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PART 1 - GENERAL INFORMATION

1.1 Introduction

The bid solicitation is divided into seven parts plus attachments and annexes, as follows:

- Part 1 General Information: provides a general description of the requirement;
- Part 2 Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions: provides Bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications and Additional Information: includes the certifications and additional information to be provided;
- Part 6 Security, Financial and Other Requirements: includes specific requirements that must be addressed by Bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work, the Basis of Payment, the Security Requirements Checklist, the Electronic Payment Instruments, the Federal Contractors Program for Employment Equity - Certification, and the mandatory evaluation criteria.

1.2 Summary

- 1.2.1 The Department of National Defence (DND) has a requirement to purchase a Large Environmental Chamber (LEC), delivered to and installed at the Naval Engineering Test Establishment (NETE), LaSalle QC, in replacement of the existing obsolete system.

In addition to the LEC, there is a requirement for a spare parts list including all components and ancillary equipment, a Technical Data Package (TDP) to be used by NETE to support maintenance, an acoustic dampening package, and necessary training and training materials.

- 1.2.2 There are security requirements associated with this requirement. For additional information, consult Part 6 - Security, Financial and Other Requirements, and Part 7 - Resulting Contract Clauses. For more information on personnel and organization security screening or security clauses, Bidders should refer to the [Contract Security Program](#) of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.
- 1.2.3 This procurement is subject to the Controlled Goods Program. The [Defence Production Act](#) defines Canadian Controlled Goods as certain goods listed in Canada's Export Control List, a regulation made pursuant to the Export and Import Permits Act (EIPA).
- 1.2.4 There is an optional site visit associated with this requirement where personnel security screening is required prior to gaining access to secure information, assets or sites. Consult Part 2 – Bidder Instructions.

- 1.2.5 The Federal Contractors Program (FCP) for employment equity applies to this procurement; refer to Part 5 – Certifications and Additional Information, Part 7 - Resulting Contract Clauses and the annex titled Federal Contractors Program for Employment Equity - Certification.
- 1.2.6 The requirement is subject to the provisions of the following trade agreements: CETA, WTO-AGT, CPTPP, CCFTA, Canada - Colombia Free Trade Agreement, Canada - Honduras Free Trade Agreement, Canada - Korea Free Trade Agreement, CPFTA, CUFTA, CFTA.

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.

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](#) 2022-03-29 Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

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 the Public Works and Government Services Canada (PWGSC) Bid Receiving Unit specified below by the date and time indicated on page 1 of the bid solicitation:

Bid Receiving – PWGSC / Réception des
soumissions - TPSGC
11 Laurier St. / 11 rue Laurier
Place du Portage, Phase III
Core 0B2 / Noyau 0B2
Gatineau
Québec
K1A 0S5

Facsimile number: 819-997-9776

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 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 Ontario.

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.

2.5 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least 14 days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

2.6 Optional Site Visit

It is recommended that the Bidder or a representative of the Bidder visit the work site. Arrangements have been made for the site visit to be held at 9401 rue Wanklyn, LaSalle, Quebec on Friday 9 Dec, 22. The site visit will begin at 1030 hrs.

Personnel security screening is required prior to gaining authorized access to the secure sites. The Bidder's Company Security Officer (CSO) must ensure that their representative(s) hold a valid security clearance at the required level for the site visit. Failure to comply with the security requirements will result in the representative(s) being denied access to the site.

Bidders must communicate with the Contracting Authority no later than 1600 hrs, Thursday 1 Dec, 22 to confirm attendance and provide the name(s) of the person(s) holding a valid security clearance at the required level, who will attend. Bidders who do not confirm attendance and who do not provide the name(s) of the person(s) who will attend as required will not be allowed access to the site. Bidders will be requested to sign an attendance sheet. No alternative appointment will be given to bidders who do not attend or do not send a representative. Bidders who do not participate in the visit will not be precluded

from submitting a bid. Any clarifications or changes to the bid solicitation resulting from the site visit will be included as an amendment to the bid solicitation.

2.7 Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
- Office of the Procurement Ombudsman (OPO)
 - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.

2.8 Technical Data

Contact:

Department of National Defence
National Defence Headquarters
MGen George R Pearkes
101 Colonel By Drive
Ottawa, Ontario
K1A 0K2
ATTN: D Mar P 2-3-4
Email: dianne.montgomery@forces.gc.ca

In order to receive Technical Data Packages against this solicitation, bidders must provide the following details with their request:

- Company Name
- Complete mailing & physical address (P.O. Box numbers not acceptable)
- Area code and telephone number
- Contact name
- E-mail address
- Solicitation Number & Closing Date

It is imperative that the request be done as soon as possible to ensure timely receipt. Notwithstanding Canada must not be held responsible for untimely release of the technical data.

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 (3 hard copies)
Section II: Financial Bid (1 hard copy)
Section III: Certifications (1 hard copy)
Section IV: Additional Information (1 hard copy)

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

Due to the nature of the bid solicitation, bids transmitted by CPC Connect service will not be accepted.

Canada requests that bidders follow the format instructions described below in the preparation of hard copy 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](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573) (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). To assist Canada in reaching its objectives, bidders should:

- 1) Include all environmental certification(s) relevant to your organization (e.g., ISO 14001, Leadership in Energy and Environmental Design (LEED), Carbon Disclosure Project, etc.)
- 2) Include all environmental certification(s) or Environmental Product Declaration(s) (EPD) specific to your product/service (e.g., Forest Stewardship Council (FSC), ENERGYSTAR, etc.)
- 3) Unless otherwise noted, bidders are encouraged to submit bids electronically. If hard copies are required, bidders should:
 - a. 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
 - b. 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, duo tangs or binders.

Section I: Technical Bid

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Section II: Financial Bid

3.1.1 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “D” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “D” Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.2 Exchange Rate Fluctuation

SACC Manual clause C3010T (2014-11-27), Exchange Rate Fluctuation Risk Mitigation

1. The Bidder may request Canada to assume the risks and benefits of exchange rate fluctuations. If the Bidder claims for an exchange rate adjustment, this request must be clearly indicated in the bid at time of bidding. The Bidder must submit form PWGSC-TPSGC 450 , Claim for Exchange Rate Adjustments with its bid, indicating the Foreign Currency Component (FCC) in Canadian dollars for each line item for which an exchange rate adjustment is required.
2. The FCC is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuations. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.
3. The total price paid by Canada on each invoice will be adjusted at the time of payment, based on the FCC and the exchange rate fluctuation provision in the contract. The exchange rate adjustment will only be applied where the exchange rate fluctuation is greater than 2% (increase or decrease).
4. At time of bidding, the Bidder must complete columns (1) to (4) on form PWGSC-TPSGC 450 , for each line item where they want to invoke the exchange rate fluctuation provision. Where bids are evaluated in Canadian dollars, the dollar values provided in column (3) should also be in Canadian dollars, so that the adjustment amount is in the same currency as the payment.
5. Alternate rates or calculations proposed by the Bidder will not be accepted for the purposes of this exchange rate fluctuation provision.

3.1.3 SACC Manual Clauses

Section III: Certifications

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

Section IV: 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.

The only Security Requirement for this contract is that personnel working on this procurement require, as a minimum, a **RELIABILITY STATUS** before access to a secure site is granted.

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", "financial" and all other applicable mandatory evaluation criteria.
- (b) An evaluation team composed of representatives of Canada and Weir Canada, Inc. will evaluate the bids.

4.1.1 Technical Evaluation

4.1.1.1. Mandatory Technical Criteria

In order to be compliant, Bidder's proposal must, to the satisfaction of Canada, meet all requirements and provide all information as requested in **PART 3 - BID PREPARATION INSTRUCTIONS, 3.2 Section I - Technical Bid**.

4.1.2 Financial Evaluation

The price of the bid will be evaluated in Canadian dollars, Applicable Taxes excluded, FOB destination, Canadian customs duties and excise taxes included.

The requested optional spare parts prices and optional acoustic dampening will be included in the Basis of Payment, however they will not form part of the bid evaluation.

4.1.2.1 Mandatory Financial Criteria

In order to be compliant, the bidder's proposal must, to the satisfaction of Canada, meet all requirements and provide all information as requested in **PART 3 - BID PREPARATION INSTRUCTIONS, 3.3 Section II – Financial Bid**.

4.1.1.2 Point Rated Technical Criteria

As described in **Annex F, Mandatory Evaluation Criteria**.

4.2 Basis of Selection

4.2.1 Basis of Selection - Highest Combined Rating of Technical Merit and Price

- 2. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation; and
 - b. meet all mandatory criteria.

3. Bids not meeting "(a) or (b)" will be declared non-responsive.
3. The selection will be based on the highest responsive combined rating of technical merit and price.
The ratio will be 20 % for the technical merit and 80% for the price.
4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 20 %.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 80 %.
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 60/40 ratio of technical merit and price, respectively. The total available points equals 135 and the lowest evaluated price is \$45,000 (45).

Basis of Selection - Highest Combined Rating Technical Merit (60%) and Price (40%)

		Bidder 1	Bidder 2	Bidder 3
Overall Technical Score		115/135	89/135	92/135
Bid Evaluated Price		\$55,000.00	\$50,000.00	\$45,000.00
Calculations	Technical Merit Score	115/135 x 60 = 51.11	89/135 x 60 = 39.56	92/135 x 60 = 40.89
	Pricing Score	45/55 x 40 = 32.73	45/50 x 40 = 36.00	45/45 x 40 = 40.00
Combined Rating		83.84	75.56	80.89
Overall Rating		1st	3rd	2nd

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 Integrity 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.

5.1.2 Additional Certifications Required with the Bid

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 specified 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 property 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.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed annex titled Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

5.2.3 Additional Certifications Precedent to Contract Award

5.2.3.1 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

6.1 Security Requirements

1. Before award of a contract, the following conditions must be met:
 - (a) the Bidder must hold a valid organization security clearance as indicated in Part 7 - Resulting Contract Clauses;
 - (b) the Bidder's proposed individuals requiring access to classified or protected information, assets or sensitive work sites must meet the security requirements as indicated in Part 7 - Resulting Contract Clauses;
 - (c) the Bidder must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites.
2. Bidders are reminded to obtain the required security clearance promptly. Any delay in the award of a contract to allow the successful Bidder to obtain the required clearance will be at the entire discretion of the Contracting Authority.
3. For additional information on security requirements, Bidders should refer to the [Contract Security Program](http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html) of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.

6.2 Security Requirements – Required Documentation

In accordance with the [requirements of the Contract Security Program](http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html) of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>), the Bidder must provide a completed Contract Security Program Application for Registration (AFR) form to be given further consideration in the procurement process.

Bidders are reminded to obtain the required security clearance and, as applicable, security capabilities promptly. As indicated above, bidders who do not provide all the required information at bid closing will be given the opportunity to complete any missing information from the AFR form within a period set by the Contracting Authority. If that information is not provided within the timeframe established by the Contracting Authority (including any extension granted by the Contracting Authority in its discretion), or if Canada requires further information from the Bidder in connection with assessing the request for security clearance (i.e., information not required by the AFR form), the Bidder will be required to submit that information within the time period established by the Contracting Authority, which will not be less than 48 hours. If, at any time, the Bidder fails to provide the required information within the timeframe established by the Contracting Authority, its bid will be declared non-compliant.

6.3 Controlled Goods Requirement

SACC *Manual* clause [A9130T](#) 2019-11-28 Controlled Goods Program

PART 7 - RESULTING CONTRACT CLAUSES

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

7.1 Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex "A".

7.1.1 Optional Goods and/or Services

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at Annex B Basis of Payment of the Contract under the same conditions and at the prices and/or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option at any time before the expiry of the Contract by sending a written notice to the Contractor.

7.1.2 Task Authorization

The Work or a portion of the Work to be performed under the Contract will be on an "as and when requested basis" using a Task Authorization (TA). The Work described in the TA must be in accordance with the scope of the Contract.

7.1.2.1 Task Authorization Process

1. The Technical Authority will provide the Contractor with a description of the task using the "Task Authorization Form for non-DND clients" or "DND 626, Task Authorization Form" or "Task Authorization" form specified in Annex H.
2. The Task Authorization (TA) will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The TA will also include the applicable basis(bases) and methods of payment as specified in the Contract.
3. The Contractor must provide the Technical Authority, within 14 calendar days of its receipt, the proposed total estimated cost for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract.
4. The Contractor must not commence work until a TA authorized by the Contracting Authority has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been received will be done at the Contractor's own risk.

7.1.2.2 Task Authorization Limit

The Contracting Authority may authorize individual task authorizations up to a limit of \$TBD, Applicable Taxes included, inclusive of any revisions.

Any task authorization to be issued in excess of that limit must be authorized by the Contracting Authority before issuance.

7.1.2.3 Canada's Obligation - Portion of the Work - Task Authorization

Canada's obligation with respect to the portion of the Work under the Contract that is performed through task authorizations is limited to the total amount of the actual tasks performed by the Contractor.

7.1.2.4 Task Authorization - Department of National Defence

The administration of the Task Authorization process will be carried out by the Contracting Authority. This process includes monitoring, controlling and reporting on expenditures of the contract with task authorizations to the Contracting Authority.

7.2 Standard Clauses and Conditions

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.

7.2.1 General Conditions

SACC Manual clause [2030](#) (2022-05-12)_General Conditions - Higher Complexity - Goods, apply to and form part of the Contract.

7.2.2 Supplemental General Conditions

4001 (2015-04-01) Hardware Purchase, Lease and Maintenance, apply to and form part of the Contract.
4013 (2021-11-29) Compliance with on-site measures, standing orders, policies, and rules.
4006 (2010-08-16) Contractor to Own Intellectual Property Rights in Foreground Information.

7.3 Security Requirements

7.3.1 The following security requirements (SRCL and related clauses provided by the Contract Security Program) apply and form part of the Contract.

1. The Contractor/Offeror must, at all times during the performance of the Contract/Standing Offer, hold a valid Designated Organization Screening (DOS), issued by the Contract Security Program (CSP), Public Works and Government Services Canada (PWGSC).
2. The Contractor/Offeror personnel requiring access to sensitive site(s) must EACH hold a valid RELIABILITY STATUS, granted or approved by the CSP, PWGSC.
3. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of the CSP, PWGSC.

4. The Contractor/Offeror must comply with the provisions of the:
- a) Security Requirements Check List and security guide (if applicable), attached at Annex C;
 - b) *Contract Security Manual* (Latest Edition).

7.4 Term of Contract

7.4.1 Period of the Contract

The period of the contract is from the date of the contract to the warranty period inclusive.

7.4.2 Delivery Date

All the deliverables must be received on or before 4 months after contract award.

7.4.3 Delivery Points

Delivery of the requirement will be made to Naval Engineering Test Establishment (NETE), LaSalle QC.

7.5 Authorities

7.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Dianne Montgomery
Title: D Mar P 2-3-4
Department of National Defence
Directorate: D Mar P 2
Address: 101 Colonel By Drive
Ottawa, Ontario, K1A 0K2
Telephone: 613-794-2911
E-mail address: dianne.montgomery@forces.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.

7.5.2 Technical Authority

The Technical Authority for the Contract is:

Name:
Title:
Address:
Telephone:
E-mail address:

The Technical Authority named above 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 Technical Authority,

however the Technical Authority has no 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.

7.5.3 Contractor's Representative

Contractor's Project Manager to be inserted at contract award.

Name:

Title:

Telephone:

E-mail address:

7.6 Payment

7.6.1 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 in Annex B for a cost of \$ __TBD__ 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.

7.6.2 Limitation of Price

SACC Manual clause [C6000C](#) (2017-08-17) Limitation of Price

7.6.2.1 Payment for Fuels, Oils and Lubricants

The Contractor is responsible for the supply and cost of all fuel, lubricating oil, hydraulic oil and other lubricants sufficient for fully charging all systems as required for operating the machinery and other equipment and for performing all tests and trials.

7.6.3 Milestone Payments

For Annex B basis of payment Item 1, and should the option be exercised, Annex B basis of payment item 2:

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract if:

(a) an accurate and complete claim for payment using PWGSC-TPSGC 1111, Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;

(b) all the certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives;

(c) all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

7.6.4 Multiple Payments

For the Recommended Spare Parts Price List, should the option be exercised,

Canada will pay the Contractor upon completion and delivery of units in accordance with the payment provisions of the Contract if:

an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;

all such documents have been verified by Canada;

the Work delivered has been accepted by Canada.

7.6.5 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Direct Deposit (Domestic and International);
- b. Electronic Data Interchange (EDI);

7.7 Invoicing Instructions

1. The Contractor must submit a claim for payment using form PWGSC-TPSGC 1111, Claim for Progress Payment.

Each claim must show:

- (a) all information required on form PWGSC-TPSGC 1111;
- (b) all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;

(c) the description and value of the milestone claimed as detailed in the Contract;

(d) Quality assurance documentation when applicable and/or as requested by the Contracting Authority.

2. The Goods and Services Tax or Harmonized Sales Tax (GST/HST), as applicable, must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no GST/HST payable as it was claimed and payable under the previous claims for progress payments.

3. The Contractor must prepare and certify one original and one (1) copy of the claim on form PWGSC-TPSGC 1111, and forward it to the Contracting Authority identified under the section entitled "Authorities" of the Contract for appropriate certification after inspection and acceptance of the Work takes place.

4. The Contracting Authority will then forward the original of the claim to the Technical Authority for certification and onward submission to the Payment Office for the remaining certification and payment action.

5. The Contractor must not submit claims until all work identified in the claim is completed.

7.8 Certifications and Additional Information

7.8.1 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.

7.8.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

7.9 Applicable Laws

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

7.10 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 supplemental general conditions (2015-04-01)
- c) the general conditions [2030](#) (2020-05-28)
- d) Annex A, Statement of Work, Technical Statement of Requirement
- e) Annex B, Basis of Payment;
- f) Annex C, Security Requirements Check List
- g) Annex D, Electronic Payment Instruments
- h) Annex E, Contractors Program for Employment Equity
- i) Annex F, Mandatory Evaluation Criteria
- j) Annex G, Task Authorization Form
- k) Annex H, Design Change/Deviation Form (DND 672)
- l) the Contractor's bid dated _____, as clarified on _____ " **or** ", as amended on _____ "

7.11 Insurance

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

7.12 Defence Contract

SACC *Manual* clause [A9006C](#) (2012-07-16), Defence Contract

7.13 Controlled Goods Program

SACC *Manual* clause [A9131C](#) (2020-11-19), Controlled Goods Program

7.14 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "[Dispute Resolution](#)".

