

## INVITATION TO TENDER

**RETURN BIDS TO:**

**Bid Receiving / Agriculture and Agri-Food Canada**

Agriculture and Agri-Food Canada  
 Eastern Service Centre  
 Tender Receiving Unit  
 2001 University Street., Suite 671-TEN  
 Montréal, Quebec  
 H3A 3N2

**TENDER TO:**

**Agriculture and Agri-Food 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 construction listed herein and on any attached sheets at the price(s) set out therefor.

Comments

Title CEF Lighting Retrofit Project				
Solicitation No. 01B46-14-0143			Date 2014-11-25	
Client Reference No. 1314-144210-P11				
File No. 01B46-14-0143				
Solicitation Closes:				
Day of Week Wednesday	Month December	Day 10	Year 2014	Time 02:00
Time of Day <input type="radio"/> AM <input checked="" type="radio"/> PM			Time Zone EST	
F.O.B. <input type="radio"/> Plant <input checked="" type="radio"/> Destination <input type="radio"/> Other				
Address Enquiries to: Gabriel Le Raina Plouffe				
Title: Contracting Officer				
Email: gabriel.le.plouffe@agr.gc.ca				
Telephone Number     Ext.		Fax Number		
514 315-6123		514 283-3143		
Destination Agriculture and Agri-Food Canada Central Experimental Farm, Multiple Sites (13) 960 Carling Avenue Ottawa, Ontario, K1A 0C6				

**Instructions: See Herein**

Delivery Required March 31, 2015		Delivery Offered
Vendor / Firm Name and Address		
Telephone Number     Ext.		Fax Number

**ISSUING OFFICE**

Agriculture and Agri-Food Canada  
 Eastern Service Centre  
 Tender Receiving Unit  
 2001 University Street., Suite 671-TEN  
 Montréal, Quebec  
 H3A 3N2

Name and title of person authorized to sign on behalf of Vendor / Firm  
(type or print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



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## Appendix "A"

### GENERAL INSTRUCTIONS TO BIDDERS

## GENERAL INSTRUCTIONS TO BIDDERS

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### **GI01 COMPLETION OF BID**

- 1) The bid shall be:
  - (a) submitted on the BID AND ACCEPTANCE FORM provided by AAFC with the bid package or on a clear and legible reproduced copy of such BID AND ACCEPTANCE FORM that must be identical in content and format to the BID AND ACCEPTANCE FORM provided by AAFC;
  - (b) based on the Bid Documents listed in the Special Instructions to Bidders;
  - (c) correctly completed in all respects;
  - (d) signed, with an original signature, by a duly authorized representative of the Bidder; and
  - (e) accompanied by
    - (i) bid security as specified in GI07; and
    - (ii) any other document or documents specified elsewhere in the solicitation where it is stipulated that said documents are to accompany the bid.
- 2) Subject to paragraph 6) of GI10, any alteration to the pre-printed or pre-typed sections of the Bid and Acceptance Form, or any condition or qualification placed upon the bid shall be cause for disqualification. Alterations, corrections, changes or erasures made to statements or figures entered on the Bid and Acceptance Form by the Bidder shall be initialed by the person or persons signing the bid. Alterations, corrections, changes or erasures that are not initialed shall be deemed void and without effect.
- 3) Unless otherwise noted elsewhere in the Bid Documents, facsimile copies of bids are not acceptable.

## **GENERAL INSTRUCTIONS TO BIDDERS (Continued)**

### **GI02 IDENTITY OR LEGAL CAPACITY OF THE BIDDER**

- 1) In order to confirm the authority of the person or persons signing the bid or to establish the legal capacity under which the Bidder proposes to enter into Contract, any Bidder who carries on business in other than its own personal name shall, if requested by Canada, provide satisfactory proof of
  - (a) such signing authority; and
  - (b) the legal capacity under which it carries on business;

prior to contract award. Proof of signing authority may be in the form of a certified copy of a resolution naming the signatory(ies) that is (are) authorized to sign this bid on behalf of the corporation or partnership. Proof of legal capacity may be in the form of a copy of the articles of incorporation or the registration of the business name of a sole proprietor or partnership.

### **GI03 APPLICABLE TAXES**

- 1) "Applicable Taxes" means the Goods and Services Tax (GST), the Harmonized Sales Tax (HST), and any provincial tax, by law, payable by Canada such as, the Quebec Sales Tax (QST) as of April 1, 2013.

### **GI04 CAPITAL DEVELOPMENT AND REDEVELOPMENT CHARGES**

- 1) For the purposes of GC1.8 LAWS, PERMITS AND TAXES in the General Conditions of the Contract, only fees or charges directly related to the processing and issuing of building permits shall be included. The Bidder shall not include any monies in the bid amount for special municipal development, redevelopment or other fees or charges which a municipal authority may seek as a prerequisite to the issuance of building permits.

### **GI05 REGISTRY AND PRE-QUALIFICATION OF FLOATING PLANT**

- 1) Dredges or other floating plant to be used in the performance of the Work must be of Canadian registry. For dredges or other floating plant that are not of Canadian make or manufacture, the Bidder must obtain a certificate of qualification from Industry Canada and this certificate must accompany the bid. Plant so qualified by Industry Canada may be accepted on this project.

### **GI06 LISTING OF SUBCONTRACTORS AND SUPPLIERS**

- 1) Notwithstanding any list of Subcontractors that the Bidder may be required to submit as part of the bid, the Bidder shall, within 48 hours of receipt of a notice to do so, submit all information requested in the said notice including the names of Subcontractors and Suppliers for the part or parts of the Work listed. Failure to do so shall result in the disqualification of its bid.

### **GI07 BID SECURITY REQUIREMENTS**

- 1) The Bidder shall submit bid security with the bid in the form of a bid bond or a security deposit in an amount that is equal to not less than 10 percent of the bid amount. Applicable Taxes shall not be included when calculating the amount of any bid security that may be required. The maximum amount of bid security required with any bid is \$2,000,000.00.

## GENERAL INSTRUCTIONS TO BIDDERS (Continued)

- 2) A bid bond shall be in an approved form <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494&section=text#appS>, properly completed, with original signature(s) and issued by an approved company whose bonds are acceptable to Canada either at the time of solicitation closing or as identified in Treasury Board Appendix L: [Acceptable Bonding Companies](#).
- 3) A security deposit shall be an original, properly completed, signed where required and be either:
  - (a) a bill of exchange, bank draft or money order made payable to the Receiver General for Canada and certified by an approved financial institution or drawn by an approved financial institution on itself; or
  - (b) bonds of, or unconditionally guaranteed as to principal and interest by, the Government of Canada;
- 4) For the purposes of subparagraph 3) (a) of GI07
  - (a) a bill of exchange is an unconditional order in writing signed by the Bidder and addressed to an approved financial institution, requiring the said institution to pay, on demand, at a fixed or determinable future time a sum certain of money to, or to the order of, the Receiver General for Canada;
  - (b) if a bill of exchange, bank draft or money order is certified by or drawn on an institution or corporation other than a chartered bank, it must be accompanied by proof that the said institution or corporation meets at least one of the criteria described in subparagraph 4.c. of GI07, either by letter or by a stamped certification on the bill of exchange, bank draft or money; and
  - (c) An approved financial institution is:
    - (i) a corporation or institution that is a member of the Canadian Payments Association as defined in the [Canadian Payments Act](#);
    - (ii) a corporation that accepts deposits that are insured, to the maximum permitted by law, by the Canada Deposit Insurance Corporation or the "Autorité des marchés financiers";
    - (iii) a corporation that accepts deposits from the public if repayment of the deposit is guaranteed by Her Majesty the Queen in right of a province;
    - (iv) a corporation, association or federation incorporated or organized as a credit union or co-operative credit society that conforms to the requirements of a credit union which are more particularly described in paragraph 137(6) of the [Income Tax Act](#); or
    - (v) Canada Post Corporation.
- 5) Bonds referred to in subparagraph 3)(b) of GI07 shall be provided on the basis of their market value current at the date of solicitation closing, and shall be:
  - (a) payable to bearer;
  - (b) accompanied by a duly executed instrument of transfer of the bonds to the Receiver General for Canada in the form prescribed by the Domestic Bonds of Canada Regulations; or
  - (c) registered as to principal or as to principal and interest in the name of the Receiver General for Canada pursuant to the Domestic Bonds of Canada Regulations.

## GENERAL INSTRUCTIONS TO BIDDERS (Continued)

- 6) As an alternative to a security deposit an irrevocable standby letter of credit is acceptable to Canada and the amount shall be determined in the same manner as a security deposit referred to above.
- 7) An irrevocable standby letter of credit referred to in paragraph 6) of GI07 shall
  - (a) be an arrangement, however named or described, whereby a financial institution (the "Issuer") acting at the request and on the instructions of a customer (the "Applicant) or on its own behalf,
    - (i) is to make a payment to, or to the order of, the Receiver General for Canada as the beneficiary;
    - (ii) is to accept and pay bills of exchange drawn by the Receiver General for Canada;
    - (iii) authorizes another financial institution to effect such payment or accept and pay such bills of exchange; or
    - (iv) authorizes another financial institution to negotiate against written demand(s) for payment provided that the terms and conditions of the letter of credit are complied with;
  - (b) state the face amount which may be drawn against it;
  - (c) state its expiry date;
  - (d) provide for sight payment to the Receiver General for Canada by way of the financial institution's draft against presentation of a written demand for payment signed by the Departmental Representative identified in the letter of credit by his/her office;
  - (e) provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face value of the letter of credit;
  - (f) provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice (UCP) for Documentary Credits, 2007 Revision, ICC Publication No. 600; pursuant to the ICC UCP; a credit is irrevocable even if there is no indication to that effect; and
  - (g) be issued or confirmed, in either official language, by a financial institution which is a member of the Canadian Payments Association and is on the letterhead of the Issuer or Confirmer. The format is left to the discretion of the Issuer or Confirmer.
- 8) Bid security shall lapse or be returned as soon as practical following:
  - (a) the solicitation closing date, for those Bidders submitting non-compliant bids; and
  - (b) the administrative bid review, for those Bidders submitting compliant bids ranked fourth to last on the schedule of bids; and
  - (c) the award of contract, for those Bidders submitting the second and third ranked bids; and
  - (d) the receipt of contract security, for the successful Bidder; or
  - (e) the cancellation of the solicitation, for all Bidders.
- 9) Notwithstanding the provisions of paragraph 8) of GI07 and provided more than three compliant bids have been received, if one or more of the bids ranked third to first is withdrawn or rejected



## **GENERAL INSTRUCTIONS TO BIDDERS (Continued)**

for whatever reason then Canada reserves the right to hold the security of the next highest ranked compliant bid in order to retain the bid security of at least three valid and compliant bids.

### **GI08 SUBMISSION OF BID**

- 1) The Bid and Acceptance Form, duly completed, and the bid security shall be enclosed and sealed in an envelope provided by the Bidder, and shall be addressed and submitted to the office designated on the INVITATION TO TENDER Form for the receipt of bids. The bid must be received on or before the date and time set for solicitation closing.
- 2) Unless otherwise specified in the Special Instructions to Bidders
  - (a) the bid shall be in Canadian currency;
  - (b) exchange rate fluctuation protection is not offered; and
  - (c) any request for exchange rate fluctuation protection shall not be considered.
- 3) Prior to submitting the bid, the Bidder shall ensure that the following information is clearly printed or typed on the face of the bid envelope:
  - (a) Solicitation Number;
  - (b) Name of Bidder;
  - (c) Return address; and
  - (d) Closing Date and Time.
- 4) Timely and correct delivery of bids is the sole responsibility of the Bidder.

### **GI09 REVISION OF BID**

- 1) A bid submitted in accordance with these instructions may be revised by letter or facsimile provided the revision is received at the office designated for the receipt of bids, on or before the date and time set for the closing of the solicitation. The letter or facsimile shall be on the Bidder's letterhead or bear a signature that identifies the Bidder;
- 2) A revision to a bid that includes unit prices must clearly identify the changes(s) in the unit price(s) and the specific item(s) to which each change applies.
- 3) A letter or facsimile submitted to confirm an earlier revision shall be clearly identified as a confirmation.
- 4) Failure to comply with any of the above provisions shall result in the rejection of the non-compliant revision(s) only. The bid shall be evaluated based on the original bid submitted and all other compliant revision(s).

### **GI10 REJECTION OF BID**

- 1) Canada may accept any bid, whether it is the lowest or not, or may reject any or all bids.
- 2) Without limiting the generality of paragraph 1) of GI10, Canada may reject a bid if any of the following circumstances is present:

## GENERAL INSTRUCTIONS TO BIDDERS (Continued)

- (a) the Bidder, or any employee or subcontractor included as part of the bid, has been convicted under Section 121 ("Frauds on the government" & "Contractor subscribing to election fund"), 124 "Selling or purchasing office"), 380 ("Fraud committed against Her Majesty") or 418 ("Selling defective stores to Her Majesty") of the Criminal Code of Canada, or under paragraph 80(1)(d) ("False entry, certificate or return"), subsection 80(2) ("Fraud against Her Majesty") or Section 154.01 ("Fraud against Her Majesty") of the *Financial Administration Act*;
  - (b) the Bidder's bidding privileges are suspended or are in the process of being suspended;
  - (c) the bidding privileges of any employee or subcontractor included as part of the bid are suspended or are in the process of being suspended, which suspension or pending suspension would render that employee or subcontractor ineligible to bid on the Work, or the portion of the Work the employee or subcontractor is to perform;
  - (d) the Bidder is bankrupt, or where for whatever reason, its activities are rendered inoperable for an extended period;
  - (e) evidence, satisfactory to Canada, of fraud, bribery, fraudulent misrepresentation or failure to comply with any law protecting individuals against any manner of discrimination, has been received with respect to the Bidder, any of its employees or any subcontractor included as part of its bid;
  - (f) evidence satisfactory to Canada that based on past conduct or behavior, the Bidder, a sub-contractor or a person who is to perform the Work is unsuitable or has conducted himself/herself improperly;
  - (g) with respect to current or prior transactions with Canada
    - (i) Canada has exercised, or intends to exercise, the contractual remedy of taking the work out of the contractor's hands with respect to a contract with the Bidder, any of its employees or any subcontractor included as part of its bid; or
    - (ii) Canada determines that the Bidder's performance on other contracts is sufficiently poor to jeopardize the successful completion of the requirement being bid on.
- 3) In assessing the Bidder's performance on other contracts pursuant to subparagraph 2)(g)(ii) of GI10, Canada may consider, but not be limited to, such matters as:
- (a) the quality of workmanship in performing the Work;
  - (b) the timeliness of completion of the Work;
  - (c) the overall management of the Work and its effect on the level of effort demanded of the department and its representative; and
  - (d) the completeness and effectiveness of the Contractor's safety program during the performance of the Work.
- 4) Without limiting the generality of paragraphs 1), 2) and 3) of GI10, Canada may reject any bid based on an unfavourable assessment of the:
- (a) adequacy of the bid price to permit the work to be carried out and, in the case of a bid

## **GENERAL INSTRUCTIONS TO BIDDERS (Continued)**

providing prices per unit or a combination of lump sum and prices per unit, whether each such price reasonably reflects the cost of performing the part of the work to which that price applies;

- (b) Bidder's ability to provide the necessary management structure, skilled personnel, experience and equipment to perform competently the work under the Contract; and
  - (c) Bidder's performance on other contracts.
- 5) Where Canada intends to reject a bid pursuant to a provision of paragraphs 1), 2), 3) or 4) of GI10, other than subparagraph 2)(g) of IT10, the contracting authority will inform the Bidder and provide the Bidder ten (10) days within which to make representations, before making a final decision on the bid rejection.
- 6) Canada may waive informalities and minor irregularities in bids received if Canada determines that the variation of the bid from the exact requirements set out in the Bid Documents can be corrected or waived without being prejudicial to other Bidders.

### **GI11 BID COSTS**

- 1) No payment will be made for costs incurred in the preparation and submission of a bid in response to the bid solicitation. Costs associated with preparing and submitting a bid, as well as any costs incurred by the Bidder associated with the evaluation of the bid, are the sole responsibility of the Bidder.

### **GI12 COMPLIANCE WITH APPLICABLE LAWS**

- 1) By submission of a bid, the Bidder certifies that the Bidder has the legal capacity to enter into a contract and is in possession of all valid licences, permits, registrations, certificates, declarations, filings, or other authorizations necessary to comply with all federal, provincial and municipal laws and regulations applicable to the submission of the bid and entry into any ensuing contract for the performance of the work.
- 2) For the purpose of validating the certification in paragraph 1) of GI12, a Bidder shall, if requested, provide a copy of every valid licence, permit, registration, certificate, declaration, filing or other authorization listed in the request, and shall provide such documentation within the time limit(s) set out in the said request.
- 3) Failure to comply with the requirements of paragraph 2) of GI12 shall result in disqualification of the bid.

### **GI13 APPROVAL OF ALTERNATIVE MATERIALS**

- 1) When materials are specified by trade names or trademarks, or by manufacturers' or suppliers' names, the bid shall be based on use of the named materials. During the solicitation period, alternative materials may be considered provided full technical data is received in writing by the Contracting Officer at least 10 calendar days prior to the solicitation closing date.

### **GI14 CONFLICT OF INTEREST - UNFAIR ADVANTAGE**

- 1) In order to protect the integrity of the procurement process, bidders are advised that Canada may reject a bid in the following circumstances:

## GENERAL INSTRUCTIONS TO BIDDERS (Continued)

- (a) if the Bidder, any of its subcontractors, any of their respective employees or former employees was involved in any manner in the preparation of the bid solicitation or in any situation of conflict of interest or appearance of conflict of interest;
  - (b) if the Bidder, any of its subcontractors, any of their respective employees or former employees had access to information related to the bid solicitation that was not available to other bidders and that would, in Canada's opinion, give or appear to give the Bidder an unfair advantage.
- 2) The experience acquired by a bidder who is providing or has provided the goods and services described in the bid solicitation (or similar goods or services) will not, in itself, be considered by Canada as conferring an unfair advantage or creating a conflict of interest. This bidder remains however subject to the criteria established above.
- 3) Where Canada intends to reject a bid under this section, the Contracting Authority will inform the Bidder and provide the Bidder an opportunity to make representations before making a final decision. Bidders who are in doubt about a particular situation should contact the Contracting Authority before bid closing. By submitting a bid, the Bidder represents that it does not consider itself to be in conflict of interest nor to have an unfair advantage. The Bidder acknowledges that it is within Canada's sole discretion to determine whether a conflict of interest, unfair advantage or an appearance of conflict of interest or unfair advantage exists.



## Appendix "B"

### SPECIAL INSTRUCTIONS TO BIDDERS

## SPECIAL INSTRUCTIONS TO BIDDERS (SI)

SI01	Bid Documents
SI02	Enquiries during the Solicitation Period
SI03	Non-Mandatory Site Visit
S104	Revision of Bid
S105	Bid Results
SI06	Insufficient Funds
SI07	Bid Validity Period
SI08	Construction Documents
SI09	Web Sites
SI10	Personnel Security Requirements

### SI01 BID DOCUMENTS

- 1) The following are the bid documents:
  - (a) INVITATION TO TENDER - Page 1 form AAFC / AAC5323-E;
  - (b) SPECIAL INSTRUCTIONS TO BIDDERS form AAFC / AAC5301-E;
  - (c) GENERAL INSTRUCTIONS TO BIDDERS form AAFC / AAC5313-E;
  - (d) Clauses and Conditions identified in "CONTRACT DOCUMENTS";
  - (e) Drawings and Specifications;
  - (f) BID AND ACCEPTANCE form AAFC / AAC5320-E and any Appendices attached thereto; and,
  - (g) Any amendment issued prior to solicitation closing.

Submission of a bid constitutes acknowledgement that the Bidder has read and agrees to be bound by these documents.

### SI02 ENQUIRIES DURING THE SOLICITATION PERIOD

- 1) Enquiries regarding this bid must be submitted in writing to the Contracting Officer named on the INVITATION TO TENDER - Page 1 as early as possible within the solicitation period. Except for the approval of alternative materials as described in G113 of the GENERAL INSTRUCTIONS TO BIDDERS, enquiries should be received no later than five (5) calendar days prior to the date set for solicitation closing to allow sufficient time to provide a response. Enquiries received after that time may not result in an answer being provided.
- 2) To ensure consistency and quality of the information provided to Bidders, the Contracting Officer shall examine the content of the enquiry and shall decide whether or not to issue an amendment.
- 3) All enquiries and other communications related to this bid sent throughout the solicitation period are to be directed ONLY to the Contracting Officer named on the INVITATION TO TENDER - Page 1. Non-compliance with this requirement during the solicitation period can, for that reason alone, result in disqualification of a bid.

### SI03 NON-MANDATORY SITE VISIT

- 1) There will be a site visit on Tuesday,        December,        2        , 2014 at  
01:00  AM  PM EST.

## **SPECIAL INSTRUCTIONS TO BIDDERS (Continued)**

Interested bidders are to meet at:

Agriculture and Agri-Food Canada  
Central Experimental Farm  
960 Carling Avenue, Building 20  
Ottawa, Ontario, K1A 0C6

### **SI04 REVISION OF BID**

- 1) A bid may be revised by letter or facsimile in accordance with GI09 of the GENERAL INSTRUCTIONS TO BIDDERS. The facsimile number for receipt of revisions is 514 283-3143 .

### **SI05 BID RESULTS**

- 1) Following bid closing, bid results may be obtained from the bid receiving office by email at gabriel.leplouffe@agr.gc.ca .

### **SI06 INSUFFICIENT FUNDING**

- 1) In the event that the lowest compliant bid exceeds the amount of funding allocated for the Work, Canada in its sole discretion may:
  - (a) cancel the solicitation; or
  - (b) obtain additional funding and award the Contract to the Bidder submitting the lowest compliant bid; and/or
  - (c) negotiate a reduction in the bid price and/or scope of work of not more than 15% with the Bidder submitting the lowest compliant bid. Should an agreement satisfactory to Canada not be reached, Canada shall exercise option (a) or (b).

