



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

PWGSC/TPSGC Acquisitions Bid Receiving
Box/Boîte de Réception des Soumissions
Bid Receiving Box/Boîte de Récepti
1st Floor/1ière étage, Suite 1212
100-1045 Main Street
Moncton
New Brunswick
E1C 1H1
Bid Fax: (506) 851-6759

INVITATION TO TENDER

APPEL D'OFFRES

**Tender To: Public Works and Government Services
Canada**

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

**Soumission aux: Travaux Publics et Services
Gouvernementaux Canada**

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

Comments - Commentaires

All enquiries are to be submitted in writing to the
Contracting Authority, Darlene Reay, either by
facsimile or by e-mail at: darlene.reay@pwgsc.gc.ca.

Vendor/Firm Name and Address

Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Acquisitions NB/PEI (Moncton Office) – Bureau
d'acquisitions N.-B./Î.-P.-É. (Moncton)
1045 Main Street / 1045, rue Main
Moncton
New Bruns
E1C 1H1

Title - Sujet Maintenance Services-Inspection and	
Solicitation No. - N° de l'invitation W6898-190294/A	Date 2018-12-12
Client Reference No. - N° de référence du client W6898-190294	GETS Ref. No. - N° de réf. de SEAG PW-\$MCT-034-5489
File No. - N° de dossier MCT-8-41076 (034)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2019-01-10	
Time Zone Fuseau horaire Atlantic Standard Time AST	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Reay (MCT), Darlene	Buyer Id - Id de l'acheteur mct034
Telephone No. - N° de téléphone (902) 314-7957 ()	FAX No. - N° de FAX (506) 851-6759
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: DEPARTMENT OF NATIONAL DEFENCE 5 CDSB GAGETOWN BLDG. B18, 238 CHAMPLAIN AVENUE OROMOCTO New Brunswick E2V4J5 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

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

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PART 1 - GENERAL INFORMATION

1.1 Statement of Work

The work under this Service Contract consists of the furnishing of all labour, materials, tools, equipment, software and firmware updates required to complete repairs, remote phone line inspections and annual on-site inspection of the Alerton building automation system at Woodstock Armoury and Grand Falls Armoury as specified herein.

Woodstock Armoury is located at 107 Chapel Street, Woodstock, NB.
Grand Falls Armoury is 576 Madawaska Road, Grand Falls, NB.

This Service Contract will extend from 01 Apr 2019 to 31 March 2020 with two, one year option periods. The services must be provided in accordance with the Specification attached at Annex "D".

1.2 Debriefings

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

1.3 Trade Agreements

The requirement is subject to the provisions of the Canadian Free Trade Agreement (CFTA).

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

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

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

The [2003 \(2018-05-22\)](#) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

2.2 Submission of Bids

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

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) 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 New Brunswick.

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

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid. It is required that the bids follow the response format/instructions as detailed below:

Section I: Technical Bid

See Annex A

Section II: Financial Bid

Bidders must submit their financial bid in accordance with Annex "B" Basis of Payment. The total amount of Applicable Taxes must be shown separately.

Section III: Certifications

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

3.1.1 Electronic Payment of Invoices – Bid

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

If Annex “C” 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.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

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

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

See Annex A

4.1.2 Financial Evaluation

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

4.2 Basis of Selection

- 4.2.1** *SACC Manual* Clause [A0031T](#) (2010-08-16), Basis of Selection – Mandatory Technical Criteria

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

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

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

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

5.1 Certifications Required with the Bid

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

5.1.1 Integrity Provisions - Declaration of Convicted Offences

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

5.2 Certifications Precedent to Contract Award and Additional Information

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

5.2.1 Integrity Provisions – Required Documentation

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

5.2.2 Additional Certifications Precedent to Contract Award

See Annex A

PART 6 - RESULTING CONTRACT CLAUSES

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

6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

6.2 Statement of Work

The work under this Service Contract consists of the furnishing of all labour, materials, tools, equipment, software and firmware updates required to complete repairs, remote phone line inspections and annual on-site inspection of the Alerton building automation system at Woodstock Armoury and Grand Falls Armoury as specified herein.

Woodstock Armoury is located at 107 Chapel Street, Woodstock, NB.
Grand Falls Armoury is 576 Madawaska Road, Grand Falls, NB.

This Service Contract will extend from 01 Apr 2019 to 31 March 2020 with two, one year option periods. The services must be provided in accordance with the Specification attached at Annex "D".

6.3 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.

6.3.1 General Conditions

[2010C \(2018-06-21\)](#), General Conditions - Services (Medium Complexity) apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from April 1, 2019 to March 31, 2020 inclusive.

6.4.2 Option to Extend the Contract

The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to 2 additional 1 year period(s) under the same conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions as set out in the Basis of Payment.