7.15 Project Kick Off Meeting

Within twenty five (10) business days of Contract Award, the Contractor must convene and co-chair a project Kick Off Meeting, IAW CDRL item CDRL-PM-05 and DID-PM-05 at NETE LaSalle facility, via video or teleconference or elsewhere as agreed to between the Contractor and NETE.

7.16 Acceptance Review Meeting

The Contractor must convene and co-chair an Acceptance Review Meeting(s) for the purpose of reviewing the design deliverables identified in the Technical Data Package (TDP) in accordance with CDRL-EN-02 and DID-EN-02 for review of the results of inspections and tests required to verify compliance with the TSOR.

7.17 Progress Review Meetings

Progress meetings, co-chaired by the Contracting Authority, will take place at the Contractor's facility as and when required, generally once a month. Interim meetings may also be scheduled. Contractor's attendees at these meetings will, as a minimum, be its Contract (Project) Manager and Quality Assurance Manager. Progress meetings will generally incorporate technical meetings to be chaired by the Technical Authority.

7.18 Project Management Plan

The Contractor must prepare and deliver a Project Management Plan (PMP) IAW CDRL Item CDRL-PM-01 and DID-PM-01 to identify how the Contractor intends to fulfill the project management requirements of this SOW to both the Technical Authority and the Contracting Authority.

7.19 Progress Reports

The Contractor must monitor progress and deliver Project Status Reports (PSRs) IAW CDRL Item CDRL-PM-04 and DID-PM-04 to both the Technical Authority and the Contracting Authority.

7.20 Quality Plan

No later than 10 days after the effective date of the Contract, the Contractor must submit for acceptance by the Department of National Defence (DND) a Quality Plan prepared according to the latest issue (at contract date) of ISO 10005:2005 "Quality management systems - Guidelines for quality plans". The Quality Plan must describe how the Contractor will conform to the specified quality requirements of the Contract and specify how the required quality activities are to be carried out, including quality assurance of subcontractors. The Contractor must include a traceability matrix from the elements of the specified quality requirements to the corresponding paragraphs in the Quality Plan.

The documents referenced in the Quality Plan must be made available when requested by Public Works and Government Services Canada or DND.

If the Quality Plan was submitted as part of the bidding process, the Contractor must review and, where appropriate, revise the submitted plan to reflect any changes in requirements or planning which may have occurred as a result of pre-contract negotiations.

Upon acceptance of the Quality Plan by DND, the Contractor must implement the Quality Plan. The Contractor must make appropriate amendments to the Quality Plan throughout the term of the contract to reflect current and planned quality activities. Amendments to the Quality Plan must be acceptable to DND.

If the Contract includes the option for software design, development or maintenance of software, the Contractor must interpret the requirements of ISO 9001:2008 "Quality management systems - Requirements", according to the guidelines of the latest issue (at contract date) of ISO/IEC 90003:2004 "Software engineering - Guidelines for the application of ISO 9001:2000 to computer software".

7.21 SACC Manual Clauses

- B9028C** – Access to Facilities and Equipment, (2007-05-25)
- C2604C** – Customs Duties, Excise Taxes and Applicable Taxes – Non-resident, (2013-04-25)
- D2000C** – Marking, (2007-11-30)
- D2001C** – Labelling, (2007-11-30)
- D2025C** – Wood Packaging Materials, (2017-08-17)
- D5510C** – Quality assurance authority (Department of National Defence): Canadian-based contractor (2021-05-20)
- D5605C** - Release Documents (Department of National Defence) - United States-based Contractor (2010-01-11)
- D5540C** – ISO 9001:2008 Quality Management Systems - Requirements (Quality Assurance Code Q) (2021-05-20)
- D5515C** - Quality Assurance Authority (Department of National Defence) - Foreign-based and United States Contractor (2010-01-11)
- D5606C** – Release documents (Department of National Defence): Canadian-based contractor (2017-11-28)
- D6010C** – Palletization (2007-11-30)
- D9002C** – Incomplete Assemblies, (2007-11-30)
- D5604C** – Release Documents (Department of National Defence) - Foreign-based Contractor (2008-12-12)

7.22 Procedures for Design Change/Deviations

The Contractor must complete Part 1 of the Design Change/Deviation form DND 672 (ANNEX G) and forward one (1) copy to the Technical Authority and one (1) copy to the Contracting Authority.

The Contractor will be authorized to proceed upon receipt of the design change/deviation form signed by the Contracting Authority. A contract amendment will be issued to incorporate the design change/deviation in the Contract.

7.23 Recommended Spare Parts List - Contract

The Contractor must, within 30 days after contract award, provide to the Procurement Authority a Recommended Spare Parts List (RSPL) prepared in accordance with the current issue of Canadian Forces Specification D-01-100-214/SF-000. The RSPL must contain the Contractor's recommendation for spares required to maintain the equipment for a 24-month period, and must provide the basis for the spares selection to be made by Department of National Defence. Upon request from the Contractor, the specification will be provided by the Contracting Authority.

Supplementary Provisioning Technical Documentation (SPTD), as prepared by the actual manufacturer of the item, is required for the codification and cataloguing of all items listed in the RSPL. The SPTD called up in the above specification must accompany the RSPL as detailed in the specification. Specific details of the data elements required must be listed on a Provisioning Documentation Selection Sheet, prepared in accordance with the above specification, and be submitted in electronic ASCII text format.

Questions regarding the preparation, format or contents of the above provisioning documentation must be directed to the Procurement Authority.

7.24 Inspection and Acceptance

The Technical 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.

7.25 Packaging Requirement using Specification D-LM-008-036/SF-000

The Contractor must prepare optional spare parts for delivery in accordance with the latest issue of the Canadian Forces Packaging Specification D-LM-008-036/SF-000, DND Minimum Requirements for Manufacturer's Standard Pack.

7.26 Release Documents – Distribution

The Contractor must prepare the release documents in a current electronic format and distribute them as follows:

- a. One (1) copy mailed to consignee marked: "Attention: Receipts Officer";
- b. Two (2) copies with shipment (in a waterproof envelope) to the consignee;
- c. One (1) copy to the Contracting Authority;
- d. One (1) copy to:

*National Defence Headquarters
Mgen George R. Pearkes Building
101 Colonel By Drive
Ottawa, ON K1A 0K2
Attention: D Mar P 2-3-5*

- e. One (1) copy to the Quality Assurance Representative;

Solicitation No. - N° de l'invitation

W8472-225851/A

Client Ref. No. - N° de réf. du client

W8472-225851/A

Amd. No. - N° de la modif.

File No. - N° du dossier

W8472-225851

Buyer ID - Id de l'acheteur

M31

CCC No./N° CCC - FMS No./N° VME

f. One (1) copy to the Contractor; and

g. For all non-Canadian contractors, one (1) copy to:

DQA/Contract Administration
National Defence Headquarters
Mgen George R. Pearkes Building
101 Colonel By Drive
Ottawa, ON K1A 0K2

E-mail: ContractAdmin.DQA@forces.gc.ca

Solicitation No. - N° de l'invitation
W8472-225851/A
Client Ref. No. - N° de réf. du client
W8472-225851/A

Amd. No. - N° de la modif.
File No. - N° du dossier
W8472-225851

Buyer ID - Id de l'acheteur
M31
CCC No./N° CCC - FMS No./N° VME

ANNEX "A"

STATEMENT OF WORK

W8472 - 225851



**STATEMENT OF WORK
FOR THE PROCUREMENT OF
A LARGE ENVIRONMENTAL CHAMBER**



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LIST OF ACRONYMS AND ABBREVIATIONS

Acronyms or Abbreviations	Definition
°C	Degrees Celcius
AIAOD	Act respecting Industrial Accident and Occupational Diseases
ASCII	American Standard Code for Information Interchange
AOHS	Act respecting Occupational Health and Safety
CA	Contracting Authority
CCQ	Code de Construction de Québec
CDRL	Contract Deliverable Requirements List
CEAA	Canadian Environmental Assessment Act
CFFM	Canadian Forces Fire Marshal Directive
CFTO	Canadian Forces Technical Order
CISD	Canadian Industrial Security Directorate
CSA	Canadian Standards Association
dBA	A-Weighted Decibels
DID	Data Item Description
DND	Department of National Defence
HAZMAT	Hazardous Materials
Hz	Hertz
IAW	In Accordance With
ITP	Inspection and Test Plan
Kg	Kilogram
kW	Kilowatt
LEC	Large Environmental Chamber
LOE	Level of Effort
M	Meter
Mm	Milimeter
NDQAR	National Defence Quality Assurance Representative
NETE	Naval Engineering Test Establishment
OEM	Original Equipment Manufacturer
PA	Procurement Authority
PM	Project Manager
PMP	Project Management Plan
PSPC	Public Services and Procurement Canada
QA	Quality Assurance
RH	Relative Humidity
S	Second
SAT	Site Acceptance Trial
SDS	Safety Data Sheet
SOW	Statement of Work
TA	Technical Authority
TDP	Technical Data Package



TSOR	Technical Statement of Requirements
USB	Universal Serial Bus
UUT	Unit Under Test
V	Volts
VCR/RFV	Visitor Clearance Request/Request for Visit
WHIMS	Workplace Hazardous Material Information System

Table 1: Acronyms and Abbreviations



1 SCOPE

1.1 OBJECTIVE

- 1.1.1 The objective of this Statement of Work (SOW) is to describe the requirements for the procurement, installation and set-to-work for a new large environmental chamber and associated auxiliaries (LEC).

1.2 BACKGROUND

- 1.2.1 The Department of National Defence (DND) has a requirement to modernize the environmental testing capability at NETE: The Naval Engineering Test Establishment. As the Canadian Navy's principal Test and Evaluation centre, NETE supports the Canadian Navy from coast to coast.
- 1.2.2 The Naval Engineering Test Establishment (NETE) is a Government-Owned-Contractor-Operated organization which is managed under contract by Weir Marine Engineering, a Division of Weir Canada Inc.
- 1.2.3 The existing LEC has reached the end of its usable life and there is a requirement to procure and install a new, modern chamber to carry out high and low temperature and humidity testing on equipment for the Canadian Navy to ensure that the equipment's performance can meet MIL-STD-810.

1.3 OBJECTIVES

- 1.3.1 The primary operational use of a LEC is to perform temperature and humidity (environmental) testing of large pieces of equipment.
- 1.3.2 The fundamental objectives of the LEC procurement are to:
- 1.3.2.1 Acquire a LEC with a robust and a proven design from a single manufacturer together with its associated components and ancillary equipment required for proper operation;
 - 1.3.2.2 Acquire a spare parts list;
 - 1.3.2.3 Acquire a Technical Data Package (TDP) to be used by NETE to support maintenance and LEC operations through its intended life cycle;
 - 1.3.2.4 Acquire necessary training and training materials IAW SOW Section 7; and
 - 1.3.2.5 An option for one (1) acoustic dampening package.



2 APPLICABLE DOCUMENTS

2.1 DND AND GOVERNMENT DOCUMENTS

2.1.1 Where standards are referenced in this document, the whole standard may not apply unless specifically directed. The reference will indicate what tailoring is required by the Technical Authority. If no tailoring is specified, then the Contractor must specify the extent of their compliance to the referenced standard in their proposal.

2.1.2 Applicable Documents are as follows:

- 2.1.2.1 R.S.C., 1985, c. D-1: Canada Defence Production Act, 17 December 2020.
- 2.1.2.2 SOR/86-304: Canada Occupational Health and Safety Regulations, 25 June 2018.
- 2.1.2.3 NRCC 56190: Canada Occupational Health and Safety Regulations, 2015.
- 2.1.2.4 NBC: National Building Code of Canada 2015, 2015.
- 2.1.2.5 NFC: National Fire Code of Canada 2015, 2015.
- 2.1.2.6 FHR: Federal Halocarbon Regulations, 2003 (SOR/2003-289) and regulations amending the FHR, 2003 (SOR/209-221)
- 2.1.2.7 FMD 4003: Fire Marshall Directives, December 2014
- 2.1.2.8 CEAA: Canadian Environmental Assessment Act.
- 2.1.2.9 CSA- B52: Canadian Standards Association, Mechanical Refrigeration Code, 2018
- 2.1.2.10 CSA-C22.1-18: Canadian Standards Association, Canadian Electrical Code Part I - Safety Standard for Electrical Installations, 2018.
- 2.1.2.11 CSA-C22.2 No. 0-10: Canadian Standards Association, Canadian Electrical Code Part II - General requirements, 2015.
- 2.1.2.12 CSA-C22.2 No. 0.4-17: Canadian Standards Association, Canadian Electrical Code Part II - Bonding of Electrical Equipment, 2017.
- 2.1.2.13 SST C-27: Labour Code, Minister of Labour, Quebec Government, 1 September 2020.
- 2.1.2.14 L.R.Q., c. S-2.1: Act Respecting Occupational Health and Safety, Minister of Labour, Quebec Government, 1 September 2020.
- 2.1.2.15 CCQ, c. B1.1 r2: Code de Construction de Québec, 2020
- 2.1.2.16 CFFM 4003 – Canadian Forces Fire Marshal Directive (December 2014)

2.2 NON-GOVERNMENT OF CANADA DOCUMENTS

2.2.1 Where standards are referenced in this document, the whole standard may not apply unless specifically directed. The reference will indicate what tailoring is required by the Technical Authority. If no tailoring is specified, then the Contractor must specify the extent of his compliance to the referenced standard in his proposal. If any referenced standard or regulation in section 2.2.2 below has been superseded by a new revision or it has become obsolete and it has been replaced by a new standard or it has not been replaced, then the Contractor must use the latest revision or replaced standard or an equivalent standard respectively.



2.2.2 Applicable documents are as follows:

2.2.2.1 MIL-STD-810G: USA Department of Defense, Test Method Standard, Environmental Engineering Considerations and Laboratory Tests, 31 January 2019.

2.3 ORDER OF PRECEDENCE

2.3.1 In the event of a conflict between requirements stated in the applicable documents above and the requirements defined in this SOW, the following order of precedence applies:

2.3.1.1 Content of this SOW;

2.3.1.2 NBC: National Building Code of Canada 2015;

2.3.1.3 CSA-C22.2 No. 0-10: Canadian Standards Association, Canadian Electrical Code Part II - General requirements, 2015; and

2.3.1.4 CSA-C22.2 No. 0.4-17: Canadian Standards Association, Canadian Electrical Code Part II - Bonding of Electrical Equipment, 2017.

2.3.2 In the event of a conflict between the contents of this document and the applicable portions of any other referenced technical documents, the Contractor must inform NETE (specifically the Technical Authority (TA)) of the differences. NETE will inform the Contractor of the requirements to apply and amend the SOW as necessary.

3 **PROJECT DELIVERABLES**

3.1 GENERAL

3.1.1 The Contractor must:

3.1.1.1 Decommission the existing LEC and provide the applicable disposal certificates (HAZMAT, Gases, etc.) in accordance with applicable federal and provincial standards as described in the applicable documents above.

3.1.1.2 Supply, install and commission one (1) Large Environmental Chamber and its associated equipment that meets the requirements of the Technical Statement of Requirements (TSOR) found in Appendix 1 of this SOW.

3.1.1.3 Provide all required documentation in hardcopy and PDF format.

3.1.1.4 Hold or be eligible to hold a valid security clearance to the level of Confidential or higher issued by the Canadian Industrial Security Directorate (CISD) in order to perform work in NETE Operational Zone. A Visit Clearance Request (VCR) approved by CISD and Public Services and Procurement Canada (PSPC) is required for all Contractor or Subcontractor personnel prior to conducting work at the NETE site.

3.1.1.5 Be responsible for shipping and duty clearances up to the NETE facility.



- 3.1.1.6 Provide all technical details of the LEC including:
 - 3.1.1.6.1 Individual component details and drawings including physical dimension and weight, connection points, mounting interface requirement, lifting points; and,
 - 3.1.1.6.2 Facility services requirements for installation (Electrical, Cooling Water, Compressed Air, etc.).
- 3.1.1.7 Provide all Safety Data Sheets (SDS) for all parts, assemblies and components that contain Hazardous Materials (HAZMAT).
- 3.1.1.8 In addition, the Contractor must develop and deliver plans and procedures for:
 - 3.1.1.8.1 Maintenance;
 - 3.1.1.8.2 Inspections; and,
 - 3.1.1.8.3 Safe Operation of the LEC.
- 3.1.1.9 Contractor must deliver to NETE a maintenance TDP, meeting all relevant requirements identified in this SOW.
- 3.1.1.10 Familiarization and maintenance training must be provided in accordance with the applicable Contract Deliverable Requirement Lists (CDRLs) and Data Item Descriptions (DIDs).



3.2 DATA REVIEWS AND REVISIONS

- 3.2.1 The Contractor must submit all deliverables in draft form for NETE's review IAW the applicable CDRL.
- 3.2.2 The Contractor must ensure that submitted documents are complete and in compliance with the requirements of the SOW and the applicable CDRL and DID.
- 3.2.3 Unless otherwise noted, NETE's review will take no more than ten (10) business days from receipt of the data.
- 3.2.4 The provision of comments by NETE on draft deliverables must not be construed as approval of the data deliverable.
- 3.2.5 Unless otherwise noted, the Contractor must address NETE's comments and resubmit the document showing a new revision number, within five (5) business days of reaching agreement on the comments.
- 3.2.6 The Contractor must ensure that final documents consist of the draft document modified to include changes as authorized by NETE.
- 3.2.7 When revisions and amendments have been made to data deliverables required under this SOW, the Contractor must submit these revised deliverables to NETE for acceptance and approval.

