shall have an effective means of restricting the ability of birds to roost on the lantern.
A.6.18	Sighting mechanism	Required on delivery	Sighting scope or any components for the horizontal adjustment of the light beam shall be provided.
A.6.19	Service Life	Minimum	10 years, based on year-round operation

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

A.6.20	Photometric curves	Required on delivery	The photometric curves shall be provided.
A.6.21	Warranty	Minimum	Full 5-year warranty including parts, labor and shipping
A.6.22	Operating Temperature	Range	-40°C to +55°C
A.6.23	Wind	Speed	Up to 160 km/hour
A.6.24	Ice accumulation	Thickness	Up to 40 mm
A.6.25	Immersion	Minimum	IP 66
A.6.26	Programming/hardware	Required on delivery	All software, hardware and/or remote control required to program and troubleshoot issues shall be provided with the delivery of lantern.
A.6.27	User manuals	Required on delivery	User/programming and installation manuals shall be provided with the lantern.
A.6.28	Maintenance schedule	Required on delivery	A maintenance schedule shall be provided.
A.6.29	Spare parts list	Required on delivery	A spare parts list shall be provided
A.6.30	Original LED lantern design		The lantern must not be a previous lantern version with bulbs converted to LED.

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

7. Balache Point Front Range – LL#702

ID	Specification Description		Requirement or Value
A.7.01	Recommendation IALA, Guideline December 2008		E-200 series
A.7.02	Recommendation IALA Guideline , Rhythmic Characters, June 2012		E-110
A.7.03	System power consumption (Watts)	The bidder must provide the max power consumption of the proposed system (including all electronic components)	
A.7.04	Color		Red
A.7.05	Bulb type		LED
A.7.06	Rhythmic Character	Time ON	10 seconds
A.7.07		Time OFF	1 second
A.7.08	Period of annual operation		365 days per year
A.7.09	Period of daily operation		24 per day
A.7.10	Input voltage		12 Volts dc or 24Volts dc
A.7.11	Synchronisation		No Requirement
A.7.12	Candelas reduction at night		No Requirement
A.7.13	Target Candelas (Cd)	Minimum	29,693 candela
A.7.14	Vertical divergence (°)	Minimum	3°
A.7.15	Horizontal divergence (°)	Minimum @ 50% of Maximum candelas	6°
A.7.15	Markings	Required	The Lantern shall be identified with the following information, on a name plate and always visible. Permanently engraved or chemically printed <ol style="list-style-type: none"> 1. Manufacturer Name 2. Date of Manufacturing 3. Model Number 4. Serial number 5. Rated Voltage/Amperage All markings shall be legible for the entire lantern service life.
A.7.16	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.
A.7.17	Bird deterrent Required	Required	The lantern shall have an effective means of restricting the ability of birds to roost on the lantern.
A.7.18	Sighting mechanism	Required on delivery	Sighting scope or any components for the horizontal adjustment of the light beam shall be provided.
A.7.19	Service Life	Minimum	10 years, based on year-round operation
A.7.20	Photometric curves	Required on delivery	The photometric curves shall be provided.

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

A.7.21	Warranty	Minimum	Full 5-year warranty including parts, labor and shipping
A.7.22	Operating Temperature	Range	-40°C to +55°C
A.7.23	Wind	Speed	Up to 160 km/hour
A.7.24	Ice accumulation	Thickness	Up to 40 mm
A.7.25	Immersion	Minimum	IP 66
A.7.26	Programming/hardware	Required on delivery	All software, hardware and/or remote control required to program and troubleshoot issues shall be provided with the delivery of lantern.
A.7.27	User manuals	Required on delivery	User/programming and installation manuals shall be provided with the lantern.
A.7.28	Maintenance schedule	Required on delivery	A maintenance schedule shall be provided.
A.7.29	Spare parts list	Required on delivery	A spare parts list shall be provided
A.7.30	Original LED lantern design		The lantern must not be a previous lantern version with bulbs converted to LED.