Canada may exercise this option at any time by sending a written notice to the Contractor at least 30 calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced for administrative purposes only, through a contract amendment.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Darlene Reay
Title: Supply Officer
Organization: Public Works and Government Services Canada
Acquisitions Branch Directorate:
Real Property Contracting
Address: Sherwood Business Centre
161 St. Peters Road
Floor #2 Suite 204
Charlottetown, PEI C1A 5P7

Telephone: 902-314-7957
Facsimile: 902-566-7514
E-mail address: darlene.reay@pwgsc.gc.ca

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

6.5.2 Project Authority

The Project Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
Address: _____

Telephone: _____
Facsimile: _____
E-mail address: _____

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Project Authority, however the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.3 Contractor's Representative

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

6.6 Payment

6.6.1 Basis of Payment

Basis of payment is in accordance with Annex "B" and section 12, Payment Period, of the 2010C (2018-06-21), General Conditions - Services (Medium Complexity).

6.6.2 Limitation of Price

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

6.6.3 Monthly Payment

SACC Manual clause H1008C (2008-05-12) Monthly Payment

6.6.4 Electronic Payment of Invoices – Contract

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

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

6.7 Invoicing Instructions

The Contractor must submit invoices in accordance with the information required in section 10, Invoice Submission, of the 2010C (2018-06-21), General Conditions - Services (Medium Complexity).

6.8 Certifications and Additional Information

6.8.1 Compliance

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

6.9 Applicable Laws

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

6.10 Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the supplemental general conditions _____
- (c) the general conditions 2010C ([2018-06-21](#));
- (d) Annex D, Statement of Work;
- (e) the Contractor's bid dated _____ (*insert date of bid*), as amended on _____”

6.11 Insurance - Proof of Availability Prior to Contract Award

The Bidder must provide a letter from an insurance broker or an insurance company licensed to operate in Canada stating that the Bidder, if awarded a contract as a result of the bid solicitation, can be insured in accordance with the Insurance Requirements specified in Annex A .

If the information is not provided in the bid, the Contracting Authority will so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

ANNEX "A"

MANDATORY REQUIREMENTS

EVALUATION CRITERIA AND BASIS OF SELECTION

Bids received will be assessed in accordance with the entire requirement of the bid solicitation.

Mandatory Criteria

1. Submission of firm prices/rates for one (1) year including two (2) option years in accordance with Invitation to Tender.
2. A duly completed and signed Invitation to Tender including all Addenda.
3. Within seven (7) days of request from contracting authority and prior to award of Service Contract, provide proof that Bidder has an account in good standing with the Provincial Workers Compensation Board/Commission.
4. Within seven (7) days of request from Contracting Authority and prior to award of the Service Contract, Contractor must provide proof of \$2 Million General Liability Insurance.

Within seven days of request from Contracting Authority and prior to award of the Service Contract

5. The Contractor must provide a copy of an agreement with Alerton Controls, the system manufacturer, to the Engineer before the award of this Service Contract. This agreement must show that the Contractor and Technicians are qualified to perform work on this system and that the Contractor can provide the system software, firmware as well as all updates as required.
6. The work shall be performed by qualified controls technicians directly employed by the Contractor and trained by the system's manufacturer. The Contractor must provide copies of certificates as proof of training in Alerton Bactalk Control Systems for all technicians assigned to work on these systems. Copies of certificates are to be provided to the Engineer prior to the award of this Service Contract.

2. 2007/05/25 A0069T Basis of Selection - Mandatory Requirements Only

A bid must comply with all requirements of the bid solicitation to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

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W6898-190294/A
Client Ref. No. - N° de réf. du client
W6898-190294/A

Amd. No. - N° de la modif.
File No. - N° du dossier
mct-8-41076

Buyer ID - Id de l'acheteur
mct034
CCC No./N° CCC - FMS No./N° VME

ANNEX "B"

BASIS OF PAYMENT

The following requirement must be strictly adhered to: **Failure to do so shall render the bidder's proposal as non-responsive.**

It is mandatory that the bidders submit firm rates for the Period of the Service Contract for all items listed hereafter. Unit Price Tables, will be considered as the bidder's Financial Proposal.

Each item specified in the Unit Price Tables, includes wages, traveling time and costs, allowances, supervision, liabilities as employer, insurance, and the use of all tools, tackle, etc., overhead, profit, and all other liabilities whatsoever.

The prices inserted in the Unit Price Tables, includes all applicable federal, provincial and municipal taxes. However, they do not include any amount for the Goods and Services Tax (GST)/Harmonized Sales Tax (HST). The appropriate GST/HST amounts will be paid by Her Majesty to the Offeror in addition to the amount paid against the amount of the contract.

**W6898-190294 -The estimated quantity entered in column four for each item is an estimate only for service as and when required and does not infer all the quantities for that item will be utilized or that the quantities may not be exceeded.
NOTE: TENDERS WILL BE EVALUATED ON THE TOTAL BID FOR THE FIRST TERM OF THE CONTRACT PLUS THE OPTION YEARS.
HOWEVER, ANY CONTRACT AWARD WILL BE FROM APRIL 1, 2019 TO MARCH 31, 2020.**