4 **PROJECT MANAGEMENT**

4.1 ORGANIZATION

- 4.1.1 **Project Manager:** The Contractor must assign a Project Manager (PM), placing the authority and responsibility for the overall project management under a single point of contact. The PM must ensure the timely and efficient allocation of the Contractor's resources to meet the requirements of the SOW. The PM must have full responsibility for the operations of the Contractor and its sub-Contractors in the performance of the Work and must be authorized to accept their work.
- 4.1.2 **Contractor's Point of Contact:** The Contractor's Project Manager must be the main single point of contact with NETE.

4.2 PROJECT MANAGEMENT PLAN

- 4.2.1 The Contractor must prepare and deliver a Project Management Plan (PMP) IAW CDRL Item CDRL-PM-01 and DID-PM-01 that identifies how the Contractor intends to fulfill the project management requirements of this SOW.
- 4.2.2 It is estimated that the delivery of the LEC should be completed within 4 months (16 weeks) after Contract Award (CA) at the latest, followed by the installation and the set to work.



- 4.2.3 Once accepted by NETE, the PMP must be used by the Contractor to manage the activities of this Contract. Throughout the duration of the Contract, the Contractor must inform NETE of any changes that affect the execution of the PMP and resubmit a revised PMP for NETE's acceptance.
- 4.2.4 The contractor must:
- 4.2.4.1 Provide a preliminary project schedule indicating the sequence and completion dates of project milestones, deliverables and project tasks based on Contract Award as of 'day 0'.
- 4.2.4.2 Within twenty five (25) business days of Contract Award, convene and co-chair a project Kick Off Meeting, IAW CDRL item CDRL-PM-02 and DID-PM-02 at NETE LaSalle facility, via video or teleconference or elsewhere as agreed to between the Contractor and NETE. Further:
- 4.2.4.2.1 The agenda must be delivered five (5) business days prior to the meeting for input from NETE and acceptance. The agenda of items to be reviewed at the meeting must include, without being limited to:
- 4.2.4.2.1.1 The PMP (in particular the Master Schedule) IAW CDRL Item CDRL-PM-01 and DID-PM-01;
- 4.2.4.2.1.2 The Project Schedule and Milestones;
- 4.2.4.2.1.3 The Technical Specification of Requirements;
- 4.2.4.2.1.4 Critical Path Activities;
- 4.2.4.2.1.5 Risk management concerns and mitigation actions;
- 4.2.4.2.1.6 Any other contractual or programmatic issues associated with the project as mutually agreed between the NETE Representative, Procurement Authority (PA) and Contracting Authority (CA) and the Contractor; and
- 4.2.4.2.1.7 Scheduling of a site visit by the Contractor.
- 4.2.4.3 Perform a site inspection to validate the site physical constraints and existing building services.
- 4.2.4.4 Provide a work plan and schedule for the decommissioning and demolition of the existing LEC. The decommission work plan must be accepted by NETE before this phase starts.
- 4.2.4.5 Provide engineering drawings, work plan and schedule for the installation phase in accordance with CDRL item CDRL-EN-01 and DID-EN-01. The engineering drawings must be signed by an engineer certified in Quebec. The engineering drawings, which must include the final location of the LEC and must be accepted by NETE before this phase starts.
- 4.2.4.6 Coordinate the decommissioning phase, the installation phase and commissioning phase of the new chamber in such a way that the impact to normal operations shall be minimal.



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- 4.2.4.7 Hold regular coordination meetings with NETE and maintain an up-to-date, detailed work schedule. The meetings will address:
- 4.2.4.7.1 Discussion on progress of work
 - 4.2.4.7.2 Variations from planned progress
 - 4.2.4.7.3 Discussion of foreseeable problems and proposed solutions.
 - 4.2.4.7.4 The Contractor must prepare and distribute, within five (5) business days of the meeting, an electronic copy of the minutes to NETE's attendees IAW CDRL Item CDRL-PM-03 and DID-PM-03
 - 4.2.4.7.5 During the decommissioning and installation phases, the Contractor must hold at least one (1) coordination meeting a week
- 4.2.4.8 Identify local LEC maintenance companies/representatives who would be qualified to carry out preventative, corrective and operational maintenance on the LEC and its associated equipment.
- 4.2.4.9 Give the upmost importance to health and safety and the prevention of accidents. The contractor shall, at all times, conform to the DND and Weir Health and Safety policies and are responsible for the health and safety of its employees and accident prevention. In addition, the Contractor must:
- 4.2.4.9.1 Provide a site specific Health and Safety (H&S) Plan before the start of work on site. This plan includes:
 - 4.2.4.9.1.1 Contractor's company H&S Plan;
 - 4.2.4.9.1.2 Result of site's specific safety hazard assessment; and
 - 4.2.4.9.1.3 Site specific H&S Plan.
 - 4.2.4.9.2 Submit the site specific H&S plan for review, comment and acceptance by NETE.
 - 4.2.4.9.3 Submit copies of health and safety incident and accident reports within 24 hours of occurrence.
 - 4.2.4.9.4 Submit applicable Workplace Hazardous Material Information System (WHMIS) Safety Data Sheets (SDS) to NETE representative.
 - 4.2.4.9.5 Be responsible for the health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by the work.
 - 4.2.4.9.6 Be the Principal Contractor as defined in The Act respecting occupational health and safety of Quebec, to execute only the Work within scope and in areas defined in this specification.
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- 4.2.4.9.7 Comply with and enforce compliance by employees and sub-contractors with safety requirements of Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with the site-specific Health and Safety Plan.
- 4.2.4.9.8 Comply with and enforce compliance by employees with safety requirements of Contract. Comply with An Act respecting occupational health and safety (AOHS) (R.S.Q., c. S-2.1), latest edition; An Act respecting industrial accident and occupational diseases (AIAOD) (R.S.Q., c. A-3.001), latest edition; and Safety Code for the construction industry (R.S.Q., c S 2.1, r.4), latest edition. Comply with Canada Labour Code, Part II, and Canada Occupational Safety and Health Regulations.
- 4.2.4.9.9 Comply with the DND Fire Safety Requirements as detailed in the FMD 4003.
- 4.2.4.9.10 Possess all the necessary insurance to carry out the specified work, such as: civil liability, errors and omissions and any other required insurance.

4.3 CRITICAL DESIGN REVIEW MEETING

- 4.3.1 The Contractor must convene and co-chair a Critical Design Review (CDR) Meeting for the purpose of reviewing the design deliverables identified as Critical Design Documents IAW CDRL-EN-01 and DID-EN-01.

4.4 GENERAL SITE CONDITIONS

4.4.1 Prior to the installation of the new LEC, the Contractor must:

- 4.4.1.1 Validate the site electrical, water and compressed air supplies to ensure they are adequate for the operation of the LEC.
- 4.4.1.2 Identify any obstacles that may impact the installation of the LEC.
- 4.4.1.3 Confirm if existing refrigeration piping will be reused.

4.4.2 The Contractor must supply all lifting and moving equipment (cranes, forklift, etc.) required to remove the current LEC and ancillary equipment and to install the new LEC system.

4.4.3 The Contractor must ensure that the site is kept clean and free of debris during the execution of the work. Upon completion of work the contractor shall remove all waste, temporary installations and tools from the construction site leaving the area as it was before the work started.

4.4.4 Site Access is Monday to Friday from 7h00-16h00.

4.4.5 Other facility physical information and constraints are detailed in Appendix 2.



5 QUALITY ASSURANCE

5.1 GENERAL

- 5.1.1 The Contractor must implement and maintain a Quality Management System in accordance with the Contract Quality Assurance clauses.
- 5.1.2 The Contractor must make available to the NDQAR the Quality Assurance audits and inspection records upon request.
- 5.1.3 Canada reserves the right to conduct system verification to confirm product compliance with any or all the performance requirements defined within the Requirements Specification at Appendix 1 to Annex A and all other referenced specifications.
- 5.1.4 Canada reserves the right to conduct QA inspections and audits to verify the Contractor's quality assurance procedures, practices, and methods during production and all other work associated with the Contract.

6 SCOPE OF WORK

6.1 DECOMMISSIONING OF EXISTING ENVIRONMENTAL CHAMBER

- 6.1.1 The contractor must:
 - 6.1.1.1 Supply the equipment and trained personnel required to decommission and dispose of the LEC, its associated equipment and components.
 - 6.1.1.2 Provide a decommissioning plan which includes a schedule and the work plan.
 - 6.1.1.3 Disconnect, remove and properly dispose of all unused components of the current LEC which includes but is not limited to: The environmental chamber, cooling package, roof top condensing unit, unused piping, and unused electrical conduit and components.
 - 6.1.1.4 Repair any holes in walls, roof or floor that are the result of items that have been removed e.g. piping.
 - 6.1.1.5 Remove and dispose of all refrigerants, oils and other hazardous material in accordance with all applicable environmental regulations.

6.2 INSTALLATION OF NEW CHAMBER

- 6.2.1 The contractor must:



- 6.2.1.1 Supply, install and set-to-work a LEC that meets the TSOR found in Appendix 1 of this SOW.
- 6.2.1.2 Perform a site inspection to ensure the building services are adequate before delivery of the unit.
- 6.2.1.3 Validate that the test facility roof where the new condensing unit will be located will support the load. The Contractor is responsible to validate the structural requirements and carry-out any necessary modifications to the roof structure.
- 6.2.1.4 Make all necessary modifications to the site infrastructure and systems (e.g. electrical, compressed air, water) in order to accommodate the installation of the LEC and auxiliaries. The Contractor must ensure that the installation conforms to all Codes and regulations.
- 6.2.1.5 Provide an installation plan which includes a schedule, work plan, and approved engineering drawings.
- 6.2.1.6 Have the installation plan approved by NETE prior to the start of work.
- 6.2.1.7 Coordinate the installation of the LEC with NETE.
- 6.2.1.8 Position the LEC in its final location and connect it to the existing building services.
- 6.2.1.9 In addition to the applicable Codes and regulations, ensure that the following minimum general electrical requirements are followed.
 - 6.2.1.9.1 All equipment supplied must be CSA approved.
 - 6.2.1.9.2 All new wiring used to install the LEC must be copper.
 - 6.2.1.9.3 All transformers windings must be copper.
 - 6.2.1.9.4 All new wiring must be installed in a minimum of 21 mm (3/4") conduit with liquid tight connectors.
 - 6.2.1.9.5 All communication cables must be installed in a minimum of 27 mm (1") conduit with liquid tight connectors.
 - 6.2.1.9.6 Flexible metal conduit may be used in dry areas for final connection to equipment that may vibrate, such as motors and transformers and to equipment not permanently fixed or which must be moved for servicing. The minimum length of flexible metal conduit connection must be 600 mm and the maximum length of flexible metal conduit connection must be 1000 mm.
 - 6.2.1.9.7 Liquid tight flexible metal conduit must be used in damp, wet, sprinklered or corrosive locations for final connection to equipment that may vibrate, such as: motors and transformers and to equipment not permanently fixed or which must be moved for



servicing. The minimum length of liquid tight flexible metal conduit connection must be 600 mm and the maximum length of liquid tight flexible metal conduit connection must be 1000 mm.

- 6.2.1.9.8 Any new conduit passing through a wall must be sealed with fire proof sealant which conforms to CAN-ULC-S115 (e.g. Hilti Firestop).
- 6.2.1.9.9 All circuits must be identified in the applicable electrical panels. Maintenance and Training

6.3 GENERAL

- 6.3.1 The maintenance and training plans must be provided by the Contractor to NETE to facilitate safe operation of the LEC.

6.4 MAINTENANCE REQUIREMENTS

- 6.4.1 The Contractor must prepare and deliver, for acceptance by NETE, a recommended Maintenance Program IAW CDRL item CDRL-MTN-01 and DID-MTN-01 and current industrial best practices.

- 6.4.2 The maintenance concept for the LEC must assume nominal preventive maintenance cycles (i.e. monthly, yearly, bi-yearly, etc.). Maintenance activities must include, but not limited to:

- 6.4.2.1 Refrigeration system maintenance and verification;
- 6.4.2.2 Heating system maintenance and verification;
- 6.4.2.3 Dehumidifier system maintenance and verification;
- 6.4.2.4 Humidifier system maintenance and verification;
- 6.4.2.5 Physical inspection; and
- 6.4.2.6 Control system maintenance and verification.

- 6.4.3 The maintenance concept must contain a maintenance manual detailing the required maintenance routines, the schedule of maintenance routines and instructions for the completion of each maintenance routine.

- 6.4.4 The maintenance manual must reference any standards that must be used to effect the required maintenance routines to the same quality as the original build.

- 6.4.5 Wherever possible for common industry components, the maintenance of the LEC must use repair by replacement of defective components and sub-assemblies.

- 6.4.6 A maintenance contract is not part of this Request for Proposal. However, the Contractor must prepare and deliver an estimated annual maintenance cost for the LEC in accordance with CDRL-MTN-01 and DID-MTN-02. This estimate must include but is not limited to:

- 6.4.6.1 Estimated LOE (Level of Effort) to perform each maintenance item;
- 6.4.6.2 Technician hourly rate to perform maintenance or repairs;



- 6.4.6.3 Technician travel fees and/or rates if not from a local company;
- 6.4.6.4 Cost of and number of regularly replaced parts;

6.5 SPARES

6.5.1 The Contractor must provide a Recommended Spare Parts List (RPSL). The RSPL must contain the Contractor's recommendation for spares required to maintain the equipment for a 24-month period.

6.6 FAMILIARIZATION AND MAINTENANCE TRAINING

6.6.1 The Contractor must develop and deliver familiarization and maintenance training IAW this Section and CDRL item CDRL-TRG-01 and DID-TRG-01 and the current industrial best practice.

6.7 NUMBER TRAINING SESSIONS AND STUDENTS

6.7.1 The maintenance portion of the training must be based on the Maintenance Concept and Maintenance Manual developed by the Contractor in section 7.2.2 above.

6.7.2 The Contractor must prepare and produce a Training Plan and Maintenance and Familiarization Training Package. The Contractor must develop and conduct one (1) maintenance and familiarization training session on the LEC.

6.7.3 The Contractor is to assume that the training session will be for up to eight (8) personnel from NETE.

6.8 TRAINING MATERIAL AND CONTENT

6.8.1 The training material and content must be reviewed and accepted by NETE.

6.8.2 The Contractor must provide the LEC operator and maintainer training package, in MS Office and PDF formats.

6.8.3 The Contractor must provide unrestricted rights for NETE to use and have use of all intellectual property associated with the training and maintenance package material provided.

6.9 LANGUAGE

6.9.1 All Contractor supplied training and the training material must be provided in both official languages in Canada (English and French).

6.9.2 If provision of French version, or vice versa, is not possible, the Contractor must provide the unrestricted rights for NETE to translate all material into French, or vice versa.



6.10 TECHNICAL DATA PACKAGE

- 6.10.1 The Contractor must provide the technical data package for the LEC IAW CDRL-EN-02 and DID-EN-02.

6.11 ELECTRONIC LABELLING

- 6.11.1 All electronic media must be clearly labelled with the project number, project name, and date as prescribed by D Mar P and agreed upon with NETE.

6.12 ENGINEERING DATA ACCESS

- 6.12.1 In addition to any other specific documentation or engineering data identified as a deliverable in this SOW, the Contractor must provide NETE access to all engineering data during the period of the Contract, upon request.

6.13 ORIGINAL EQUIPMENT MANUFACTURER (OEM)

- 6.13.1 If applicable, the Contractor must make maximum use of existing OEM technical publications and provide OEM parts identification data.
- 6.13.2 For any such documentation (e.g. User Guide, Operating Manual(s)), the Contractor must obtain permission from the OEM to allow NETE to use the data and to have any unilingual data translated into the official languages of Canada.

7 ACCEPTANCE TESTING AND COMMISSIONING

7.1 GENERAL

- 7.1.1 The Contractor must produce and deliver an Inspection and Test Plan (ITP) that provides an overall outline of the entire spectrum of inspection, test and trial activities associated with the LEC acceptance.
- 7.1.2 The ITP must contain all conditions, precautions, adjustments, expected test results, tolerances, and test equipment required to verify the proper design, fabrication, and verification of the LEC. All inspections, test and trials must be witnessed and accepted by NETE, the Contractor and any required third party inspectors (i.e. members of DND).
- 7.1.3 The Contractor must produce an ITP that includes, but is not limited to the criteria listed in the TSOR (Appendix 1).
- 7.1.4 The ITP must be developed, reported on and delivered IAW CDRL item CDRL-AP-01 and DID-AP-01, and approved by NETE

7.2 POST-INSTALLATION INSPECTION AND SITE ACCEPTANCE TRIAL (SATs)



- 7.2.1 The purpose of the acceptance testing is to demonstrate that the performance and functional requirements of the LEC at each integration step have been satisfactorily met.
- 7.2.2 The Contractor must perform an inspection of the installed system prior to initial power up.
- 7.2.3 The Contractor must perform all tests and trials necessary to demonstrate the LEC meets all requirements identified in this SOW and the TSOR.
- 7.2.4 The Contractor must, with support from NETE, perform SATs for an expected minimum duration of one (1) week to validate the chamber against the MIL-STD- 810 Specification.
- 7.2.5 The Contractor must, with support from NETE, perform initial commissioning including a written statement report on:
 - 7.2.5.1 Verification of all safety interlocks and limits;
 - 7.2.5.2 Configuration of controller parameters for LEC limits and scaling factors; and,
 - 7.2.5.3 Defined normal operating parameters.
- 7.2.6 Upon successful completion of the SATs, the Contractor must present NETE with a written statement report on:
 - 7.2.6.1 Validation that all TSOR parameters are met; and
 - 7.2.6.2 Validation that all tests stated in the SAT were performed and met.
- 7.3 REPAIR AND RE-TESTING
 - 7.3.1 If any of the LEC components or the system as whole fail any inspection or trial, the Contractor must rectify the issue, including any underlying causes, and re-test the repaired LEC as required.
 - 7.3.2 If it is determined that the test failure was the result of a design or construction issue, the Contractor must repair/rectify the defect. All associated technical documentation must be updated to reflect the repaired solution, if applicable.
- 7.4 PROVISIONAL ACCEPTANCE
 - 7.4.1 Following the successful completion of all inspections, trial of the LEC, and the delivery of the associated TDP, the Contractor must hold an Acceptance Review Meeting to review the deliverable package as a whole with NETE.
 - 7.4.2 Upon agreement by NETE that all associated deliverables and other Contractual obligations for the LEC have been received / completed, all defects have been satisfactorily remedied and the LEC has met all requirements in this SOW, NETE will issue a provisional acceptance for the system.