### **SI07 BID VALIDITY PERIOD**

- 1) Canada reserves the right to seek an extension to the bid validity period prescribed in Clause 4 of the BID AND ACCEPTANCE Form. Upon notification in writing from Canada, Bidders shall have the option to either accept or reject the proposed extension.
- 2) If the extension referred to in paragraph 1) of SI07 is accepted, in writing, by all those who submitted bids, then Canada shall continue immediately with the evaluation of the bids and its approvals processes.
- 3) If the extension referred to in paragraph 1) of SI07 is not accepted in writing by all those who submitted bids then Canada shall, at its sole discretion, either:
  - (a) continue to evaluate the bids of those who have accepted the proposed extension and seek the necessary approvals; or
  - (b) cancel the invitation to bid.
- 4) The provisions expressed herein do not in any manner limit Canada's rights in law or under GI10 of the GENERAL INSTRUCTIONS TO BIDDERS.

## **SPECIAL INSTRUCTIONS TO BIDDERS (Continued)**

### **SI08 CONSTRUCTION DOCUMENTS**

- 1) The successful contractor will be provided with one paper copy of the sealed and signed plans, the specifications and the amendments upon acceptance of the offer. Additional copies, up to a maximum of zero ( 0 ), will be provided free of charge upon request by the Contractor. Obtaining more copies shall be the responsibility of the Contractor including costs.

### **SI09 WEB SITES**

The connection to some of the Web sites in the solicitation documents is established by the use of hyperlinks. The following is a list of the addresses of the Web sites:

Treasury Board Appendix L, Acceptable Bonding Companies

<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494&section=text#appL>

Canadian economic sanctions

<http://www.international.gc.ca/sanctions/index.aspx?lang=eng>

### **SI10 PERSONNEL SECURITY REQUIREMENTS**

- 1) The successful Bidder's personnel, as well as any subcontractor and its personnel, who are required to perform any part of the work pursuant to the subsequent contract, must meet the following contract security requirements:
  - Personnel who are required to perform any part of the work must EACH hold a valid personnel security screening at the level of RELIABILITY STATUS, granted or approved by Agriculture and Agri-Food Canada. Until the security screening of the personnel has been completed satisfactorily by Agriculture and Agri-Food Canada, the Contractor/Subcontractor personnel MAY NOT perform contract work. Each of the proposed staff must complete "Security Clearance Form" (TBS 330-23E) upon request from Canada.





## Appendix "C"

### BID AND ACCEPTANCE FORM



## BID AND ACCEPTANCE FORM

### CONSTRUCTION CONTRACT - MAJOR WORKS

<b>BA01 IDENTIFICATION</b>					
Description of the Work The project will require contracting a construction company to implement the lighting retrofit design at 13 buildings at the Central Experimental Farm in Ottawa, ON, and submitting a closeout documentation including Operations and Maintenance manual, inspection certificates and other required documents.					
Solicitation Number 01B46-14-0143			File / Project Number 1314-144210-P11		
<b>BA02 BUSINESS NAME AND ADDRESS OF BIDDER</b>					
Name					
Address					
Unit/Suite/Apt.	Street number	Number suffix	Street name	Street type	Street direction
PO Box or Route Number		Municipality (City, Town, etc.)		Province	Postal code
Phone number		Fax number		Email address	
<b>BA03 THE OFFER</b>					
1) The Bidder offers to Canada as represented by the Minister of Agriculture and Agri-food Canada to perform and complete the Work for the above named project in accordance with the Bid Documents for the Total Bid Amount of:  \$ _____ excluding Applicable Taxes (GST/HST/QST). (to be expressed in numbers only)					
<b>BA04 BID VALIDITY PERIOD</b>					
1) The bid shall not be withdrawn for a period of <u>60</u> days following the date of solicitation closing.					
<b>BA05 APPENDICES</b>					
1) The following appendices are included in this Bid and Acceptance Form: <input checked="" type="checkbox"/> Appendix 2					
<b>BA06 ACCEPTANCE AND CONTRACT</b>					
1) Upon acceptance of the Bidder's offer by Canada, a binding Contract shall be formed between Canada and the resulting Contractor. The documents forming the Contract shall be the contract documents referred to in SC01 CONTRACT DOCUMENTS.					
<b>BA07 CONSTRUCTION TIME</b>					
1) The Contractor shall perform and complete the Work <u>on or before</u> <u>2015-03-31</u>					
<b>BA08 BID SECURITY</b>					
1) The Bidder shall enclose bid security with its bid in accordance with GI07 BID SECURITY REQUIREMENTS.					
2) If a security deposit is furnished as bid security, it shall be forfeited in the event that the bid is accepted by Canada and the Contractor fails to provide Contract Security in accordance with GC9 CONTRACT SECURITY, provided that Canada may, if it is in the public interest, waive the right of Canada to forfeiture any or all of the security deposit.					

**BA09 SIGNATURE**

Name and title of person authorized to sign on behalf of Bidder (type or print)	Name
	Title
	_____
	Signature _____ Date _____
	Name
	Title
	_____
	Signature _____ Date _____

**BID AND ACCEPTANCE FORM**  
CONSTRUCTION CONTRACT - MAJOR WORKS  
APPENDIX 2

**LIST OF SUBCONTRACTORS**

The Bidder will subcontract the parts of the work listed below to the subcontractor named for each part. The Bidder agrees not to make changes in the list of subcontractors without the written consent of the Departmental Representative. The Bidder understands that for each part of the work, if more than one subcontractor is named, or no subcontractor is named, or, the Bidder fails to state that the work will be done by its own forces where applicable, the bid will be subject to disqualification.

**LIST OF EQUIPMENT**

N/A

**LIST OF MATERIALS**

N/A



## Appendix "D"

### MAJOR WORKS - GENERAL CONDITIONS



**MAJOR WORKS – GENERAL CONDITIONS**

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**MAJOR WORKS GENERAL CONDITIONS FORM AAFC 5321:**

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GC6	DELAYS AND CHANGES IN THE WORK	Original
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**GC1 GENERAL PROVISIONS**

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- GC1.18 CERTIFICATION - CONTINGENCY FEES
- GC1.19 INTERNATIONAL SANCTIONS

**GC1.1 INTERPRETATION**

**GC1.1.1 Headings and References**

- 1) The headings in the contract documents, other than those in the drawings and specifications, form no part of the Contract but are inserted for convenience of reference only.
- 2) A reference made to a part of the Contract by means of numbers preceded by letters is a reference to the particular part of the Contract that is identified by that combination of letters and numbers and to any other part of the Contract referred to therein.
- 3) A reference to a paragraph or subparagraph followed by an identifying number, letter or combination thereof is, unless specifically stated otherwise, a reference to the paragraph or subparagraph that forms part of the clause within which the reference is made.

**GC1.1.2 Terminology**

- 1) In the Contract

"Applicable Taxes" means the Goods and Services Tax (GST), the Harmonized Sales Tax (HST), and any provincial tax, by law, payable by Canada such as, the Quebec Sales Tax (QST) as of April 1, 2013;

"Canada", "Crown", "Her Majesty" means Her Majesty the Queen in right of Canada;

"Contract" means the contract documents referred to as such therein and every other document specified or referred to in any of them as forming part of the Contract, all as amended by agreement of the parties;

"Contract Amount" means the amount set out in the Contract to be payable to the Contractor for the Work, subject to the terms and conditions of the Contract, exclusive of Applicable Taxes;

"Contract Security" means any security given by the Contractor to Canada in accordance with the Contract;

"Contractor" means the person contracting with Canada to provide or furnish all labour, Material and Plant for the execution of the Work under the Contract, and includes the Contractor's superintendent as designated in writing to Canada.

"Certificate of Completion" means a certificate issued by Canada when the Work reaches Completion;

"Certificate of Measurement" means a certificate issued by Canada certifying the correctness of the final quantities, prices per unit and values of labour, Plant and Material performed, used and supplied by the Contractor for the construction of the part of the Work to which a Unit Price Arrangement applies;

"Certificate of Substantial Performance" means a certificate issued by Canada when the Work reaches Substantial Performance;

"Departmental Representative" means the person designated in the Contract, or by written notice to the Contractor, to act as the Departmental Representative for the purposes of the Contract, and includes a person, designated and authorized in writing by the Departmental Representative to the Contractor;

"herein", "hereby", "hereof", "hereunder" and similar expressions refer to the Contract as a whole and not to any particular section or part thereof;

"Lump Sum Arrangement" means that part of the Contract that prescribes a lump sum as payment for performance of the Work to which it relates;

"Material" includes all commodities, articles, machinery, equipment, fixtures and things required to be furnished in accordance with the Contract for incorporation into the Work;

"person" also includes, unless there is an express stipulation in the Contract to the contrary, any partnership, proprietorship, firm, joint venture, consortium or corporation;

"Plant" includes all tools, implements, machinery, vehicles, structures, equipment, articles and things that are necessary for the performance of the Contract, other than Material and those tools customarily provided by a tradesperson in practicing a trade;

"Subcontractor" means a person having a direct contract with the Contractor, subject to GC3.6 SUBCONTRACTING, to perform a part or parts of the Work, or to supply Material customized for the Work;

"Superintendent" means the employee or representative of the Contractor designated by the Contractor to act pursuant to GC2.6 SUPERINTENDENT;

"Supplementary Conditions" means the part of the Contract that amends or supplements the General Conditions;



"Supplier" means a person having a direct contract with the Contractor to supply Plant or Material not customized for the Work;

"Total Estimated Cost", "Revised Estimated Cost", "Increase (Decrease)" on Page 1 of the Contract or Contract Amendment means an amount used for internal administrative purposes only that comprises the Contract Amount, or the revised Contract Amount, or the amount that would increase or decrease the Contract Amount and the Applicable Taxes as evaluated by the Contracting Authority, and does not constitute tax advice on the part of Canada;

"Unit Price Arrangement" means that part of the Contract that prescribes the product of a price per unit of measurement multiplied by a number of units of measurement for performance of the Work to which it relates;

"Unit Price Table" means the table of prices per unit set out in the Contract;

"Work" means, subject only to any express stipulation in the Contract to the contrary, everything that is necessary to be done, furnished or delivered by the Contractor to perform the Contract in accordance with the contract documents; and

"Working Day" means a day other than a Saturday, Sunday, or a statutory holiday that is observed by the construction industry in the area of the place of the Work.

### **GC1.1.3 Application of Certain Provisions**

- 1) Any provisions of the Contract that are expressly stipulated to be applicable only to a Unit Price Arrangement are not applicable to any part of the Work to which a Lump Sum Arrangement applies.
- 2) Any provisions of the Contract that are expressly stipulated to be applicable only to a Lump Sum Arrangement are not applicable to any part of the Work to which a Unit Price Arrangement applies.

### **GC1.1.4 Substantial Performance**

- 1) The Work shall be considered to have reached Substantial Performance when
  - (a) the Work or a substantial part thereof has passed inspection and testing and is, in the opinion of Canada, ready for use by Canada or is being used for the intended purposes; and
  - (b) the Work is, in the opinion of Canada, capable of completion or correction at a cost of not more than
    - (i) 3 percent of the first \$500,000;
    - (ii) 2 percent of the next \$500,000; and
    - (iii) 1 percent of the balanceof the Contract Amount at the time this cost is calculated.
- 2) Where the Work or a substantial part thereof is ready for use or is being used for the purposes intended and

- (a) the remainder of the Work or a part thereof cannot be completed by the time specified in the Contract, or as amended in accordance with GC6.5 DELAYS AND EXTENSION OF TIME, for reasons beyond the control of the Contractor; or
- (b) Canada and the Contractor agree not to complete a part of the Work within the specified time;

the cost of that part of the Work that was either beyond the control of the Contractor to complete or Canada and the Contractor have agreed not to complete by the time specified, shall be deducted from the value of the Contract referred to in subparagraph 1)(b) of GC1.1.4 and the said cost shall not form part of the cost of the Work remaining to be done in determining Substantial Performance.

**GC1.1.5 Completion**

- 1) The Work shall be deemed to have reached Completion when all labour, Plant and Material required have been performed, used or supplied, and the Contractor has complied with the Contract and all orders and directions made pursuant thereto, all to the satisfaction of Canada.

**GC1.2 CONTRACT DOCUMENTS****GC1.2.1 General**

- 1) The contract documents are complementary, and what is required by any one shall be as binding as if required by all.
- 2) References in the contract documents to the singular shall be considered to include the plural as the context requires.
- 3) Nothing contained in the contract documents shall create a contractual relationship between Canada and any Subcontractor or Supplier, their subcontractors or suppliers, or their agents or employees.

**GC1.2.2 Order of Precedence**

- 1) In the event of any discrepancy or conflict in the contents of the following documents, such documents shall take precedence and govern in the following order:
  - (a) any amendment or variation of the contract documents that is made in accordance with the General Conditions;
  - (b) any amendment issued prior to tender closing;
  - (c) Supplementary Conditions;
  - (d) General Conditions;
  - (e) the duly completed Bid and Acceptance Form when accepted;
  - (f) drawings and specifications.

later dates shall govern within each of the above categories of documents.

- 2) In the event of any discrepancy or conflict in the information contained in the drawings and specifications, the following rules shall apply:
  - (a) specifications shall govern over drawings;
  - (b) dimensions shown in figures on a drawings shall govern where they differ from dimensions scaled from the same drawings; and
  - (c) drawings of larger scale govern over those of smaller scale.

**GC1.2.3 Security and Protection of Documents and Work**

- 1) The Contractor shall guard and protect contract documents, drawings, information, models and copies thereof, whether supplied by Canada or the Contractor, against loss or damage from any cause.
- 2) The Contractor shall keep confidential all information provided to the Contractor by or on behalf of Canada in connection with the Work, and all information developed by the Contractor as part of the Work, and shall not disclose any such information to any person without the written permission of Canada, except that the Contractor may disclose to a subcontractor, authorized in accordance with the Contract, information necessary to the performance of a subcontract. This section does not apply to any information that
  - (a) is publicly available from a source other than the Contractor; or
  - (b) is or becomes known to the Contractor from a source other than Canada, except any source that is known to the Contractor to be under an obligation to Canada not to disclose the information.
- 3) When the Contract, the Work, or any information referred to in paragraph 2) is identified as top secret, secret, confidential, or protected by Canada, the Contractor shall, at all times, take all measures reasonably necessary for the safeguarding of the material so identified, including such measures as may be further specified elsewhere in the Contract or provided, in writing, from time to time by Canada.
- 4) Without limiting the generality of paragraphs 2) and 3) of GC1.2.3, when the Contract, the Work, or any information referred to in paragraph 2) is identified as top secret, secret, confidential or protected by Canada, Canada shall be entitled to inspect the Contractor's premises and the premises of its subcontractors or suppliers and any other person at any tier, for security purposes at any time during the term of the Contract, and the Contractor shall comply with, and ensure that any such subcontractors or suppliers comply with all written instructions issued by Canada dealing with the material so identified, including any requirement that employees of the Contractor and its subcontractors and suppliers and any other person at any tier execute and deliver declarations relating to reliability screenings, security clearances and other procedures.
- 5) The Contractor shall safeguard the Work and the Contract, the specifications, drawings and any other information provided by Canada to the Contractor, and shall be liable to Canada for any loss or damage from any causes.

**GC1.3 STATUS OF THE CONTRACTOR**

- 1) The Contractor is engaged under the Contract as an independent contractor.

- 2) The Contractor, its subcontractors and suppliers and any other person at any tier and their employees are not engaged by the Contract as employees, servants or agents of Canada.
- 3) For the purposes of the contract the Contractor shall be solely responsible for any and all payments and deductions required to be made by law including those required for Canada or Quebec Pension Plans, Employment Insurance, Worker's Compensation, provincial health or insurance plans, and Income Tax.

#### **GC1.4 RIGHTS AND REMEDIES**

- 1) Except as expressly provided in the Contract, the duties and obligations imposed by the Contract and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights, and remedies otherwise imposed or available by law.

#### **GC1.5 TIME OF THE ESSENCE**

- 1) Time is of the essence of the Contract.

#### **GC1.6 INDEMNIFICATION BY THE CONTRACTOR**

- 1) The Contractor shall pay all royalties and patent fees required for the performance of the Contract and, at the Contractor's expense, shall defend all claims, actions or proceedings against Canada charging or claiming that the Work or any part thereof provided or furnished by the Contractor to Canada infringes any patent, industrial design, copyright trademark, trade secret or other proprietary right enforceable in Canada.
- 2) The Contractor shall indemnify and save Canada harmless from and against all claims, demands, losses, costs, damages, actions, suits, or proceedings by any third party, brought or prosecuted and in any manner based upon, arising out of, related to, occasioned by, or attributable to the activities of the Contractor, its subcontractors and suppliers and any other person at any tier, in performing the Work.
- 3) For the purposes of paragraph 2) of GC1.6, "activities" means any act improperly carried out, any omission to carry out an act and any delay in carrying out an act.

#### **GC1.7 INDEMNIFICATION BY CANADA**

- 1) Subject to the [Crown Liability and Proceedings Act](#), the [Patent Act](#), and any other law that affects Canada's rights, powers, privileges or obligations, Canada shall indemnify and save the Contractor harmless from and against all claims, demands, losses, costs, damage, actions, suits or proceedings arising out of the Contractor's activities under the Contract that are directly attributable to
  - (a) a lack of or a defect in Canada's title to the Work site if owned by Canada, whether real or alleged; or
  - (b) an infringement or an alleged infringement by the Contractor of any patent of invention or any other kind of intellectual property occurring while the Contractor was performing any act for the purposes of the Contract employing a model, plan or design or any other thing related to the Work that was supplied by Canada to the Contractor.

**GC1.8 LAWS, PERMITS AND TAXES**

- 1) The Contractor shall comply with all federal, provincial and municipal laws and regulations applicable to the performance of the Work or any part thereof including, without limitation, all laws concerning health and labour conditions and the protection of the environment, and shall require compliance therewith by all of its subcontractors and suppliers at any tier as if the Work were being performed for an owner other than Canada. The Contractor shall furnish evidence of compliance with such laws and regulations to Canada at such times as Canada may reasonably request.
- 2) Unless stipulated otherwise in the Contract, the Contractor shall obtain and maintain all permits, certificates, licences, registrations and authorizations required for the lawful performance of the Work.
- 3) Prior to the commencement of the Work at the site, the Contractor shall tender to a municipal authority an amount equal to all fees and charges that would be lawfully payable to that municipal authority in respect of building permits as if the Work were being performed for an owner other than Canada.
- 4) Within 10 days of making a tender pursuant to paragraph 3) of GC1.8, the Contractor shall notify Canada of the amount properly tendered and whether or not the municipal authority has accepted that amount.
- 5) If the municipal authority has not accepted the amount tendered, the Contractor shall pay that amount to Canada within 6 days after the time stipulated in paragraph 4) of GC1.8.
- 6) For the purposes of this clause, "municipal authority" means any authority that would have jurisdiction respecting permission to perform the Work if the owner were not Canada.
- 7) Notwithstanding the residency of the Contractor, the Contractor shall pay any applicable tax arising from or related to the performance of the Work under the Contract.
- 8) In accordance with the Statutory Declaration referred to in paragraph 4) of GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK, a Contractor who has neither residence nor place of business in the province or territory in which work under the Contract is being performed shall provide Canada with proof of registration with the provincial sales tax authorities in the said province.
- 9) For the purpose of the payment of any Applicable Taxes or the furnishing of security for the payment of any Applicable Taxes arising from or related to the performance of the Work, and notwithstanding the provision that all Material, Plant and interest of the Contractor in all real property, licences, powers and privileges, become the property of Canada after the time of purchase in accordance with GC3.10 MATERIAL PLANT AND REAL PROPERTY BECOME PROPERTY OF CANADA, the Contractor shall be liable, as a user or consumer, for the payment or for the furnishing of security for the payment of any Applicable Taxes payable, at the time of the use or consumption of that Material, Plant or interest of the Contractor in accordance with the relevant legislation.
- 10) Federal government departments and agencies are required to pay Applicable Taxes.
- 11) Applicable Taxes will be paid by Canada as provided in the request for payment. It is the sole responsibility of the Contractor to charge Applicable Taxes at the correct rate in accordance with applicable legislation. The Contractor agrees to remit to appropriate tax authorities any amounts of Applicable Taxes paid or due.

- 12) The Contractor is not entitled to use Canada's exemptions from any tax, such as provincial sales taxes, unless otherwise specified by law. The Contractor must pay applicable provincial sales tax, ancillary taxes, and any commodity tax, on taxable goods or services used or consumed in the performance of the Contract (in accordance with applicable legislation), including for material incorporated into real property.
- 13) In those cases where Applicable Taxes, customs duties, and excise taxes are included in the Contract Amount, the Contract Amount will be adjusted to reflect any increase, or decrease, of Applicable Taxes, customs duties, and excise taxes that will have occurred between bid submission and contract award. However, there will be no adjustment for any change to increase the Contract Amount if public notice of the change was given before bid submission date in sufficient detail to have permitted the Contractor to calculate the effect of the change.
- 14) Tax Withholding of 15 Percent – Canada Revenue Agency  
  
Pursuant to the [Income Tax Act](#), 1985, c. 1 (5th Supp.) and the [Income Tax Regulations](#), Canada must withhold 15 percent of the amount to be paid to the Contractor in respect of services provided in Canada if the Contractor is not a resident of Canada, unless the Contractor obtains a valid waiver from the Canada Revenue Agency. The amount withheld will be held on account for the Contractor in respect to any tax liability which may be owed to Canada.

#### **GC1.9 WORKERS' COMPENSATION**

- 1) Prior to commencement of Work, at the time of Substantial Performance of the Work, and prior to issuance of the Certificate of Completion, the Contractor shall provide evidence of compliance with workers' compensation legislation applicable to the place of the Work, including payments due thereunder.
- 2) At any time during the term of the Contract, when requested by Canada, the Contractor shall provide such evidence of compliance by the Contractor, its subcontractors and any other person at any tier and any other person performing part of the Work who is required to comply with such legislation.

#### **GC1.10 NATIONAL SECURITY**

- 1) If Canada determines that the Work is of a class or kind that involves national security, Canada may order the Contractor to
  - (a) provide Canada with any information concerning persons employed or to be employed by the Contractor for purposes of the Contract; and
  - (b) remove any person from the site of the Work if, in the opinion of Canada, that person may be a risk to the national security;and the Contractor shall comply with the order.
- 2) In all contracts with persons who are to be employed in the performance of the Contract, the Contractor shall make provision for the performance of any obligation that may be imposed upon the Contractor under paragraph 1) of GC1.10.

**GC1.11 UNSUITABLE WORKERS**

- 1) Canada shall instruct the Contractor to remove from the site of the Work any person employed by the Contractor for purposes of the Contract who, in the opinion of Canada, is incompetent or is guilty of improper conduct, and the Contractor shall not permit a person who has been removed to return to the site of the Work.