Item	Class of Service	Unit of Measure	Estimated Quantity	A Term April 1, 2019 to March 31, 2020		B Option Year April 1, 2020 to March 31, 2021		C Option Year April 1, 2021 to March 31, 2022	
				Price per Unit	Total	Price per Unit	Total	Price per Unit	Total
1	Rate per Minor Maintenance Inspection as per Annex A at Woodstock Armoury.	Inspection	2						
2	Rate per Major Maintenance Inspection as per Annex B at Woodstock Armoury	Inspection	1						
3	Rate per hour for a service Technician at Woodstock Armoury	Hour	100						
4	Rate per Minor Maintenance Inspection as per Annex A at Grand Falls Armoury.	Inspection	2						
5	Rate per Major Maintenance Inspection as per Annex B at Grand Falls Armoury	Inspection	1						
6	Rate per hour for a service Technician at Grand Falls Armoury	Hour	100						

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Item	Class of Service	Unit of Measure	Estimated Quantity	A Term April 1, 2019 to March 31, 2020		B Option Year April 1, 2020 to March 31, 2021		C Option Year April 1, 2021 to March 31, 2022	
				Price per Unit	Total	Price per Unit	Total	Price per Unit	Total
7	All material will be invoiced at the Contractor's wholesale cost, plus a percentage of mark-up. For tendering purposes, the Contractor will submit their percent of mark-up on material _____% Allowance + Mark-up = TOTAL	Allowance	\$10,000.00	Mark Up in \$ _____	_____	Mark Up in \$ _____	_____	Mark Up in \$ _____	_____
				\$ _____	A	\$ _____	B	\$ _____	C

TOTAL FOR FIRST YEAR AND OPTION YEARS

GRAND TOTAL FOR FIRST YEAR AND OPTION YEARS

\$ _____ A, B and C

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Client Ref. No. - N° de réf. du client
W6898-190306

Amd. No. - N° de la modif.
File No. - N° du dossier
MCT-8-41075

Buyer ID - Id de l'acheteur
MCT034
CCC No./N° CCC - FMS No./N° VME

ANNEX "C" to PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

The Bidder accepts any of the following Electronic Payment Instrument(s):

- VISA Acquisition Card;
- MasterCard Acquisition Card;
- Direct Deposit (Domestic and International);
- Electronic Data Interchange (EDI);
- Wire Transfer (International Only);
- Large Value Transfer System (LVTS) (Over \$25M)

Solicitation No. - N° de l'invitation
W6898-190306
Client Ref. No. - N° de réf. du client
W6898-190306

Amd. No. - N° de la modif.
File No. - N° du dossier
MCT-8-41075

Buyer ID - Id de l'acheteur
MCT034
CCC No./N° CCC - FMS No./N° VME

ANNEX "D"

STATEMENT OF WORK



**DEPARTMENT OF NATIONAL DEFENCE
REAL PROPERTY OPERATION
DETACHMENT (GAGETOWN)
5 CDSB GAGETOWN**

SPECIFICATION

SERVICE CONTRACT
INSPECTION AND MAINTENANCE OF ALERTON DIRECT
DIGITAL CONTROL SYSTEM
WOODSTOCK ARMOURY, WOODSTOCK, NB
GRAND FALLS ARMOURY, GRAND FALLS, NB
01 APRIL 2019 TO 31 MARCH 2020
WITH AN OPTION TO RENEW FOR TWO ONE-YEAR PERIODS

Mark Gistelt
Designed by

[Signature]
Fire Inspector

Mark Gistelt
Project O

[Signature]
A/Engineering O

PF No:

Job No: L-G2-9900/1791

Date: 2018-07-16

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<u>List of Annexes</u>		
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END OF SECTION

1 GENERAL

1.01 DESCRIPTION OF WORK

- .1 The work under this Service Contract consists of the furnishing of all labour, materials, tools, equipment, software and firmware updates required to complete repairs, remote phone line inspections and annual on-site inspection of the Alerton building automation system at Woodstock Armoury and Grand Falls Armoury as specified herein.
- .2 Woodstock Armoury is located at 107 Chapel Street, Woodstock, NB.
- .3 Grand Falls Armoury is 576 Madawaska Road, Grand Falls, NB.

1.02 DURATION OF CONTRACT

- .1 This Service Contract will extend from 01 Apr 2019 to 31 March 2020 with two, one year option periods.

1.03 REFERENCES

- .1 Canada Labour Code, Part II - Occupational Health and Safety.
- .2 Canadian Electrical Code, (Latest Edition).
- .3 American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE)
 - .1 Standard 62.1 - Ventilation for Acceptable Indoor Air Quality.
 - .2 Standard 135 - BACnet Data Communication Protocol for Building Automation and Control Networks.

1.04 BUILDING SYSTEMS

- .1 Building Automation System (BAS) components included for maintenance and inspection under this Service Contract are:
 - .1 Alerton Envision for BACTalk Global Controller, Model VLX.
 - .2 Alerton Envision for BACTalk Programmable Controllers, EXP-1048 and EXP-10120.
 - .3 Associated modems, power supplies, cabinets, software and firmware.
 - .4 All associated end control devices, input sensors, network devices and wiring.
 - .5 On-site user-interface PC workstation.

1.05 QUALIFICATIONS

- .1 The Contractor must be qualified and knowledgeable in the inspection and repair of Alerton Bactalk Energy Management Systems and all equipment listed in 1.4.1.
- .2 The Contractor must provide a copy of an agreement with Alerton Controls, the system manufacturer, to the Engineer before the award of this Service Contract. This agreement must show that the Contractor and Technicians are qualified to perform work on this system and that the Contractor can provide

the system software, firmware as well as all updates as required.