7.5 ACCEPTANCE

- 7.5.1 Once the provisionally accepted LEC has successfully performed a set of environmental tests (temperature and humidity testing) for an arbitrary DND piece of equipment, NETE will formally accept the LEC system.

8 CONTRACT DELIVERABLE REQUIREMENTS LIST (CDRL) AND DATA ITEM DESCRIPTION (DID)

8.1 GENERAL

8.1.1 Document Changes/Updates

- 8.1.1.1 All the approved documents must be prepared, updated and delivered as required by the CDRL. All changes to updated versions of documents must be identified as follows:

- 8.1.1.2 On a change page indicating page numbers, paragraph numbers, date of change and reason for change:

- 8.1.1.2.1 Within the hard copy, by use of change bars in the side margins of the printed document; and,

- 8.1.1.2.2 Within the soft copy, using a method appropriate to the authoring tools that clearly differentiates old content from new or revised content.

- 8.1.1.3 Proposed amendments and the list of affected pages must be forwarded to NETE for acceptance as described in the CDRL.

8.1.2 Deliverable Format and Number of Copies:

- 8.1.2.1 The number of documentation copies required for each CDRL is defined within each CDRL.

- 8.1.2.2 All soft copies of documentation must be delivered in the original editable native source file format, (e.g. Microsoft Word, Excel, AutoCAD, SolidWorks, etc.) and in portable document format (PDF).

- 8.1.2.3 In the following CDRL tables '1 soft copy' means one (1) complete electronic copy comprised of both a native format file and the pdf format file.



8.2 CDRL AND DID SUMMARIES

8.2.1 The CDRLs and summaries use the following abbreviations:

8.2.1.1 A: Acceptance

8.2.1.2 R: Review

8.2.1.3 CA: Contract Award

8.2.1.4 bd: Business day

8.2.1.5 PRM: Progress Review Meeting

8.2.1.6 PA: Provisional Approval (Acceptance Meeting) for LEC

8.2.1.7 CDR: Critical Design Review Meeting

8.2.2 Project Management Summary

CDRL	DID	Deliverable	Review Level	Due	SOW Section
CDRL-PM-01	DID-PM-01	Project Management Plan	A	CA +20bd	4.2
CDRL-PM-02	DID-PM-02	Project Kickoff Meeting	R	CA +25bd	4.2.4.2
CDRL-PM-03	DID-PM-03	Meeting Minutes	A	Meeting Date +5bd	4.2.4.7

Table 2: Project Management Summary

8.2.3 Engineering Summary

CDRL	DID	Deliverable	Review Level	Due	SOW Section
CDRL-EN-01	DID-EN-01	Critical Design Documents	A	Not less than CDR-10bd	4.2.4.5 1.1.1
CDRL-EN-02	DID-EN-02	Technical Data Package	A	PA -20bd	6.10

Table 3: Engineering Summary

8.2.4 Acceptance Testing Summary

CDRL	DID	Deliverable	Review Level	Due	SOW Section
CDRL-AP-01	DID-AP-01	LEC Acceptance Plan and Procedures	R	CA +60bd	7.1.1

Table 4: Acceptance Testing Summary



8.2.5 Training and Maintenance Support Summary

CDRL	DID	Deliverable	Review Level	Due	SOW Section																																			
CDRL-TRG-01	DID-TRG-01	Training Package	A	PA - 20bd	6.6 6.7 6.8 6.9																																			
<p>8.2.6 Training Support CDRL Details</p> <p>8.2.6.1 CDRL-TRG-01</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">1</td> <td style="width: 20%;">Sequence Number</td> <td style="width: 25%;">TRG-01</td> <td colspan="3"></td> </tr> <tr> <td>2</td> <td>Title or Description of Data</td> <td>Training and Training Package</td> <td colspan="3"></td> </tr> <tr> <td>3</td> <td>Data Item Description of Data</td> <td>DID-TRG-01</td> <td colspan="3"></td> </tr> <tr> <td>4</td> <td>Reference</td> <td>SOW 6.6, 6.7, 6.8, 6.9.</td> <td colspan="3"></td> </tr> <tr> <td>5</td> <td>First Submission</td> <td>PA -20bd</td> <td rowspan="2">DID-MTN-01</td> <td rowspan="2">Maintenance Concept</td> <td rowspan="2">A</td> </tr> <tr> <td>6</td> <td>Number of Copies</td> <td>First submission: 1 soft copy + 1 hard copy (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s)) Second submission: 10 hard</td> <td>PA - 20bd</td> <td>6.4</td> </tr> </table>						1	Sequence Number	TRG-01				2	Title or Description of Data	Training and Training Package				3	Data Item Description of Data	DID-TRG-01				4	Reference	SOW 6.6, 6.7, 6.8, 6.9.				5	First Submission	PA -20bd	DID-MTN-01	Maintenance Concept	A	6	Number of Copies	First submission: 1 soft copy + 1 hard copy (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s)) Second submission: 10 hard	PA - 20bd	6.4
1	Sequence Number	TRG-01																																						
2	Title or Description of Data	Training and Training Package																																						
3	Data Item Description of Data	DID-TRG-01																																						
4	Reference	SOW 6.6, 6.7, 6.8, 6.9.																																						
5	First Submission	PA -20bd	DID-MTN-01	Maintenance Concept	A																																			
6	Number of Copies	First submission: 1 soft copy + 1 hard copy (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s)) Second submission: 10 hard				PA - 20bd	6.4																																	



CDRL		DID	Deliverable	Review Level	Due	SOW Section
7	TA Acceptance Requirements					
8	Acceptance Lead Times					
9	Subsequent Submission					
10	Remarks					
<p>copies (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s))</p> <p>Yes</p> <p>10bd</p> <p>At time of Cadre Training Session</p> <p>First submission: Deliver soft copy via email or FTP, hard copy by mail or courier</p> <p>Second submission: Hand deliver hard copies to the cadre training session</p> <p>Table 12: CDRL-TRG-01</p> <p>CDRL-MTN-01</p>						
CDRL-MTN-02		DID-MTN-02	Estimated Annual Maintenance	R	PA - 20bd	6.4.6



CDRL	DID	Deliverable	Review Level	Due	SOW Section
		Cost			

Table 5: Training and Maintenance Support Summary

8.3 CRDLs

8.3.1 Project Management CDRL Details

8.3.1.1 CDRL-PM-01

1	Sequence Number	PM-01
2	Title or Description of Data	Project Management Plan
3	Data Item Description of Data	DID-PM-01
4	Reference	SOW 4.2
5	First Submission	CA +20bd
6	Number of Copies	1 soft copy
7	TA Acceptance Requirements	Yes
8	Acceptance Lead Times	
9	Subsequent Submission	As required, if changes needed.
10	Remarks	Deliver via email

Table 6: CDRL-PM-01

8.3.1.2 CDRL-PM-02

1	Sequence Number	PM-02
2	Title or Description of Data	Project Kick Off Meeting
3	Data Item Description of Data	DID-PM-02
4	Reference	SOW 4.2.4.2
5	First Submission	CA +25bd
6	Number of Copies	N/A
7	TA Acceptance Requirements	No
8	Acceptance Lead Times	N/A
9	Subsequent Submission	N/A
10	Remarks	N/A

Table 7: CDRL-PM-05



8.3.1.3 CDRL-PM-03

1	Sequence Number	PM-03
2	Title or Description of Data	Meeting Minutes
3	Data Item Description of Data	DID-PM-03
4	Reference	SOW 4.2.4.7
5	First Submission	Meeting Date +5bd
6	Number of Copies	1 soft copy
7	TA Acceptance Requirements	Yes
8	Acceptance Lead Times	2 bd
9	Subsequent Submission	N/A
10	Remarks	Deliver via email

Table 8: CDRL-PM-03

8.3.2 Engineering CDRL Details

8.3.2.1 CDRL-EN-01

1	Sequence Number	EN-01
2	Title or Description of Data	Critical Design Documents
3	Data Item Description of Data	DID-EN-01
4	Reference	4.2.4.5 and 1.1.1
5	First Submission	No later than CA +60bd and not less than CDR -10bd
6	Number of Copies	1 soft copy + 1 hard copy (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s))
7	TA Acceptance Requirements	No
8	Acceptance Lead Times	N/A
9	Subsequent Submission	EN-02
10	Remarks	Deliver soft copy via email or FTP, hard copy by mail or courier

Table 9: CDRL-EN-01



8.3.2.2 CDRL-EN-02

1	Sequence Number	EN-02
2	Title or Description of Data	Technical Data Package
3	Data Item Description of Data	DID-EN-02
4	Reference	SOW 6.10
5	First Submission	PA -20bd
6	Number of Copies	1 soft copy + 1 hard copy (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s))
7	TA Acceptance Requirements	Yes
8	Acceptance Lead Times	10bd
9	Subsequent Submission	N/A
10	Remarks	Deliver soft copy via email or FTP, hard copy by mail or courier

Table 10: CDRL-EN-02

8.3.3 Acceptance CDRL Details

8.3.3.1 CDRL-AP-01

1	Sequence Number	AP-01
2	Title or Description of Data	LEC Acceptance Plan and Procedures
3	Data Item Description of Data	DID-AP-01
4	Reference	SOW 7.1.1
5	First Submission	CA +60bd
6	Number of Copies	1 soft copy
7	TA Approval Requirements	No
8	Acceptance Lead Times	5bd
9	Subsequent Submission	N/A
10	Remarks	Deliver via email or FTP

Table 11: CDRL-AP-01

8.3.4 Training Support CDRL Details

8.3.4.1 CDRL-TRG-01



1	Sequence Number	TRG-01
2	Title or Description of Data	Training and Training Package
3	Data Item Description of Data	DID-TRG-01
4	Reference	SOW 6.6, 6.7, 6.8, 6.9.
5	First Submission	PA -20bd
6	Number of Copies	First submission: 1 soft copy + 1 hard copy (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s)) Second submission: 10 hard copies (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s))
7	TA Acceptance Requirements	Yes
8	Acceptance Lead Times	10bd
9	Subsequent Submission	At time of Cadre Training Session
10	Remarks	First submission: Deliver soft copy via email or FTP, hard copy by mail or courier Second submission: Hand deliver hard copies to the cadre training session

Table 12: CDRL-TRG-01

8.3.4.2 CDRL-MTN-01

1	Sequence Number	MNT-01
2	Title or Description of Data	Maintenance Concept
3	Data Item Description of Data	DID-MTN-01
4	Reference	SOW 6.4
5	First Submission	PA -20bd
6	Number of Copies	1 soft copy + 1 hard copy (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s))
7	TA Acceptance Requirements	Yes
8	Acceptance Lead Times	10bd
9	Subsequent Submission	N/A
10	Remarks	Deliver via email

Table 13: CDRL-MTN-01



8.3.4.3 CDRL-MTN-02

1	Sequence Number	MNT-02
2	Title or Description of Data	Estimated Annual Maintenance Cost
3	Data Item Description of Data	DID-MTN-02
4	Reference	SOW 6.4.6
5	First Submission	PA -20bd
6	Number of Copies	1 soft copy + 1 hard copy (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s))
7	TA Acceptance Requirements	No
8	Acceptance Lead Times	10bd
9	Subsequent Submission	N/A
10	Remarks	Deliver via email

Table 14: CDRL-MTN-01

8.4 DIDs

8.4.1 Project Management DIDs

8.4.1.1 DID-PM-01

1. TITLE Project Management Plan		2. IDENTIFICATION NUMBER DID-PM-01	
3. DESCRIPTION / PURPOSE The Contractor must develop, implement and maintain a LEC Project Management Plan (PMP) in order to fulfill the project management requirements of this SOW.			
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST (OPI) Technical Authority:		6. SPARE
7. APPLICATION / INTERRELATIONSHIP CDRL-PM-01 SOW Ref: Section 4.2			
8. ORIGINATOR		9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS			
10.1 The Project Management Plan (PMP) must be prepared in Contractor's format.			



<p>10.2 Structure - The PMP must contain, as a minimum, the following sections:</p> <ul style="list-style-type: none"> • Management Organization, Communications and Responsibilities; • Work Breakdown Structure (to at least a sub-assembly level of detail for the design and construction) and including development activities for all non-construction deliverables (i.e. training manual(s)); • Master Schedule (showing, at a minimum, all planned meetings, inspections, tests, trials, provisional acceptance(s), delivery(ies), site visit(s) and other major milestones); • The Contractor must provide a site specific Health and Safety (H&S) Plan before the start of work on site. This plan includes: <ul style="list-style-type: none"> ○ Contractor's company H&S Plan ○ Site specific H&S Plan ○ Submit applicable Workplace Hazardous Material Information System (WHMIS) Safety Data Sheets (SDS) for the decommissioning of the existing LEC system and installation of the new system. • Quality Assurance Plan; • Inspections and Tests Plans; • Risk Register and Mitigation Strategy; and, • Cost Management Plan.

Table 15: DID-PM-01

8.4.1.2 DID-PM-02

1. TITLE Project Kickoff Meeting		2. IDENTIFICATION NUMBER DID-PM-02	
3. DESCRIPTION / PURPOSE The Project Kickoff Meeting is to review the project management plan and the project schedule.			
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST (OPI) Technical Authority:	6. SPARE	
7. APPLICATION / INTERRELATIONSHIP CDRL-PM-02 SOW Ref: Section 4.2.4.2			
8. ORIGINATOR		9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS			
<p>10.1 The Project kick off meeting must include as a minimum:</p> <ul style="list-style-type: none"> • Meeting agenda; • A line by line review of the SOW (including in particular the LEC Technical Requirements); • Review of industrial security requirements; • Overview of the Project Management Plan; and, • Critical path activities. 			



Table 16: DID-PM-02

8.4.1.3 DID-PM-03

1. TITLE Meeting Minutes		2. IDENTIFICATION NUMBER DID-PM-03	
3. DESCRIPTION / PURPOSE The purpose of Meeting / Teleconference / Conference Minutes is to document discussions, agreements and action items identified (with the responsible parties and closure dates) reached during subject meetings.			
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST (OPI) Technical Authority:		6.SPARE
7. APPLICATION / INTERRELATIONSHIP CDRL-PM-03 SOW Ref: Section 4.2.4.7			
8. ORIGINATOR		9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS			
10.1 Meeting / Teleconference / Conference Minutes must be prepared in the Contractor's format and must include the following information: <ul style="list-style-type: none"> • Date and location of meeting; and, • Name, organization, phone number, e-mail address and title of each person that attended the meeting. 			
10.2 In addition, the minutes must include the following: <ul style="list-style-type: none"> • Statement relating to the purpose and/or objective of the meeting; and, • The original agenda and any revisions to the agenda - this may be accomplished by reference to attachments or enclosures. 			
10.3 Minutes must include a record of each agenda item and any additional items raised, discussed or reviewed during the meeting, including: <ul style="list-style-type: none"> • A brief statement identifying the item or problem and their status; • A summary of pertinent information associated with the item; • Any decisions or recommendation associated with the item; • An action item - identifying the person or organization responsible for taking and/or co-ordinating required action with key dates; and, • An updated Action Item List with all open and closed items. 			
10.4 Meeting minutes should be distributed, where possible, at the end of the meeting and signed by the responsible parties before leaving. Otherwise the meeting minutes must be delivered as directed in CDRL.			

Table 17: DID-PM-03



8.4.2 Engineering DIDs

8.4.2.1 DID-EN-01

1. TITLE Critical Design Documents		2. IDENTIFICATION NUMBER DID-EN-01	
3. DESCRIPTION / PURPOSE. The Critical Design Documents must provide all of the review materials required for the Critical Design Review meeting.			
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST (OPI) Technical Authority:		6. SPARE
7. APPLICATION / INTERRELATIONSHIP - APPLICATION / INTERDEPENDANCE CDRL-EN-01 SOW Ref: Section 4.2.4.5 and 1.1.1			
8. ORIGINATOR		9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS			
10.1 The following document must be provided to, but not be limited to, the Critical Design Review meeting: <ul style="list-style-type: none"> • All data to prove that the Contractors solution meets all the technical and logistic requirements of the SOW. 			
10.2 Final documents provided by the Contractor must include (but are not limited to): <ul style="list-style-type: none"> • All stamped final drawings, calculations, diagrams, designs, or plans related to the LEC and as required for installation and proper operation. In addition to plans related to the installation of the LEC, drawings, calculations and certifications for the following items are required: <ul style="list-style-type: none"> ○ Roof structure validation; and ○ Paraseismic integrity. • All additional final drawings, diagrams, designs, or plans necessary to demonstrate compliance with the requirements of this SOW; • Identification of all Classification Society Certifications and Approvals required during construction; • Final LEC and associated equipment General Arrangement and layout drawings. All layout drawings must be superimposed onto the NETE Floor plan (SOW Section Error! Reference source not found.) where applicable; and, • Updated build and delivery schedule. 			



10.3	<p>The Contractor must:</p> <ul style="list-style-type: none"> • Prepare the Critical Design Documents using metric units, unless the source of the original documentation is non-metric, and no changes to that original documentation are to be made; • Prepare Critical Design Documents in the Contractors format; and, • Present the Critical Design Documents to the TA prior to the design review meetings for review to check compliance with the SOW.
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Table 18: DID-EN-01

8.4.2.2 DID-EN-02

1. TITLE Technical Data Package (TDP)		2. IDENTIFICATION NUMBER DID-EN-02	
3. DESCRIPTION / PURPOSE The TDP is intended to provide the necessary data for NETE personnel to operate the LEC.			
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST (OPI) Technical Authority:	4. APPROVAL DATE	
7. APPLICATION / INTERRELATIONSHIP - APPLICATION / INTERDEPENDANCE CDRL-EN-02 DID-AP-01 SOW Ref: Section 6.10			
8. ORIGINATOR		9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS			
10.1 The Contractor must supply a complete set of technical drawings, in native format as well as in scalable pdf, for the LEC, to allow for full identification of all components, as well as he performance of preventative and corrective maintenance.			