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

8. Balache Point Rear Range – LL#703

ID	Specification Description		Requirement or Value
A.8.01	Recommendation IALA, Guideline December 2008		E-200 series
A.8.02	Recommendation IALA Guideline , Rhythmic Characters, June 2012		E-110
A.8.03	System power consumption (Watts)	The bidder must provide the max power consumption of the proposed system (including all electronic components)	
A.8.04	Color		Red
A.8.05	Bulb type		LED
A.8.06	Rhythmic Character	Time ON	10 seconds
A.8.07		Time OFF	1 second
A.8.08	Period of annual operation		365 days per year
A.8.09	Period of daily operation		24 per day
A.8.10	Input voltage		12 Volts dc or 24Volts dc
A.8.11	Synchronisation		No Requirement
A.8.12	Candelas reduction at night		No Requirement
A.8.13	Target Candelas (Cd)	Minimum	29,693 candela
A.8.14	Vertical divergence (°)	Minimum	3°
A.8.15	Horizontal divergence (°)	Minimum @ 50% of Maximum candelas	6°
A.8.15	Markings	Required	The Lantern shall be identified with the following information, on a name plate and always visible. Permanently engraved or chemically printed <ol style="list-style-type: none"> 1. Manufacturer Name 2. Date of Manufacturing 3. Model Number 4. Serial number 5. Rated Voltage/Amperage All markings shall be legible for the entire lantern service life.
A.8.16	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.
A.8.17	Bird deterrent Required	Required	The lantern shall have an effective means of restricting the ability of birds to roost on the lantern.
A.8.18	Sighting mechanism	Required on delivery	Sighting scope or any components for the horizontal adjustment of the light beam shall be provided.
A.8.19	Service Life	Minimum	10 years, based on year-round operation
A.8.20	Photometric curves	Required on delivery	The photometric curves shall be provided.

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

A.8.21	Warranty	Minimum	Full 5-year warranty including parts, labor and shipping
A.8.22	Operating Temperature	Range	-40°C to +55°C
A.8.23	Wind	Speed	Up to 160 km/hour
A.8.24	Ice accumulation	Thickness	Up to 40 mm
A.8.25	Immersion	Minimum	IP 66
A.8.26	Programming/hardware	Required on delivery	All software, hardware and/or remote control required to program and troubleshoot issues shall be provided with the delivery of lantern.
A.8.27	User manuals	Required on delivery	User/programming and installation manuals shall be provided with the lantern.
A.8.28	Maintenance schedule	Required on delivery	A maintenance schedule shall be provided.
A.8.29	Spare parts list	Required on delivery	A spare parts list shall be provided
A.8.30	Original LED lantern design		The lantern must not be a previous lantern version with bulbs converted to LED.

ANNEX "B" TECHNICAL COMPLIANCE FORM

The Bidder must provide documentation and demonstrate in the bid that they meet each and every criterion. Failure to provide supporting documentation may result in the bid being deemed non- responsive.

1. Cahill Front Range - LL# 694.3				
ID	Specification Description		Minimum Requirement	Bidder's Substantiation (should indicate the page reference to the technical documentation included with their Bid)
B.1.01	Brand			
B.1.02	Model			
B.1.03	Attach Brochure and Specifications of Product			
B.1.04	System power consumption (Watt)			Watts
B.1.05	Proposed Input voltage			Volts
B.1.06	Proposed Candelas of Product	Minimum	38,937 cd	candelas
B.1.07	Colour of Light		Green	
B.1.08	Proposed Product Vertical divergence (°)	Minimum	3°	°
B.1.09	Proposed Product Horizontal divergence (°) of Product	Minimum @ 50% of maximum candelas	10°	°
B.1.10	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.	

B.1.11	Sighting mechanism type			
B.1.12	Expected Service Life		10 years	years
B.1.13	Warranty		5 years	years
B.1.14	Immersion Rating		IP66	

2. Cahill Front Range - LL# 694.4

ID	Specification Description	Minimum Requirement	Bidder's Substantiation (should indicate the page reference to the technical documentation included with their Bid)
B.2.01	Brand		
B.2.02	Model		
B.2.03	Attach Brochure and Specifications of Product		
B.2.04	System power consumption (Watt)		Watts
B.2.05	Proposed Input voltage		Volts
B.2.06	Proposed Candelas of Product	Minimum	43,094 cd candelas
B.2.07	Colour of Light	Green	
B.2.08	Proposed Product Vertical divergence (°)	Minimum	3° °
B.2.09	Proposed Product Horizontal divergence (°) of Product	Minimum @ 50% of maximum candelas	10° °