- .3 The work shall be performed by qualified controls technicians directly employed by the Contractor and trained by the system's manufacturer. The Contractor must provide copies of certificates as proof of training in Alerton Bactalk Control Systems for all technicians assigned to work on these systems. Copies of certificates are to be provided to the Engineer prior to the award of this Service Contract.

1.06 ENGINEER

- .1 The Engineer as defined and stated in this specification will be the Officer Commanding Real Property Operations Detachment (Gagetown) or a designated representative. The address of the Engineer is:

Contracts Office
Real Property Operations Det Gagetown
Building B-18
238 Champlain Avenue
PO Box 17000 Station Forces
Oromocto, N.B. E2V 4J5

Tel. (506) 422-2677

Fax. (506) 422-1248

1.07 DOCUMENTS REQUIRED

- .1 Maintain at the job site, one copy each of the following:
 - .1 Specification,
 - .2 All Addenda,
 - .3 Electronic copies of all panel databases, current sequence of operations, floorplan showing all device locations and up-to-date points lists.

1.08 CONTRACTOR'S USE OF SITE

- .1 Work site access will be as directed by the Engineer.
- .2 Movement around the site is subject to restrictions laid down by the Engineer.
- .3 Do not unreasonably encumber site with materials or equipment.

1.09 ACCEPTABILITY OF MATERIAL

- .1 Materials and parts used will be those specified by the manufacturer of the equipment and any other material will require the approval of the Engineer.
- .2 Provide material and equipment of specified design and quality, performing to published ratings and for which replacement parts are readily available.
- .3 The Contractor will not make any change in the design and installation of equipment and materials without the prior written approval of the Engineer.
- .4 If, in an emergency, the Contractor installs parts other than those

specified, they will be replaced with specified parts before claiming payment, but no claim for other than specified parts will be made.

- .5 All replaced parts and materials not under warranty, whether serviceable or unserviceable will be left on site for inspection on completion of the work.
- .6 All manufactured articles, materials and equipment will be applied, installed, connected and used as specified by the manufacturer.
- .7 Requests for acceptance of material other than those specified will be submitted in writing to the Engineer. The request must be supported with sufficient product information to enable the Engineer to make an assessment.

1.10 GUARANTEE

- .1 The Contractor will guarantee all materials and workmanship for a period of one year or the manufacturer's guarantee, whichever is longer, after acceptance by the Engineer. Any defects which may develop during this period will be rectified and made good to the satisfaction of the Engineer, by the Contractor at their own expense.

1.11 CODES AND STANDARDS

- .1 Observe and enforce construction safety measures required by Canada Labour Code Part II and WorkSafeNB. Contractor must be registered and in good standing with WorkSafeNB.
- .2 All line-voltage electrical work is to conform to the Canadian Electrical Code. Line voltage work is to be performed by a journeyman electrician certified by the New Brunswick Department of Post-Secondary Education, Training and Labour or appropriate governmental department of the Contractor's province.
- .3 All low-voltage control wiring and control device installations are to conform to the highest quality industry standards and as directed by the Engineer.
- .4 All programming and sequences are to be such that they provide indoor air quality as per the recommendations detailed in the ASHRAE Standard 62.1.
- .5 All network communication protocols to conform to ASHRAE Standard 135.
- .6 Direct Digital Controls (DDC) installation technicians are to use wiring installation standards to ensure all wire used meets appropriate codes. In mechanical rooms all wire will be in raceways or conduit. Above ceiling plenums, installations will use plenum rated wire and tie wraps to secure the wire in a high location. Additionally, above ceiling plenum wiring must never be tied off to other trades' piping or hangers.

1.12 OVERLOADING

- .1 Contractor is responsible to ensure that no part of the work performed or equipment installed subjects adjacent structures to unsafe loads or permanent deformation.

1.13 TEMPORARY STRUCTURES

- .1 The Contractor will furnish and maintain all equipment such as temporary stairs, ramps, ladders, scaffolds, hoists, chutes, etc, as may be required for the proper execution of the work.
- .2 Temporary structures erected by the Contractor will remain their property and will be removed by them from the site on completion of the work.

1.14 CLEAN UP

- .1 On completion of all work, the Contractor will remove all surplus material, tools, equipment and debris. The building and site must be left in a clean and tidy condition to the satisfaction of the Engineer. The Contractor will not remove any salvageable material or equipment from the job site without permission from the Engineer.