10.2	<p>The TDP must include each of the following but is not limited to:</p> <ul style="list-style-type: none"> • Final LEC, ancillary and auxiliary equipment General Arrangement and layout drawings; • Any additional Approved Drawings; • As-built drawings - Red line drawings in a clear and understandable fashion which outline changes resulting from the new construction. The drawings shall be stamped “As-built” and include a signature and date; • Inspection Reports and certificates from Authority having jurisdiction; • Final Inspections, Tests and Trials Report(s); • Site Acceptance Test (SAT) signed by NETE representative • List of any relevant Certifications and Approvals; • Equipment Manuals - For each piece of equipment used in the project supply a specification sheet and maintenance/operation manual. Also included shall be the contact information of the supplier for replacement parts; • Spare Parts List with OEM part numbers and supply details; • Documentation related to the refrigeration system (Type and amount of refrigerant, SDS, permits, leak tests, etc.) • Calibration certificates; and • Letter of guarantee and warranty documents.
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Table 19: DID-EN-02

8.4.3 Acceptance DIDs

8.4.3.1 DID-AP-01

1. TITLE LEC Acceptance Plan and Procedures		2. IDENTIFICATION NUMBER DID-AP-01	
3. DESCRIPTION / PURPOSE Deliver the plan and procedures for the Acceptance program to be used to verify the compliance of the LEC, its equipment, and components in operational conditions at NETE LaSalle.			
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST (OPI) Technical Authority:	6. SPARE	
7. APPLICATION / INTERRELATIONSHIP CDRL-AP-01 SOW Ref: 7.1.1			
8. ORIGINATOR		9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS 10.1 Must be prepared by Contractor in Contractor’s format.			



10.2	<p>The LEC Acceptance Plan and Procedures must include the following as a minimum:</p> <ul style="list-style-type: none"> • Details of the plans and procedures for all inspections, tests and trials necessary to verify that the LEC meets the requirements specified in the SOW and related references, including as a minimum of verification of operation as described in Section 7.2; • The list of prerequisite mandatory inspection reports required to verify compliance with the requirements of this SOW, in order to proceed with the Acceptance Test and Trials; • The detailed list of supplies and systems required to complete the test and trials; • The list of the personnel required for the inspection, test or trial (as a minimum representatives from NETE and the Contractor must attend all inspections, tests and trials used to verify Contractual compliance); • The environmental and personnel safety requirements related to the LEC operation during the trial; • The approved test plan and recording data sheets to be filled during the inspection, test or trial; and, • The sequential order and type of trials to be conducted on the LEC and performances metrics to be obtained.
10.3	<p>Contractor must develop and deliver an Acceptance schedule based on the LEC Acceptance Plan and Procedures. The schedule must provide an estimated duration of each of the main activities where applicable. The schedule for all test activities must be integrated in the Master Schedule.</p>

Table 20: DID-AP-01

8.4.4 Training Support DIDs

8.4.4.1 DID-TRG-01

1. TITLE LEC Training and Training Package		2. IDENTIFICATION NUMBER DID-TRG-01	
3. DESCRIPTION / PURPOSE The LEC training agenda and plan will be for a training session, provided at NETE LaSalle, QC, to provide NETE personnel with familiarization and maintenance training related to the operation of the LEC.			
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST (OPI) Technical Authority:		6. SPARE
7. APPLICATION / INTERRELATIONSHIP CDRL-TRG-01 DID-MTN-01 SOW Ref: Sections 6.6, 6.7, 6.8, 6.9.			
8. ORIGINATOR		9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS			



10.1	The Contractor must provide a LEC familiarization and maintenance training package, in electronic format, to allow subsequent training of the equipment at NETE facility. One hard copy of the training package must be provided to each student at the cadre training
10.2	<p>A training session will be held in LaSalle, Quebec. A maximum of 8 students will attend the training session. The LEC familiarization and maintenance training will include, as a minimum:</p> <ul style="list-style-type: none">• Familiarization with the overall LEC arrangements and any limits associated with each of these;• An overview of the maintenance manual developed for the LEC;• Description of the preventative maintenance requirements, in particular those required on monthly basis duration;• Demonstrations of the repair procedures where applicable;• Demonstrations of accessing the LEC components with and without removing the major sub-assemblies; and• Any other processes and/or procedures that the Contractor identifies as helpful to NETE for the ongoing maintenance and operation of the LEC.
10.3	<p>The Contractor will provide a Cadre training package which must include but is not limited to the following:</p> <ul style="list-style-type: none">• Outline;• Training materials;• Workbook/Manual/Text etc.; and,• Appropriate training aids. <p>The Contractor must provide NETE the right to reproduce, translate and use all provided training material. This includes the right to have third parties use this material on behalf of NETE.</p>

Table 21: DID-TGR-01



8.4.4.2 DID-MTN-01

1. TITLE LEC Maintenance Concept		2. IDENTIFICATION NUMBER DID-MTN-01	
3. DESCRIPTION / PURPOSE The LEC Maintenance Concept must provide a complete set of maintenance plans that identify the required maintenance tasks and identify the logistics support resources needed to perform the tasks.			
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST (OPI) Technical Authority:		6. SPARE

7. APPLICATION / INTERRELATIONSHIP
 Training Support CDRL Details

8.4.4.3 CDRL-TRG-01

1	Sequence Number	TRG-01
2	Title or Description of Data	Training and Training Package
3	Data Item Description of Data	DID-TRG-01
4	Reference	SOW 6.6, 6.7, 6.8, 6.9.
5	First Submission	PA -20bd
6	Number of Copies	First submission: 1 soft copy + 1 hard copy (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s)) Second submission: 10 hard copies (Drawings on 11x17 sized paper, Reports and other documents on 8 ½ x 11 sized paper, bound in a binder(s))
7	TA Acceptance Requirements	Yes
8	Acceptance Lead Times	10bd
9	Subsequent Submission	At time of Cadre Training Session
10	Remarks	First submission: Deliver soft copy via email or FTP, hard copy by mail or courier Second submission: Hand deliver hard copies to the cadre training session

Table 12: CDRL-TRG-01

CDRL-MTN-01
 DID-TRG-01
 SOW Ref: Section 6.4

8. ORIGINATOR		9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS			
10.1 Must be prepared in the Contractor's format.			



10.2	The submission must identify the required maintenance for each component including Repair By Replacement requirements. The data must be consolidated into one document.						
10.3	<p>The data must be grouped into tables listing routine, calendar based and operating hour based tasks.</p> <p>An example of rudimentary breakout is shown below. Each interval within a category will be a column in its respective table.</p> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>Scheduled Task</th> <th>Interval</th> </tr> </thead> <tbody> <tr> <td>Routine Shop Floor Tasks</td> <td>Monthly or Yearly</td> </tr> <tr> <td>Monthly Maintenance Tasks</td> <td>e.g. 1, 3, 4, 6, 12, 18, 24, 36, 48 or 60 months</td> </tr> </tbody> </table>	Scheduled Task	Interval	Routine Shop Floor Tasks	Monthly or Yearly	Monthly Maintenance Tasks	e.g. 1, 3, 4, 6, 12, 18, 24, 36, 48 or 60 months
Scheduled Task	Interval						
Routine Shop Floor Tasks	Monthly or Yearly						
Monthly Maintenance Tasks	e.g. 1, 3, 4, 6, 12, 18, 24, 36, 48 or 60 months						
10.4	<p>The LEC Maintenance Concept must include a section presenting maintenance task data sheets that contain the following information for each maintenance task:</p> <ul style="list-style-type: none"> • Maintenance identification number; • Asset (equipment); • Description (brief, of maintenance item); • Steps/Process (including safety considerations, special tools required, applicable standards); • Frequency (number, i.e. 1, 500); • Frequency units (i.e. Hours, Months, Year); • Parts Required; and, • Estimated LOE (Level of Effort). 						

Table 22: DID-MTN-01

8.4.4.4 DID-MTN-02

1. TITLE Estimated Annual LEC Maintenance Cost		2. IDENTIFICATION NUMBER DID-MTN-02	
3. DESCRIPTION / PURPOSE The LEC Maintenance Concept must provide a complete set of maintenance plans that identify required maintenance tasks and identify the logistics support resources needed to perform tasks.			
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST (OPI) Technical Authority:	6. SPARE	
7. APPLICATION / INTERRELATIONSHIP CDRL-MTN-02 DID-TRG-02 SOW Ref: Section 6.4.6			
8. ORIGINATOR		9. APPLICABLE FORMS	
10. PREPARATION INSTRUCTIONS			
10.1 Must be prepared in the Contractor's format.			



10.2 The submission must identify the estimated cost for each maintenance routine including Repair By Replacement requirements. The data must be consolidated into one document.

10.3 The data must be grouped into tables listing routine, estimated LOE, consumable/replacement parts and associated costs. An example of rudimentary breakout is shown below.

Routine Description	Interval	LOE	Replacement part and cost
Inspect door seals to negate thermal loss, adjust as required	1 Monthly	0.5 hours	Nil
Replace Lube Oil in Compressor	12 Monthly	2 hours	Lube Oil - \$100.00

10.4 The LEC Maintenance Concept must include a section presenting maintenance task data sheets that contain the following information for each maintenance task:

- Maintenance routine description;
- Estimated LOE (Level of Effort) to complete each maintenance item;
- Cost of replacement parts and/or consumables; and
- Technician hourly rate to perform maintenance or repairs;
- Associated travel fees/rates for technician.

Table 23: DID-MTN-02



9 APPENDIX 1: LARGE ENVIRONMENTAL CHAMBER TECHNICAL STATEMENT OF REQUIREMENTS

9.1 PURPOSE

- 9.1.1 This Technical Statement of Requirements (TSOR) specifies the technical requirements for the provision and installation of a Large Environmental Chamber (LEC) at the NETE premises in LaSalle, Quebec, Canada.

9.2 SITE SPECIFICATIONS

9.2.1 Site Address:

- 9.2.1.1 Naval engineering Test Establishment, 9401 Wanklyn St. LaSalle, Qc, Canada, H8R 1Z2

9.2.2 Site Access

- 9.2.2.1 Access to the site is restricted by the main shipping/receiving door located at NETE. The equipment must be designed to fit through this door. The dimensions of the opening are as follows.
- 9.2.2.2 Height: maximum of 3,960 mm (~13 feet – 8 inches); and
- 9.2.2.3 Width: maximum of 4,260 mm (~14 feet).
- 9.2.2.4 Access to the site is Monday to Thursday from 07:00 to 16:00.s

9.3 MANDATORY SYSTEM REQUIREMENTS

- 9.3.1 The LEC provided by the contractor must be a proven design.

- 9.3.1.1 The Contractor must demonstrate that the proposed solution is a proven and quality design by providing a list of references (minimum 2) of similar systems (model and size) installations, preferably located in Montreal (QC) area or otherwise in Canada or United States.

- 9.3.2 The LEC and ancillary equipment must be CSA certified.

- 9.3.3 The LEC must accommodate a site supply voltage of 600 V.

- 9.3.4 The LEC must be intrinsically safe

- 9.3.5 The LEC must be equipped with Hydrocarbon and Carbon Monoxide monitors located inside the chamber.

- 9.3.6 The LEC must have a built in condensation control and be equipped with heated windows to allow for an unobstructed view.

- 9.3.7 The LEC must be equipped with a pressure relief vent.

- 9.3.8 The LEC must have an internal and external emergency stop control.



- 9.3.9 The LEC must be equipped with interior lighting.
- 9.3.10 The floor of the LEC must be equipped with a floor drain to remove condensation from the chamber.
- 9.3.11 The LEC must be finished with a stainless steel interior.
- 9.3.12 The exterior of the LEC must be painted with an enamel paint or equivalent finish and must be non-corrosive and easily maintained.
- 9.3.13 The refrigeration system must be air-cooled and the condensing unit must be located on the roof of the NETE test facility.
- 9.3.14 Refrigerants must not include ozone depleting substances.
- 9.3.15 The system must meet the listed performance requirements during all seasons without the need to adjust the amount of refrigerant in the system.

9.4 MANDATORY PERFORMANCE REQUIREMENTS

- 9.4.1 At a minimum, the LEC must meet, but is not limited to, the MIL-STD-810 (501.6, 502.6 and 507.6) (latest version) standard specifications.
- 9.4.2 The temperature range of the LEC must have a lower limit of at least -51°C and an upper limit of at least 71°C.
- 9.4.3 The LEC must be able to control the temperature rate of change to avoid thermal shock (i.e. must not exceed $\pm 3^{\circ}\text{C}/\text{min}$) when required.
- 9.4.4 The allowable temperature fluctuation of the LEC must be within $\pm 2^{\circ}\text{C}$.
- 9.4.5 The LEC humidity range must have a lower limit of at least 10% RH and an upper limit of at least 95% RH, non-condensing.
- 9.4.6 The LEC must be able to accommodate a unit under test (UUT) that produces a 5 kW heat load.
- 9.4.7 The air flow in the LEC must be at most 1.7 m/s (meters per second) over the unit under test.

9.5 MANDATORY PHYSICAL REQUIREMENTS

- 9.5.1 The working volume of the LEC must be at least 38m³ (cubic meters), similar to the existing chamber. The following are the internal dimensions of the current chamber:
 - 9.5.1.1 Width of 3,580 mm
 - 9.5.1.2 Length of 4,826 mm
 - 9.5.1.3 Height of 2,667 mm



NOTE: The LEC must fit within an envelope of 5,180 mm (width) x 6,240 mm (length) x 3,355 mm (height)



9.5.2 The LEC must have a main door with an opening of at least, 1,854 mm (width) x at least 2,438 mm (height) to accommodate equipment entering the LEC; in addition to a standard 914 mm (width) x 2,032 mm (height) side access door.

9.5.2.1 Both doors must have exterior lockable latches as well as safety releases located inside the chamber.

9.5.3 The distributed floor load capacity of the chamber must be at least 4,390 kg/m² (kilograms per square meter).

9.5.4 The chamber must be equipped with a minimum of two (2) closable, welded cable access ports with a minimum diameter of 60 mm in order to pass cables and hoses for the unit under test inside the chamber.

9.6 CONTROLLER REQUIREMENTS

9.6.1 The Controller of the LEC must be capable of independently controlling the temperature and humidity of the LEC in accordance with the performance requirements listed in Section 4.2 above.

9.6.2 The Controller must provide a colored touch screen display for complete automatic chamber control, monitoring, maintenance and troubleshooting.

9.6.3 The Controller must be capable of multi-step programming.

9.6.4 The Controller must be capable of storing a minimum of fifty (50) programs in non-volatile memory.

9.6.5 The Controller must have a minimum of 20 user-definable programs with up to 99 steps each.

9.6.6 The Controller must be capable of performing infinite looping.

9.6.7 The Controller must be capable of delaying the start and stop time of the various programs.

9.6.8 The Controller must be capable of recording reference sensors for temperature and humidity.

9.6.9 The Controller must be capable of recording a minimum of four (4) external temperature sensors that may be placed by the user on the unit under test.

9.6.10 The Controller must be capable of recording a minimum of two (2) external humidity sensors that may be placed by the user on the unit under test.

9.6.11 The Controller must be capable of Multipoint Control (Control based on surface temperature or humidity of UUT or any other sensors located in the chamber).



- 9.6.12 The Controller must be capable of independently controlling the temperature and humidity of the chamber using sensors placed on the unit under test (refer to points 4.4.9 and 4.4.10).
- 9.6.13 The Controller must have network access to provide the capability of monitoring, controlling, remotely programming and logging the data produced by the chamber.
- 9.6.14 The Controller must be capable of displaying data trends graphically on the screen.
- 9.6.15 The Recorder of the Controller must be paperless and have a color display.
- 9.6.16 The Controller sampling rate must be a minimum of 1 Hz.
- 9.6.17 The transfer of data and programs must be via a USB or some other standard portable media (e.g. SD Card) and the transferred data must be in an ASCII or Microsoft Excel-compatible format.

9.7 OPTION - ACOUSTIC DAMPENING PACKAGE

- 9.7.1 An option requirement exists for the procurement of an acoustic dampening package that would reduce the sound level of the LEC system.
- 9.7.2 The Contractor must provide the cost and details for the fabrication of two different acoustic dampening packages as described below:
 - 9.7.2.1 Acoustic dampening package that would lower the sound level of the quoted LEC system to at most 70 dBA; and
 - 9.7.2.2 Acoustic dampening package that would lower the sound level of the quoted LEC system to at most 65 dBA;



10 APPENDIX 2: NETE SITE SPECIFICATIONS AND FLOOR PLAN LAYOUT

10.1 PURPOSE

- 10.1.1 The purpose of this document is to provide information about the NETE facility and the existing environmental chamber currently located there.