**GC1.12 PUBLIC CEREMONIES AND SIGNS**

- 1) The Contractor shall not permit any public ceremony in connection with the Work without the prior consent of Canada.
- 2) The Contractor shall not erect nor permit the erection of any sign or advertising on the Work or its site without the prior consent of Canada.

**GC1.13 CONFLICT OF INTEREST**

- 1) It is a term of the Contract that no individual, for whom the post-employment provisions of the Conflict of Interest and Post-Employment Code for Public Office Holders or the Values and Ethics Code for the Public Service apply, shall derive a direct benefit from the Contract unless that individual is in compliance with the applicable post-employment provisions.

**GC1.14 AGREEMENTS AND AMENDMENTS**

- 1) The Contract constitutes the entire and sole agreement between the parties with respect to the subject matter of the Contract and supersedes all previous negotiations, communications and other agreements, whether written or oral, relating to it, unless they are incorporated by reference in the Contract. There are no terms, covenants, representations, statements or conditions binding on the parties other than those contained in the Contract.
- 2) The failure of either party at any time to require performance by the other party of any provision hereof shall not affect the right thereafter to enforce such provision. Nor shall the waiver by either party of any breach of any covenant, term or condition hereof be taken to be held to be a waiver of any further breach of the same covenant, term or condition.
- 3) The Contract may be amended only as provided for in the Contract.

**GC1.15 SUCCESSION**

- 1) The Contract shall inure to the benefit of and be binding upon the parties hereto and their lawful heirs, executors, administrators, successors and, subject to GC1.16 ASSIGNMENT, permitted assigns.

**GC1.16 ASSIGNMENT**

- 1) The Contractor shall not make any assignment of the Contract, either in whole or in part, without the written consent of Canada.

**GC1.17 NO BRIBE**

- 1) The Contractor represents and covenants that no bribe, gift, benefit, nor other inducement has been nor shall be paid, given, promised or offered directly or indirectly to any official or employee of Canada or to a member of the family of such a person, with a view to influencing the entry into the Contract or the administration of the Contract.

**GC1.18 CERTIFICATION - CONTINGENCY FEES**

- 1) In this clause
  - (a) "contingency fee" means any payment or other compensation that is contingent upon or is calculated upon the basis of a degree of success in soliciting or obtaining a Government contract or negotiating the whole or any part of its terms;
  - (b) "employee" means a person with whom the Contractor has an employer/employee relationship; and
  - (c) "person" includes an individual or a group of individuals, a corporation, a partnership, an organization and an association and, without restricting the generality of the foregoing, includes any individual who is required to file a return with the registrar pursuant to section 5 of the [Lobbying Act](#) R.S.C. 1985 c.44 (4th Supplement) as the same may be amended from time to time.
- 2) The Contractor certifies that it has not directly or indirectly paid nor agreed to pay and covenants that it shall not directly or indirectly pay nor agree to pay a contingency fee for the solicitation, negotiation or obtaining of the Contract to any person other than an employee acting in the normal course of the employee's duties.
- 3) All accounts and records pertaining to payments of fees or other compensation for the solicitation, obtaining or negotiation of the Contract shall be subject to the accounts and audit provisions of the Contract.
- 4) If the Contractor certifies falsely under this section or is in default of the obligations contained therein, Canada may either take the Work out of the Contractor's hands in accordance with the provisions of the Contract or recover from the Contractor by way of reduction to the Contract Amount or otherwise, the full amount of the contingency fee.

**GC1.19 INTERNATIONAL SANCTIONS**

- 1) Persons and companies in Canada, and Canadians outside of Canada are bound by economic sanctions imposed by Canada. As a result, the Government of Canada cannot accept delivery of goods or services that originate, either directly or indirectly, from the countries or persons subject to [economic sanctions](#)
- 2) It is a condition of the Contract that the Contractor not supply to the Government of Canada any goods or services which are subject to economic sanctions.
- 3) By law, the Contractor must comply with changes to the regulations imposed during the life of the Contract. During the performance of the Contract should the imposition of sanctions against a country or person or the addition of a good or service to the list of sanctioned goods or services cause an impossibility of performance for the Contractor, the Contractor may request that the Contract be terminated in accordance with GC7.3 TERMINATION OF CONTRACT.



**GC2 ADMINISTRATION OF THE CONTRACT**

- GC2.1 DEPARTMENTAL REPRESENTATIVE'S AUTHORITY
- GC2.2 INTERPRETATION OF CONTRACT
- GC2.3 NOTICES
- GC2.4 SITE MEETINGS
- GC2.5 REVIEW AND INSPECTION OF WORK
- GC2.6 SUPERINTENDENT
- GC2.7 NON-DISCRIMINATION IN HIRING AND EMPLOYMENT OF LABOUR
- GC2.8 ACCOUNTS AND AUDITS

**GC2.1 DEPARTMENTAL REPRESENTATIVE'S AUTHORITY**

- 1) Canada shall designate a Departmental Representative and shall notify the Contractor of the name, address and telephone number of the Departmental Representative.
- 2) The Departmental Representative shall perform Canada's duties and functions under the contract.
- 3) The Departmental Representative shall be authorized to issue notices, instructions and directions to the Contractor and to accept on behalf of Canada any notice, order or other communication from the contractor relating to the Work.
- 4) The Departmental Representative shall, within a reasonable time, review and respond to submissions made by the Contractor in accordance with the requirements of the Contract.

**GC2.2 INTERPRETATION OF CONTRACT**

- 1) If, at any time before Canada has issued a Certificate of Completion, any question arises between the parties about whether anything has been done as required by the Contract or about what the Contractor is required by the Contract to do, and in particular but without limiting the generality of the foregoing, about
  - (a) the meaning of anything in the drawings and specifications;
  - (b) the meaning to be given to the drawings and specifications in case of any error therein, omission therefrom, or obscurity or discrepancy in their wording or intention;
  - (c) whether or not the quality or quantity of any Material or workmanship supplied or proposed to be supplied by the Contractor meets the requirements of the Contract;
  - (d) whether or not the labour, Plant or Material performed, used and supplied by the Contractor for performing the Work and carrying out the Contract are adequate to ensure that the Work shall be performed in accordance with the Contract and that the Contract shall be carried out in accordance with its terms;
  - (e) what quantity of any of the Work has been completed by the Contractor; or
  - (f) the timing and scheduling of the various phases of the performance of the Work as specified in the Contract;

the question shall be decided, subject to the provisions of GC8 DISPUTE RESOLUTION, by Canada.

- 2) The Contractor shall perform the Work in accordance with any decisions of Canada that are made under paragraph 1) of GC2.2 and in accordance with any consequential directions given by Canada.
- 3) If the Contractor fails to comply with any instruction or direction issued by Canada pursuant to the Contract, Canada may employ such methods as Canada deems advisable to do what the Contractor failed to do, and the Contractor shall, on demand, pay Canada an amount that is equal to the aggregate of all costs, expenses and damages incurred or sustained by Canada by reason of the Contractor's failure to comply with such instruction or direction, including the cost of any methods employed by Canada in doing what the Contractor failed to do.

**GC2.3 NOTICES**

- 1) Subject to paragraph 3) of GC2.3, any notice, order or other communication may be given in any manner, and if required to be in writing, shall be addressed to the party to whom it is intended at the address in the Contract or at the last address of which the sender has received written notice in accordance with this section.
- 2) Any notice, order or other communication given in writing in accordance with paragraph 1) of GC2.3 shall be deemed to have been received by either party
  - (a) if delivered personally, on the day that it was delivered;
  - (b) if forwarded by mail, on the earlier of the day it was received or the sixth day after it was mailed; and
  - (c) if forwarded by facsimile or electronic mail, 24 hours after it was transmitted.
- 3) A notice given under GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS, GC7.2 SUSPENSION OF WORK, and GC7.3 TERMINATION OF CONTRACT shall be given in writing and, if delivered personally, shall be delivered, if the Contractor is a sole proprietor, to the Contractor or, if the Contractor is a partnership or corporation, to an officer thereof.

**GC2.4 SITE MEETINGS**

- 1) In consultation with Canada, the Contractor shall arrange site meetings at regular intervals, with all involved parties who are to attend, in order to ensure, among other things, the proper co-ordination of the Work.

**GC2.5 REVIEW AND INSPECTION OF WORK**

- 1) Canada shall review the Work to determine if it is proceeding in conformity with the Contract and to record the necessary data to make an assessment of the value of Work completed. Canada shall measure and record the quantities of labour, Plant and Material performed, used or supplied by the Contractor in performing the Work or any part thereof that is subject to a Unit Price Arrangement and, on request, shall inform the Contractor of those measurements, and permit the Contractor to inspect any records pertaining thereto.
- 2) Canada shall reject Work or Material which in Canada's opinion does not conform to the requirements of the Contract, and shall require inspection or testing of Work, whether or not such Work is fabricated, installed, or completed. If such Work is not in accordance with the

requirements of the Contract, the Contractor shall correct the Work and shall pay Canada, on demand, all reasonable costs and expenses that were incurred by Canada in having the examination performed.

- 3) The Contractor shall provide Canada with access to the Work and its site at all times, and at all times shall provide sufficient, safe, and proper facilities for the review and inspection of the Work by persons authorized by Canada and any representatives of those authorities having jurisdiction. If parts of the Work are in preparation at locations other than the site of the Work, Canada shall be given access to such Work whenever it is in progress.
- 4) The Contractor shall furnish Canada with such information respecting the performance of the Contract as Canada may require, and render every possible assistance to enable Canada to verify that the Work is performed in accordance with the Contract, carry out any other duties and exercise any powers in accordance with the Contract.
- 5) If Work is designated for tests, inspections, or approvals in the Contract or by Canada's instructions, or by laws or ordinances of the place of the Work, the Contractor shall give Canada reasonable notice of when such Work shall be ready for review and inspection. The Contractor shall arrange for and shall give Canada reasonable notice of the date and time of inspections, tests or approvals.
- 6) If the Contractor covers, or permits to be covered, Work that has been designated for tests, inspections or approvals before such tests, inspections or approvals are made, completed or given, the Contractor shall, if so directed by Canada, uncover such Work, have the inspections, tests or approvals satisfactorily made, completed or given and make good the covering of the Work at the Contractor's expense.

**GC2.6 SUPERINTENDENT**

- 1) Prior to commencing the Work, the Contractor shall designate a Superintendent and shall notify Canada of the name, address and telephone number of the Superintendent. The Contractor shall keep the Superintendent at the Work site during working hours until the Work has reached completion.
- 2) The Superintendent shall be in full charge of the operations of the Contractor during the performance of the Work and shall be authorized to accept on behalf of the Contractor any notice, order or other communication given to the Superintendent or the Contractor relating to the Work.
- 3) Upon request of Canada, the Contractor shall remove any Superintendent who, in the opinion of Canada, is incompetent or has been guilty of improper conduct, and shall forthwith designate another Superintendent who is acceptable to Canada.
- 4) The Contractor shall not substitute a Superintendent without the written consent of Canada. If a Superintendent is substituted without such consent, Canada shall be entitled to refuse to issue any documentation or certification relating to progress payments, Substantial Performance or Completion of the Work until the Superintendent has returned to the Work site or another Superintendent who is acceptable to Canada has been substituted.

**GC2.7 NON-DISCRIMINATION IN HIRING AND EMPLOYMENT OF LABOUR**

- 1) For the purposes of this clause, "persons" include the Contractor, its subcontractors and suppliers at any tier and their respective employees, agents, licensees or invitees and any other individual involved in the performance of the Work or granted access to the Work site.

A “person” includes any partnership, proprietorship, firm, joint venture, consortium and corporation.

- 2) Without restricting the provisions of paragraph 3) of GC2.6, SUPERINTENDENT, the Contractor shall not refuse to employ and shall not discriminate in any manner against any person because
  - (a) of that person's race, national or ethnic origin, colour, religion, age, sex, sexual orientation, marital status, disability, conviction for which a pardon has been granted, or family status;
  - (b) of the race, national or ethnic origin, colour, religion, age, sex, sexual orientation, marital status, disability, conviction for which a pardon has been granted, or family status of any person having a relationship or association with that person, or
  - (c) a complaint has been made or information has been given in respect of that person relating to an alleged failure by the Contractor to comply with subparagraph (a) or (b).
- 3) Within two working days immediately following receipt of a written complaint pursuant to paragraph 2) of GC2.7, the Contractor shall
  - (a) cause to have issued a written direction to the person or persons named by the complainant to cease all actions that form the basis of the complaint;
  - (b) forward a copy of the complaint to Canada by registered mail or courier service; and
  - (c) when the Labour Conditions are applicable under the circumstances of the complaint, forward a copy of the complaint to HRSDC - Labour to the attention of the appropriate Director as described in the Labour Conditions (“HRSDC - Labour” means the labour component of the federal Department of Human Resources and Social Development).
- 4) Within twenty four (24) hours immediately following receipt of a direction from Canada to do so, the Contractor shall cause to have removed from the site of the Work and from the performance of Work under the Contract, any person or persons whom Canada believes to be in breach of the provisions of paragraph 2) of GC2.7.
- 5) No later than thirty (30) days after receipt of the direction referred to in paragraph 4) of GC2.7, the Contractor shall cause the necessary action to be commenced to remedy the breach described in the direction.
- 6) If a direction is issued pursuant to paragraph 4) of GC2.7, Canada may withhold from monies that are due and payable to the Contractor or setoff pursuant to GC5.9 RIGHT OF SETOFF, whichever is applicable, an amount representing the sum of the costs and payment referred to in paragraph 8) of GC2.7.
- 7) If the Contractor fails to proceed in accordance with paragraph 5) of GC2.7, Canada shall take the necessary action to have the breach remedied, and shall determine all supplementary costs incurred by Canada as a result.
- 8) Canada may make a payment directly to the complainant from monies that are due and payable to the Contractor upon receipt from the complainant of
  - (a) a written award issued pursuant to the federal [Commercial Arbitration Act](#), R.S.C. 1985, c. 17 (2nd Supp.);

- (b) a written award issued pursuant to the Canadian Human Rights Act, R.S.C. 1985, c. H-6;
  - (c) a written award issued pursuant to provincial or territorial human rights legislation; or
  - (d) a judgement issued by a court of competent jurisdiction.
- 9) If Canada is of the opinion that the Contractor has breached any of the provisions of this clause, Canada may take the Work out of the Contractor's hands pursuant to GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS.
- 10) Subject to paragraph 7) of GC3.6 SUBCONTRACTING, the Contractor shall ensure that the provisions of this clause are included in all agreements and contracts entered into as a consequence of the Work.

### GC2.8 ACCOUNTS AND AUDITS

- 1) The Contractor shall, in addition to the requirements expressed in paragraph 6) of GC3.4 EXECUTION OF THE WORK, maintain full records of the Contractor's estimated and actual cost of the Work together with all tender calls, quotations, contracts, correspondence, invoices, receipts and vouchers relating thereto, and shall make them available on request to audit and inspection by Canada and the Deputy Receiver General for Canada or by persons designated to act on behalf of either or both of them.
- 2) The Contractor shall allow any of the persons referred to in paragraph 1) of GC2.8 to make copies of and take extracts from any of the records and material, and shall furnish such persons or entities with any information those persons or entities may require from time to time in connection with such records and material.
- 3) The Contractor shall maintain and keep the records intact until the expiration of two years after the date that a Certificate of Completion has been issued or until the expiration of such other period of time as Canada may direct.
- 4) The Contractor shall cause all subcontractors at any tier and all other persons directly or indirectly controlled by or affiliated with the Contractor and all persons directly or indirectly having control of the Contractor to comply with the requirements of this clause as if they were the Contractor.

**GC3 EXECUTION AND CONTROL OF THE WORK**

- GC3.1 PROGRESS SCHEDULE
- GC3.2 ERRORS AND OMISSIONS
- GC3.3 CONSTRUCTION SAFETY
- GC3.4 EXECUTION OF THE WORK
- GC3.5 MATERIAL
- GC3.6 SUBCONTRACTING
- GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS
- GC3.8 LABOUR
- GC3.9 TRUCK HAULAGE RATES (CANCELLED)
- GC3.10 MATERIAL, PLANT AND REAL PROPERTY BECOME PROPERTY OF CANADA
- GC3.11 DEFECTIVE WORK
- GC3.12 CLEANUP OF SITE
- GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK

**GC3.1 PROGRESS SCHEDULE**

- 1) The Contractor shall
  - (a) prepare and submit to Canada, prior to the submission of the Contractor's first progress claim, a progress schedule in accordance with the requirements set out in the Contract;
  - (b) monitor the progress of the Work relative to the schedule and update the schedule as stipulated by the contract documents;
  - (c) advise Canada of any revisions to the schedule required as the result of any extension of time for completion of the Contract that was approved by Canada; and
  - (d) prepare and submit to Canada, at the time of issuance of a Certificate of Substantial Performance, an update of any schedule clearly showing a detailed timetable that is acceptable to Canada for the completion of any unfinished Work and the correction of all listed defects.

**GC3.2 ERRORS AND OMISSIONS**

- 1) The Contractor shall report promptly to Canada any errors, discrepancies, or omissions the Contractor may discover when reviewing the contract documents. In making a review, the Contractor does not assume any responsibility to Canada for the accuracy of the review. The Contractor shall not be liable for damage or costs resulting from such errors, discrepancies, or omissions in the contract documents prepared by or on behalf of Canada that the Contractor did not discover.

**GC3.3 CONSTRUCTION SAFETY**

- 1) Subject to GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS, the Contractor shall be solely responsible for construction safety at the place of the Work and for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Work. In any emergency, the Contractor shall either stop the Work, make changes or order extra work to ensure the safety of life and the protection of the Work and neighbouring property.

- 2) Prior to commencing the Work, the Contractor shall notify the authorities having jurisdiction for construction safety at the site of the Work with respect to the intended commencement of the Work, and shall provide such authority with whatever additional information may be required by that authority.

**GC3.4 EXECUTION OF THE WORK**

- 1) The Contractor shall perform, use or supply and pay for, all labour, Plant, Material, tools, construction machinery and equipment, water, heat, light, power, transportation and other facilities and services necessary for the performance of the Work in accordance with the Contract.
- 2) The Contractor shall, at all times, perform the Work in a proper, diligent and expeditious manner as is consistent with construction industry standards and in accordance with the progress schedule prepared pursuant to GC3.1 PROGRESS SCHEDULE and shall provide sufficient personnel to fulfil the Contractor's obligations in accordance with that schedule.
- 3) Subject to paragraph 4) of GC3.4, the Contractor shall have complete care, custody and control of the Work and shall direct and supervise the Work so as to ensure compliance with the Contract. The Contractor shall be responsible for construction means, methods, techniques, sequences and procedures and for co-ordinating the various parts of the Work.
- 4) When requested in writing by Canada, the Contractor shall make appropriate alterations in the method, Plant or workforce at any time Canada considers the Contractor's actions to be unsafe or damaging to either the Work, existing facilities, persons at the site of the Work or the environment.
- 5) The Contractor shall have sole responsibility for the design, erection, operation, maintenance and removal of temporary structures and other temporary facilities and for the construction methods used in their erection, operation, maintenance and removal. The Contractor shall engage and pay for registered professional engineering personnel, skilled in the appropriate discipline to perform these functions if required by law or by the Contract, and in all cases when such temporary facilities and their methods of construction are of such a nature that professional engineering skill is required to produce safe and satisfactory results.
- 6) The Contractor shall keep at least one copy of current contract documents, submittals, reports, and records of meetings at the site of the Work, in good order and available to Canada.
- 7) Except for any part of the Work that is necessarily performed away from or off the site of the Work, the Contractor shall confine Plant, storage of Material, and operations of employees to limits indicated by laws, ordinances, permits or the contract documents.

**GC3.5 MATERIAL**

- 1) Unless otherwise specified in the Contract, all Material incorporated in the Work shall be new.
- 2) Subject to paragraph 3) of GC3.5, if a specified reused, refurbished, or recycled item of Material is not available, the Contractor shall apply to Canada to substitute a similar item for the one specified.
- 3) If Canada agrees that the Contractor's application for substitution of a reused, refurbished or recycled item is warranted, and that the substitute item is of acceptable quality and value to

that specified and is suitable for the intended purpose, Canada may approve the substitution, subject to the following:

- (a) the request for substitution shall be made in writing to Canada and shall be substantiated by information in the form of the manufacturer's literature, samples and other data that may be required by Canada;
- (b) the Contractor shall make the request for substitution in a manner that shall not negatively affect the progress schedule of the Contract and well in advance of the time the item of Material must be ordered;
- (c) substitution of Material shall be permitted only with the prior written approval of Canada, and any substituted items that are supplied or installed without such approval shall be removed from the site of the Work at the expense of the Contractor, and specified items installed at no additional cost to Canada; and
- (d) the Contractor shall be responsible for all additional expenses incurred by Canada, the Contractor, its subcontractors and suppliers at any tier due to the Contractor's use of the substitute.

### **GC3.6 SUBCONTRACTING**

- 1) Subject to the provisions of this clause, the Contractor may subcontract any part of the Work but not the whole of the Work.
- 2) The Contractor shall notify Canada in writing of the Contractor's intention to subcontract.
- 3) A notification referred to in paragraph 2) of GC3.6 shall identify the part of the Work and the Subcontractor with whom the Contractor intends to subcontract.
- 4) Canada may for reasonable cause, object to the intended subcontracting by notifying the Contractor in writing within six (6) days of receipt by Canada of a notification referred to in paragraph 2) of GC3.6.
- 5) If Canada objects to a subcontracting, the Contractor shall not enter into the intended subcontract.
- 6) The Contractor shall not change, nor permit to be changed, a Subcontractor engaged by the Contractor, in accordance with this clause, without the written consent of Canada.
- 7) The Contractor shall ensure that all the terms and conditions of the Contract that are of general application shall be incorporated in every other contract issued as a consequence of the Contract, at whatever tier, except those contracts issued solely to suppliers at any tier for the supply of Plant or Material.
- 8) Neither a subcontracting nor Canada's consent to a subcontracting shall be construed to relieve the Contractor from any obligation under the Contract or to impose any liability upon Canada.

### **GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS**

- 1) Canada reserves the right to send other contractors or workers, with or without Plant and Material, onto the site of the Work.