1.15 MAINTENANCE INSPECTIONS

- .1 Provide operational inspections as follows:
 - .1 Provide two (2) Minor Remote Inspections, one during the month of January and one during the month of May as per Annex A at Woodstock Armoury.
 - .2 Provide one (1) Major On-Site Inspection during the month of September as per Annex B at Woodstock Armoury.
 - .3 Provide two (2) Minor Remote Inspections, one during the month of January and one during the month of May as per Annex A at Grand Falls Armoury.
 - .4 Provide one (1) Major On-Site Inspection during the month of September as per Annex B at Grand Falls Armoury.
 - .5 All inspections to include a complete point verification checklist and all contractor's recommendations for repairs on the Alerton Building Automation System. Major inspections include all upgrades as recommended by the manufacturer, Alerton Controls. Major inspections to include all mechanical adjustments to control devices, calibrations, cleaning and a review of the sequence and programming of all control panels.
 - .6 The Contractor will provide their own computer, necessary software and equipment for all inspections.
 - .7 All telephone charges required to do Minor Remote Inspections will be included in the Contractor's submitted bid price. No additional charges for remote connection to the system will be accepted.
- .2 Up-to-date points lists will be generated by the contractor at the time of each inspection. For bidding purposes, bidders will use the points list in Annex C (Woodstock Armoury) and Annex D (Grand Falls Armoury) to submit prices. Changes to points lists, either adjustments or additions will not constitute changes to inspection prices unless deemed significant and approved by the Engineer.

1.16 QUANTITIES BASIS FOR PAYMENT

- .1 The Contractor will submit costs per inspection, hourly rates and a material mark-up for the following in accordance with the specification. Such prices will include labour, supervision, expenses, tools, equipment, and transportation (travel time to and from the contractors base of operation will be included in the rates provided) and profit:

- .1 Rate per Minor Maintenance Inspection as per Annex A at Woodstock Armoury.
 - .2 Rate per Major Maintenance Inspection as per Annex B at Woodstock Armoury.
 - .3 Rate per hour for a service technician at Woodstock Armoury.
 - .4 Rate per Minor Maintenance Inspection as per Annex A at Grand Falls Armoury.
 - .5 Rate per Major Maintenance Inspection as per Annex B at Grand Falls Armoury.
 - .6 Rate per hour for a service technician at Grand Falls Armoury.
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- .2 All products and materials will be invoiced at the Contractor's wholesale cost plus a percentage for mark-up. Contractor shall submit all invoices for materials as supporting documentation when submitting invoices for payment. For tendering purposes, the Contractor will submit their percent of mark-up on products and material.
 - .3 The above estimated quantities may increase or decrease and are to be used for tendering purposes only. The quantities are not guaranteed and the Contractor will have no claim for loss of anticipated profits as a result of these estimated quantities.
 - .4 Time charged and the contract price of materials (if any) used may be verified by Government Audit before or after payment.
 - .5 The Contractor will provide service daily during normal working hours, Monday to Friday 0730 to 1600 hrs as well as in the evenings and during Saturdays, Sundays and holidays.
 - .6 Upon receipt of a Service Contract, the Contractor will advise the Engineer in writing of the telephone number and location at which they or their personnel may be contacted at any time. Also at this time, the Engineer will inform the Contractor of the Engineer's Representatives authorized to request service. When repairs are required, over and above the regularly scheduled inspections, the Engineer's Representative will notify the Contractor and detail the work to be completed in writing. Work undertaken at the request of any others will be entirely at the Contractor's risk with regard to payment and will not be authorized by the Engineer after completion.
 - .7 The Contractor will not refuse any call for service requested by the Engineer and must respond within 24 hours on normal service calls and 4 hours on emergency service calls.
 - .8 The Contractor will submit his invoice for payment to the Engineer within 15 working days of completion of the work.

1.17 SECURITY CLEARANCES

- .1 The Contractor shall maintain an up-to-date roster of all employees involved in the contract including managers, supervisors, tradespersons, drivers and labourers. This roster shall be made available to the Engineer upon request.
- .2 Security procedures require, that when requested by the Engineer, the Contractor will provide to the Engineer, at no cost to DND, a copy of a Canadian Police Certificate for Employment for each employee who will work

on this Service Contract.

END OF SECTION

1 GENERAL

1.01 REFERENCES

- .1 Canada Labour Code, Part II.
- .2 Canada Occupational Safety and Health Regulations.
- .3 National Building Code of Canada, (Latest Edition)
- .4 Province of New Brunswick Occupational Health and Safety Act, 1983, C.O-0.2.

1.02 REGULATORY REQUIREMENTS

- .1 Do work in accordance with the safety measures of the Canada Labour Code, Part II, New Brunswick Occupational Health and Safety Act and WorkSafeNB, provided that in any case of conflict or discrepancy the more stringent requirements shall apply.

1.03 RESPONSIBILITY

- .1 Contractor is responsible for the health and safety of all persons on site. Contractor is also responsible for the protection of property, persons and the environment on or adjacent to the site in so far as the work may affect these.
- .2 Contractor and all contractor's employees are to comply with all safety requirements specified in the Contract Documents as well as all applicable federal, provincial and local statutes, regulations and ordinances and with Contractor's site-specific Health and Safety Plan.
- .3 As outlined in the Canada Labour Code Part II, the Contractor is responsible to provide a site-specific Health and Safety Plan that includes a Confined Space Entry Procedure in the event that work is deemed by the Engineer to be in a confined space. Work is not to begin until this Health and Safety Plan is submitted and approved by the Engineer.
- .4 Real Property Operations Detachment (Gagetown) employs a Lock Out/Tag Out program to prevent work related injuries due to electrical or mechanical systems being energized while personnel are working in or around these systems. The Contractor must respect these locks and tags when encountered. Do not forcibly remove these locks and/or tags at any time. If the Contractor requires that these be removed to perform work, a request is to be made to the Engineer for such removal.
- .5 As per the Canada Labour Code Part II, it is the Contractor's responsibility to employ their own Lock Out/Tag Out program to ensure that equipment is not energized by other personnel while they are working in or around equipment.
- .6 It is the Contractor's responsibility to ensure that all their employees are provided all Personal Protective Equipment (PPE) necessary to perform all work.