10.2 SITE SPECIFICATIONS

- 10.2.1 The following list provides information regarding NETE site specifications

10.2.1.1 Access to the site is restricted by the driveway gate and shipping/receiving door located at NETE. The equipment must be designed to fit through this door. The dimensions of the opening are:

10.2.1.1.1 Driveway gate width: 4260mm (~14 feet);

10.2.1.1.2 Shipping/receiving door height: maximum of 3960mm (~13 feet – 8 inches); and

10.2.1.1.3 Shipping/receiving door width: maximum of 4360mm (~14 feet – 4 inches).

10.2.1.2 Access to the site is Monday to Thursday from 07:00 to 16:00.



10.3 EXISTING LARGE ENVIRONMENTAL CHAMBER PHOTOGRAPHS



Photograph 1 - Front of Existing LEC (Main Door)



Photograph 2 - Side of Existing LEC (Second Door)



Photograph 3 - Rear of Existing LEC 1



Photograph 4 - Rear of Existing LEC 2



Photograph 5 - Top of Existing LEC (Compressor Package) 1



Photograph 6 - Top of Existing LEC (Compressor Package) 2



10.4 EXISTING ROOFTOP CONDENSER UNIT PHOTOGRAPHS



Photograph 7 - Rooftop Condenser Unit 1



Photograph 8 - Rooftop Condenser Unit 2



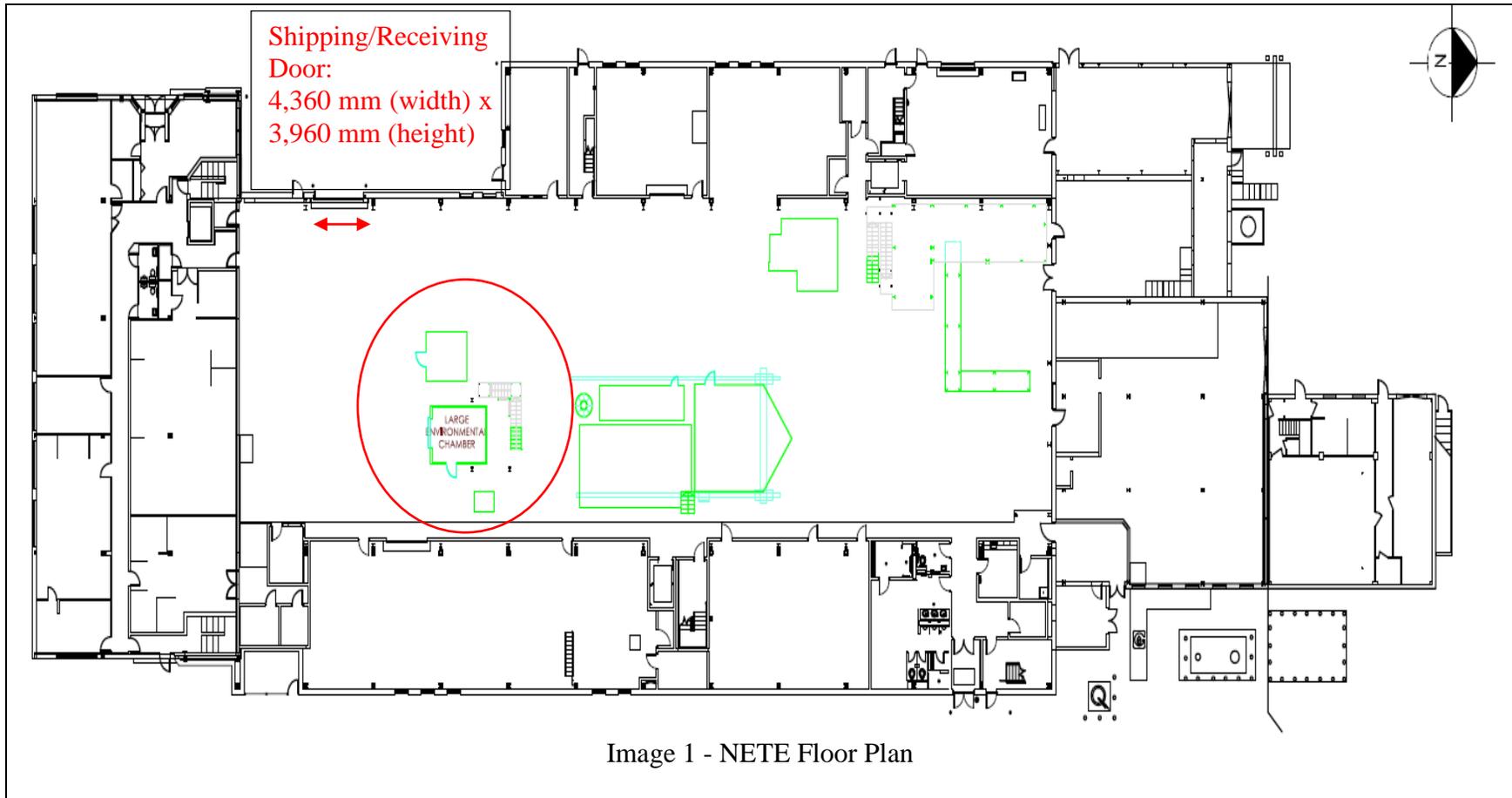
Photograph 9 - Rooftop Condenser Unit 3

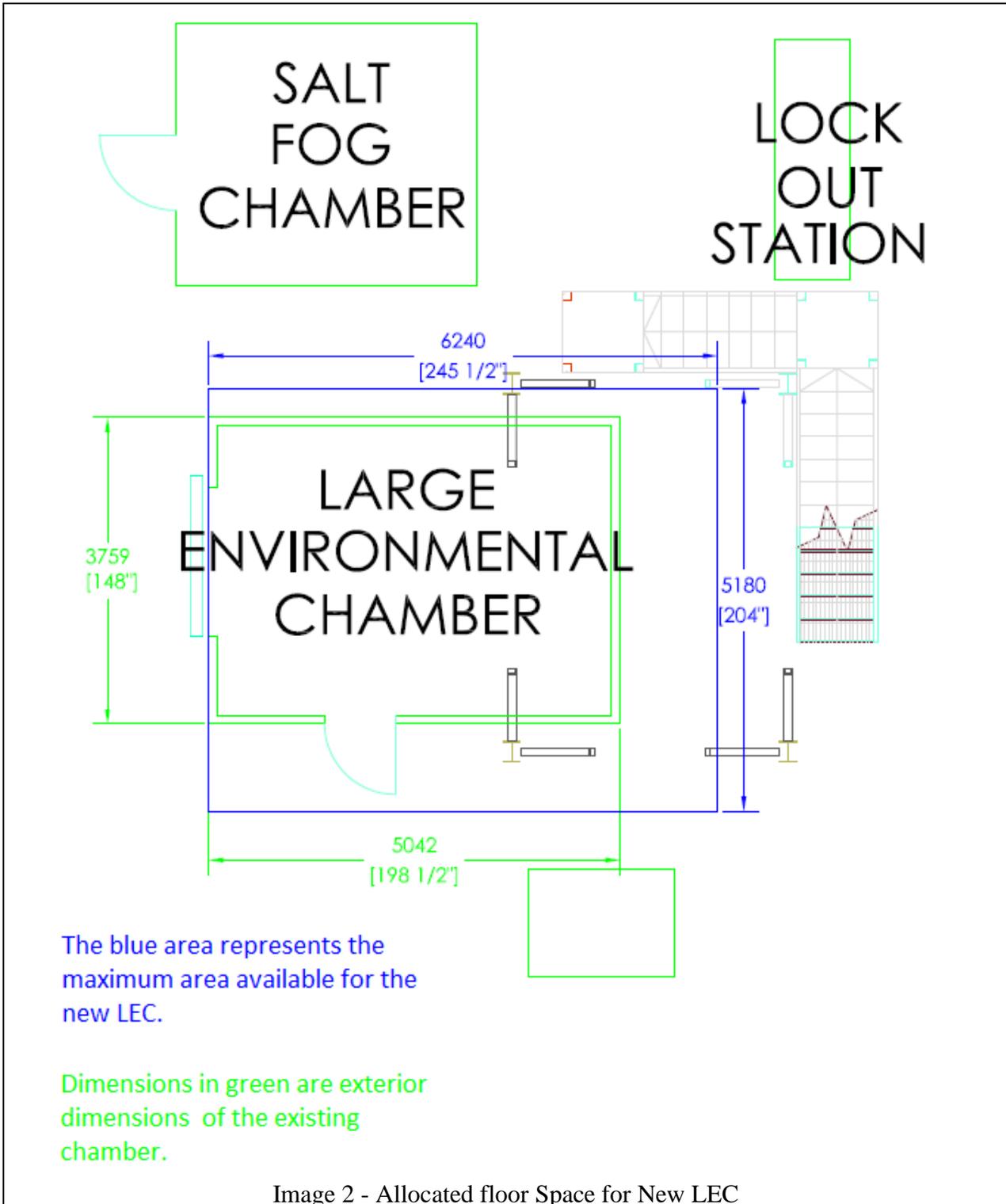


Photograph 10 - Aerial View of Rooftop Condenser Unit



10.5 NETE FLOOR PLAN





ANNEX "B"

1.1 BASIS OF PAYMENT

1. Bidders must indicate the Firm Unit Bid prices, excluding taxes.

Table 1

Item	Description	Unit Price CAN\$	Qty	Total Price
1	Supply, deliver, install and commission one (1) Large Environmental Chamber and its associated equipment that meets the requirements of the Technical Statement of Requirements (TSOR)			\$
2	Optional Acoustic Dampening Package as described in the SOW.			\$
Grand Total Price (Sum item 1)				\$
Grand Total Price including option 2 (Sum item 1&2)				\$

*Item 2 and the following Unscheduled Work Rates and optional spare parts list will be included in the Basis of Payment, however they will not form part of the bid evaluation.

2. Unscheduled Work Rates and Optional Spare Parts Price List:
Bidders must provide the following requested rates:

A. The Charge-out Rate specified below includes all classes of labor, engineering and foreperson, and all overheads, supervision and profit. The Charge-out Rate will be used for pricing unscheduled work that results in an increase or decrease in the Work Period, except as noted in the clause entitled "Overtime."
Charge-out Rate - \$..... /person/hour.

B. Overtime:

Occasionally, Canada may elect to authorize overtime, for Unscheduled Work only. If this is the case, and the rate is greater than the Charge-out Rate, cost of labor hours will be determined on the following basis;

Time and one-half rate: \$..... /person/hour
Double Time Rate: \$..... /person/hour

3. The cost of material must be the net laid-down cost of the material to which must be added a mark-up of 10% of the net laid-down cost of the material. For the purposes of pricing, Unscheduled Work and material must be deemed to include subcontracts.

4. Recommended Spare Parts Price List

All firm prices for the recommended spare parts must be Delivered Duty Paid (DDP) Incoterms 2000 to the Naval Engineering Test Establishment (NETE), LaSalle QC.

Table 2

Item	Spare Part Description	Part Number	Unit Price CAN\$	Recommended Qty
			\$	
			\$	
			\$	
			\$	
			\$	
			\$	
			\$	
			\$	
			\$	

1.2 Schedule of Milestones

The schedule of milestones for which payments will be made in accordance with the Contract is as:

Item No.	Milestone/Progress	Description	Percentage of total contract	Milestone/Progress Value (populated at contract award)
1	Project kickoff meeting/ Minutes	Successful completion of project kickoff meeting in accordance with SOW Appendix 1, 8.4.1.2 DID-PM-02 through SOW Appendix 1, 8.4.1.3 DID-PN-03 acceptance of meeting minutes.	5%	
2	Decommissioning of Existing Environmental Chamber	Successful decommissioning of the existing chamber in accordance with the section 6 of the SOW inclusive.	10%	
3	Large Environmental Chamber and Auxiliary Systems	Successful delivery and installation of LEC and Auxiliary systems in accordance with section 6.2 of the SOW inclusive.	30%	
4	Critical Design Review	Delivery and acceptance of CDR documents in accordance CDRL-EN-01 and DID-EN-01.	5%	
5	Acceptance Plan	Delivery and acceptance of acceptance plan in accordance CDRL-AP-01 and DID-AP-01.	5%	
6	Inspection and Test Plan	Delivery and acceptance of ITP in accordance with SOW 7.1 through SOW 7.1.4	5%	
7	Post-installation inspection and site acceptance trials (SATs)	Successful completion of SAT and delivery and acceptance of required documents in accordance with SOW section 7.2 through SOW 6.2.6.2	5%	
8	Technical Data Package	Delivery and acceptance of TDP in accordance with Appendix 1 of SOW, 10.2, CDRL-EN-02 and DID-EN-02.	10%	

9	Provisional Acceptance	Successful completion of provisional acceptance in accordance with SOW 7.4 through SOW 7.4.2	10%	
10	Training Documents	Delivery and acceptance of Cadre Training Package documents in accordance with CDRL-TRG-01 and DID-TRG-01.	5%	
11	Training	Successful completion of training sessions to the identified by NETE personnel outlined in the SOW Section 6 and CDRL-TRG-01 and DID-TRG-01.	5%	
12	Final Payment	Upon successful completion of project.	5%	
Total:			%100	%100

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ANNEX "C"

SECURITY REQUIREMENTS CHECK LIST

W8472 - 225851



Contract Number / Numéro du contrat W8472-225851
Security Classification / Classification de sécurité Unclassified

**SECURITY REQUIREMENTS CHECK LIST (SRCL)
LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ (LVERS)**

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE		
1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine Department of National Defence		2. Branch or Directorate / Direction générale ou Direction DGMEPM / Naval Engineering Test Establishment
3. a) Subcontract Number / Numéro du contrat de sous-traitance	3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant	
4. Brief Description of Work / Brève description du travail To decommission the existing Large Environmental Chamber (LEC) at the Naval Engineering Test Establishment and to install and commission a new large environmental chamber along with all ancillary equipment at the same site.		
5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées?		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques?		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
6. Indicate the type of access required / Indiquer le type d'accès requis		
6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? (Specify the level of access using the chart in Question 7. c) (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c)		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé.		<input type="checkbox"/> No / Non <input checked="" type="checkbox"/> Yes / Oui
6. c) Is this a commercial courier or delivery requirement with no overnight storage? S'agit-il d'un contrat de messagerie ou de livraison commerciale sans entreposage de nuit?		<input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui
7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès		
Canada <input type="checkbox"/>	NATO / OTAN <input type="checkbox"/>	Foreign / Étranger <input type="checkbox"/>
7. b) Release restrictions / Restrictions relatives à la diffusion		
No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/>	All NATO countries Tous les pays de l'OTAN <input type="checkbox"/>	No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/>
Not releasable À ne pas diffuser <input type="checkbox"/>		
Restricted to: / Limité à : <input type="checkbox"/> Specify country(ies): / Préciser le(s) pays :	Restricted to: / Limité à : <input type="checkbox"/> Specify country(ies): / Préciser le(s) pays :	Restricted to: / Limité à : <input type="checkbox"/> Specify country(ies): / Préciser le(s) pays :
7. c) Level of information / Niveau d'information		
PROTECTED A PROTÉGÉ A <input type="checkbox"/>	NATO UNCLASSIFIED NATO NON CLASSIFIÉ <input type="checkbox"/>	PROTECTED A PROTÉGÉ A <input type="checkbox"/>
PROTECTED B PROTÉGÉ B <input type="checkbox"/>	NATO RESTRICTED NATO DIFFUSION RESTREINTE <input type="checkbox"/>	PROTECTED B PROTÉGÉ B <input type="checkbox"/>
PROTECTED C PROTÉGÉ C <input type="checkbox"/>	NATO CONFIDENTIAL NATO CONFIDENTIEL <input type="checkbox"/>	PROTECTED C PROTÉGÉ C <input type="checkbox"/>
CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>	NATO SECRET NATO SECRET <input type="checkbox"/>	CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/>
SECRET SECRET <input type="checkbox"/>	COSMIC TOP SECRET COSMIC TRÈS SECRET <input type="checkbox"/>	SECRET SECRET <input type="checkbox"/>
TOP SECRET TRÈS SECRET <input type="checkbox"/>		TOP SECRET TRÈS SECRET <input type="checkbox"/>
TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>		TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/>



PART A (continued) / PARTIE A (suite)

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?
Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS? No / Non Yes / Oui
If Yes, indicate the level of sensitivity:
Dans l'affirmative, indiquer le niveau de sensibilité :
9. Will the supplier require access to extremely sensitive INFOSEC information or assets?
Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate? No / Non Yes / Oui
- Short Title(s) of material / Titre(s) abrégé(s) du matériel :
Document Number / Numéro du document :

PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis
- | | | | |
|---|---|---|--|
| <input checked="" type="checkbox"/> RELIABILITY STATUS
COTE DE FIABILITÉ | <input type="checkbox"/> CONFIDENTIAL
CONFIDENTIEL | <input type="checkbox"/> SECRET
SECRET | <input type="checkbox"/> TOP SECRET
TRÈS SECRET |
| <input type="checkbox"/> TOP SECRET-SIGINT
TRÈS SECRET - SIGINT | <input type="checkbox"/> NATO CONFIDENTIAL
NATO CONFIDENTIEL | <input type="checkbox"/> NATO SECRET
NATO SECRET | <input type="checkbox"/> COSMIC TOP SECRET
COSMIC TRÈS SECRET |
| <input type="checkbox"/> SITE ACCESS
ACCÈS AUX EMPLACEMENTS | | | |
- Special comments:
Commentaires spéciaux : _____
- NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.
REMARQUE : Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?
Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail? No / Non Yes / Oui
If Yes, will unscreened personnel be escorted?
Dans l'affirmative, le personnel en question sera-t-il escorté? No / Non Yes / Oui

PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)

INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?
Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS? No / Non Yes / Oui
11. b) Will the supplier be required to safeguard COMSEC information or assets?
Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC? No / Non Yes / Oui

PRODUCTION

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?
Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ? No / Non Yes / Oui

INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?
Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS? No / Non Yes / Oui
11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?
Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale? No / Non Yes / Oui



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PART C - (continued) / PARTIE C - (suite)

For users completing the form **manually** use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.

Les utilisateurs qui remplissent le formulaire **manuellement** doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form **online** (via the Internet), the summary chart is automatically populated by your responses to previous questions.

Dans le cas des utilisateurs qui remplissent le formulaire **en ligne** (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

SUMMARY CHART / TABLEAU RÉCAPITULATIF

Category / Catégorie	PROTECTED / PROTÉGÉ			CLASSIFIED / CLASSIFIÉ			NATO				COMSEC					
	A	B	C	CONFIDENTIAL / CONFIDENTIEL	SECRET	TOP SECRET / TRÈS SECRET	NATO RESTRICTED / NATO DIFFUSION RESTREINTE	NATO CONFIDENTIAL / NATO CONFIDENTIEL	NATO SECRET	COSMIC TOP SECRET / COSMIC TRÈS SECRET	PROTECTED / PROTÉGÉ			CONFIDENTIAL / CONFIDENTIEL	SECRET	TOP SECRET / TRÈS SECRET
											A	B	C			
Information / Assets / Renseignements / Biens / Production																
IT Media / Support TI																
IT Link / Lien électronique																

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?
La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?

No / Non Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".
Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire.

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?
La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE?

No / Non Yes / Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).
Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquez qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).