B.2.10	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.	
B.2.11	Sighting mechanism type			
B.2.12	Expected Service Life		10 years	years
B.2.13	Warranty		5 years	years
B.2.14	Immersion Rating		IP66	

3. Middle Melford Front Range – LL#690.3

ID	Specification Description	Minimum Requirement	Bidder's Substantiation (should indicate the page reference to the technical documentation included with their Bid)
B.3.01	Brand		
B.3.02	Model		
B.3.03	Attach Brochure and Specifications of Product		
B.3.04	System power consumption (Watt)		Watts
B.3.05	Proposed Input voltage		Volts
B.3.06	Proposed Candelas of Product	Minimum	14,144 cd candelas
B.3.07	Colour of Light		Green

B.3.08	Proposed Product Vertical divergence (°)	Minimum	3°	°
B.3.09	Proposed Product Horizontal divergence (°) of Product	Minimum @ 50% of maximum candelas	14°	°
B.3.10	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.	
B.3.11	Sighting mechanism type			
B.3.12	Expected Service Life		10 years	years
B.3.13	Warranty		5 years	years
B.3.14	Immersion Rating		IP66	

4. Middle Melford Rear Range – LL# 694.4

ID	Specification Description	Minimum Requirement	Bidder's Substantiation (should indicate the page reference to the technical documentation included with their Bid)
B.4.01	Brand		
B.4.02	Model		
B.4.03	Attach Brochure and Specifications of Product		
B.4.04	System power consumption (Watt)		Watts

B.4.05	Proposed Input voltage			Volts
B.4.06	Proposed Candelas of Product	Minimum	15,553 cd	candelas
B.4.07	Colour of Light		Green	
B.4.08	Proposed Product Vertical divergence (°)	Minimum	3°	°
B.4.09	Proposed Product Horizontal divergence (°) of Product	Minimum @ 50% of maximum candelas	14°	°
B.4.10	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.	
B.4.11	Sighting mechanism type			
B.4.12	Expected Service Life		10 years	years
B.4.13	Warranty		5 years	years
B.4.14	Immersion Rating		IP66	

5. Eddy Point Front Range - LL# 689.3

ID	Specification Description	Minimum Requirement	Bidder's Substantiation (should indicate the page reference to the technical documentation included with their Bid)
B.5.01	Brand		
B.5.02	Model		

B.5.03	Attach Brochure and Specifications of Product			
B.5.04	System power consumption (Watt)			Watts
B.5.05	Proposed Input voltage			Volts
B.5.06	Proposed Candelas of Product	Minimum	29, 693 cd	candelas
B.5.07	Colour of Light		Green	
B.5.08	Proposed Product Vertical divergence (°)	Minimum	3°	°
B.5.09	Proposed Product Horizontal divergence (°) of Product	Minimum @ 50% of maximum candelas	6°	°
B.5.10	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.	
B.5.11	Sighting mechanism type			
B.5.12	Expected Service Life		10 years	years
B.5.13	Warranty		5 years	years
B.5.14	Immersion Rating		IP66	

6. Eddy Point Rear Range - LL# 694.4

ID	Specification Description		Minimum Requirement	Bidder's Substantiation (should indicate the page reference to the technical documentation included with their Bid)
B.6.01	Brand			
B.6.02	Model			
B.6.03	Attach Brochure and Specifications of Product			
B.6.04	System power consumption (Watt)			Watts
B.6.05	Proposed Input voltage			Volts
B.6.06	Proposed Candelas of Product	Minimum	43728 cd	candelas
B.6.07	Colour of Light		Green	
B.6.08	Proposed Product Vertical divergence (°)	Minimum	3°	°
B.6.09	Proposed Product Horizontal divergence (°) of Product	Minimum @ 50% of maximum candelas	6°	°
B.6.10	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.	
B.6.11	Sighting mechanism type			
B.6.12	Expected Service Life		10 years	years
B.6.13	Warranty		5 years	years