1.04 UNFORESEEN HAZARDS

- .1 Should any unforeseen or peculiar safety-related factor, hazard, or condition become evident during performance of Work, advise Engineer verbally and in writing. Follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction.

1.05 CORRECTION OF NON-COMPLIANCE

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Engineer.
- .2 Provide Engineer with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Engineer may stop Work if non-compliance of health and safety regulations is not corrected.

1.06 WORK STOPPAGE

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

END OF SECTION

1 GENERAL

1.01 REPORTING FIRES

- .1 Know location of nearest fire alarm box and telephone, including emergency phone number.
- .2 Report immediately all fire incidents to Fire Department as follows:
 - .1 activate nearest fire alarm box; or
 - .2 telephone 911.
- .3 When reporting fire by telephone, give location of fire, name or number of building and be prepared to verify the location.

1.02 INTERIOR AND EXTERIOR FIRE PROTECTION AND ALARM SYSTEMS

- .1 Fire protection and alarm system will not be:
 - .1 obstructed;
 - .2 shut-off; and
 - .3 left inactive at end of working day or shift without authorization from Fire Chief.
- .2 Fire hydrants, standpipes and hose systems will not be used for other than fire-fighting purposes unless authorized by Fire Chief.

1.03 FIRE EXTINGUISHERS

- .1 Supply fire extinguishers, as scaled by Fire Chief, necessary to protect work in progress and contractor's physical plant on site.

1.04 BLOCKAGE OF ROADWAYS

- .1 Advise Fire Chief of any work that would impede fire apparatus response. This includes violation of minimum overhead clearance, as prescribed by Fire Chief, erecting of barricades and digging of trenches.

1.05 SMOKING PRECAUTIONS

- .1 Observe smoking regulations at all times.

1.06 RUBBISH AND WASTE MATERIALS

- .1 Rubbish and waste materials are to be kept to a minimum.
- .2 Burning of rubbish is prohibited.
- .3 Removal:
 - .1 Remove all rubbish from work site at end of work day or shift or as directed.
- .4 Storage:
 - .1 Store oily waste in approved receptacles to ensure maximum cleanliness and safety.

- .2 Deposit greasy or oily rags and materials subject to spontaneous combustion in approved receptacles and remove.

1.07 FLAMMABLE AND COMBUSTIBLE LIQUIDS

- .1 Handling, storage and use of flammable and combustible liquids are to be governed by the National Fire Code of Canada.
- .2 Flammable and combustible liquids such as gasoline, kerosene and naphtha will be kept for ready use in quantities not exceeding 45 litres provided they are stored in approved safety cans bearing Underwriters' Laboratory of Canada or Factory Mutual seal of approval. Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires permission of Fire Chief.
- .3 Transfer of flammable and combustible liquids is prohibited within buildings or jetties.
- .4 Transfer of flammable and combustible liquids will not be carried out in vicinity of open flames or any type of heat-producing devices.
- .5 Flammable liquids having a flash point below 38° C such as naphtha or gasoline will not be used as solvents or cleaning agents.
- .6 Flammable and combustible waste liquids, for disposal, will be stored in approved containers located in a safe ventilated area. Quantities are to be kept to a minimum and Fire Department is to be notified when disposal is required.

1.08 HAZARDOUS SUBSTANCES

- .1 Work entailing use of toxic or hazardous materials, chemicals and/or explosives, or otherwise creating hazard to life, safety or health, will be in accordance with National Fire Code of Canada.
- .2 Obtain from Fire Chief a "Hot Work" permit for work involving welding, burning or use of blow torches and salamanders, in buildings or facilities.
- .3 When Work is carried out in dangerous or hazardous areas involving use of heat, provide fire watchers equipped with sufficient fire extinguishers. Determination of dangerous or hazardous areas along with level of protection necessary for Fire Watch is at discretion of the Fire Chief. Contractors are responsible for providing fire watch service for work on a scale established and in conjunction with Fire Chief at pre-work conference.
- .4 Where flammable liquids, such as lacquers or urethanes are to be used, proper ventilation will be assured and all sources of ignition are to be eliminated. Fire Chief is to be informed prior to and at cessation of such work.

1.09 QUESTIONS AND/OR CLARIFICATION

- .1 Direct any questions or clarification on Fire Safety in addition to above requirements to Fire Chief.

1.10 FIRE INSPECTION

- .1 Site inspections by Fire Chief will be coordinated through Engineer.
- .2 Allow Fire Chief unrestricted access to work site.
- .3 Co-operate with Fire Chief during routine fire safety inspection of work site.
- .4 Immediately remedy all unsafe fire situations observed by Fire Chief.