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PART D - AUTHORIZATION / PARTIE D - AUTORISATION

13. Organization Project Authority / Chargé de projet de l'organisme				
Name (print) - Nom (en lettres moulées) MENEGOZ, Tim		Title - Titre Facilities Manager	Signature MENEGOZ, TIM @310	Date Digitally signed by MENEGOZ, TIM @310 Date: 2021.05.13 08:02:45 -04'00'
Telephone No. - N° de téléphone 514-366-4310x6633470	Facsimile No. - N° de télécopieur 514-365-0262	E-mail address - Adresse courriel tim.menegoz@nete.dnd.ca	Date	
14. Organization Security Authority / Responsable de la sécurité de l'organisme				
Name (print) - Nom (en lettres moulées) Sasa Medjovic		Title - Titre Senior security analyst	Signature MEDJOVIC SASHA 234	Date Digitally signed by MEDJOVIC, SASHA 234 DN: cn=CA, o=GC, ou=DND-MDN, ou=Personnel, ou=INTERN, cn=MEDJOVIC, SASHA 234 Reason: I am the author of this document Location: your signing location here Date: 2021.05.17 11:07:07-04'00' Font: PhantomPDF Version: 10.1.3
Telephone No. - N° de téléphone 613-996-0286	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel sasa.medjovic@forces.gc.ca	Date	
15. Are there additional instructions (e.g. Security Guide, Security Classification Guide) attached? Des instructions supplémentaires (p. ex. Guide de sécurité, Guide de classification de la sécurité) sont-elles jointes?				<input type="checkbox"/> No / <input type="checkbox"/> Yes <input type="checkbox"/> Non / <input type="checkbox"/> Oui
16. Procurement Officer / Agent d'approvisionnement				
Name (print) - Nom (en lettres moulées) MONTGOMERY, Dianne		Title - Titre D Mar P 2-3-4	Signature MONTGOMER Y, DIANNE 422	Date Digitally signed by MONTGOMERY, DIANNE 422 Date: 2021.05.10 13:39:49 -04'00'
Telephone No. - N° de téléphone 613-794-2911	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel dianne.montgomery@forces.gc.ca	Date	
17. Contracting Security Authority / Autorité contractante en matière de sécurité				
Name (print) - Nom (en lettres moulées) C. Jason Quade Contract Security Officer Jason.Quade@pwgsc-tpsgc.gc.ca		Title - Titre	Signature Quade, Clarence	Date Digitally signed by Quade, Clarence Date: 2021.06.07 13:49:54 -04'00'
N° de télécopieur	E-mail address - Adresse courriel	Date		

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ANNEX "D" to PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

The Bidder accepts to be paid by any of the following Electronic Payment Instrument(s):

Direct Deposit (Domestic and International);

ANNEX "E" to PART 5 OF THE BID SOLICITATION

FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY – CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\) – Labour's](#) website.

Date: _____ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- A1. The Bidder certifies having no work force in Canada.
- A2. The Bidder certifies being a public sector employer.
- A3. The Bidder certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- A4. The Bidder certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- A5.1. The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.

OR

- A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity \(LAB1168\)](#) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- B1. The Bidder is not a Joint Venture.

OR

- B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

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ANNEX "F"

MANDATORY EVALUATION CRITERIA

W8472-225851



**MANDATORY EVALUATION CRITERIA
FOR THE PROCUREMENT OF
LARGE ENVIRONMENTAL CHAMBER**



Annex F - MANDATORY EVALUATION CRITERIA

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Annex F - MANDATORY EVALUATION CRITERIA

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Annex F - MANDATORY EVALUATION CRITERIA

1 SCOPE

1.1 PURPOSE

- 1.1.1 This purpose of this document is to provide details on the bid evaluation process by which the bids for the LEC will be evaluated.

2 COMPLIANCE AND TECHNICAL REQUIREMENTS EVALUATION

2.1 GENERAL

- 2.1.1 This Annex contains the Compliance and Technical Requirements evaluation matrices.

2.2 PHASE 1 - MANDATORY BIDDERS COMPLIANCE CHECK

- 2.2.1 Mandatory Bidders Compliance check must be submitted together with the Bid.
- 2.2.2 Mandatory Bidders Compliance check uses the following abbreviations:
- 2.2.2.1 Pt(s) – Point(s);
 - 2.2.2.2 “A” – The Bidder must provide a compliance statement to clearly “Agree (A)” that the stated work will be completed, or that the stated requirement will be met; and,
 - 2.2.2.3 “I” – The Bidder must include the requested “Information (I)” with the bid.
- 2.2.3 Bidder must be fully compliant with all of the mandatory requirements that are evaluated with “Pass/Fail” criteria. in Phase 1 as outlined in the Table 1 below in order to be evaluated in Phase 2 (Section 2.3).



Annex F - MANDATORY EVALUATION CRITERIA

SOW Ref	Requirement	Test Method	Bidders Response	Associated Definition(s)
GENERAL				
1.3.2.1	<p>Single Supplier</p> <p>The Contractor must supply the LEC system from a single supplier, including all components and ancillary equipment.</p>	<p>Compliance statement.</p> <p><u>Evaluation:</u> Pass/Fail</p>		"A"
1.3.2.1	<p>Proven Design</p> <p>The Contractor must demonstrate that the proposed solution is a proven and quality design by providing a list of references of system installations successfully installed, similar in (model and size).</p>	<p>Provide list of references for at least 2 similar systems (model and size) installed in Montreal (QC) area or otherwise in North America.</p> <p>Provide Technical Data Sheet</p> <p><u>Evaluation:</u> Pass/Fail</p>		"I"



Annex F - MANDATORY EVALUATION CRITERIA

SOW Ref	Requirement	Test Method	Bidders Response	Associated Definition(s)
5.1.6	<p>Documentation</p> <p>The Contractor must provide NETE with:</p> <ul style="list-style-type: none"> • A complete set of installation and equipment drawings, in both Hardcopy and Softcopy (.pdf). • All pertinent datasheets and manuals required to install, operate, calibrate and maintain the LEC, in both Hardcopy and Softcopy (.pdf). • All relevant calibration and conformity certificates, in both Hardcopy and Softcopy (.pdf). • A complete listing of documents that will be provided at the completion of the project must be provided as part of the proposal. <p>All documents must be provided in English language as a minimum. If original documents are of French language origin, they must be provided in addition to their corresponding English translation(s).</p>	<p>Compliance statement</p> <p><u>Evaluation:</u> Pass/Fail</p>		"A"
6.2.1.9	<p>The LEC system must be compliant to the Canadian Electrical Code (CEC) from the Canadian Standards Association (CSA).</p>	<p>Provide Certification</p> <p><u>Evaluation:</u> Pass/Fail</p>		"A" and "I"



Annex F - MANDATORY EVALUATION CRITERIA

SOW Ref	Requirement	Test Method	Bidders Response	Associated Definition(s)
3.1.1.4	<p>The Contractor and Sub-Contractor(s) who must come onsite to NETE, must hold or be eligible to hold a valid security clearance to the level of Confidential or higher issued by the Canadian Industrial Security Directorate (CISD) in order to perform work in NETE Operational Zone. A Visit Clearance Request (VCR) approved by CISD and Public Services and Procurement Canada (PSPC) is required for all Contractor or sub-Contractor personnel prior to conducting work at the NETE site.</p>	<p>Provide evidence of current certification or provide compliance statement of eligibility.</p> <p><u>Evaluation:</u> Pass/Fail</p>		<p>“A” or “I”</p>
4.1.1	<p>Project Manager</p> <p>The Contractor must assign a Project Manager (PM), placing the authority and responsibility for Overall project management under a single Pt of contact. The PM must ensure the timely and efficient allocation of the Contractor’s resources to meet the requirements of the SOW. The PM must have full responsibility for the operations of the Contractor and its sub-Contractors in the performance of the Work and must be authorized to accept</p> <p>Notes: The Contractor does not need to have the individual identified on-staff staff at time of bidding. However, Bidder must ensure that the proposed individual, or an equivalently qualified individual, is retained for the duration of the Contract.</p>	<p>Compliance statement.</p> <p>Demonstrate experience of the proposed PM by providing a portfolio that contains at least two (2) successfully completed projects of similar capacity.</p> <p><u>Evaluation:</u> Pass/Fail</p>		<p>"A" and/or "I"</p>



Annex F - MANDATORY EVALUATION CRITERIA

SOW Ref	Requirement	Test Method	Bidders Response	Associated Definition(s)
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Annex F - MANDATORY EVALUATION CRITERIA

4.2	Project Management Plan	Compliance statement.		"A"
4.2.1 CDRL- PM-01	It is estimated that the delivery of the LEC should be completed within 4 months (16 weeks) after Contract Award (CA) at the latest, followed by the installation and the set to work.			
DID- PM-01	<p>The Contractor must prepare and deliver a Project Management Plan (PMP) to identify how the Contractor intends to fulfill the project management requirements of this SOW</p> <p>At minimum, the PMP must contain:</p> <ul style="list-style-type: none"> • Management Organization, Communications and Responsibilities; • Work Breakdown Structure (to at least a sub-assembly level of detail for the design and construction) and including development activities for all non-construction deliverables (i.e. training manual(s)); • Master Schedule (showing, at a minimum, all planned meetings, inspections, tests, trials, provisional acceptance(s), delivery(ies) and other major milestones); • Quality Assurance Plan; • Health and Safety Plans • Inspections and Tests Plans; • Risk Register and Mitigation Strategy; and, • Cost Management Plan. 	<p><u>Evaluation:</u> Pass/Fail</p>		



Annex F - MANDATORY EVALUATION CRITERIA

SOW Ref	Requirement	Test Method	Bidders Response	Associated Definition(s)
4.2.4.2 CDRL-PM-02 DID-PM-02	Kick-Off Meeting Within ten (10) business days of Contract Award, the Contractor must convene and co-chair a project Kick Off Meeting, IAW CDRL item CDRL-PM-02 and DID-PM-02 at NETE LaSalle facility, via video or teleconference or elsewhere as agreed to between the Contractor and NETE.	Compliance statement. <u>Evaluation:</u> Pass/Fail		"A"
3.1.1.6	The Contractor’s proposal must include the following LEC technical details: <ul style="list-style-type: none"> • Recommended installation layout and constraints (e.g. max distance between components); • Facility services requirements for installation (Electrical, Cooling Water, Compressed Air, etc.). 	Provide required technical documents. <u>Evaluation:</u> Pass/Fail		"I"
FACILITY MODIFICATIONS				
4.2.2.4 6.1	Provide a work plan and schedule for the decommissioning and demolition of the existing LEC. The decommission work plan must be accepted by NETE before this phase starts	Compliance statement. <u>Evaluation:</u> Pass/Fail		"A"
INSTALLATION				



Annex F - MANDATORY EVALUATION CRITERIA

SOW Ref	Requirement	Test Method	Bidders Response	Associated Definition(s)
6.2.1.5 6.2.1.6	NETE must review and approve the installation drawings provided by the Contractor, and the Contractor must perform a site inspection of the facility before delivery of the system in order to ensure that there are no issues on site that would impact the delivery and installation of the chamber.	Compliance statement. <u>Evaluation:</u> Pass/Fail		"A"
COMMISSIONING				
8.2.2	The Contractor must perform an inspection of the installed system prior to the initial power up.	Compliance statement. <u>Evaluation:</u> Pass/Fail		"A"
8.1.3	The Contractor must produce an ITP that includes, but is not limited to the criteria listed in the TSOR.	Compliance Statement <u>Evaluation:</u> Pass/Fail		"A"
8.2.5	The Contractor must, with support from NETE, perform initial commissioning including a written statement report on: <ul style="list-style-type: none"> • Verification of all safety interlocks and limits; • Configuration of controller parameters for LEC limits and scaling factors; and, • Define normal operating parameters. 	Compliance statement. <u>Evaluation:</u> Pass/Fail		"A"



Annex F - MANDATORY EVALUATION CRITERIA

SOW Ref	Requirement	Test Method	Bidders Response	Associated Definition(s)
8.2.6.2	<p>Upon successful completion of the SATs, the Contractor must present NETE with a written statement report on:</p> <ul style="list-style-type: none"> • Validation that all TSOR parameters are met; • Validation that all tests stated in the SAT were performed and met. 	<p>Compliance statement.</p> <p><u>Evaluation:</u> Pass/Fail</p>		"A"
7.4 7.5 7.6 CDRL-TRG-01 DID-TRG-01	<p>The Contractor must provide necessary training sessions and training materials to the identified NETE personnel and outlined in the SOW Section 6 and CDRL-TRG-01 together with DID-TRG-01. All training materials must be in English language minimum.</p>	<p>Compliance statement.</p> <p><u>Evaluation:</u> Pass/Fail</p>		"A"
7.3	<p>Spares</p> <p>The Contractor must provide a Recommended Spare Parts List (RPSL). The RSPL must contain the Contractor's recommendation for spares required to maintain the equipment for a 24-month period</p>	<p>Compliance statement.</p> <p><u>Evaluation:</u> Pass/Fail</p>		"A"

Table 1: Mandatory Bidders Compliance Check



Annex F - MANDATORY EVALUATION CRITERIA

2.3 PHASE 2 – MANDATORY TECHNICAL REQUIREMENTS CHECK

2.3.1 This phase evaluates the Bidder’s Compliance to the Technical Requirements of the LEC system.

2.3.2 Bidders must be compliant for each mandatory technical requirement in order to be considered. Additional points can and will be awarded for bidders who exceed the minimum requirements for certain criteria. These point rated criteria can be found in section 2.4 (PHASE 3 – Point Rated Criteria Evaluation).

TSOR Ref	MANDATORY REQUIREMENTS	Bidder’s Proposal Ref	Compliant Yes/No
10.3	MANDATORY SYSTEM REQUIREMENTS		
10.3.1	The LEC provided by the contractor must be a proven design. <ul style="list-style-type: none"> - The Contractor must demonstrate that the proposed solution is a proven and quality design by providing a list of references (minimum 2) of similar systems (model and size) installations, preferably located in Montreal (QC) area or otherwise in Canada or United States. 		
10.3.2	The LEC and ancillary equipment must be CSA certified.		
10.3.3	The LEC must accommodate a site supply voltage of 600 V.		
10.3.4	The LEC must be intrinsically safe.		
10.3.5	The LEC must be equipped with a hydrocarbon and carbon monoxide monitors located inside the chamber.		
10.3.6	The LEC must have a built in condensation control and be equipped with heated windows to allow for unobstructed observation.		
10.3.7	The LEC must be equipped with a pressure relief vent.		



Annex F - MANDATORY EVALUATION CRITERIA

10.3.8	The LEC must have an internal and external emergency stop.		
10.3.9	The LEC must be equipped with interior lighting.		
10.3.10	The floor of the LEC must be equipped with a floor drain to remove condensation from the chamber.		
10.3.11	The LEC must be finished with a stainless steel interior.		
10.3.12	The exterior of the LEC must be painted with an enamel paint or equivalent finish and must be non-corrosive and easily maintained.		
10.3.13	During operation, the LEC must not surpass 65 dBA of airborne sound.		
10.3.14	The refrigeration system must be air-cooled and the condensing unit must be located on the roof of the NETE test facility.		
10.3.15	Refrigerants must not include ozone depleting substances.		
10.3.16	The system must meet the listed performance requirements during all seasons without the need to adjust the amount of refrigerant in the system.		
10.4	PERFORMANCE REQUIREMENTS		
10.4.1	At a minimum, the LEC must, meet but not limited to the standard MIL-STD-810 (501.6, 502.6 and 507.6) (latest version) specifications.		
10.4.2	The temperature range of the LEC must have a lower limit of at least -51°C and an upper limit of at least 71°C.		
10.4.3	The LEC must be able to control the temperature rate of change to avoid thermal shock (i.e. must not exceed 3°C/min) when required.		
10.4.4	The allowable temperature fluctuation of the LEC must be within ± 2°C.		
10.4.5	The LEC humidity range must have a lower limit of at least 10% RH and an upper limit of at least 95% RH, non-condensing.		
10.4.6	The LEC must be able to accommodate a unit under test that produces a 5kW heat load.		



Annex F - MANDATORY EVALUATION CRITERIA

10.4.7	The air flow in the LEC must be at most 1.7 m/s (meters per second) over the unit under test.		
10.5	MANDATORY PHYSICAL REQUIREMENTS		
10.5.1	<p>The working volume of the LEC must be at least 38m³ (cubic meters) (i.e. similar to the existing chamber), the following internal dimensions are those of the current chamber.</p> <ul style="list-style-type: none"> - Width 3,580 mm; - Length 4,826 mm; and - Height 2,667 mm. <p>NOTE: The LEC must fit within an envelope of 5,180 mm (width) x 6,240 mm (length) x 3,355 mm (height)</p>		
10.5.2	<p>The LEC must have a main door with an opening of at least, 1,854 mm (width) x at least 2,438 mm (height) to accommodate equipment entering the LEC; in addition to a standard 914 mm (width) x 2,032 mm (height) side access door.</p> <p>NOTE: Both doors must have lockable latches and safety releases located inside the chamber.</p>		
10.5.3	The distributed floor load capacity of the chamber must be at least 4,390 kg/m ² (kilograms per square meter).		
10.5.4	The chamber must be equipped with a minimum of two (2) closable, welded cable access ports with a minimum diameter of 60 mm in order to pass cables and hoses for the unit under test inside the chamber.		
10.6	CONTROLLER REQUIREMENTS		
10.6.1	The Controller of the LEC must be capable of independently controlling the temperature and humidity of the LEC in accordance with the performance requirements listed in Section 4.2 (Performance Requirements).		
10.6.2	The Controller must provide a colored touch screen display for complete automatic chamber control, monitoring, maintenance and troubleshooting.		
10.6.3	The Controller must be capable of multi-step programming.		