- 2) When other contractors or workers are sent on to the site of the Work, Canada shall
  - (a) enter into separate contracts, to the extent it is possible, with the other contractors under conditions of contract that are compatible with the conditions of the Contract;
  - (b) ensure that the insurance coverage provided by the other contractors is co-ordinated with the insurance coverage of the Contractor as it affects the Work; and
  - (c) take all reasonable precautions to avoid labour disputes or other disputes arising from the work of the other contractors or workers.
- 3) When other contractors or workers are sent on to the site of the Work, the Contractor shall
  - (a) co-operate with them in the carrying out of their duties and obligations;
  - (b) co-ordinate and schedule the Work with the work of the other contractors and workers;
  - (c) participate with other contractors and workers in reviewing their construction schedules when directed to do so;
  - (d) where part of the Work is affected by or depends upon the work of other contractors or workers for its proper execution, promptly report to Canada in writing and prior to proceeding with that part of the Work, any apparent deficiencies in such work. Failure by the Contractor to so report shall invalidate any claims against Canada by reason of the deficiencies in the work of other contractors or workers except those deficiencies that are not then reasonably discoverable; and
  - (e) when designated as being responsible for construction safety at the place of work in accordance with the applicable provincial or territorial laws, carry out its duties in that role and in accordance with those laws.
- 4) If, when entering into the Contract, the Contractor could not have reasonably foreseen nor anticipated the sending of other contractors or workers on to the site of the Work and provided the Contractor
  - (a) incurs extra expense in complying with the requirements of paragraph 3) of GC3.7; and
  - (b) gives Canada written notice of a claim for that extra expense within thirty (30) days of the date that the other contractors or workers were sent onto the Work or its site;

Canada shall pay the Contractor the cost of the extra labour, Plant and Material that was necessarily incurred, calculated in accordance with GC6.4 DETERMINATION OF PRICE.

### **GC3.8 LABOUR**

- 1) To the extent to which they are available, consistent with proper economy and the expeditious carrying out of the Work, the Contractor shall, in the performance of the Work, employ a reasonable number of persons who have been on active service with the Armed Forces of Canada and have been honourably discharged therefrom.

- 2) The Contractor shall maintain good order and discipline among the Contractor's employees and workers engaged in the Work and shall not employ on the site of the Work anyone not skilled in the tasks assigned.

**GC3.9 TRUCK HAULAGE RATES**

CANCELLED

**GC3.10 MATERIAL, PLANT AND REAL PROPERTY BECOME PROPERTY OF CANADA**

- 1) Subject to paragraph 9) of GC1.8 LAWS PERMITS AND TAXES, all Material and Plant and the interest of the Contractor in all real property, licences, powers and privileges purchased, used or consumed by the Contractor for the Work shall, immediately after the time of their purchase, use or consumption be the property of Canada for the purposes of the Work and they shall continue to be the property of Canada
  - (a) in the case of Material, until Canada indicates that the Materials shall not be required for the Work; and
  - (b) in the case of Plant, real property, licences, powers and privileges, until Canada indicates that the interest vested in Canada therein is no longer required for the purposes of the Work.
- 2) Material or Plant, that is the property of Canada by virtue of paragraph 1) of GC3.10, shall not be taken away from the site of the Work nor used nor disposed of except for the purposes of the Work without the written consent of Canada.
- 3) Canada is not liable for loss of nor damage from any cause to the Material or Plant referred to in paragraph 1) of GC3.10, and the Contractor is liable for such loss or damage notwithstanding that the Material or Plant is the property of Canada.

**GC3.11 DEFECTIVE WORK**

- 1) The Contractor shall promptly remove from the site of the Work and replace or re-execute defective Work whether or not the defective Work has been incorporated in the Work and whether or not the defect is the result of poor workmanship, use of defective Material, or damage through carelessness or other act or omission of the Contractor.
- 2) The Contractor, at the Contractor's expense, shall promptly make good other work destroyed or damaged by such removals or replacements.
- 3) If, in the opinion of Canada, it is not expedient to correct defective Work or Work not performed as provided for in the Contract documents, Canada may deduct from the amount otherwise due to the Contractor the difference in value between the Work as performed and that called for by the contract documents.
- 4) The failure of Canada to reject any defective Work or Material shall not constitute acceptance of the defective Work or Material.

**GC3.12 CLEANUP OF SITE**

- 1) The Contractor shall maintain the Work and its site in a tidy condition and free from an accumulation of waste material and debris.
- 2) Before the issue of a Certificate of Substantial Performance, the Contractor shall remove waste material and debris, and all Plant and Material not required for the performance of the remaining Work and, unless otherwise stipulated in the Contract Documents, shall cause the Work and its site to be clean and suitable for occupancy by Canada.
- 3) Before the issue of a Certificate of Completion, the Contractor shall remove all surplus Plant and Materials and any waste products and debris from the site of the Work.
- 4) The Contractor's obligations described in paragraphs 1) to 3) of GC3.12 do not extend to waste products and other debris caused by Canada's servants, or by other contractors and workers referred to in GC3.7 CONSTRUCTION BY OTHER CONTRACTORS OR WORKERS.

**GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK**

- 1) Without restricting any warranty or guarantee implied or imposed by law or contained in the Contract, the Contractor shall, at the Contractor's expense
  - (a) rectify and make good any defect or fault that appears in the Work or comes to the attention of Canada with respect to those parts of the Work accepted in connection with the Certificate of Substantial Performance within 12 months from the date of Substantial Performance; and
  - (b) rectify and make good any defect or fault that appears in or comes to the attention of Canada in connection with those parts of the Work described in the Certificate of Substantial Performance within 12 months from the date of the Certificate of Completion.
  - (c) transfer and assign, to Canada, any subcontractor, manufacturer or supplier extended warranties or guarantees implied or imposed by law or contained in the Contract covering periods beyond the 12 months stipulated above. Extended warranties or guarantees referred to herein shall not extend the 12-month period whereby the Contractor, except as may be provided elsewhere in the Contract, must rectify and make good any defect or fault that appears in the Work or comes to the attention of Canada.
  - (d) provide, to Canada prior to the issuance of the Certificate of Completion, a list of all extended warranties and guarantees referred to in paragraph (c) above.
- 2) Canada may direct the Contractor to rectify and make good any defect or fault referred to in paragraph 1) of GC3.13 or covered by any other expressed or implied warranty or guarantee and the Contractor shall rectify and make good such defect within the time stipulated in the direction.
- 3) A direction referred to in paragraph 2) GC3.13 shall be in writing and shall be given to the Contractor in accordance with GC2.3 NOTICES.

**GC4 PROTECTIVE MEASURES**

GC4.1 PROTECTION OF WORK AND PROPERTY

GC4.2 PRECAUTIONS AGAINST DAMAGE, INFRINGEMENT OF RIGHTS, FIRE AND OTHER HAZARDS

GC4.3 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY CANADA

GC4.4 CONTAMINATED SITE CONDITIONS

**GC4.1 PROTECTION OF WORK AND PROPERTY**

- 1) The Contractor shall protect the Work and its site against loss or damage from any cause and shall similarly protect all Material, Plant and real property under the Contractor's care, custody and control whether or not such Material, Plant and real property are supplied by Canada to the Contractor.
- 2) The Contractor shall provide all facilities necessary for the purpose of maintaining security, and shall assist any person authorized by Canada to inspect or to take security measures in respect of the Work and its site.
- 3) Canada may direct the Contractor to do such things and to perform such work as Canada considers reasonable and necessary to ensure compliance with or to remedy a breach of paragraphs 1) or 2) of GC4.1, and the Contractor, shall comply with such direction.

**GC4.2 PRECAUTIONS AGAINST DAMAGE, INFRINGEMENT OF RIGHTS, FIRE AND OTHER HAZARDS**

- 1) The Contractor shall do whatever is necessary to ensure that
  - (a) no person, property, right, easement nor privilege is injured, damaged or infringed upon by reasons of the Contractor's activities in performing the Work;
  - (b) pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted nor endangered by the performance or existence of the Work, Material or Plant;
  - (c) fire hazards in or about the site of the Work are eliminated and any fire is promptly extinguished;
  - (d) the health and safety of all persons employed in the performance of the Work is not endangered by the methods nor means of their performance;
  - (e) adequate medical services are available to all persons employed on the Work or its site at all times during the performance of the Work;
  - (f) adequate sanitation measures are taken in respect of the Work and its site; and
  - (g) all stakes, buoys and marks placed on the Work or its site by Canada are protected and are not removed, defaced, altered nor destroyed.
- 2) Canada may direct the Contractor to do such things and to perform such work as Canada considers reasonable and necessary to ensure compliance with or to remedy a breach of paragraph 1) of GC4.2, and the Contractor shall comply with the direction of Canada.

**GC4.3 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY CANADA**

- 1) Subject to paragraph 2) of GC4.3, the Contractor is liable to Canada for any loss of or damage to Material, Plant or real property that is supplied or placed in the care, custody and control of the Contractor by Canada for use in connection with the Contract, whether or not that loss or damage is attributable to causes beyond the Contractor's control.
- 2) The Contractor is not liable to Canada for any loss or damage to Material, Plant or real property referred to in paragraph 1) of GC4.3 if that loss or damage results from and is directly attributable to reasonable wear and tear.
- 3) The Contractor shall not use any Material, Plant or real property supplied by Canada except for the purpose of performing the Contract.
- 4) When the Contractor fails to make good any loss or damage for which the Contractor is liable under paragraph 1) within a reasonable time, Canada may cause the loss or damage to be made good at the Contractor's expense, and the Contractor shall thereupon be liable to Canada for the cost thereof and shall, on demand, pay to Canada an amount equal to that cost.
- 5) The Contractor shall keep records of all Material, Plant and real property supplied by Canada as Canada requires and shall satisfy Canada, when requested, that such Material, Plant and real property are at the place and in the condition in which they ought to be.

**GC4.4 CONTAMINATED SITE CONDITIONS**

- 1) For the purposes of GC4.4, a contaminated site condition exists when a solid, liquid, gaseous, thermal or radioactive irritant or contaminant, or other hazardous or toxic substance or material, including moulds and other forms of fungi, is present at the site of the Work to an extent that constitutes a hazard, or potential hazard, to the environment, property, or the health or safety of any person.
- 2) If the Contractor encounters a contaminated site condition of which the Contractor is not aware or about which the Contractor has not been advised, or if the Contractor has reasonable grounds to believe that such a site condition exists at the site of the Work, the Contractor shall
  - (a) take all reasonable steps, including stopping the Work, to ensure that no person suffers injury, sickness or death, and that neither property nor the environment is injured or destroyed as a result of the contaminated site condition;
  - (b) immediately notify Canada of the circumstances in writing; and
  - (c) take all reasonable steps to minimize additional costs that may accrue as a result of any work stoppage.
- 3) Upon receipt of a notification from the Contractor, Canada shall promptly determine whether a contaminated site condition exists, and shall notify the Contractor in writing of any action to be taken, or work to be performed, by the Contractor as a result of Canada's determination.
- 4) If the Contractor's services are required by Canada, the Contractor shall follow the direction of Canada with regard to any excavation, treatment, removal and disposal of any polluting substance or material.

- 5) Canada, at Canada's sole discretion, may enlist the services of experts and specialty contractors to assist in determining the existence of, and the extent and treatment of contaminated site conditions, and the Contractor shall allow them access and co-operate with them in the carrying out of their duties and obligations.
- 6) Except as may be otherwise provided for in the Contract, the provisions of GC6.4 DETERMINATION OF PRICE shall apply to any additional work made necessary because of a contaminated site condition.

**GC5 TERMS OF PAYMENT**

- GC5.1 INTERPRETATION
- GC5.2 AMOUNT PAYABLE
- GC5.3 INCREASED OR DECREASED COSTS
- GC5.4 PROGRESS PAYMENT
- GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK
- GC5.6 FINAL COMPLETION
- GC5.7 PAYMENT NOT BINDING ON CANADA
- GC5.8 CLAIMS AND OBLIGATIONS
- GC5.9 RIGHT OF SETOFF
- GC5.10 ASSESSMENTS AND DAMAGES FOR LATE COMPLETION
- GC5.11 DELAY IN MAKING PAYMENT
- GC5.12 INTEREST ON SETTLED CLAIMS
- GC5.13 RETURN OF SECURITY DEPOSIT

**GC5.1 INTERPRETATION**

In these Terms of Payment

- 1) The "payment period" means a period of 30 consecutive days or such other longer period as may be agreed between the Contractor and Canada.
- 2) An amount is "due and payable" when it is due and payable by Canada to the Contractor according to GC5.4 PROGRESS PAYMENT, GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK or GC5.6 FINAL COMPLETION.
- 3) An amount is "overdue" when it remains unpaid on the first day following the day upon which it is due and payable.
- 4) The "date of payment" means the date of the negotiable instrument of an amount due and payable by the Receiver General for Canada.
- 5) The "Bank Rate" means the rate of interest established by the Bank of Canada as the minimum rate at which it makes short term advances to members of the Canadian Payments Association.
- 6) The "Average Bank Rate" means the simple arithmetic mean of the Bank Rate in effect at 4:00 p.m. Eastern Time each day during the calendar month which immediately precedes the calendar month in which payment is made.

**GC5.2 AMOUNT PAYABLE**

- 1) Subject to any other provisions of the Contract, Canada shall pay the Contractor, at the times and in the manner hereinafter set out, the amount by which the amounts payable by Canada to the Contractor in accordance with the Contract exceed the amounts payable by the Contractor to Canada, and the Contractor shall accept that amount as payment in full satisfaction for everything furnished and done by the Contractor in respect of the Work to which the payment relates.
- 2) When making any payment to the Contractor, the failure of Canada to deduct an amount payable to Canada by the Contractor shall not constitute a waiver of the right to do so, or an admission of lack of entitlement to do so in any subsequent payment to the Contractor.

- 3) Should any payment be made by Canada in excess of what is owed to the Contractor for the actual work performed, the Contractor will reimburse Canada the excess immediately, with or without demand, and any amounts outstanding shall bear simple interest at the Average Bank rate plus 3 percent per annum from the date of overpayment until the day prior to the date of repayment by the Contractor.
- 4) No payment other than a payment that is expressly stipulated in the Contract shall be made by Canada to the Contractor for any extra expense or any loss or damage incurred or sustained by the Contractor.

### **GC5.3 INCREASED OR DECREASED COSTS**

- 1) The Contract Amount shall not be increased nor decreased by reason of any increase or decrease in the cost of the Work that is brought about by an increase or decrease in the cost of labour, Plant, Material or any wage adjustment arising pursuant to the Labour Conditions.
- 2) Notwithstanding paragraph 1) of GC5.3, if any change, including a new imposition or repeal, of any tax, customs or other duty, charge, or any similar imposition that is imposed under sales, customs or excise tax legislation of the Government of Canada or any Provincial or Territorial legislation, affects the cost of the Work to the Contractor, and occurs
  - (a) after the date of submission by the Contractor of its bid; or
  - (b) after the date of submission of the last revision, if the Contractor's bid was revised;the Contract Amount shall be adjusted in the manner provided in paragraph 3) of GC5.3.
- 3) If a change referred to in paragraph 2) of GC5.3 occurs, the Contract Amount shall be increased or decreased by an amount established by an examination by Canada of the relevant records of the Contractor referred to in GC2.8 ACCOUNTS AND AUDITS to be the increase or decrease in the cost incurred by the Contractor that is directly attributable to that change.
- 4) For the purpose of paragraph 2) of GC5.3, if a tax is changed after the solicitation closing, but public notice of the change has been given by the Minister of Finance or the corresponding Provincial or Territorial authority before that closing, the change shall be deemed to have occurred before the solicitation closing.
- 5) Notwithstanding paragraphs 2) to 4) of GC5.3, no adjustment to the Contract Amount in respect of the Work or a part thereof shall be made for a change in any imposition referred to in this section that occurs after the date required by the Contract for completion of the Work or that part of the Work.

### **GC5.4 PROGRESS PAYMENT**

- 1) On the expiration of a payment period, the Contractor shall deliver to Canada
  - (a) a written progress claim in a form acceptable to Canada that fully describes any part of the Work that has been completed, and any Material that was delivered to the Work site but not incorporated into the Work, during that payment period, and
  - (b) a completed and signed statutory declaration containing a declaration that, up to the date of the progress claim, the Contractor has complied with all lawful obligations with



respect to the Labour Conditions and that, in respect of the Work, all lawful obligations of the Contractor to its Subcontractors and Suppliers, referred to collectively in the declaration as “subcontractors and suppliers”, have been fully discharged.

- 2) Within 10 days of receipt of a progress claim and statutory declaration from the Contractor, Canada shall inspect, or cause to have inspected, the part of the Work and the Material described in the progress claim, and shall issue a progress report to the Contractor, that indicates the value of the part of the Work and the Material described in the progress claim that, in the opinion of Canada
  - (a) is in accordance with the Contract; and
  - (b) was not included in any other progress report relating to the Contract.
- 3) Subject to GC5.2 AMOUNT PAYABLE, and paragraph 5) of GC5.4, Canada shall pay the Contractor an amount that is equal to
  - (a) 95 percent of the value that is indicated in Canada's progress report if a labour and material payment bond has been furnished by the Contractor; or
  - (b) 90 percent of the value that is indicated in Canada's progress report if a labour and material payment bond has not been furnished by the Contractor.
- 4) Canada shall pay the amount referred to in paragraph 3) of GC5.4 not later than
  - (a) 30 days after receipt by Canada of both a progress claim and a statutory declaration referred to in paragraph 1) of GC5.4; or
  - (b) 15 days after receipt by Canada of the Contractor's progress schedule or updated progress schedule, in accordance with GC3.1 PROGRESS SCHEDULE,whichever is later.
- 5) In the case of the Contractor's first progress claim, it is a condition precedent to Canada's obligation under paragraph 3) of GC5.4 that the Contractor has provided all necessary documentation required by the Contract for the first progress claim.

#### **GC5.5 SUBSTANTIAL PERFORMANCE OF THE WORK**

- 1) If, at any time before the issuance of a Certificate of Completion, Canada determines that the Work has reached Substantial Performance as described in subparagraph 1) (b) of GC1.1.4 SUBSTANTIAL PERFORMANCE, Canada shall issue a Certificate of Substantial Performance to the Contractor. The Certificate of Substantial Performance shall state or describe
  - (a) the date of Substantial Performance;
  - (b) the parts of the Work not completed to the satisfaction of Canada; and
  - (c) all things that must be done by the Contractor before a Certificate of Completion is issued and before the 12-month warranty period referred to in GC3.13 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK commences for the said parts and all the said things.

- 2) The issuance of a Certificate of Substantial Performance does not relieve the Contractor from the Contractor's obligations under GC3.11 DEFECTIVE WORK.
- 3) Subject to GC5.2 AMOUNT PAYABLE and paragraph 4) of GC5.5, Canada shall pay the Contractor the amount referred to in paragraph 1) of GC5.2 AMOUNT PAYABLE, less the aggregate of
  - (a) the sum of all payments that were made pursuant to GC5.4 PROGRESS PAYMENT;
  - (b) an amount that is equal to Canada's estimate of the cost to Canada of rectifying defects described in the Certificate of Substantial Performance; and
  - (c) an amount that is equal to Canada's estimate of the cost to Canada of completing the parts of the Work described in the Certificate of Substantial Performance other than defects listed therein.
- 4) Canada shall pay the amount referred to in paragraph 3) of GC5.5 not later than
  - (a) 30 days after the date of issue of a Certificate of Substantial Performance, or
  - (b) 15 days after the Contractor has delivered to Canada
    - (i) a statutory declaration containing a declaration by the Contractor that up to the date of the Certificate of Substantial Performance, the Contractor has complied with all lawful obligations with respect to the Labour Conditions, discharged all its lawful obligations to its Subcontractors and Suppliers in respect of the work under the Contract, and discharged its lawful obligations referred to in GC1.8 LAWS, PERMITS AND TAXES;
    - (ii) evidence of compliance with workers' compensation legislation in accordance with GC1.9 WORKERS' COMPENSATION; and
    - (iii) an update of the progress schedule in accordance with the requirements of GC3.1 PROGRESS SCHEDULE;

whichever is later.

#### **GC5.6 FINAL COMPLETION**

- 1) When Canada is of the opinion that the Contractor has complied with the Contract and all orders and directions made pursuant thereto, and that the Work has been completed as described in GC1.1.5 COMPLETION, Canada shall issue a Certificate of Completion to the Contractor and, if the Work or a portion of the Work is subject to a Unit Price Arrangement, Canada shall issue a Certificate of Measurement that shall, subject to GC8, be binding upon and conclusive between Canada and the Contractor as to the quantities referred to therein.
- 2) Subject to GC5.2 AMOUNT PAYABLE and paragraph 3) of GC5.6, Canada shall pay the Contractor the amount referred to in GC5.2 AMOUNT PAYABLE, less the aggregate of the sum of all payments that were made pursuant to GC5.4 PROGRESS PAYMENT and GC5.5 SUBSTANTIAL PERFORMANCE OF WORK.
- 3) Canada shall pay the amount referred to in paragraph 2) of GC5.6 not later than
  - (a) 60 days after the date of issue of a Certificate of Completion; or

- (b) 15 days after the Contractor has delivered to Canada
  - (i) a statutory declaration which contains a declaration by the Contractor that all of the Contractor's lawful obligations and any lawful claims against the Contractor that arose out of the performance of the Contract have been discharged and satisfied; and
  - (ii) evidence of compliance with workers' compensation legislation in accordance with GC1.9 WORKERS' COMPENSATION;

whichever is later.

#### **GC5.7 PAYMENT NOT BINDING ON CANADA**

- 1) Neither acceptance of a progress claim or progress report, nor any payment made by Canada under the Contract, nor partial or entire use or occupancy of the Work by Canada shall constitute an acceptance by Canada of any portion of the Work or Material that is not in accordance with the requirements of the Contract.