END OF SECTION

1 GENERAL

1.01 GENERAL

- .1 Contractor will take all reasonable steps to ensure that they and their employees have complied with all pertinent legislation and have protected the environment.

1.02 FIRES

- .1 Fires and burning of rubbish on site not permitted.

1.03 DISPOSAL OF WASTES

- .1 Do not bury rubbish and waste materials on site unless approved by Engineer.
- .2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.

1.04 SPILL PROTECTION

- .1 The Contractor must have adequate clean up materials for any potential hazardous materials used in the completion of the work (ie. fuels, oils, lubricants, etc).

END OF SECTION

MINOR OPERATIONAL REMOTE INSPECTION OF BUILDING AUTOMATION SYSTEM

.1 Dates:

- .1 Minor Remote Inspections are to be completed twice a year. The first remote inspection is to be done in the month of May in conjunction with the shutdown of heating systems or change over to summer months programming. The second is to be done during the month of January.

.2 Network Remote Inspections:

- .1 Connect via phone line modem to Alerton Envision for BACtalk VLX Global Controller at Armoury.
- .2 Check connectivity of EXP 1048 and EXP 10120 subpanels on network and confirm proper connection speed.

.3 End Devices and Sensors Remote Inspection:

- .1 Review the system for alarms. Reset alarms and determine cause. Include recommendations in inspection report with respect to any and all alarm/event conditions.
- .2 Review the system for inputs/outputs in manual override state. Ensure inputs/outputs in manual override are included in report and Contract Manager is aware.
- .3 Save all panel databases. Provide to Contracts Manager upon request.
- .4 Toggle all outputs on/off or modulate through range and verify proper system response. Prepare a points list that includes point number, name, type and verified movement.
- .5 Verify all inputs have reasonable values and are responding to associated output modulation. Include observed values in point's verification checklist.

.4 Upgrades:

- .1 All Envision for Bactalk software upgrades on Workstation and firmware upgrades to panels are to be completed during the major inspection. No upgrades are to be done remotely.

.5 Schedules:

- .1 Ensure panel time and date are accurate. Ensure all annual schedules are set for proper heating season end date. Confirm this date with Contracts Manager.

.6 Inspection Report:

- .1 Provide verification checklist and all recommendations regarding control system and mechanical system devices that appear faulty and include in report submitted with inspection invoice to Contracts Manager.

MAJOR ON-SITE OPERATIONAL INSPECTION OF BUILDING AUTOMATION SYSTEM

.1 Date:

- .1 The Major On-Site Inspection is to be completed once per year. This inspection is to be completed in September in conjunction with the start of heating season.

.2 Global and Programmable Controllers:

- .1 Check all connections and secure if required.
- .2 Clean all exterior surfaces.
- .3 Save and copy all control panel databases.
- .4 Review sequence of operations and ensure maximum energy efficiency.
- .5 Install upgrades if available.
- .6 Check network speeds for optimum performance.
- .7 Check the LED indications to verify proper DC power levels, transmit and receive activity and check for possible error code indications.
- .8 Inspect wiring for signs of corrosion and fraying.
- .9 Replace Battery.
- .10 Cycle panel power to initiate self-test diagnostic and monitor lead sequencing for proper self-test displays or error code indications.
- .11 Remove dust from heat sink surfaces.
- .12 Verify the proper operation of the critical control processes and points associated with this unit and make adjustments if necessary.

.3 Exhaust and Destratification Fan Controls:

- .1 Review the sequence of operation.
- .2 Check/Repair the operation of all dampers.

- .3 Check all control valves and report condition.
- .4 Check/Calibrate all controllers as required.
- .5 Check all connections and secure as required.
- .6 Check/Calibrate all sensors as required.
- .7 If problems are evident in controlled equipment make note of such in report.

.4 Space Control Devices:

- .1 Check/Calibrate all room temperature sensors as required.
- .2 Check all control valves and report condition.
- .3 Check/Calibrate the operation of all dampers as required.
- .4 Check all thermostat operation and associated radiator valves. Report evidence of leaks and any thermostat problems in inspection report.

.5 Boiler Controls:

- .1 Check all valves for full range of modulation and enable for on/off operation. Check all pumps for on/off operation. Note: Control devices integral to boiler are **not** included in this Service Contract. If problems are evident, note on report.
- .2 Check remote dial-out alarm system for operation. Replace Battery.

.7 Point List Verification Report:

- .1 Prepare a point checklist that provides verification of each point. Provide point address, name and on/off check for binary points and 0, 50 and 100% modulation for analog points. Indicate room number where point is located as well as model number of devices. All points must be modulated and visually checked for proper operation.
- .2 Verify that the panel is in control at the desired values.
- .3 Change one set point value to verify smooth transmission and stable control at the new set point.

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- .3 Return the set point to its original value.
- .4 Repeat this test for each additional control loop.
- .5 Verify that the controlled valves and the dampers will stroke fully in both directions, sealing tightly where appropriate.
- .6 Verify the proper operation of the critical control processes and points associated with this unit. Make adjustments as required.