B.6.14	Immersion Rating		IP66	
--------	------------------	--	------	--

7. Balache Point Front Range - LL# 702

ID	Specification Description		Minimum Requirement	Bidder's Substantiation (should indicate the page reference to the technical documentation included with their Bid)
B.7.01	Brand			
B.7.02	Model			
B.7.03	Attach Brochure and Specifications of Product			
B.7.04	System power consumption (Watt)			Watts
B.7.05	Proposed Input voltage			Volts
B.7.06	Proposed Candelas of Product	Minimum	5,734 cd	candelas
B.7.07	Colour of Light		Red	
B.7.08	Proposed Product Vertical divergence (°)	Minimum	3°	°
B.7.09	Proposed Product Horizontal divergence (°) of Product	Minimum @ 50% of maximum candelas	6°	°
B.7.10	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.	
B.7.11	Sighting mechanism type			

B.7.12	Expected Service Life		10 years	years
B.7.13	Warranty		5 years	years
B.7.14	Immersion Rating		IP66	

8. Balache Point Rear Range – LL# 702

ID	Specification Description		Minimum Requirement	Bidder's Substantiation (should indicate the page reference to the technical documentation included with their Bid)
B.8.01	Brand			
B.8.02	Model			
B.8.03	Attach Brochure and Specifications of Product			
B.8.04	System power consumption (Watt)			Watts
B.8.05	Proposed Input voltage			Volts
B.8.06	Proposed Candelas of Product	Minimum	6,853 cd	candelas
B.8.07	Colour of Light		Red	
B.8.08	Proposed Product Vertical divergence (°)	Minimum	3°	°
B.8.09	Proposed Product Horizontal divergence (°) of Product	Minimum @ 50% of maximum candelas	6°	°

B.8.10	Mounting	A bolting circle drawing must be provided as a proof of compliance.	The base of the unit shall be capable of being bolted to a plate measuring 300 mm by 400 mm.	
B.8.11	Sighting mechanism type			
B.8.12	Expected Service Life		10 years	years
B.8.13	Warranty		5 years	years
B.8.14	Immersion Rating		IP66	

Canada reserves the right to verify that any and all of the mandatory specifications identified in Appendix A - are met prior to award of contract. Mandatory specifications found not to be met will result in a non-compliant bid, and if found after contract award may result in the termination of the contract. Bidder certifies that all of the above mandatory requirements are met:

Signature: _____

ANNEX "C"

BASIS OF PAYMENT

Evaluation of Price: The price of the bid will be evaluated in Canadian dollars (CAD), the Goods and Services Tax or the Harmonized Sales Tax excluded.

Goods must be consigned to the destination specified in the Contract and delivered DDP Delivered Duty Paid; Canadian Coast Guard, Fisheries and Oceans, 50 Discovery Drive, Dartmouth, Nova Scotia, B2Y 3Z8 Canada, Incoterms 2010 for shipments from commercial contractor.

Basis of Selection: A bid must comply with the requirements of the bid solicitation and **meet all minimum specifications as per Annex A** to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

Note: Bidders are required to complete the pricing table shown below. An incomplete bid (financial or technical) will be deemed non-responsive and will not be considered for further evaluation.

All pricing entered in the table below is to **exclude** GST/HST.

Art.	Description	Qty.	Unit	Firm Unit Price CAD
1	Cahill Front Range – LL# 694.4 In accordance with Annex B Indicate the equipment Brand and Model : Brand : _____ Model : _____	1	Each	\$
2	Cahill Rear Range – LL# 694.5 In accordance with Annex B Indicate the equipment Brand and Model : Brand : _____ Model : _____	1	Each	\$

3	Middle Melford Front Range –LL#690.3 In accordance with Annex B Indicate the equipment Brand and Model : Brand : _____ Model : _____	1	Each	\$
4	Middle Melford Rear Range – LL#690.4 In accordance with Annex B Indicate the equipment Brand and Model : Brand : _____ Model : _____	1	Each	\$
5	Eddy Point Front Range – LL#689.3 In accordance with Annex B Indicate the equipment Brand and Model : Brand : _____ Model : _____	1	Each	\$
6	Eddy Point Rear Range – LL#689.4 In accordance with Annex B Indicate the equipment Brand and Model : Brand : _____ Model : _____	1	Each	\$