#### **GC5.8 CLAIMS AND OBLIGATIONS**

- 1) The Contractor shall discharge all the Contractor's lawful obligations and shall satisfy all lawful claims against the Contractor arising out of the performance of the Work at least as often as the Contract requires Canada to pay the Contractor.
- 2) Whenever requested to do so by Canada, the Contractor shall make a statutory declaration declaring to the existence and condition of any obligations and claims against the Contractor arising out of the performance of the Work.
- 3) In order to discharge lawful obligations of and satisfy lawful claims against the Contractor or its Subcontractors arising out of the performance of the Contract, Canada may pay an amount that is due and payable to the Contractor directly to the claimant. Such payment is, to the extent of the payment, a discharge of Canada's liability to the Contractor under the Contract and may be deducted from any amount payable to the Contractor under the Contract.
- 4) For the purposes of paragraph 3) of GC5.8, and subject to paragraph 6) of GC5.8, a claim or obligation shall be considered lawful when it is so determined by
  - (a) a court of legal jurisdiction;
  - (b) an arbitrator duly appointed to arbitrate the claim; or
  - (c) the written consent of the Contractor authorizing payment of the claim or obligation.
- 5) If a claim or obligation would have been subject to the provisions of Provincial or Territorial lien legislation or, in the Province of Quebec, the law relating to legal hypothecs had the Contractor been performing the Work for an entity other than Canada
  - (a) such amount as may be paid by Canada pursuant to paragraphs 3) and 4) of GC5.8 shall not exceed the amount that the Contractor would have been obliged to pay had the provisions of such legislation or law been applicable to the Work;

- (b) a claimant need not comply with the provisions of such legislation, setting out the steps by way of notice, registration or otherwise as might have been necessary to preserve or perfect any claim for lien or privilege which the claimant might have had; and
  - (c) for the purposes of determining the entitlement of a claimant, the notice required by paragraph 8) of GC5.8 shall be deemed to replace the registration or provision of notice after the performance of work as required by any applicable legislation and no claim shall be deemed to have expired, become void or unenforceable by reason of the claimant not commencing any action within the time prescribed by such legislation.
- 6) The Contractor shall, at the request of any claimant, submit to binding arbitration those questions that need to be answered to establish the entitlement of the claimant to payment. The arbitration shall have as parties to it any Subcontractor or Supplier to whom the claimant supplied Material, performed work or rented equipment should such Subcontractor or Supplier wish to be adjoined, and Canada shall not be a party to such arbitration. Subject to any agreement between the Contractor and the claimant, the arbitration shall be conducted in accordance with the governing Provincial or Territorial legislation applicable to the site of the Work.
- 7) Paragraph 3) of GC5.8 shall apply only to claims and obligations
- (a) the notification of which has set forth the amount claimed to be owing and the person who by contract is primarily liable and has been received by Canada in writing before final payment is made to the Contractor pursuant to GC5.6 FINAL COMPLETION, and within 120 days of the date on which the claimant
    - (i) should have been paid in full under the claimant's contract with the Contractor, its Subcontractor or Supplier if the claim is for money that was lawfully required to be held back from the claimant; or
    - (ii) performed the last of the services, work or labour, or furnished the last of the Material pursuant to the claimant's contract with the Contractor or its Subcontractor or Supplier where the claim is for money not lawfully required to be held back from the claimant; and
  - (b) the proceedings to determine the right to payment of which, pursuant to paragraph 5) of GC5.8, shall have commenced within one year from the date that the notification required by subparagraph 7)(a) of GC5.8 was received by Canada.
- 8) Upon receipt of a notice of claim, Canada may withhold, from any amount that is due and payable to the Contractor pursuant to the Contract, the full amount of the claim or any portion thereof.
- 9) Canada shall notify the Contractor in writing in a timely manner of receipt of any claim and of the intention of Canada to withhold funds. At any time thereafter and until payment is made to the claimant, the Contractor may be entitled to post, with Canada, security in a form acceptable to Canada in an amount equal to the value of the claim, and upon receipt of such security Canada shall release to the Contractor any funds that would be otherwise payable to the Contractor, that were withheld pursuant to the provisions of this clause in respect of the claim of any claimant for whom the security stands.

**GC5.9 RIGHT OF SETOFF**

- 1) Without limiting any right of setoff or deduction given or implied by law or elsewhere in the Contract, Canada may set off any amount payable to Canada by the Contractor under the

Contract, or under any current contract, against any amount payable to the Contractor under the Contract.

- 2) For the purposes of paragraph 1) of GC5.9, "current contract" means a contract between Canada and the Contractor
  - (a) under which the Contractor has an undischarged obligation to perform or supply work, labour or material; or
  - (b) in respect of which Canada has, since the date of the Contract, exercised any right to take the work that is the subject of that contract out of the Contractor's hands.

#### **GC5.10 ASSESSMENTS AND DAMAGES FOR LATE COMPLETION**

- 1) For the purposes of this clause
  - (a) the Work shall be deemed to be completed on the date of the Certificate of Completion; and
  - (b) the "period of delay" means the number of days commencing on the day fixed for completion of the Work and ending on the day immediately preceding the day on which the Work is completed but does not include any day within a period of extension granted pursuant to GC6.5 DELAYS AND EXTENSION OF TIME and any other day on which, in the opinion of Canada, completion of the Work was delayed for reasons beyond the control of the Contractor.
- 2) If the Contractor does not complete the Work by the day fixed for its completion but completes it thereafter, the Contractor shall pay Canada an amount equal to the aggregate of
  - (a) all salaries, wages and travelling expenses incurred by Canada in respect of persons overseeing the performance of the Work during the period of delay;
  - (b) the cost incurred by Canada as a result of the inability to use the completed Work for the period of delay; and
  - (c) all other expenses and damages incurred or sustained by Canada during the period of delay as a result of the Work not being completed by the day fixed for its completion.
- 3) Canada may waive the right of Canada to the whole or any part of the amount payable by the Contractor pursuant to paragraph 2) of GC5.10 if, in the opinion of Canada, it is in the public interest to do so.

#### **GC5.11 DELAY IN MAKING PAYMENT**

- 1) Notwithstanding GC1.5 TIME OF THE ESSENCE, any delay by Canada in making any payment when it is due pursuant to GC5 TERMS OF PAYMENT, shall not be a breach of the Contract by Canada.
- 2) Subject to paragraph 3) of GC5.11, Canada shall pay to the Contractor simple interest at the Average Bank Rate plus 3 percent per annum on any amount that is overdue pursuant to paragraph 3) of GC5.1 INTERPRETATION, and the interest shall apply from and include the day such amount became overdue until the day prior to the date of payment.

- 3) Interest shall be paid without demand by the Contractor except that
  - (a) in respect of amounts that are less than 15 days overdue, no interest shall be paid in respect of payment made within such 15 days unless the Contractor so demands after such amounts have become due and payable; and
  - (b) interest shall not be payable or paid on overdue advance payments, if any.

**GC5.12 INTEREST ON SETTLED CLAIMS**

- 1) For the purposes of this clause, a claim means a disputed amount subject to negotiation between Canada and the Contractor under the Contract.
- 2) A claim is deemed to have been settled when an agreement in writing is signed by Canada and the Contractor setting out the amount of the claim to be paid by Canada and the items of work for which the said amount is to be paid.
- 3) A settled claim is deemed to be outstanding from the day immediately following the date the said claim would have been due and payable under the Contract had it not been disputed.
- 4) Canada shall pay to the Contractor simple interest on the amount of a settled claim at the Average Bank Rate plus 3 percent per annum from the date the settled claim was deemed to be outstanding until the day prior to the date of payment.

**GC5.13 RETURN OF SECURITY DEPOSIT**

- 1) After a Certificate of Substantial Performance has been issued, and if the Contractor is not in breach of nor in default under the Contract, Canada shall return to the Contractor all or any part of a Security Deposit that, in the opinion of Canada, is not required for the purposes of the Contract.
- 2) After a Certificate of Completion has been issued, Canada shall return to the Contractor the remainder of any security deposit unless the Contract stipulates otherwise.
- 3) If the security deposit was paid into the Consolidated Revenue Fund of Canada, Canada shall pay interest thereon to the Contractor at a rate established pursuant to section 21(2) of the [\*Financial Administration Act \(FAA\)\*](#).

**GC6 DELAYS AND CHANGES IN THE WORK**

- GC6.1 CHANGES IN THE WORK
- GC6.2 CHANGES IN SUBSURFACE CONDITIONS
- GC6.3 HUMAN REMAINS, ARCHAEOLOGICAL REMAINS AND ITEMS OF HISTORICAL OR SCIENTIFIC INTEREST
- GC6.4 DETERMINATION OF PRICE
  - GC6.4.1 Price Determination Prior to Undertaking Changes
  - GC6.4.2 Price Determination Following Completion of Changes
  - GC6.4.3 Price Determination - Variations in Tendered Quantities
- GC6.5 DELAYS AND EXTENSION OF TIME

**GC6.1 CHANGES IN THE WORK**

- 1) At any time before issuance of a Certificate of Completion, Canada may issue orders for additions, deletions or other changes to the Work, or changes in the location or position of the whole or any part of the Work, if the addition, deletion, change or other revision is deemed by Canada to be consistent with the general intent of the Contract.
- 2) An order referred to in paragraph 1) of GC6.1 shall be in writing and given to the Contractor in accordance with GC2.3 NOTICES.
- 3) Upon receipt of an order, the Contractor shall promptly perform the work in accordance with the order as if the order had appeared in and been part of the original Contract.
- 4) If anything done or omitted by the Contractor pursuant to an order increases or decreases the cost of the Work to the Contractor, payment for the work shall be made in accordance with GC6.4 DETERMINATION OF PRICE.

**GC6.2 CHANGES IN SUBSURFACE CONDITIONS**

- 1) If, during the performance of the Work, the Contractor encounters subsurface conditions that are substantially different from the subsurface conditions described in the tender documents supplied to the Contractor, or a reasonable assumption of fact based thereon, the Contractor shall give notice to Canada immediately upon becoming aware of the situation.
- 2) If the Contractor is of the opinion that the Contractor may incur or sustain any extra expense or any loss or damage that is directly attributable to the changed subsurface conditions, the Contractor shall within 10 days of the date the changed subsurface conditions were encountered, give Canada written notice of intention to claim for that extra expense, loss or damage.
- 3) If the Contractor has given a notice referred to in paragraph 2) of GC6.2, the Contractor shall give Canada a written claim for extra expense, loss or damage no later than 30 days after the date that a Certificate of Substantial Performance is issued.
- 4) A written claim referred to in paragraph 3) of GC6.2 shall contain a sufficient description of the facts and circumstances of the occurrence that is the subject of the claim to enable Canada to determine whether or not the claim is justified, and the Contractor shall supply such further and other information for that purpose as Canada requires.
- 5) If Canada determines that a claim referred to in paragraph 3) of GC6.2 is justified, Canada shall make an extra payment to the Contractor in an amount that is calculated in accordance with GC6.4 DETERMINATION OF PRICE.

- 6) If, in the opinion of Canada, the Contractor effects a saving of expenditure that is directly attributable to a substantial difference between the information relating to subsurface conditions at the site of the Work that is contained in the tender documents, or a reasonable assumption of fact based thereon, and the actual subsurface conditions encountered by the Contractor, the Contract Amount shall be reduced by the amount of the saving of expenditure determined in accordance with GC6.4 DETERMINATION OF PRICE.
- 7) If the Contractor fails to give a notice referred to in paragraph 2) of GC6.2 and a claim referred to in paragraph 3) of GC6.2 within the times stipulated, an extra payment shall not be made to the Contractor in respect of the occurrence.
- 8) Canada does not warrant the content expressed in any subsurface report available for the perusal of the Contractor that does not form part of the tender and contract documents.

### **GC6.3 HUMAN REMAINS, ARCHAEOLOGICAL REMAINS AND ITEMS OF HISTORICAL OR SCIENTIFIC INTEREST**

- 1) For the purposes of this clause
  - (a) "human remains" means the whole or any part of a deceased human being, irrespective of the time of death;
  - (b) "archaeological remains" are items, artefacts or things made, modified or used by human beings in antiquity and may include, but not be limited to, stone, wood or iron structures or monuments, dump deposits, bone artefacts, weapons, tools, coins, and pottery; and
  - (c) "items of historical or scientific interest" are naturally occurring or manufactured objects or things of any age that are not archaeological remains but may be of interest to society because of their historical or scientific significance, value, rarity, natural beauty, or other quality.
- 2) If, during the course of the Work, the Contractor encounters any object, item or thing which is described in paragraph 1) of GC6.3 or which resembles any object, item or thing described in paragraph 1) of GC6.3, the Contractor shall
  - (a) take all reasonable steps, including stopping work in the affected area, to protect and preserve the object, item or thing;
  - (b) immediately notify Canada of the circumstances in writing; and
  - (c) take all reasonable steps to minimize additional costs that may accrue as a result of any work stoppage.
- 3) Upon receipt of a notification in accordance with subparagraph 2)(b) of GC6.3, Canada shall promptly determine whether the object, item or thing is one described in, or contemplated by paragraph 1) of GC6.3, and shall notify the Contractor in writing of any action to be performed, or work to be carried out, by the Contractor as a result of Canada's determination.
- 4) Canada may, at any time, enlist the services of experts to assist in the investigation, examination, taking of measurements or other such recordings, placing of permanent protection around or removing of the object, item or thing encountered by the Contractor, and the Contractor shall, to the satisfaction of Canada, allow them access and co-operate with them in the carrying out of their duties and obligations.



- 5) Human remains, archaeological remains and items of historical or scientific interest encountered at the site of the Work shall be deemed to be the property of Canada.
- 6) Except as may be otherwise provided for in the Contract, the provisions of GC6.4 DETERMINATION OF PRICE and GC6.5 DELAYS AND EXTENSION OF TIME shall apply.

## **GC6.4 DETERMINATION OF PRICE**

### **GC6.4.1 Price Determination Prior to Undertaking Changes**

- 1) If a Lump Sum Arrangement applies to the Contract or a part thereof, the price of any change shall be the aggregate estimated cost of labour, Plant and Material that is required for the change as agreed upon in writing by the Contractor and Canada plus a negotiated allowance for supervision, co-ordination, administration, overhead, margin and the risk of undertaking the work within the stipulated amount.
- 2) If a Unit Price Arrangement applies to the Contract or a part thereof, the Contractor and Canada may, by agreement in writing, add items, units of measurement, estimated quantities and prices per unit to the Unit Price Table.
- 3) A price per unit referred to in paragraph 2) of GC6.4.1 shall be determined on the basis of the aggregate estimated cost of labour, Plant and Material that is required for the additional item as agreed upon by the Contractor and Canada, plus a negotiated allowance.
- 4) To facilitate approval of the price of the change or the additional price per unit as applicable, the Contractor shall submit a cost estimate breakdown identifying, as a minimum, the estimated cost of labour, Plant, Material, each subcontract amount, and the amount of the negotiated allowance.
- 5) If no agreement is reached as contemplated in paragraph 1) of GC6.4.1, the price shall be determined in accordance with GC6.4.2.
- 6) If no agreement is reached, as contemplated in paragraphs 2) and 3) of GC6.4.1, Canada shall determine the class and the unit of measurement of the item of labour, Plant or Material and the price per unit shall be determined in accordance with GC6.4.2.

### **GC6.4.2 Price Determination Following Completion of Changes**

- 1) If it is not possible to predetermine, or if there is failure to agree upon the price of a change in the Work, the price of the change shall be equal to the aggregate of
  - (a) all reasonable and proper amounts actually expended or legally payable by the Contractor in respect of the labour, Plant and Material that fall within one of the classes of expenditure described in paragraph 2) of GC6.4.2, that are directly attributable to the performance of the Contract;
  - (b) an allowance for profit and all other expenditures or costs, including overhead, general administration costs, financing and interest charges, in an amount that is equal to 10 percent of the sum of the expenses referred to in subparagraph 1)(a) of GC6.4.2; and
  - (c) interest on the amounts determined under subparagraphs 1)(a) and 1)(b) of GC6.4.2 calculated in accordance with GC5.12 INTEREST ON SETTLED CLAIMS;

- 2) The cost of labour, Plant and Material referred to in subparagraph 1)(a) of GC6.4.2 shall be limited to the following categories of expenditure:
- (a) payments to Subcontractors and Suppliers;
  - (b) wages, salaries, bonuses and, if applicable, travel and lodging expenses of employees of the Contractor located at the site of the Work and that portion of wages, salaries, bonuses and, if applicable, travel and lodging expenses of personnel of the Contractor generally employed at the head office or at a general office of the Contractor provided they are actually and properly engaged on the Work under the Contract;
  - (c) assessments payable under any statutory authority relating to workers' compensation, employment insurance, pension plan or holidays with pay, provincial health or insurance plans, environmental reviews, and Applicable Taxes collection costs;
  - (d) rent that is paid for Plant, or an amount equivalent to the said rent if the Plant is owned by the Contractor, that is necessary for and used in the performance of the Work, if the rent or the equivalent amount is reasonable and use of that Plant has been approved by Canada;
  - (e) payments for maintaining and operating Plant necessary for and used in the performance of the Work, and payments for effecting repairs thereto that, in the opinion of Canada, are necessary for the proper performance of the Contract, other than payments for any repairs to the Plant arising out of defects existing before its allocation to the Work;
  - (f) payments for Material that is necessary for and incorporated in the Work, or that is necessary for and consumed in the performance of the Contract;
  - (g) payments for preparation, delivery, handling, erection, installation, inspection, protection and removal of the Plant and Material necessary for and used in the performance of the Contract; and
  - (h) any other payments made by the Contractor with the approval Canada that are necessary for the performance of the Contract in accordance with the Contract Documents.

#### **GC6.4.3 Price Determination - Variations in Tendered Quantities**

- 1) Except as provided in paragraphs 2), 3), 4) and 5) of GC6.4.3, if it appears that the final quantity of labour, Plant and Material under a price per unit item shall exceed or be less than the estimated tendered quantity, the Contractor shall perform the Work or supply the Plant and Material required to complete the item and payment shall be made for the actual Work performed or Plant and Material supplied at the price per unit set out in the Contract.
- 2) If the final quantity of the price per unit item exceeds the estimated tendered quantity by more than 15 percent, either party to the Contract may make a written request to the other party to negotiate an amended price per unit for that portion of the item which exceeds 115 percent of the estimated tendered quantity, and to facilitate approval of any amended price per unit, the Contractor shall, on request, provide Canada with
- (a) detailed records of the actual cost to the Contractor of performing or supplying the tendered quantity for the price per unit item up to the time the negotiation was requested; and

- (b) the estimated unit cost of labour, Plant and Material required for the portion of the item that is in excess of 115 percent of the tendered quantity.
- 3) If agreement is not reached as contemplated in paragraph 2) of GC6.4.3, the price per unit shall be determined in accordance with GC6.4.2.
  - 4) If it appears that the final quantity of labour, Plant and Material under a price per unit item shall be less than 85 percent of the estimated tendered quantity, either party to the Contract may make a written request to the other party to negotiate a change to the price per unit for the item if
    - (a) there is a demonstrable difference between the unit cost to the Contractor of performing or supplying the estimated tendered quantity and the unit cost to the Contractor for performing or supplying the final quantity; and
    - (b) the difference in unit cost is due solely to the decrease in quantity and not to any other cause.
  - 5) For the purposes of the negotiation referred to in paragraph 4) of GC6.4.3
    - (a) the onus of establishing, justifying and quantifying a proposed change lies with the party making the request for negotiation; and
    - (b) in no event shall the total price for an item that has been amended as a result of a reduction in quantity pursuant to paragraph 4) of GC6.4.3 exceed the amount that would have been payable to the Contractor had 85 percent of the tendered quantity actually been performed or supplied.

#### **GC6.5 DELAYS AND EXTENSION OF TIME**

- 1) Upon application of the Contractor made before the date first fixed for completion of the Work or before any other date previously fixed under this clause, Canada may extend the time for completion of the Work by fixing a new date if Canada determines that causes beyond the control of the Contractor have delayed its completion.
- 2) The Contractor's application shall be accompanied by the written consent of the bonding company whose bond forms part of the Contract Security.
- 3) Subject to paragraph 4) of GC6.5, no payment, other than a payment that is expressly stipulated in the Contract, shall be made by Canada to the Contractor for any extra expense, loss or damage incurred or sustained by the Contractor due to delay, whether or not the delay is caused by circumstances beyond the control of the Contractor.
- 4) If the Contractor incurs or sustains any extra expense or any loss or damage that is directly attributable to any neglect or delay that occurs after the date of the Contract on the part of Canada in providing any information or in doing any act that the Contract either expressly requires Canada to do or that would ordinarily be done by an owner in accordance with the practice of the trade, the Contractor shall give Canada written notice of intention to claim for that extra expense or loss or damage within ten working days of the date the neglect or delay first occurred.
- 5) When the Contractor has given a notice referred to in paragraph 4) of GC6.5, the Contractor shall give Canada a written claim for the extra expense, loss or damage no later than 30 days after the date that a Certificate of Completion is issued and not afterwards.

- 6) A written claim referred to in paragraph 5) of GC6.5 shall contain a sufficient description of the facts and circumstances of the occurrence that is the subject of the claim to enable Canada to determine whether or not the claim is justified and the Contractor shall supply such further and other information for that purpose as Canada may require.
- 7) If Canada determines that a claim referred to in paragraph 5) of GC6.5 is justified, Canada shall make an extra payment to the Contractor in an amount that is calculated in accordance with GC6.4 DETERMINATION OF PRICE.
- 8) If the Contractor fails to give a notice referred to in paragraph 4) and a claim referred to in paragraph 5) of GC6.5 within the times stipulated, an extra payment shall not be made to the Contractor in respect of the occurrence.

**GC7 DEFAULT, SUSPENSION OR TERMINATION OF CONTRACT**

GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS

GC7.2 SUSPENSION OF WORK

GC7.3 TERMINATION OF CONTRACT

GC7.4 SECURITY DEPOSIT - FORFEITURE OR RETURN

**GC7.1 TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS**

- 1) By giving notice in writing to the Contractor in accordance with GC2.3 NOTICES, Canada, without any other authorization, may take all or any part of the Work out of the Contractor's hands, and may employ such means as Canada sees fit to have the Work completed if the Contractor:
  - (a) fails to remedy any delay in the commencement or default in the diligent performance of the Work to the satisfaction of Canada within six days of Canada giving notice to the Contractor in writing in accordance with GC2.3 NOTICES;
  - (b) defaults in the completion of any part of the Work within the time fixed for its completion by the Contract;
  - (c) becomes insolvent, or has committed an act of bankruptcy, and has neither made a proposal to its creditors nor filed a notice of intention to make such a proposal, pursuant to the [\*Bankruptcy and Insolvency Act\*](#);
  - (d) abandons the work;
  - (e) makes an assignment of the Contract without the consent required by GC1.16 ASSIGNMENT; or
  - (f) otherwise fails to observe or perform any of the provisions of the Contract.
- 2) If the whole or any part of the Work is taken out of the Contractor's hands, the Contractor's right to any further payment that is due or accruing due under the Contract is, subject only to paragraph 3) of GC7.1, extinguished, and the Contractor is liable to pay Canada, upon demand, an amount that is equal to the amount of all loss and damage incurred or sustained by Canada in respect of the Contractor's failure to complete the Work.
- 3) If the whole or any part of the Work that is taken out of the Contractor's hands is completed by Canada, Canada may pay the Contractor the amount, if any, of the holdback or a progress claim as determined by Canada that had accrued and was due prior to the date on which the Work was taken out of the Contractor's hands and that is not required for the purposes of having the Work performed or of compensating Canada for any other loss or damage incurred or sustained by reason of the Contractor's default.
- 4) The taking of the Work or any part thereof out of the Contractor's hands does not relieve the Contractor from any obligation under the Contract or imposed by law except the obligation to complete the performance of that part of the Work that was taken out of the Contractor's hands.
- 5) If the Work or any part thereof is taken out of the Contractor's hands, all Plant and Material and the interest of the Contractor, or its suppliers or subcontractors at any tier, in all real property, licences, powers and privileges acquired, used or provided by the Contractor, or its suppliers or subcontractors at any tier, under the Contract shall continue to be the property of Canada without compensation.