Annex F - MANDATORY EVALUATION CRITERIA

10.6.4	The Controller must be capable of storing a minimum of fifty (50) programs in non-volatile memory.		
10.6.5	The Controller must have a minimum of 20 user-definable programs with up to 99 steps each.		
10.6.6	The Controller must be capable of performing infinite looping.		
10.6.7	The Controller must be capable of delaying the start and stop time of the various programs.		
10.6.8	The Controller must be capable of recording reference sensors for temperature and humidity.		
10.6.9	The Controller must be capable of recording a minimum of four (4) external temperature sensors that may be placed by the user on the unit under test.		
10.6.10	The Controller must be capable of recording a minimum of two (2) external humidity sensors that may be placed by the user on the unit under test.		
10.6.11	The Controller must be capable of MultiPoint Control (Control based on surface temperature or humidity of UUT or any other sensors located in the chamber).		
10.6.12	The Controller must be capable of independently controlling the temperature and humidity of the chamber using sensors placed on the unit under test (refer to Pts 4.4.9 and 4.4.10).		
10.6.13	The Controller must have network access to provide the capability of monitoring, control, remote programming and data logging of the chamber.		
10.6.14	The Controller must be capable of displaying data trends graphically.		
10.6.15	The Recorder of the Controller must be paperless and have a color display.		
10.6.16	The transfer of data and programs must be capable using a USB or other standard portable media and must be in an ASCII or Microsoft Excel-compatible text file.		
10.6.17	The Controller sampling rate must be a minimum of 1 Hz.		

Table 2 - Technical Requirements Compliance



Annex F - MANDATORY EVALUATION CRITERIA

2.4 PHASE 3 – POINT RATED CRITERIA EVALUATION

2.4.1 This bid phase allocates additional points to Bidder’s for exceeding the minimum physical and technical requirements. Possible allotted points can be seen in the individual items of Table 3 below.

TSOR Ref	POINT RATED CRITERIA	Bidder’s Proposal Ref	Pts Achieved										
10.3.13	During operation, the LEC must not surpass 65 dBA of airborne sound. -The sound level does not surpass 60 dBA (5 Pts); -The sound level does not surpass 50 dBA (10 Pts).												
10.4.2	The temperature range of the LEC must have a lower limit of at least -51°C and an upper limit of at least 71°C. <table border="1" data-bbox="423 1150 1044 1486"> <thead> <tr> <th data-bbox="428 1157 841 1224">LEC Temperature Range</th> <th data-bbox="844 1157 1039 1224">Allotted Points</th> </tr> </thead> <tbody> <tr> <td data-bbox="428 1228 841 1295">Lower limit is between -52°C and -61°C</td> <td data-bbox="844 1228 1039 1295">0.25</td> </tr> <tr> <td data-bbox="428 1299 841 1333">Lower limit is below -62°C</td> <td data-bbox="844 1299 1039 1333">0.5</td> </tr> <tr> <td data-bbox="428 1337 841 1404">Upper limit is between 72°C and 81°C</td> <td data-bbox="844 1337 1039 1404">0.25</td> </tr> <tr> <td data-bbox="428 1409 841 1476">Upper limit is greater than 82°C</td> <td data-bbox="844 1409 1039 1476">0.5</td> </tr> </tbody> </table>	LEC Temperature Range	Allotted Points	Lower limit is between -52°C and -61°C	0.25	Lower limit is below -62°C	0.5	Upper limit is between 72°C and 81°C	0.25	Upper limit is greater than 82°C	0.5		
LEC Temperature Range	Allotted Points												
Lower limit is between -52°C and -61°C	0.25												
Lower limit is below -62°C	0.5												
Upper limit is between 72°C and 81°C	0.25												
Upper limit is greater than 82°C	0.5												
10.4.4	The allowable temperature fluctuation of the LEC must be at most ± 2°C. - The temperature fluctuation is less than ±1°C (0.5 Pts).												
10.4.5	The LEC humidity range must have a lower limit of at least 10% RH and an upper limit of at least 95% RH, non-condensing.												



Annex F - MANDATORY EVALUATION CRITERIA

	LEC Humidity Range	Allotted Points		
	Lower limit is between 8% and 7% RH	0..25		
	Lower limit is below 6% RH	0.5		
	Upper limit is between 97% and 98% RH	0.25		
	Upper limit is greater than 99% RH	0.5		
10.4.6	<p>The LEC must be able to accommodate a unit under test that produces a 5kW heat load.</p> <ul style="list-style-type: none"> - The LEC can accommodate a heat load of 8 kW or more (0.5 Pts). 			
10.5.1	<p>The working volume of the LEC must be at least 38m³ (cubic meters) (i.e. similar to the existing chamber), the following internal dimensions are those of the current chamber.</p> <ul style="list-style-type: none"> - Width 3,580 mm; - Length 4,826 mm; and - Height 2,667 mm. <p>NOTE: The LEC must fit within an envelope of 5,180 mm (width) x 6,240 mm (length) x 3,355 mm (height)</p> <ul style="list-style-type: none"> - The working volume is between 40 m³ and 45 m³ (1 Pts); 			

Table 3 – Point Rated Criteria Evaluation

Solicitation No. - N° de l'invitation
W8472-225851/A
Client Ref. No. - N° de réf. du client
W8472-225851/A

Amd. No. - N° de la modif.
File No. - N° du dossier
W8472-225851

Buyer ID - Id de l'acheteur
M31
CCC No./N° CCC - FMS No./N° VME

ANNEX "G"

Task Authorization Form DND 626

W8472-225851



TASK AUTHORIZATION AUTORISATION DES TÂCHES

<p>All invoices/progress claims must show the reference Contract and Task numbers. Toutes les factures doivent indiquer les numéros du contrat et de la tâche.</p>		Contract no. – N° du contrat Task no. – N° de la tâche
Amendment no. – N° de la modification	Increase/Decrease – Augmentation/Réduction	Previous value – Valeur précédente
To – À	<p>TO THE CONTRACTOR</p> <p>You are requested to supply the following services in accordance with the terms of the above reference contract. Only services included in the contract shall be supplied against this task.</p> <p>Please advise the undersigned if the completion date cannot be met. Invoices/progress claims shall be prepared in accordance with the instructions set out in the contract.</p> <p>À L'ENTREPRENEUR</p> <p>Vous êtes prié de fournir les services suivants en conformité des termes du contrat mentionné ci-dessus. Seuls les services mentionnés dans le contrat doivent être fournis à l'appui de cette demande.</p> <p>Prière d'aviser le signataire si la livraison ne peut se faire dans les délais prescrits. Les factures doivent être établies selon les instructions énoncées dans le contrat.</p>	
Delivery location – Expédié à	<p>_____</p> <p style="text-align: center;">Date</p> <p style="text-align: right;">_____</p> <p style="text-align: right;">for the Department of National Defence pour le ministère de la Défense nationale</p>	
Delivery/Completion date – Date de livraison/d'achèvement	<p>_____</p>	
Contract item no. N° d'article du contrat	Services	Cost Prix
	GST/HST TPS/TVH	
	Total	

APPLICABLE ONLY TO PWGSC CONTRACTS: The Contract Authority signature is required when the total value of the DND 626 exceeds the threshold specified in the contract.

NE S'APPLIQUE QU'AUX CONTRATS DE TPSGC : La signature de l'autorité contractante est requise lorsque la valeur totale du formulaire DND 626 est supérieure au seuil précisé dans le contrat.

for the Department of Public Works and Government Services
pour le ministère des Travaux publics et services gouvernementaux

Instructions for completing DND 626 - Task Authorization

Contract no.

Enter the PWGSC contract number in full.

Task no.

Enter the sequential Task number.

Amendment no.

Enter the amendment number when the original Task is amended to change the scope or the value.

Increase/Decrease

Enter the increase or decrease total dollar amount including taxes.

Previous value

Enter the previous total dollar amount including taxes.

To

Name of the contractor.

Delivery location

Location where the work will be completed, if other than the contractor's location.

Delivery/Completion date

Completion date for the task.

for the Department of National Defence

Signature of the DND person who has delegated **Authority** for signing DND 626 (level of authority based on the dollar value of the task and the equivalent signing authority in the PAM 1.4). **Note:** the person signing in this block ensures that the work is within the scope of the contract, that sufficient funds remain in the contract to cover this task and that the task is affordable within the Project/Unit budget.

Services

Define the requirement briefly (attach the SOW) and identify the cost of the task using the contractor's quote on the level of effort. The Task must use the basis of payment stipulated in the contract. If there are several basis of payment then list here the one(s) that will apply to the task quote (e.g. milestone payments; per diem rates/labour category hourly rates; travel and living rates; firm price/ceiling price, etc.). All the terms and conditions of the contract apply to this Task Authorization and cannot be ignored or amended for this task. Therefore it is not necessary to restate these general contract terms and conditions on the DND 626 Task form.

Cost

The cost of the Task broken out into the individual costed items in **Services**.

GST/HST

The GST/HST cost as appropriate.

Total

The total cost of the task. The contractor may not exceed this amount without the approval of DND indicated on an amended DND 626. The amendment value may not exceed 50% (or the percentage for amendments established in the contract) of the original value of the task authorization. The total cost of a DND 626, including all amendments, may not exceed the funding limit identified in the contract.

Applicable only to PWGSC contracts

This block only applies to those Task Authorization contracts awarded by PWGSC. The contract will include a specified threshold for DND sole approval of the DND 626 and a percentage for DND to approve amendments to the original DND 626. Tasks that will exceed these thresholds must be passed to the PWGSC Contracting Authority for review and signature prior to authorizing the contractor to begin work.

Note:

Work on the task may not commence prior to the date this form is signed by the DA Authority - for tasks within the DND threshold; and by both DND and PWGSC for those tasks over the DND threshold.

Instructions pour compléter le formulaire DND 626 - Autorisation des tâches

N° du contrat

Inscrivez le numéro du contrat de TPSGC en entier.

N° de la tâche

Inscrivez le numéro de tâche séquentiel.

N° de la modification

Inscrivez le numéro de modification lorsque la tâche originale est modifiée pour en changer la portée.

Augmentation/Réduction

Inscrivez le montant total de l'augmentation ou de la diminution, y compris les taxes.

Valeur précédente

Inscrivez le montant total précédent, y compris les taxes.

À

Nom de l'entrepreneur.

Expédiez à

Endroit où le travail sera effectué, si celui-ci diffère du lieu d'affaires de l'entrepreneur.

Date de livraison/d'achèvement

Date d'achèvement de la tâche.

pour le ministère de la Défense nationale

Signature du représentant du MDN auquel on a délégué le **pouvoir d'approbation** en ce qui a trait à la signature du formulaire DND 626 (niveau d'autorité basé sur la valeur de la tâche et le signataire autorisé équivalent mentionné dans le MAA 1.4). **Nota :** la personne qui signe cette attache de signature confirme que les travaux respectent la portée du contrat, que suffisamment de fonds sont prévus au contrat pour couvrir cette tâche et que le budget alloué à l'unité ou pour le projet le permet.

Services

Définissez brièvement le besoin (joignez l'ET) et établissez le coût de la tâche à l'aide de la soumission de l'entrepreneur selon le niveau de difficulté de celle-ci. Les modalités de paiement stipulées dans le contrat s'appliquent à la tâche. Si plusieurs d'entre elles sont prévues, énumérez ici celle/celles qui s'appliquera/ront à la soumission pour la tâche à accomplir (p.ex. acompte fondé sur les étapes franchies; taux quotidien ou taux horaire établi selon la catégorie de main-d'œuvre; frais de déplacement et de séjour; prix fixe ou prix plafond; etc.). Toutes les modalités du contrat s'appliquent à cette autorisation de tâche et ne peuvent être négligées ou modifiées quant à la tâche en question. Il n'est donc pas nécessaire de répéter ces modalités générales afférentes au contrat sur le formulaire DND 626.

Prix

Mentionnez le coût de la tâche en le répartissant selon les frais afférents à chaque item mentionné dans la rubrique **Services**.

TPS/TVH

Mentionnez le montant de la TPS/TVH, s'il y a lieu.

Total

Mentionnez le coût total de la tâche. L'entrepreneur ne peut dépasser ce montant sans l'approbation du MDN, formulaire DND 626 modifié à l'appui. Le coût de la modification ne peut pas être supérieur à 50 p. 100 du montant initial prévu dans l'autorisation de tâche (ou au pourcentage prévu dans le contrat pour les modifications). Le coût total spécifié dans le formulaire DND 626, y compris toutes les modifications, ne peut dépasser le plafond de financement mentionné dans le contrat.

Ne s'applique qu'aux contrats de TPSGC

Le présent paragraphe s'applique uniquement aux autorisations de tâche accordées par TPSGC. On inscrira dans le formulaire DND 626 un plafond précis qui ne pourra être approuvé que par le MDN et un pourcentage selon lequel le MDN pourra approuver des modifications au formulaire DND 626 original. Les tâches dont le coût dépasse ces plafonds doivent être soumises à l'autorité contractante de TPSGC pour examen et signature avant qu'on autorise l'entrepreneur à débiter les travaux.

Nota :

Les travaux ne peuvent commencer avant la date de signature de ce formulaire par le responsable du MDN, pour les tâches dont le coût est inférieur au plafond établi par le MDN, et par le MDN et TPSGC pour les tâches dont le coût dépasse le plafond établi par le MDN.

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Client Ref. No. - N° de réf. du client
W8472-225851/A

Amd. No. - N° de la modif.
File No. - N° du dossier
W8472-225851

Buyer ID - Id de l'acheteur
M31
CCC No./N° CCC - FMS No./N° VME

ANNEX "H"

Design change/Deviation Form DND 672

W8472-215850

Request for Design Change or Deviation Demande de modification de conception ou dérogation

<input type="checkbox"/> Design Change Modification de conception	<input type="checkbox"/> Deviation Dérogation
--	--

For guidance see D-02-006-008/SG-001 - Pour des conseils voir D-02-006-008/SG-001

Design Change/Deviation Serial No. N° d'ordre de la demande de modification de conception ou dérogation
Contract Demand No. N° de la demande de contrat
Contract Serial No. N° d'ordre du contrat
File No. N° du dossier
Design Authority Serial No. N° d'ordre du bureau technique responsable

Part - Partie - I

1. Item Affected - Article touché

2. Main Equipment(s) Affected - Matériel touché

3. Description of Departure from Original Technical Data - Description des points qui diffèrent des données techniques

4. Reason for Request - Motif de la demande

5. Will interchangeability be affected? L'interchangeabilité est-elle réduite?	Component Parts: - Organes: -	<input type="checkbox"/> Yes Oui	<input type="checkbox"/> No Non	Assemblies: Ensembles: <input type="checkbox"/> Yes Oui <input type="checkbox"/> No Non
6. Will spare parts schedule be affected? Le tableau en pièces de rechange est-il modifié?		<input type="checkbox"/> Yes Oui	<input type="checkbox"/> No Non	(If "YES" state details (Le cas échéant, donner les détails)

7. Production Data - Renseignements sur la production

7.1 Cost and Delivery
Coût et livraison

7.1.1 Estimated Effect of Delivery
Effet prévu sur la livraison _____

7.1.2 Estimated Added Tooling Cost \$
Coût supplémentaire prévu de l'usinage \$ _____

7.1.3 Estimated Surplus Material Value \$
Valeur prévu des matériaux supplémentaires \$ _____

7.1.4 Estimated Change in Contract Cost
Including Sales Tax and 7.1.2 and 7.1.3
above. (Indicate + or -) \$
Variation prévu du coût stipulé dans le contrat
(y compris la taxe de vente et les montants
prévu en 7.1.2 et 7.1.3). (Indiquer + ou -) \$ _____

7.2 Production Change Point
Introduction de la modification

7.2.1 Estimated Starting Date and Serial No.
Date d'introduction et N° de série prévue _____

7.2.2 Total Number of Units Involved
Nombre total d'unités touchées _____

7.3 Recommendations for Prior Built Units in Service
Recommandations quant aux unités déjà en service

7.3.1 Should prior - built units be modified?
Les unités déjà en service devraient-elles
être modifiées? Yes
Oui No
Non

7.3.2 Estimated Cost Per Unit - Coût prévu par unité

Cost of Kit
Coût du lot \$ _____

Cost of Rework
Coût du réusinage \$ _____

7.3.3 Government Held Spare Parts
Pièces de rechange appartenant à l'État

Use Rework Scrap
Utilisez Réusinage Mise au rebut

Estimated Cost to Each to Rework or Replace \$
Coût prévu du réusinage ou de remplacement \$ _____

8. Originator - Auteur de la demande

Date (yyaa-mm-dj)	Signature (if other than Prime Contractor - autre que l'entrepreneur principal)	Date (yyaa-mm-dj)	Signature (Prime Contractor - Entrepreneur principal)
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Part - Partie - II

9. Recommendations of Quality Assurance Representative - Recommandations du représentant de l'assurance de la qualité

Date (yyaa-mm-dj)	Designation - Désignation	Signature
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10. Recommendations of Design Authority - Recommandations du Responsable de la conception

Approved: Design Change Deviation or Not Approved
 Approuvé : Modification de conception Dérogation ou Rejetée

Date (yyaa-mm-dj)	Designation - Désignation	Signature
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11. Approval of Procurement Authority - Approbation du pouvoir d'achat

Date (yyaa-mm-dj)	Designation - Désignation	Signature
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12. References - Documents de référence (Departmental file numbers etc. - Numéros de dossier ministère etc.)

13. Authorized Production Action on this Contract (for Contracting Authority) - Mesure de production autorisée pour le présent contrat (pour autorité contractante)

a. Design Change Modification de conception	Existing Stock Stock actuel	Complete Units Unités entières	Assemblies Ensembles	Component Parts Organes
	Use Utilisez	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When to take effect: Prise d'effet : _____	Rework Réusinage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Scrap Mise au rebut	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Deviation Dérogation <input type="checkbox"/>	Total Number of Units Involved Nombres d'unités touchées _____	Serial No.(s) N°(s) de série _____		

14. Form DND 678 Required from Manufacturer DND 678 exigée du fabricant	<input type="checkbox"/> Yes Oui	<input type="checkbox"/> No Non
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15. Action on Equipment in Stock and Use - Mesure à prendre à l'égard du matériel en stock et en service

16. Action on Spares in Stock - Mesure à prendre à l'égard des pièces de rechange en stock

17. Date (yyaa-mm-dj)	Signature (for Department of National Defence pour le ministère de la Défense Nationale)	18. Date (yyaa-mm-dj)	Signature (for Contracting Authority pour l'Autorité contractante)
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19. Distribution List - Liste de diffusion	Copies Exemplaires	Distribution List - Liste de diffusion	Copies Exemplaires