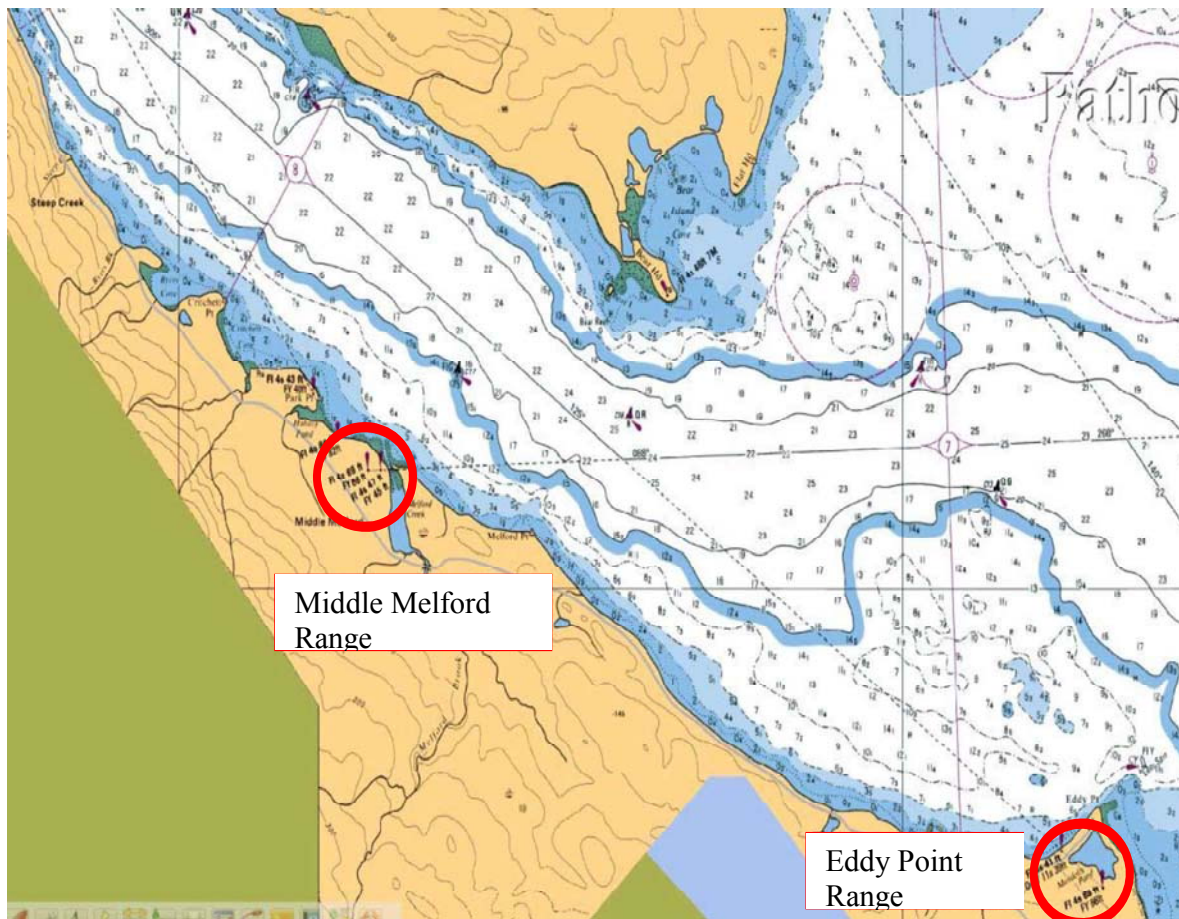
Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