- 6) When Canada certifies that any Plant, Material, or any interest of the Contractor is no longer required for the purposes of the Work, or that it is not in the interests of Canada to retain that Plant, Material, or interest, it shall revert to the Contractor.
- 7) If the Contractor has become insolvent or has committed an act of bankruptcy, and has either made a proposal to its creditors or filed a notice of intention to make such a proposal, pursuant to the Bankruptcy and Insolvency Act, the Contractor shall immediately forward a copy of the proposal or the notice of intention to Canada.

#### **GC7.2 SUSPENSION OF WORK**

- 1) When, in Canada's opinion, it is in the public interest to do so, Canada may require the Contractor to suspend performance of the Work either for a specified or an unspecified period, by giving a notice of suspension in writing to the Contractor in accordance with GC2.3 NOTICES.
- 2) When a notice of suspension is received by the Contractor, the Contractor shall suspend all operations in respect of the Work except those that Canada determines are necessary for the care and preservation of the Work, Plant and Material.
- 3) During a period of suspension, the Contractor shall not remove any part of the Work, Plant or Material from its site without the consent of Canada.
- 4) If a period of suspension is 60 days or less, the Contractor shall resume the performance of the Work on the expiration of that period, and the Contractor is entitled to be paid the extra costs necessarily incurred by the Contractor as a result of the suspension, determined in accordance with GC6.4 DETERMINATION OF PRICE.
- 5) If a period of suspension is more than 60 days, Canada and the Contractor may agree that the performance of the Work shall be continued by the Contractor, and the Contractor shall resume performance of the Work subject to any terms and conditions agreed upon by Canada and the Contractor. If Canada and the Contractor do not agree that performance of the Work shall be continued by the Contractor, or upon the terms and conditions under which the Contractor shall continue the Work, the notice of suspension shall be deemed to be a notice of termination pursuant to GC7.3 TERMINATION OF CONTRACT.

#### **GC7.3 TERMINATION OF CONTRACT**

- 1) Canada may terminate the Contract at any time by giving a notice of termination in writing to the Contractor in accordance with GC2.3 NOTICES.
- 2) If the Contractor receives a notice of termination, the Contractor shall forthwith cease all operations in performance of the Contract, subject to any conditions stipulated in the notice.
- 3) Subject to paragraph 4) of GC7.3, if the Contract is terminated, Canada shall pay the Contractor an amount determined to be due to the Contractor pursuant to GC6.4 DETERMINATION OF PRICE less the aggregate of all amounts that were paid to the Contractor by Canada and all amounts that are due to Canada from the Contractor pursuant to the Contract.
- 4) In no event shall the total amount payable by Canada to the Contractor exceed the amount, calculated in accordance with GC5 TERMS OF PAYMENT, that would have been payable to the Contractor had the Contractor completed the Work.

- 5) Payment to the Contractor, if any, shall be made as soon as practicable under the circumstances.

**GC7.4 SECURITY DEPOSIT - FORFEITURE OR RETURN**

- 1) If the Work is taken out of the Contractor's hands, or the Contractor is in breach of, or in default under, the Contract, Canada may convert a security deposit to Canada's own use.
- 2) If Canada converts a security deposit, the amount realized shall be deemed to be an amount due from Canada to the Contractor under the Contract.
- 3) Any balance of the amount realized that remains after payment of all losses, damage and claims of Canada and others shall be paid by Canada to the Contractor if, in the opinion of Canada, it is not required for the purposes of the Contract.

**GC8 DISPUTE RESOLUTION**

- GC8.1 INTERPRETATION
- GC8.2 CONSULTATION AND CO-OPERATION
- GC8.3 NOTICE OF DISPUTE
- GC8.4 NEGOTIATION
- GC8.5 MEDIATION
- GC8.6 CONFIDENTIALITY
- GC8.7 SETTLEMENT
- GC8.8 RULES FOR MEDIATION OF DISPUTES
  - GC8.8.1 Interpretation
  - GC8.8.2 Application
  - GC8.8.3 Communication
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  - GC8.8.6 Time and Place of Mediation
  - GC8.8.7 Representation
  - GC8.8.8 Procedure
  - GC8.8.9 Settlement Agreement
  - GC8.8.10 Termination of Mediation
  - GC8.8.11 Costs
  - GC8.8.12 Subsequent Proceedings

**GC8.1 INTERPRETATION**

- 1) "dispute" means any disagreement regarding any issue identified by the Contractor in the notice submitted to Canada in accordance with paragraph 2 of GC8.3 NOTICE OF DISPUTE, and includes any claim by the Contractor arising from such disagreement and any counterclaim by Canada, but does not include any claim by either party for punitive or exemplary damages, injury to persons, death, or any claim based on an allegation of libel or slander.
- 2) The alternative dispute resolution procedures set out in GC8, do not apply to any claim by Canada against the Contractor except any counterclaim in a dispute as defined in paragraph 1 of GC8.1, including, but not limited to, any claim of setoff regarding any amount due to Canada under GC5.10 ASSESSMENT AND DAMAGES FOR LATE COMPLETION.

**GC8.2 CONSULTATION AND CO-OPERATION**

- 1) The parties agree to maintain open and honest communication throughout the performance of the Contract.
- 2) The parties agree to consult and co-operate with each other in the furtherance of the Work and the resolution of problems or differences that may arise.

**GC8.3 NOTICE OF DISPUTE**

- 1) Any difference between the parties to the Contract of any nature arising out of or in connection with the Contract which could result in a claim by the Contractor against Canada, and which is not settled by consultation and co-operation as envisaged in GC8.2 CONSULTATION AND CO-OPERATION, shall be resolved in the first instance by Canada, whose written decision or direction shall be final and binding subject only to the provisions of



GC8. Such written decision or direction includes, but is not limited to, any written decision or direction by Canada under any provision of the General Conditions.

- 2) The Contractor shall be deemed to have accepted the decision or direction of Canada referred to in paragraph 1) of GC8.3 and to have expressly waived and released Canada from any claim in respect of the particular matter dealt with in that decision or direction unless, within 15 working days after receipt of the decision or direction, the Contractor submits to Canada a written notice of dispute requesting formal negotiation under GC8.4 NEGOTIATION. Such notice shall refer specifically to GC8.4 NEGOTIATION, and shall specify the issues in contention and the relevant provisions of the Contract.
- 3) The giving of a written notice in accordance with paragraph 2) of GC8.3 shall not relieve the Contractor from complying with the decision or direction that is the subject of the dispute. Such compliance, however, shall not be construed as an admission by the Contractor of the correctness of such decision or direction.
- 4) If a dispute is not resolved promptly, Canada shall give such instructions as, in Canada's opinion, are necessary for the proper performance of the Work and to prevent delays pending a resolution of the matter. Unless Canada terminates the Contract, orders the Contractor to suspend the Work, or takes the Work out of the hands of the Contractor, the Contractor shall continue to perform the Work in accordance with the provisions and requirements of the Contract and the instructions of Canada. Such performance shall not prejudice any claim that the Contractor may have.
- 5) Nothing in GC8 relieves the Contractor from its obligation to provide any other notice required by the Contract within the time specified in the Contract, including but not limited to, any notice required under GC6.2 CHANGES IN SUBSURFACE CONDITIONS.

#### **GC8.4 NEGOTIATION**

- 1) Within 10 working days after receipt by Canada of a notice referred to in paragraph 2) of GC8.3 NOTICE OF DISPUTE, or within such other period of time as may be mutually agreed to, the parties shall commence formal negotiations in order to resolve the dispute. Negotiations shall occur initially between representatives of the Contractor and Canada who play a direct supervisory role in the performance, administration or management of the Contract.
- 2) If the representatives referred to in paragraph 1) of GC8.4 are unable to resolve some or all of the issues which are the subject of the negotiations within 10 working days, the parties shall refer the remaining issues which are in dispute to a second level of negotiation between a principal or principals of the Contractor and a senior level manager or senior level managers representing Canada.
- 3) If negotiations fail to resolve the dispute within 30 working days from the date of delivery of the notice referred to in paragraph 2) of GC8.3 NOTICE OF DISPUTE, or within such longer period as may have been agreed to by the parties, the Contractor may, by giving written notice to Canada, in accordance with GC2.3 NOTICES, within 10 working days from the end of such period, request that mediation be undertaken to assist the parties to reach agreement on the outstanding issues.
- 4) If the Contractor does not request mediation within the period permitted by paragraph 3) of GC8.4, the Contractor shall be deemed to have accepted the decision or direction of Canada under paragraph 1) of GC8.3 NOTICE OF DISPUTE and to have expressly waived and released Canada from any claim in respect of the particular matter dealt with in that decision or direction.

**GC8.5 MEDIATION**

- 1) If the Contractor has requested mediation in accordance with paragraph 3) of GC8.4 NEGOTIATION, mediation shall be conducted in accordance with GC8.8 RULES FOR MEDIATION OF DISPUTES.
- 2) If a Project Mediator has not previously been appointed for the purposes of the Contract, a Project Mediator shall be appointed in accordance with GC8.8 RULES FOR MEDIATION OF DISPUTES forthwith after delivery of a notice in accordance with paragraph 3) of GC8.4 NEGOTIATION, requesting mediation.
- 3) If the dispute has not been resolved within
  - (a) Ten (10) working days following the appointment of a Project Mediator in accordance with paragraph 2) of GC8.5, if a Project Mediator was not previously appointed;
  - (b) Ten (10) working days following receipt by Canada of a written notice in accordance with paragraph 3) of GC8.4 NEGOTIATION, if a Project Mediator was previously appointed; or
  - (c) such other longer period as may have been agreed to by the parties;the Project Mediator shall terminate the mediation by giving written notice to the parties stating the effective date of termination.

**GC8.6 CONFIDENTIALITY**

- 1) All information exchanged during alternative dispute resolution procedures, by whatever means, shall be without prejudice and shall be treated as confidential by the parties and their representatives, unless otherwise required by law. However, evidence that is independently admissible or discoverable shall not be rendered inadmissible or non-discoverable by virtue of its use during an alternative dispute resolution process.

**GC8.7 SETTLEMENT**

- 1) Any agreement to settle all or any part of a dispute, by whatever means, shall be in writing and be signed by the parties or their authorized representatives.

**GC8.8 RULES FOR MEDIATION OF DISPUTES**

**GC8.8.1 Interpretation**

In these Rules

- 1) “Coordinator” means the person designated by Canada to act as the Dispute Resolution Coordinator.

**GC8.8.2 Application**

- 1) By mutual agreement, the parties may change or make additions to the Rules.

**GC8.8.3 Communication**

- 1) Written communications pursuant to these Rules shall be given in accordance with GC2.3 NOTICES.

**GC8.8.4 Appointment of Project Mediator**

- 1) The parties to the Contract may, by mutual consent, at any time after entry into the Contract, appoint a mediator (the "Project Mediator") to conduct mediation proceedings in accordance with these Rules for Mediation of Disputes, in regard to any dispute that may arise with regard to the interpretation, application or administration of the Contract. In this case, they shall jointly enter into a contract with the appointed Project Mediator, which contract shall be in a form drafted by the Coordinator and agreed to by the parties.
- 2) If the parties do not appoint a Project Mediator pursuant to paragraph 1) of GC8.8.4, the parties shall appoint a Project Mediator within 17 working days following receipt of a written notice from the Contractor, in accordance with GC2.3 NOTICES, requesting that mediated negotiations be undertaken in accordance with these Rules to assist the parties to reach agreement on any outstanding issues that may be in dispute. Any contract entered into with the appointed Project Mediator shall meet the requirements as set out for the contract described in paragraph 1) of GC8.8.4.
- 3) When mediation is requested by the Contractor pursuant to paragraph 3) of GC8.4 NEGOTIATION, if the parties have previously entered into a contract with a Project Mediator, the parties shall within 2 days send to both the Project Mediator and the Coordinator
  - (a) a copy of the notice requesting negotiation under paragraph 2) of GC8.3 NOTICE OF DISPUTE;
  - (b) a copy of Canada's written position in relation to the notice, the issues in contention and the relevant provisions of the contract; and
  - (c) a copy of the Contractor's written request for mediation required under paragraph 3) of GC8.4 NEGOTIATION.
- 4) If the parties have not agreed on a Project Mediator, the parties shall forthwith provide the Coordinator with the written materials referred to in subparagraphs 3)(a), 3)(b) and 3)(c) of GC8.8.4 together with a request that the Coordinator assist in the appointment of a mutually acceptable Project Mediator in accordance with these Rules.
- 5) Within 5 working days following receipt of the request and materials referred to in paragraph 4) of GC8.8.4, the Coordinator shall provide the parties with a list of qualified private sector mediators obtained from an independent and impartial entity, together with instructions to each party to individually and confidentially select and rank their preferred and fully acceptable choices of mediator in descending order. Each mediator listed shall be impartial and independent of the parties, and shall be an experienced and skilled commercial mediator, preferably with knowledge of the subject matter of the dispute.
- 6) Within 10 working days of receipt of the list referred to in paragraph 5) of GC8.8.4 each party shall comply with the instructions accompanying the list(s) and shall deliver the completed listing to the Coordinator.

- 7) Within 2 working days following receipt of the completed listings, the Coordinator shall select the highest common ranked mediator to act as Project Mediator for the purposes of the contract.
- 8) In the event of a tie, the Coordinator shall consult both parties to re-evaluate their rankings in order to assist the Coordinator in selecting a Project Mediator acceptable to both parties. If the parties cannot agree upon a Project Mediator, the Coordinator shall forthwith provide the parties with a second list of mediators and the procedure shall be repeated.
- 9) If the parties have not previously entered into a contract with a mutually acceptable Project Mediator, the Coordinator shall use reasonable efforts to negotiate a contract with a mutually acceptable Project Mediator on behalf of the parties, which contract shall incorporate or otherwise comply with the provisions of these Rules. If negotiations are unsuccessful, or if for other reason the individual is unwilling or unable to enter into a contract to act as Project Mediator, the Coordinator shall repeat the process with the second-highest common ranked mediator.
- 10) The parties agree that, upon successful completion of the negotiations referred to in paragraph 9) of GC8.8.4, they shall jointly enter into a contract with the selected Project Mediator, which contract shall be in a form drafted by the Coordinator and agreed to by the parties.
- 11) Upon execution of the contract with the Project Mediator referred to in paragraph 10) of GC8.8.4 the Coordinator shall provide the Project Mediator with copies of the documents referred to in paragraph 3) of GC8.8.4.

#### **GC8.8.5 Confidentiality**

- 1) Subject to paragraph 2) of GC8.8.5, and unless otherwise agreed in writing by the parties, the Project Mediator, the parties and their counsel or representatives shall keep confidential all matters and documents disclosed during mediation proceedings except where the disclosure is necessary for any implementation of any agreement reached or is required by law.
- 2) Evidence that is independently admissible or discoverable in any arbitral or judicial proceeding shall not be rendered inadmissible or non-discoverable by virtue of its use in mediation proceedings.
- 3) Neither party shall make transcripts, minutes or other records of a mediation conference.
- 4) The personal notes and written opinions of the Project Mediator made in relation to mediation are in the Project Mediator's sole possession and control, are confidential, and may not be used in any subsequent proceeding between the parties or where they are opposed in interest without the express written permission of the parties.
- 5) All information exchanged during mediation procedures, by whatever means, shall be without prejudice and shall be treated as confidential by the parties and their representatives, unless otherwise required by law.

#### **GC8.8.6 Time and Place of Mediation**

- 1) The Project Mediator, in consultation with the parties shall set the date, time and place of any mediation conference as soon as possible, bearing in mind that, subject to agreement to

the contrary between the parties, only 10 working days are available within which to attempt to settle the dispute.

#### **GC8.8.7 Representation**

- 1) Representatives of the parties may be accompanied at the mediation conference by legal counsel or any other person.
- 2) If the Project Mediator is a lawyer, the Project Mediator shall not provide legal advice to a party during the course of the mediation conference, but may recommend that a party obtain independent legal advice before finalizing a settlement agreement.

#### **GC8.8.8 Procedure**

- 1) The parties agree to an exchange of all facts, information and documents upon which they intend to rely in any oral or written presentation during the mediation. This exchange shall be completed no later than 2 working days prior to the date set for a mediation conference.
- 2) The Project Mediator shall be free to meet with the parties individually during a mediation conference if the Project Mediator is of the opinion that this may improve the chances of a mediated settlement, and either party may request such an individual meeting at any time.
- 3) The parties may agree to extend the 10 working days available for settlement of the dispute through mediation, and the Project Mediator shall record that agreement in writing.

#### **GC8.8.9 Settlement Agreement**

- 1) The parties shall record in writing any settlement agreement reached, with sufficient detail to ensure a clear understanding of
  - (a) the issues resolved;
  - (b) any obligations assumed by each party including criteria to determine if and when these obligations have been met; and
  - (c) the consequences of failure to comply with the agreement reached.
- 2) The parties agree to carry out the terms of a settlement agreement as soon as possible and, in any event, within any time periods specified in the agreement.

#### **GC8.8.10 Termination of Mediation**

- 1) Either party may withdraw from mediation at any time without reason and, in that event, the Project Mediator shall give each party a written notice terminating the mediation and establishing the effective date of termination.
- 2) If, in the opinion of the Project Mediator, either party fails to mediate in good faith or fails to comply with the terms of these Rules, or if the Project Mediator, at any time during mediation, is of the opinion that further negotiations will fail to resolve the issues outstanding, the Project Mediator may terminate the negotiations by providing the parties with a written notice of termination, stating therein the Project Mediator's reasons for the termination, and the effective date of termination.

- 3) If a dispute has not been resolved within 10 working days or such other longer period as may have been agreed to by the parties, the Project Mediator shall terminate the mediation by giving written notice to the parties stating the effective date of termination.

**GC8.8.11 Costs**

- 1) The parties agree that they will each be responsible for the costs of their own representatives and advisors and associated travel and living expenses. Fees and expenses of the Project Mediator and all administrative costs of mediation, such as the cost of the meeting room(s), if any, shall be borne equally by the parties.

**GC8.8.12 Subsequent Proceedings**

- 1) The parties shall not rely on or introduce as evidence in any arbitral or judicial proceeding, whether or not such proceeding relates to the subject matter of mediation,
  - (a) any documents of other parties that are not otherwise producible in those proceedings;
  - (b) any views expressed or suggestions made by any party in respect of a possible settlement of issues;
  - (c) any admission made by any party in the course of mediation unless otherwise stipulated by the admitting party; and
  - (d) the fact that any party has indicated a willingness to make or accept a proposal or recommendation for settlement.
- 2) The Project Mediator shall neither represent nor testify on behalf of either of the parties in any subsequent investigation, action or proceeding relating to the issues in mediation proceedings.
- 3) The Project Mediator shall not be subpoenaed to give evidence relating to
  - (a) the Project Mediator's role in mediation; or
  - (b) the matters or issues in mediation;in any subsequent investigation, action or proceeding and the parties agree to vigorously oppose any effort to have the Mediator so subpoenaed.

**GC9 CONTRACT SECURITY**

GC9.1 OBLIGATION TO PROVIDE CONTRACT SECURITY

GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY

**GC9.1 OBLIGATION TO PROVIDE CONTRACT SECURITY**

- 1) The Contractor shall, at the Contractor's expense and within 14 days after the date that the Contractor receives notice that the Contractor's bid was accepted by Canada, obtain and deliver Contract Security to Canada in one of the forms prescribed in GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY.
- 2) If the whole or a part of the Contract Security provided is in the form of a security deposit, it shall be held and disposed of in accordance with GC5.13 RETURN OF SECURITY DEPOSIT and GC7.4 SECURITY DEPOSIT - FORFEITURE OR RETURN.
- 3) If a part of the Contract Security provided is in the form of a labour and material payment bond, the Contractor shall post a copy of that bond at the site of the Work.
- 4) It is a condition precedent to the release of the first progress payment that the Contractor has provided the Contract Security as specified herein.