.8 Network Analyses:

- .1 Ensure proper network performance.
- .2 Ensure proper addressing of panels.
- .3 Confirm proper data transfer speed.
- .4 Confirm proper modem operation. Include modem phone line number in report.

.10 Inspection Report:

- .1 Prepare a written inspection report that includes the points verification check list and all recommendations for repairs and additions to Direct Digital Control System. Outline all potential energy saving adjustments to system. List all model numbers and approximate cost of system components that require replacement and provide estimates of hours of labour to replace. Ensure that report is dated and signed by technician(s) performing inspection. Submit inspection report with invoice to Contracts Manager promptly after inspection.

Note:

Keep conversations to a minimum with building occupants with respect to Building Automation System. Do not take direction from occupants or caretaker in regard to sequence of operation, schedules and set points. Make note of all requests for system adjustments and include in report. Discuss any major complaints with the Engineer's representation (i.e. Contracts Manager) immediately.

Woodstock Armoury DDC System Points List
 Panel: EXP-1048

INPUTS		OUTPUTS	
PT #	DESCRIPTION	PT #	DESCRIPTION
AI 0	Boiler HWS Space Temperature Sensor	BO 0	Boiler Enable
BI 1	Boiler Status	BO 1	
IP 2		BO 2	Pump P1 and P2 Start/Stop
BI 3	Pump P1 and P2 Status	BO 3	
AI 4	Room 013 Space Temperature Sensor	AO 0	Boiler 3 Way Valve
IP 5		AO 1	
IP 6		AO 2	
IP 7		AO 3	
IP 8		AO 4	
AI 9	OAT Sensor	AO 5	

Woodstock Armoury DDC System Points List
 Panel: EXP-10120

INPUTS		OUTPUTS	
PT #	DESCRIPTION	PT #	DESCRIPTION
AI 0	Zone 1 Space Temperature Sensor	BO 0	Zone 1 Unit Heater Start/Stop
BI 1	Zone Overhead Door Contact	BO 1	Zone 2 Unit Heater #1 Start/Stop
AI 2	Zone 2 Space Temperature Sensor #1	BO 2	Zone 2 Unit Heater #2 Start/Stop
AI 3	Zone 2 Space Temperature Sensor #2	BO 3	Zone 2 Unit Heater #3 Start/Stop
AI 4	Zone 2 Space Temperature Sensor #3	BO 4	Zone 2 Destrat Fan Start/Stop
AI 5	Zone 3 Space Temperature Sensor	BO 5	Zone 3 Unit Heater Start/Stop
AI 6	Zone 4 Space Temperature Sensor	BO 6	Zone 4 Unit Heater Start/Stop
AI 7	Room 209 Space Temperature Sensor	BO 7	Room 209 Baseboard Valve Open/Close
AI 8	Room 106 Space Temperature Sensor	BO 8	Room 106 Baseboard Valve Open/Close
AI 9	Room306 Space Temperature Sensor	BO 9	Room 306 Baseboard Valve Open/Close
		BO 10	Washroom Exhaust Fan Start/Stop
		BO 11	

Grand Falls Armoury DDC System Points List
 Panel: EXP-1048

INPUTS		OUTPUTS	
PT #	DESCRIPTION	PT #	DESCRIPTION
AI 0	HWS Space Temperature Sensor	BO 0	Boiler Enable
BI 1	Boiler Status	BO 1	Boiler Pump Stop/Start
BI2	P-1 Status	BO 2	AHU-1 Start/Stop
AI3	AHU-1 SAT	BO 3	Pump C-1 Start/Stop
AI 4	AHU-1 MAT	AO 0	AHU-1 MAD
BI5	AHU-1 Status	AO 1	AHU-1 Htg Coil Vlv
BI6	Pump C-1 Status	AO 2	
AI7	Rm 105 Spc Temp	AO 3	
IP 8		AO 4	
AI 9	OAT Sensor	AO 5	

Grand Falls Armoury DDC System Points List
 Panel: EXP-10120

INPUTS		OUTPUTS	
PT #	DESCRIPTION	PT #	DESCRIPTION
AI 0	Zone 1 Space Temperature Sensor	BO 0	Zone 1 Unit Heaters UH-1 & UH-2 Start/Stop
BI 1	Zone 1 Overhead Door Contact #1	BO 1	Zone 1 Destrat Stop/Start
AI 2	Zone 2 Space Temperature Sensor	BO 2	Zone 2 Unit Heaters UH-3 & UH-4 Start/Stop
AI 3	Zone 2 Overhead Door Contact	BO 3	Zone 2 Destrat Stop/Start
AI 4		BO 4	
AI 5	Zone 1 Overhead Door Contact #2	BO 5	Zone 3 BB Heater Vlv Open/Close
AI 6	Zone 3 Space Temperature Sensor	BO 6	Exhaust Fan EF-3 & EF-4 Start/Stop
AI 7	Ventilation Override Button	BO 7	Washroom Ex Fan Stop/Start
AI 8	Heating Override Pushbutton	BO 8	Recirc Pump Start/Stop
AI 9	Exhaust Fan EF-3 & EF-4 Override	BO 9	
		BO 10	
		BO 11	