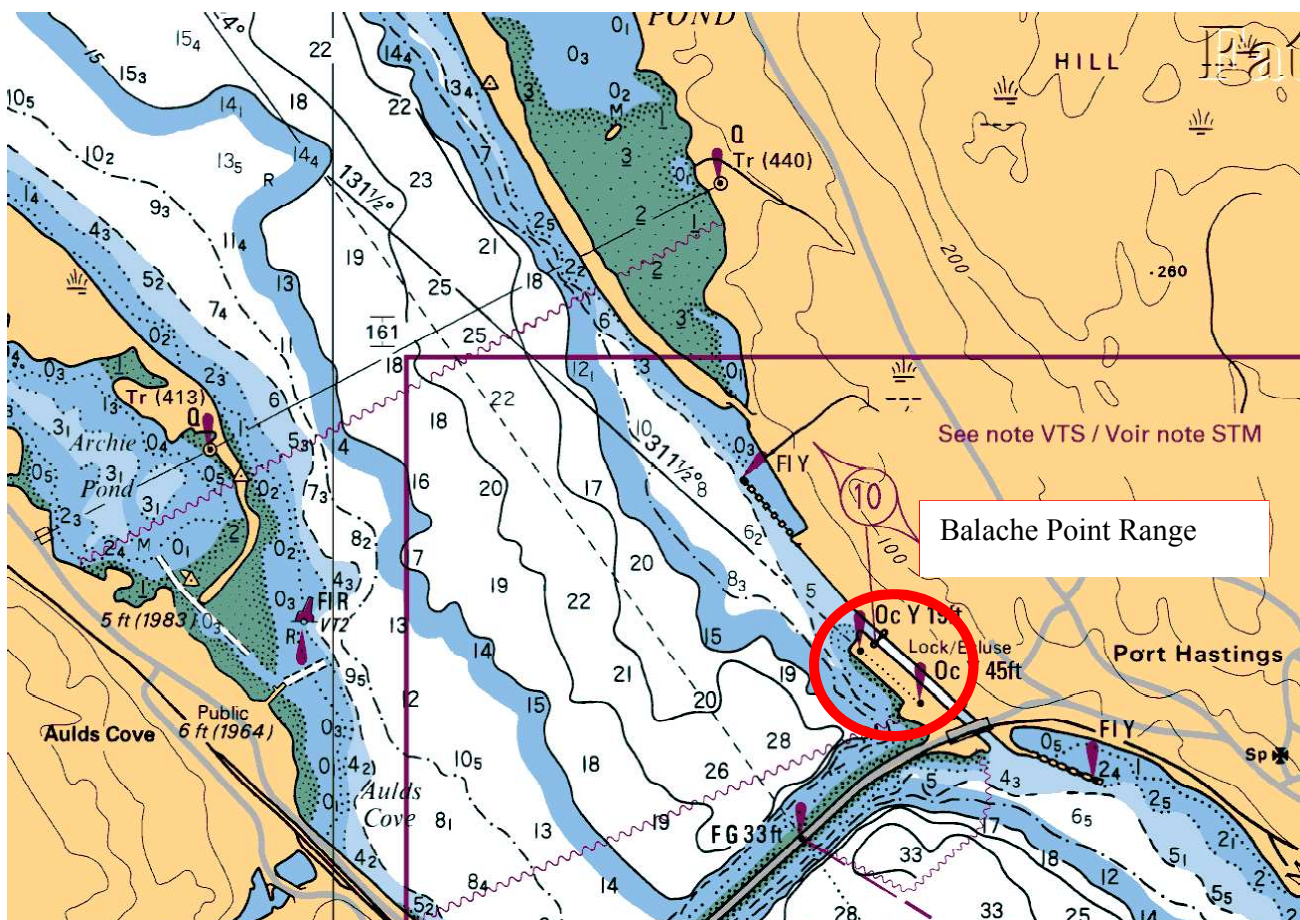
Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME

7	Balache Point Front Range - LL#701 In accordance with Annex B Indicate the equipment Brand and Model : Brand : _____ Model : _____	1	EACH	\$
8	Balache Point Front Range - LL#702 In accordance with Annex B Indicate the equipment Brand and Model : Brand : _____ Model : _____	1	EACH	\$
	TOTAL BID PRICE (TBP) in Canadian Dollars (CAD) Prices excludes applicable sales taxes.			\$

ANNEX "D" SITE LOCATIONS





Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME



ANNEX "E"
SAMPLE SITE PICTURES



Middle Melford Range

Solicitation No. - N° de l'invitation
F6839-176051/001/HAL
Client Ref. No. - N° de réf. du client
F6839-170651

Amd. No. - N° de la modif.
File No. - N° du dossier
HAL-7-79060

Buyer ID - Id de l'acheteur
HAL321
CCC No./N° CCC - FMS No./N° VME



Eddy Point Front Range