**GC9.2 TYPES AND AMOUNTS OF CONTRACT SECURITY**

- 1) The Contractor shall deliver to Canada either (a) or (b).
  - (a) A performance bond and a labour and material payment bond each in an amount that is equal to not less than 50 percent of the Contract Amount.
  - (b) A security deposit or an irrevocable standby letter of credit in an amount that is equal to not less than 20 percent of the Contract Amount.
- 2) A performance bond and a labour and material payment bond referred to in paragraph 1) of GC9.2 shall be in a form and be issued by a bonding or surety company that is approved by Canada.
  - (a) The approved form for the performance bond is displayed at the following Website:  
<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494&section=text#appS>
  - (b) The approved form for the labour and material payment bond is displayed at the following website: <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494&section=text#appS>  
; and
  - (c) The list of approved bonding or surety companies is displayed at the following Website:  
<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=14494&section=text#appL>
- 3) A security deposit referred to in subparagraph 1)(b) of GC9.2 shall be in the form of
  - (a) a bill of exchange, bank draft or money order made payable to the Receiver General for Canada and certified by an approved financial institution or drawn by an approved financial institution on itself; or

- (b) bonds of, or unconditionally guaranteed as to principal and interest by, the Government of Canada.
- 4) For the purposes of subparagraph 3)(a) of GC9.2
- (a) a bill of exchange is an unconditional order in writing signed by the Contractor and addressed to an approved financial institution, requiring the said institution to pay, on demand, at a fixed or determinable future time a sum certain of money to, or to the order of, the Receiver General for Canada;
  - (b) if a bill of exchange, bank draft or money order is certified by or drawn on an institution or corporation other than a chartered bank, it must be accompanied by proof that the said institution or corporation meets at least one of the criteria described in subparagraph 4)(c) of GC9.2, either by letter or by a stamped certification on the bill of exchange, bank draft or money; and
  - (c) An approved financial institution is
    - (i) a corporation or institution that is a member of the Canadian Payments Association as defined in the [Canadian Payments Act](#);
    - (ii) a corporation that accepts deposits that are insured, to the maximum permitted by law, by the Canada Deposit Insurance Corporation or the "Autorité des marchés financiers";
    - (iii) a corporation that accepts deposits from the public if repayment of the deposit is guaranteed by Her Majesty the Queen in right of a province;
    - (iv) a corporation, association or federation incorporated or organized as a credit union or co-operative credit society that conforms to the requirements of a credit union which are more particularly described in paragraph 137(6) of the [Income Tax Act](#); or
    - (v) Canada Post Corporation.
- 5) Bonds referred to in subparagraph 3)(b) of GC9.2 shall be provided on the basis of their market value current at the date of the Contract, and shall be
- (a) made payable to bearer; or
  - (b) accompanied by a duly executed instrument of transfer of the bonds to the Receiver General for Canada in the form prescribed by the Domestic Bonds of Canada Regulations; or
  - (c) registered as to principal, or as to principal and interest, in the name of the Receiver General for Canada pursuant to the Domestic Bonds of Canada Regulations.
- 6) An irrevocable standby letter of credit referred to in subparagraph 1)(b) of GC9.2 shall:
- (a) be an arrangement, however named or described, whereby a financial institution (the "Issuer") acting at the request and on the instructions of a customer (the "Applicant") or on its own behalf,
    - (i) is to make a payment to, or to the order of, Canada as the beneficiary;
    - (ii) is to accept and pay bills of exchange drawn by Canada;



- (iii) authorizes another financial institution to effect such payment or accept and pay such bills of exchange; or
  - (iv) authorizes another financial institution to negotiate against written demand(s) for payment provided that the terms and conditions of the letter of credit are complied with;
- (b) state the face amount that may be drawn against it;
- (c) state its expiry date;
- (d) provide for sight payment to the Receiver General for Canada by way of the financial institution's draft against presentation of a written demand for payment signed by Canada;
- (e) provide that more than one written demand for payment may be presented subject to the sum of those demands not exceeding the face value of the letter of credit;
- (f) provide that it is subject to the International Chamber of Commerce (ICC) Uniform Customs and Practice (UCP) for Documentary Credits, 2007 Revision, ICC Publication No. 600. Pursuant to the ICC UCP, a credit is irrevocable even if there is no indication to that effect; and
- (g) be issued or confirmed, in either official language in a format left to the discretion of the issuer or confirmer, by an approved financial institution on its letterhead.

**GC10 INSURANCE**

GC10.1 INSURANCE CONTRACTS

GC10.2 INSURANCE PROCEEDS

**GC10.1 INSURANCE CONTRACTS**

- 1) The contractor shall, at the contractor's expense, obtain and maintain insurance contracts in respect of the work and shall provide evidence thereof to Canada in accordance with the requirements of the INSURANCE TERMS.
- 2) The insurance contracts referred to in paragraph 1) of GC10.1 shall
  - (a) be in a form, of the nature, in the amounts, for the periods and containing the terms and conditions specified in INSURANCE TERMS; and
  - (b) provide for the payment of claims under such insurance contracts in accordance with GC10.2 INSURANCE PROCEEDS.

**GC10.2 INSURANCE PROCEEDS**

- 1) In the case of a claim payable under a Builders Risk/Installation (All Risks) insurance contract maintained by the contractor pursuant to GC10.1 INSURANCE CONTRACTS, the proceeds of the claim shall be paid directly to Canada, and
  - (a) the monies so paid shall be held by Canada for the purposes of the contract, or
  - (b) if Canada elects, shall be retained by Canada, in which event they vest in Canada absolutely.
- 2) In the case of a claim payable under a General Liability insurance contract maintained by the contractor pursuant to GC10.1 INSURANCE CONTRACTS, the proceeds of the claim shall be paid by the insurer directly to the claimant.
- 3) If an election is made pursuant to paragraph 1) of GC10.2, Canada may cause an audit to be made of the accounts of the contractor and of Canada in respect of the part of the work that was lost, damaged or destroyed for the purpose of establishing the difference, if any, between
  - (a) the aggregate of the amount of the loss or damage suffered or sustained by Canada, including any costs incurred in respect of the clearing and cleaning of the work and its site and any other amount that is payable by the contractor to Canada under the contract, minus any monies retained pursuant to subparagraph 1)(b) of GC10.2; and
  - (b) the aggregate of the amounts payable by Canada to the contractor pursuant to the contract up to the date of the loss or damage.
- 4) A difference that is established pursuant to paragraph 3) of GC10.2 shall be paid forthwith by the party who is determined by the audit to be the debtor to the party who is determined by the audit to be the creditor.

- 5) When payment of a deficiency has been made pursuant to paragraph 4) of GC10.2, all rights and obligations of Canada and the contractor under the contract shall, with respect only to the part of the work that was the subject of the audit referred to in paragraph 3) of GC10.2, be deemed to have been expended and discharged.
- 6) If an election is not made pursuant to subparagraph 1)(b) of GC10.2, the contractor shall, subject to paragraph 7) of GC10.2, clear and clean the work and its site and restore and replace the part of the work that was lost, damaged or destroyed at the contractor's expense as if that part of the work had not yet been performed.
- 7) When the contractor clears and cleans the work and its site and restores and replaces the work referred to in paragraph 6) of GC10.2, Canada shall pay the contractor out of the monies referred to in paragraph 1) of GC10.2 so far as they will thereunto extend.
- 8) Subject to paragraph 7) of GC10.2, payment by Canada pursuant to paragraph 7) of GC10.2 shall be made in accordance with the contract but the amount of each payment shall be 100 percent of the amount claimed notwithstanding subparagraphs 3)(a) and 3)(b) of GC5.4 PROGRESS PAYMENT.



## Appendix "E"

### TECHNICAL SPECIFICATIONS

AGRICULTURE & AGRI-FOOD CANADA

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**AAFC CENTRAL EXPERIMENTAL FARM**

**OTTAWA**

**LIGHTING RETROFIT PROJECT**

**NOVEMBER 2014**

*Prepared By:*



**4-4380 South Service Rd,  
Burlington, ON  
L7L 5Y6**

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AAFC Central Experimental Farm  
OTTAWA

Lighting Retrofit Project

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**DIVISION 1**

00200 INSTRUCTIONS TO BIDDERS

CONTACT INFORMATION

1.1 AAFC

The information will be revealed once the contract is awarded.

1.2 CONSULTANT

The information will be revealed once the contract is awarded.

1.3 SITE LOCATION(S)

Multiple Building Sites (13)  
Central Experimental Farm  
960 Carling Avenue,  
Ottawa, Ontario  
K1A 0C6

1.4 DRAWINGS

- .1 Floor Plans are provided in Appendix C.
- .2 Design drawings, where new lighting layouts are needed, are provided in Appendix D.

- .3 Larger print copies of these plans will be made available to the Contractor upon award of Contract.

#### 1.5 COMPLETION OF WORK

- .1 Work on this Project is to be substantially completed by March 31, 2015.
- .2 Contractor to provide written construction schedule showing resources assigned to complete Project within the desired completion date.
- .3 Work to commence within (7) days of receipt of a Letter of Intent from AAFC informing the successful Contractor of award of Contract.

#### 1.6 CONSTRAINTS

- .1 Contractor shall be fully qualified and experienced in large scale energy efficiency lighting retrofit projects of similar complexity in institutional buildings.
- .2 References may be required before the Contract is awarded.
- .3 Contractor may perform all Work during normal business hours (i.e. between 6:00AM and 6:00PM Monday to Friday). Work outside of these hours is also allowed but must be requested in advance.
- .4 Due to sensitive nature of laboratory operations, dust and debris must be minimized. Contractor to clean, vacuum and dust work area as work progresses and at the end of each work shift. Drop sheets must be used to cover and protect all work areas while work is conducted.
- .5 Areas left un-clean will be cleaned by the building owner's cleaning staff and charged back to the Contractor.
- .6 It is believed that there are no PCB containing ballasts in this Project. The Contractor is required however, to inspect all ballasts for potential PCB content. If any are found, they are to be stored and disposed of according to provincial guidelines. Disposal costs as well as storage drums will be paid for by AAFC.
- .7 Contractor is responsible for any sub-trades as may be required.
- .8 Any deviations from these specifications must be approved by the Project Engineer.

#### 1.7 DELIVERY, STORAGE, HANDLING

- .1 The Contractor will be permitted to use only those areas which have been designated by AAFC for equipment, camp or construction areas provided that such use will not interfere with any part of the work or the work of other Contractors or other agencies in the vicinity.



- .2 Contractor must provide, at his own cost, his own storage facilities where necessary. Space in Owner's building is limited and not available for storing materials on palettes or of similar volume or quantity.
- .3 Storage of waste is specified in Section 01330 Waste Management & Disposal.
- .4 Staging and storage of materials are the responsibility of the Contractor. Contractor to lock and secure all materials, tools, etc. on a daily basis.

#### 1.8 INSPECTION AND TESTS OF MATERIAL

- .1 All materials furnished and all Work performed will be subject to inspection. The Contractor must demonstrate to the Consultant and/or AAFC Project Engineer that all components are suitable and satisfactory for their intended purpose and that they meet all applicable requirements.
- .2 The Contractor is to provide the Consultant with Manufacturer's Product Information Sheets and/or Shop Drawings for all materials installed as part of this Project.

#### 1.9 MANUFACTURER'S INSTRUCTIONS

- .1 The Contractor shall be responsible for the correct installation and assembly of all materials and equipment. Manufacturer's instructions shall be carefully read and rigidly adhered to in the installation of materials and equipment.
- .2 Any damage resulting from either a failure to observe the manufacturer's instructions or as a result of proceeding with the work without complete knowledge of how a particular job is to be done, will be the Contractor's responsibility and the Contractor shall make good on any loss or damage resulting from same.
- .3 Notify in writing any conflicts between the specifications and manufacturer's instructions, so that the Consultant may establish the correct course of action.

#### 1.10 WORK BY OTHERS

- .1 Contractor to be aware that work undertaken will be in worker occupied areas. The Contractor shall coordinate his activities with occupants so that the work of all concerned shall proceed with efficiency and dispatch. No claim for additional payment will be considered on account of delays, changes in construction schedules, or any other reason whatsoever, due to the fact that others are operating in the area.

#### 1.11 PROTECTION OF CONSTRUCTED WORKS

- .1 The Contractor shall be responsible for the protection of all materials, equipment and constructed works until acceptance and take-over of the work.

- .2 The Contractor is responsible for keeping the construction area clean and free of hazards.

1.12 COMMUNICATION

- .1 The Contractor's site foreman will be available by cellular phone at all times while on-site throughout the duration of this work.

1.13 PROTECTION OF PERSONS AND PROPERTY

- .1 Prior to Canada awarding a contract, the proposed staff of the successful contractor and subcontractor(s) must be security cleared to a "Reliability" security classification level. Each of the proposed staff must complete "Security Clearance Form" (TBS 330-23E). These forms are available from the Government of Canada, upon request. (<http://www.tbs-sct.gc.ca/tbsf-fsct/330-60-eng.pdf>)
- .2 The Contractor shall use due care and take all necessary precautions to ensure the protection of persons and property and shall comply with the most current requirements of the applicable federal and provincial government agencies including but not limited to the Workplace Safety and Insurance Board and the Ontario Occupational Health and Safety Act and Regulations for Construction Projects. All training and safety equipment acquisition, transportation and maintenance is the responsibility of the Contractor.
- .3 The Contractor shall have a site safety management plan prior to mobilizing work on site. This plan shall include provisions to ensure the safety of the public, those engaged in the work under this contract and those employed by other agencies or contractors who may require access to the site against accident and injury. The Contractor shall post on site all necessary and applicable signs regarding safety hazards and the required personal safety equipment. The Contractor shall appoint a competent site supervisor who shall be responsible for the implementation of the site safety plan. The Contractor shall be responsible for all daily construction activities with authority over all contractors, subcontractors and workers on site, with respect to the site safety management plan.
- .4 The Contractor shall without additional instructions, supply and maintain at all times during the progress or suspension of the work, suitable lock-out devices, barricades and signs as are necessary to ensure the safety of the public, those engaged in the work under this contract, and those employed by other agencies or contractors who may require access to the site against accident and injury.
- .5 Notwithstanding the provisions of the General Conditions, in any emergency affecting the safety of life, or of the work, or of adjoining property, the Contractor, without direction from the AAFC Site Representative or Project Engineer, shall act in a reasonable manner to prevent loss or injury.

1.14 WASTE MANAGEMENT GOALS

- .1 Prior to start of Work conduct meeting with Departmental Representative to review and discuss Waste Management Plan and Goals.
- .2 The Waste Management Goal is that 80 percent of total Project Waste is to be diverted from landfill sites. Provide Departmental Representative documentation certifying that waste management, recycling, reuse of recyclable and reusable materials have been extensively practiced.
- .3 Accomplish maximum control of solid construction waste.
- .4 Preserve environment and prevent pollution and environment damage.

1.15 WASTE REDUCTION WORKPLAN (WRW)

- .1 Prepare and submit prior to project start-up a completed Waste Reduction Work Plan (WRW) as provided in Schedule A.
- .2 Submit before final payment a summary of waste materials salvaged for reuse, recycling or disposal for the project using a deconstruction/disassembly material audit form.
  - .1 Failure to submit will result in hold back of final payment.
  - .2 Provide receipts, scale tickets, waybills, and show quantities and types of materials reused, recycled, co-mingled and separated off-site or disposed of.
  - .3 For each material reused, sold or recycled from project, include amount quantities by number, type and size of items and the destination.
- .3 WASTE REDUCTION WORKPLAN should include but not limited to:
  - .1 Destination of materials listed.
  - .2 Deconstruction/disassembly techniques and sequencing.
  - .3 Quantities for materials to be salvaged
- .4 Structure WRW to prioritize actions and follow 3R's hierarchy, with Reduction as first priority, followed by Reuse, then Recycle.
- .5 Describe management of waste.
- .6 Post WRW or summary where workers at site are able to review content.
- .7 Set realistic goals for waste reduction, recognize existing barriers and develop strategies to overcome these barriers.
- .8 Monitor and report on waste reduction by documenting total volume of actual waste removed from project.
- .9 Waste processing sites: provide name of certified companies for approval.

TABLE A

Sample **Waste Reduction WorkPlan:**

Material Category	Person responsible	Total quantity of waste (unit)	Reused amount projected (units)	Reused amount actual	Recycled amount projected (units)	Recycled amount actual	Material destination
Wood and Plastics							
Wrapped pallet forms							
Plastic Packaging							
Cardboard Packaging							
Metal pieces							
Lamps							
Ballasts							
Others							

01010 SUMMARY OF WORK

1.1 WORK COVERED BY TENDER DOCUMENT

- .1 Lighting Upgrade. Perform all electrical Work associated with the conversion of existing lighting systems to energy efficient lighting technologies.
- .2 Controls Upgrade. Perform all electrical Work associated with the installation of advanced occupancy controls.
- .3 Comply with Division 16.
- .4 Material. Supply all material including retrofit components, new light fixtures, lighting controls and all wiring material to perform complete Project installation.
- .5 Acoustical ceiling tile work to accommodate light fixture removal and relocation.
- .6 Environmentally responsible handling and disposal of all waste generated.
- .7 Responsibility for coordinating delivery to site of all lamps, ballasts, new product, etc. as required as well as receiving and unloading all deliveries to site.
- .8 Contractor shall clean the interior surface of all light fixtures.
- .9 Contractor to replace all lamp sockets with lamp and ballast retrofit measures.
- .10 Interior lighting only is involved in this scope.
- .11 Contractor shall visit each building prior to ordering materials to assess site conditions that may affect product requirements.

1.2 BUILDINGS

- .1 This retrofit is to be implemented in the following buildings:
  - .1 Building No. 22 (5347 Sq. M)
  - .2 Building No. 136 (0370 Sq. M)
  - .3 Building No. 88 (1320 Sq. M)
  - .4 Building No. 91 (1883 Sq. M)
  - .5 Building No. 146 (1344 Sq. M)
  - .6 Building No. 104 (0752 Sq. M)
  - .7 Building No. 103 (0628 Sq. M)
  - .8 Building No. 45 (0291 Sq. M)
  - .9 Building No. 99 (1148 Sq. M)
  - .10 Building No. 34 (1044 Sq. M)
  - .11 Building No. 76 (1396 Sq. M)
  - .12 Building No. 60 (0716 Sq. M)
  - .13 Building No. 97 (0527 Sq. M)

1.3 COMPLETION

- .1 Provide sufficient labour and materials to complete the Work within the time required for each construction phase.
- .2 Arrange and carry out the Work so as to maintain access and exits; avoid conditions of unacceptable noise, dust, and appearance as to minimize disruption to the normal operation of the facility.
- .3 The Owners requirement to maintain the normal facility operations takes precedence.
- .4 Complete the Work so as to be certifiable by the Consultant as having attained Substantial Completion on or before the date proposed in Section 00300.

1.4 SCHEDULE/WORK SEQUENCE

- .1 Contractor shall provide a preliminary and proposed sequence of construction and construction schedule, for presentation at a preconstruction meeting for review and acceptance in principle by the Consultant and Owner. Schedule to be in bar chart format. The Contractor to revise the proposed sequence schedule as directed for final acceptance before commencement of on-site construction Work and as work progresses (i.e. whenever a deviation from the schedule occurs).
- .2 Construction schedule to be broken down on a room-by-room basis.

01140 WORK RESTRICTIONS

1.1 GENERAL RESTRICTIONS

- .1 No Work can begin until the following has been submitted:
  - .1 Signed Letter of Intent or Contract
  - .2 Required Bonds or Approved Project Security
  - .3 Proof of Insurance
  - .4 Workplace Safety and Insurance Board (WSIB) Clearance Certificate
  - .5 Electrical Permit as issued by the local Electrical Safety Authority
  - .6 Personal Security Clearance
  - .7 Drawings as supplied by the Contractor and approved by the Consultant
  - .8 Construction Schedule as provided by the Contractor and approved by the Owner
- .2 No Work of any kind can begin until proper authorization and/or Work permits have been obtained and submitted.
- .3 Stop Work around an area where existing previously unidentified hazardous material is discovered including material suspected of containing asbestos, and immediately contact the Consultant for direction before continuing with the Work affected.
- .4 Security Clearance. At the request of the Departmental Representative, the Contractor shall give and undertaking that all persons under its control, for the performance of the contract, shall provide the relevant data in order to obtain the required security clearance.
- .5 All Contractor personnel must check in daily at start of work shift and be given a pass which must be worn at all times. Pass must be returned at end of work shift and personnel checked out. Passes are not transferrable.

1.2 HOURS OF WORK

- .1 To be determined at initial Project meeting in consultation with Owner.
- .2 For purposes of Bid allow for construction hours to be during normal business hours (i.e. 6:00 AM to 6:00 PM).

1.3 SERVICE SHUTDOWN

- .1 Provide a written requirement of service shut-down a minimum 48 hours in advance of the shut-down.
- .2 Service shut-downs can be scheduled during unoccupied hours only.

1.4 SMOKING

- .1 Smoking is not permitted in or near AAFC buildings



01290 PAYMENT PROCEDURES

1.1 SUBMITTALS PRIOR TO FIRST PROGRESS PAYMENT

- .1 Submit construction schedule.
- .2 Submit installation schedule showing detailed progress report and associated relevance to progress billing. Detail to include breakdown of contract amount as directed by Departmental Representative and aggregating the contract amount. After approval by Departmental Representative, cost breakdown will be used as the basis of progress payments.

1.2 PROGRESS PAYMENT

- .1 Send electronic proposed application for progress payment to the Consultant for acceptance, prior to submittal of the originals.
- .2 With the submittal to the Consultant, include supporting documentation as a pre-condition for certifying payment for that Work as applicable.
- .3 After acceptance, submit Application for Progress Payment originals as directed by the Consultant, who will forward for processing Payment.

01310 CONSTRUCTION MANAGEMENT & COORDINATION

1.1 PROJECT MEETINGS

- .1 Attend regular conferenced Project meetings occurring once every (2) weeks or as determined by the Consultant and/or Owner.
- .2 Contractor's Project Manager and Contractor's on-site foreman to be in attendance at each meeting.
- .3 Prior to each meeting, Contractor will provide team with updated room level progress report, forecasted schedule, and updated record of changes.
- .4 Contractor to record all as-built conditions and any changes to the Work on an on-going basis as the Work progresses at the end of each working day. Maintain accurate records to show deviations from contract drawings and/or schedules
- .5 AAFC will pay for and arrange teleconferencing facilities.
- .6 Contractor is responsible for recording the minutes of meetings and also the distribution of documents.

1.2 CHANGE ORDER PROCEDURE

- .1 On receipt of a Contemplated Change Notice (CCN) initiated by the Consultant, the Contractor will provide cost or credit for the CCN.
- .2 If the Consultant accepts the CNN, the Consultant will issue a Change Order (CO) for the required Work.
- .3 No modifications described by a CCN are to proceed without a CO in place.

01330 WASTE MANAGEMENT AND DISPOSAL

1.1 COMPLIANCE

- .1 Comply with the Environmental Protection Act, Ontario Regulations O.Reg. 102/94 and O. Reg. 103/94 for waste management program on construction and demolition projects.

1.2 COST TO DISPOSE

- .1 Contractor shall be responsible for costs incurred with the disposal of all waste generated during this Project including on-site storage containers and transportation costs.

1.3 PROCEDURES

- .1 Contractor is responsible for recycling of all waste materials generated from the Work up to and including all metals, wire, plastics, spent fluorescent, HID and CF lamps, non-PCB ballast, old fluorescent fixtures, wood and paper waste that may be generated through the course of construction.
- .2 Handle waste materials not reused, salvaged, or recycled in accordance with appropriate Government regulations and codes.
- .3 AAFC holds exclusive salvage rights on all materials and components decommissioned or removed during this Project.
- .4 Contractor to maintain separate bins for lamps, metal, and non-recyclables.
- .5 A separate area will be designated for all items the AAFC wishes to salvage.
- .6 The Contractor is entitled to any financial return from reclaiming, recycling, or reusing of waste material resulting from Work under this Contract.
- .7 Store materials to be reused, recycled and salvaged in locations as directed by Departmental Representative.
- .8 Project waste or recyclables not to disposed of through AAFC waste disposal systems (including bins, containers, delivery or pickup).
- .9 Proof of proper disposal as defined in this document will be required in the form of a receipt and certificate from a qualified recycling company. Utility rebate programs require this proof in order to process rebate claims, which the Owner intends to proceed with.
- .10 Ensure waste store outdoors is protected from theft.

1.4 LAMP RECYCLING

- .1 Recycle fluorescent lamps through an approved company registered to provide hazardous material recycling in the Province of Ontario.
- .2 Provide Certificate indicating Project, location and quantity of material recycled from recycling Company.
- .3 Protect and store lamps in safe working procedure in a manner approved by AAFC Project Engineer; prior to pick-up from lamp recycling Co.

01357 HAZARDOUS MATERIALS

1.1 PCB CONTAINING WASTE

- .1 It is believed that there are no PCB containing ballasts in this Project.
- .2 The Contractor is required however, to inspect all ballasts for potential PCB content.
- .3 If any are found, they are to be stored and disposed of according to provincial and federal guidelines and regulations.
- .4 Disposal costs as well as storage drums will be paid for by AAFC.

1.2 ASBESTOS

- .1 It is believed that asbestos containing materials (ACM's) will not be impacted through the course of this work. Additional designated substances reports will be furnished by the owner upon request.

01410 REGULATORY REQUIREMENTS

1.1 PERMITS

- .1 The Work shall conform to the latest Standards and Codes listed in the Ontario Building Code, National Building Code and all applicable provincial and municipal codes as of the date of this Project in case of conflict or discrepancy, the most stringent requirement shall apply
- .2 The Contractor shall comply with all WSIB regulations as they apply to the Work of this Contract.
- .3 Contractor to apply for and obtain all required City or Provincial licences as necessary.
- .4 Contractor to apply for ESA (Electrical Safety Authority) permit before any Work is started.
- .5 Pay all fees and obtain all permits. Provide authorities with plans and information for acceptance certificates. Provide inspection certificates as evidence that work conforms to requirements of Authority having jurisdiction.

01520 CONSTRUCTION FACILITIES

1.1 PROCEDURES

- .1 Provide or rent scaffolding, ramps, ladders, work platforms, and all other temporary services required to execute the Work.
- .2 Coordinate parking with Owner's project coordinator. Designated parking will be provided at no cost to the contractor.
- .3 Contractor is permitted to use designated washrooms in Owner's buildings. Contractor to keep facilities clean.
- .4 Notify the Departmental Representative and utility companies of intended interruption of services, obtain requisite permission.
- .5 Give the Departmental Representative 48 hours notice related to each necessary interruption of any mechanical or electrical service throughout the course of the work. Keep duration of these interruptions to a minimum.
- .6 All construction work at all locations and at all times must be delineated from Owner employee traffic using pylons, construction tape, and signage.
- .7 Signage must be in both official languages or use commonly-understood graphic symbols, and must be approved by Departmental Representative prior to posting.
- .8 Throughout the duration of the contract, Contractor will post notice on all lab and office room doors 48 hours in advance of conducting construction work in these areas. This notice is intended to alert occupants of the work so they can make appropriate arrangements. Departmental Representative to provide Contractor with the wording of this notice. This posting of notices is not required for common areas.
- .9 It is Contractor's responsibility to remove notices as soon as work in the respective areas has been completed.

01705 HEALTH AND SAFETY

1.1 REQUIREMENTS

- .1 Workplace Health and Safety is an important focus for this Project.
- .2 All Work and activities shall be performed in accordance with the Occupational Health and Safety Act, RSO Chapter 0.1 as amended
- .3 Examination of site includes examination of risk and safety issues as it relates to the Work. Report any unacceptable conditions to the Consultant prior to commencement of Work.
- .4 Contractor is responsible for all safety on the Project including but not limited to the provision of any Personal Protective Equipment (PPE) required and the training of individual workers.
- .5 Contractor or Subcontractor to submit workplace safety policy prior to commencing Work.
- .6 Contractor shall have a competent Supervisor on site at all times to supervise the Work of their employees and any Subcontractor's under their control.
- .7 Contractor to insure that all workers have the required training in WHMIS, Fall Protection and any other specific training required by the circumstances present. Proof of training is required on-site and may be checked periodically.
- .8 Any accident shall be reported immediately and the Contractor accident investigation report shall be completed and submitted within 48 hours of the accident.
- .9 All workers on-site must be insured through WSIB coverage. A WSIB Clearance Certificate must be received prior to starting Work on any site.
- .10 Contractor to conduct a safety site review at each site before Work is initiated whereby a list of any potential safety concerns shall be made; with an associated safe Work plan to address. This plan is to be forwarded to the Consultant for review before any Work will be permitted to begin.



01740 CLEANING

1.1 REQUIREMENTS

- .1 Store waste in covered metal containers.
- .2 Prevent accumulations of wastes which create hazardous conditions.
- .3 Remove waste from site at regularly scheduled times.
- .4 Deposit waste material in containers at end of each working day.
- .5 Remove waste products and debris and leave work area clean.
- .6 Clean any areas to pre-condition if they have been soiled due to construction.
- .7 Contractor to conduct an inspection of each area of Work and notify Consultant that final cleaning has been performed prior to Certificate of Completion being issued.
- .8 All Work and activities shall be performed in accordance with the Occupational Health and Safety Act, RSO Chapter 0.1 as amended

01770 CLOSEOUT PROCEDURES

1.1 INSPECTION

- .1 Contractor to conduct an inspection of Work to identify deficiencies and defects, and repair as required.
- .2 Request Consultant's final inspection.
- .3 Consultant's Inspection. Consultant and Contractor will perform inspection of Work to identify deficiencies. Contractor to correct work accordingly.
- .4 Final Inspection. When items noted in deficiency report are completed, Contractor to request final inspection. If work is deemed incomplete by Consultant, the Contractor shall complete outstanding items and request re-inspection.
- .5 Prevent accumulations of wastes which create hazardous conditions.

1.2 SUBMITTALS

- .1 Contractor shall provide updated installation schedule indicating any changes in quantity or retrofit, and the reason for change.
- .2 Contractor shall provide marked up design layout drawings noting any change in quantity or layout, and the reason for the change.
- .3 Provide **Electrical Safety Authority** Certificate of Inspection for each building site showing final certificate of inspection with any and all defects corrected.
- .4 Furnish all related certificates/inspections to the Consultant at completion of the Contract as evidence of a complete and proper installation.

1.3 OPERATIONS AND MAINTENANCE MANUALS

- .1 Submit to Departmental Representative three (3) copies of approved Operations Data and Maintenance Manual in English, compiled as follows:
  - .1 Bind data in vinyl hard cover 3 "D" ring type loose leaf binders for 212 x 275 mm size paper. Binders must not exceed 75 mm thick or be more than 2/3 full.
  - .2 Enclose title sheet labelled "Operation Data and Maintenance Manual," project name, date and list of contents. Project name must appear on binder face and .spine
  - .3 Organize contents into applicable sections of work to parallel project specifications breakdown. Mark each section by labelled tabs protected with celluloid covers fastened to hard paper dividing sheets.

- .2 Include following information plus data specified.
  - .1 Maintenance instruction for finished surface and materials.
  - .2 Copy of hardware and paint schedules.
  - .3 Description: Operation of the equipment and systems, and any fixed or adjustable set points that affect the efficiency of the operation. Include nameplate information such as make, size, capacity and serial number.
  - .4 Maintenance: Use clear drawings, diagrams or manufacturers' literature which specifically apply and detail the following:
    - .5 Trouble shooting procedures.
    - .6 Adjustment techniques.
    - .7 Operational checks.
    - .8 Suppliers names, addresses and telephone numbers and components supplied by them must be included in this section. Components must be identified by a description and manufacturers part number.
    - .9 Include Guarantees showing:
      - a) Name and address of projects.
      - b) Guarantee commencement date (date of Interim Certificate of Completion).
      - c) Duration of guarantee.
      - d) Clear indication of what is being guaranteed and what remedial action will be taken under guarantee.
      - e) Signature and seal of Guarantor.
      - f) Additional material used in project listed under various Sections showing name of manufacturer and source of supply.
- .3 Spare parts: List all recommended spares to be maintained on site to ensure optimum efficiency. List all special tools appropriate to unique application. All parts/tools detailed must be identified as to manufacturer, manufacturer part number and supplier (including address).
- .4 Include one complete set of final shop drawings (bound separately) indicating corrections and changes made during fabrication and installation.
- .5 Contractor to provide completed O&M manual for Departmental Representative approval.
- .6 Contractor to provide proof of waste material recycling.

01900 WARRANTIES

1.1 SCHEDULE OF WARRANTIES

- .1 Contractor to warrant workmanship for (1) year from the date of substantial completion.
- .2 Contractor to register and extend manufacturer's warranty on linear fluorescent lamps for performance and replacement at no cost for a period of (2) years in the event of malfunction.
- .3 Contractor to register and extend manufacturer's warranty on LED lamps for performance and replacement at no cost for a period of (2) years in the event of malfunction.
- .4 Contractor to register and extend manufacturer's warranty on electronic ballasts for performance and replacement at no cost for a period of (5) years in the event of malfunction.
- .5 Contractor to register and extend manufacturer's warranty on new light fixtures for performance and replacement at no cost for a period of (1) year in the event of malfunction.
- .6 Contractor to register and extend manufacturer's warranty on new exit signage for performance and replacement at no cost for a period of (2) years in the event of malfunction.
- .7 Contractor to provide required labour, parts and components to service all installed items and return lighting to serviceable condition.
- .8 Warranty period to start from date of "Certificate of Completion" issued by Consultant.

## **DIVISION 16**

### **16010 ELECTRICAL GENERAL REQUIREMENTS**

#### **1.1 QUALIFICATIONS**

- .1 Electrical Work to be carried out by qualified, licensed electricians who hold valid Master Electrical Contractor license in accordance with authorities having jurisdiction as per the conditions of Provincial Act respecting manpower vocational training and qualification.
- .2 Employees registered in provincial apprentices program: permitted, under direct supervision of qualified licensed electrician, to perform specific tasks.
- .3 Permitted activities: determined based on training level attained and demonstration of ability to perform specific duties.

#### **1.2 OPERATING INSTRUCTION**

- .1 Provide operating instructions for each system and principal item of equipment supplied in this work. Operating instructions to include following:
  - a) Wiring diagrams, control diagrams, and control sequence for each principal system and item of equipment.
  - b) Safety precautions.
  - c) Procedures to be followed in event of equipment failure.
  - d) Other items of instruction as recommended by manufacturer of each system or item of equipment.
  - e) Installation methods to be in accordance with CSA 22.1.
- .2 Operating instructions must be provided in the form of Operations and Maintenance Manuals, as described in this document.

#### **1.3 WORK INCLUDED**

- .1 Perform all electrical Work associated with the conversion of existing lighting systems to energy efficient technologies.
- .2 Comply with Division 1.
- .3 Comply with Warranty Section 01900.
- .4 Work shall include all labour, materials, tools and equipment required for a complete and working installation.
- .5 Lighting Retrofit. Replace existing lamps and ballasts with energy efficient type as specified.

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- .6 Lamp Change. Retain existing light fixture/ ballast and install new lamp(s) only.
- .7 Lighting Upgrade. Remove and replace existing light fixtures with energy efficient type.
- .8 Lighting Redesign. Lighting redesign to include new light fixtures in new locations, in a new design layout.
- .9 LED lamps. Remove and replace existing lamp with LED technology light source.
- .10 Lighting Controls. Installation of new occupancy-based lighting controls.
- .11 Exit Signage Upgrade. Replace existing exit signage with new energy efficient LED exit signage.
- .12 Switching. Install new circuit for improved switching function.
- .13 Rewire. Rewire lighting to selected circuit for improved function.
- .14 Delete. Delete light fixture where not required in new layout and make electrically safe back to nearest junction box.

1.4 SHOP DRAWINGS

- .1 Upon award of Contract, submit shop drawings for items specified in sections of Division 16.
- .2 Shop drawings to be reviewed by Consultant for compliance with material specifications as outlined in Division 16.
- .3 The review is for the sole purpose of ascertaining conformance with the general design concept, and does not mean approval of the design details inherent in the shop drawings, responsibility for which shall remain with the Contractor. Such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents
- .4 Contractor to receive written review of Shop drawings from Consultant before orders placed with suppliers.
- .5 Failure of Contractor to receive written approval of Project material may result in material being rejected.

1.5 ALTERNATES

- .1 Bid price to be based on listed models as listed in Section 16500 of this Tender.

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- .2 Upon award of Contract, Contractor may submit alternates to Consultant for review in the form of detailed shop drawings.
- .3 Alternates must conform to listed specification model in all detail. If Consultant and/or AAFC Project Engineer reject alternate submitted, Contractor must supply listed model from Section 16500.

1.6 CLEANING

- .1 Contractor to clean the interior surfaces of all light fixtures within the Project that are specified for Retrofit Measure.
- .2 Touch up surfaces of shop-painted equipment scratched or marred during shipment or installation, to match original paint.
- .3 Contractor to clean the diffuser or lense with approved acrylic cleaner for this purpose with a lint free cloth; ensure lense is clear with no streaks after cleaning.

1.7 WORKMANSHIP

- .1 Work to be performed by experienced tradesperson in similar and relevant Projects.

1.8 PATCHING & REMEDIAL WORK

- .1 Submit written request in advance of cutting or alteration of exposed building elements.
- .2 Most cutting and patching will take place in the form of acoustical ceiling tile as lighting fixtures are introduced, relocated, removed, or re-sized.
- .3 Repair any damages made to the gypsum ceilings during the demolition and installation of the new fixtures.
- .4 Match adjacent surfaces
- .5 All new acoustical tiles to match existing in all respects including appearance, make, model and performance.
- .6 Acoustical ceiling tile for replacement to be Armstrong Model 769A; provide alternates to AAFC for approval, if exact match cannot be sourced.
- .7 There will be no exposed gaps or voids in the ceiling or wall surface as a result of the Work set out in this Contract. Any gap or void, including those will be patched with appropriate material (ex. acoustical ceiling tile, drywall, plaster, painted sheet metal, etc.) in a professional manner.

1.9 LENSE REPLACEMENT

- .1 Report immediately where existing fixture lense is broken, cracked or missing.
- .2 Keep detailed list of quantity and location of where replacements are required.
- .3 Provide quotation to Owner detailing quantity, type and individual replacement cost.
- .4 A Change Order is to be issued prior to any lense replacement.



16100 BASIC MATERIALS & METHODS

1.1 WORK INCLUDED

- .1 All new fixture installations and fixture retrofits must comply with all codes and standards described in Division 1.

1.2 QUALITY ASSURANCE

- .1 All new light fixture installation to be as per manufacturer's recommended installation procedures.
- .2 All components, including wiring components shall be CSA and/or ULC approved listed and labeled on the device
- .3 Carry out Work using qualified licensed workers or apprentices in accordance with Provincial Act respecting manpower vocational training and qualification

1.3 CONDUIT

- .1 All conduit shall be provided by the Contractor.
- .2 Conduit to be used in all open spaces in parallel evenly spaced runs.
- .3 Conduits to be run parallel or perpendicular to building lines.
- .4 Galvanized steel flexible tubing acceptable only for terminate from conduit to new light fixture (max 0.5M length).
- .5 Conduit racks and strut shall be ULc approved.
- .6 Provide a separate ground conductor in all EMT conduits.
- .7 Support and secure surface mounted conduit in accordance with the "Canadian Electrical Code" requirements.
- .8 Colour code conduits, boxes and metallic sheathe cables with plastic tape or paint at points where conduit or cable enters wall, ceiling, or floor. For conduits or cables up to 250V use yellow on prime lines, and for lines up to 600V use Yellow on Prime lines, and green on auxiliary lines.

1.4 BALLAST DISCONNECTS

- .1 To be supplied by the Contractor.
- .2 All ballasts to have a local means of disconnect by an approved manufacturer *regardless* of primary supply voltage.

1.5 DELETION

- .1 Includes deletion of light fixture and all associated conduit, flexible conduit, hangers, and wire back to nearest junction box.
- .2 Circuit to be made electrically safe.

1.6 FIXTURE INSTALLATION

- .1 Locate and install luminaires as indicated.
- .2 Provide adequate support to suit ceiling system.
- .3 Installation of luminaires must follow building lines.
- .4 Install bottom of suspended luminaires at same height as existing.
- .5 Align luminaires mounted in continuous rows to form straight uninterrupted line.
- .6 Align luminaires mounted individually parallel or perpendicular to building grid lines.
- .7 For suspended ceiling installations support luminaires independently of ceiling support luminaires from ceiling grid in accordance with local inspection requirements.
- .8 For the suspended lighting fixtures, reuse the existing suspensions as indicated.
- .9 Suspended fixtures are to be mounted are to hang level from plum suspensions.
- .10 Foresee any repairs to damaged suspensions.

16500 LIGHTING

1.1 PRODUCT-BALLASTS

- .1 All retrofits and new fixtures shall be supplied with ballasts suitable for the fixture type and application.
- .2 All ballasts shall comply with Canadian Standards Association (CSA) standard C22.2 No.74. Ballasts shall be suitable for use with 17W, 25W, & 32W T8 lamps.
- .3 The Contractor shall be responsible to ensure that ballasts meet National Electrical Manufacturers Association (NEMA) and Consortium for Energy Efficiency (CEE) **High-Performance** T8 Lighting System Specification as approved under Ontario Power Authority (OPA) Equipment Replacement Incentive Initiative 2012-2014 (ERII) / SaveOnEnergy program as **High Performance** product.
- .4 T8 Ballasts shall be instant-start technology with less than 10% Total Harmonic Distortion (THD).
- .5 T5HO ballasts supplied shall be programmed rapid-start technology with less than 10% (THD).
- .6 Ballast factor to be 0.88 for normal output ballast.
- .7 Ballast factor to be 0.77 for low output ballast.
- .8 Ballast factor to be 1.20 for high output ballast.
- .9 Approved Ballast Manufacturer's for Linear T8 Lamps :
  - .1 Philips Advance IOP Series
  - .2 Sylvania QHE Series
  - .3 General Electric ULTRAMAX Series
- .10 Approved Ballast Manufacturer's for Linear T5HO Lamps :
  - .1 Philips Advance CENTIUM Series
  - .2 Ultrasave ER Series
  - .3 GE Ultrastart Series

1.2 PRODUCT-LAMPS

- .1 All 4' T8 fluorescent lamps shall be 28 Watt long life type with a minimum Color Rendering Index (CRI) of 80 and Color Temperature (CT) of 4100 Kelvin (K), average life to be 36,000 hours with a mean lumen output of 2,645 lumens.
- .2 All T5HO lamps to be of energy-saving type rated at 47 to 50W, average minimum rated life of 30,000 hours, 5,000 initial lumen output, 85 CRI, CT of 4100K.

- .3 Approved Manufacturer's Linear T8 Lamps :
  - .1 Philips Energy Advantage Series
  - .2 Sylvania Octron 800XP Series
  - .3 GE Ecolux Series
  
- .4 Approved Manufacturer's Linear T5HO Lamps :
  - .1 Philips Energy Advantage Series
  - .2 Sylvania Pentron SuperSaver Series
  - .3 GE Ecolux Watt-Miser Starcoat Series

### 1.3 EXIT SIGNS

- .1 Exit lights: to CSA C22.2 No.141 and NRCan CSA C860.
- .2 Housing: cold rolled steel minimum 1.0 mm thick, satin aluminum enamel finish extruded aluminum housing, brush aluminum finish.
- .3 Face and back plates: extruded aluminum.
- .4 Lamps: multiple LED, Total sign wattage  $\leq 5W$ , 120V, over 500,000 hours.
- .5 Removable faceplate; allow access for re-lamping and cleaning.
- .6 Mounting to match existing.
- .7 Arrow knockouts to match existing.
- .8 Install exit lights to manufacturer's recommendations, listing requirements, NFPA standard and local regulatory

### 1.4 LED LAMP CODE

- .1 Type LED-PAR20-FL-Dim
  - .1 LED 25,000 life at L70 standards
  - .2 CRI > 80
  - .3 dimmable down to 10%
  - .4 energy star listed
  - .5 CT: 4100K
  - .6 Model: Maxlite 7P20DLED41 FL
  - .7 Model: TCP LED9E26P2041KFL
  - .8 Model: Phillips 8PAR20/END/F36 4000 DIM 6/1
  
- .2 Type LED-SI-12W-A19
  - .1 LED 25,000 life at L70 standards
  - .2 CRI > 80
  - .3 Energy star listed
  - .4 Model: Maxlite 12A19DLED41
  - .5 Model: TCP LED12E26A1941K

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- .6 Model: Phillips 12A19/END/2700-800 DIM 6/1
- .3 Type LED-12W-PAR30
  - .1 LED 25,000 life at L70 standards
  - .2 CRI> 80
  - .3 energy star listed
  - .4 Model: Maxlite 12P30DLED41 FL
  - .5 Model: TCP LED12E26P30S30KFL
  - .6 Model: Phillips 13PAR30S/END/F36 3000 DIM SM 6/1
- .4 Type LED-SI-17W-A21
  - .1 LED 25,000 life at L70 standards
  - .2 CRI> 80
  - .3 Dimmable down to 10%
  - .4 Energy star listed
  - .5 Model: Maxlite 17A21DLED41
  - .6 Model: TCP LED18A21D0D41K
  - .7 Model: Phillips 19A21/2700 WHT DIM 6/1
- .5 Type LED-7W-MR16
  - .1 UV and IR free
  - .2 CRI> 82
  - .3 25,000 life at L70 standards
  - .4 Energy star listed
  - .5 Model: Maxlite SKMR1607LED27 FL
  - .6 Model: TCP LED712VMR16V41KFL
  - .7 Model: Phillips 10MR16/END/F24 3000 DIM 10/1

1.5 LIGHT FIXTURES

New light fixtures to be supplied with approved ballast as specified in Section 16500 Subsection 1.1 where applicable.

- .1 Type LED-LIN-2ft
  - .1 long-life LED's
  - .2 surface mount
  - .3 linear nominal 2ft length
  - .4 high impact acrylic diffuser
  - .5 Model: Peerless NSL-2-24-40KRA-WH-MV-NOND
  - .6 Model: BJTake LSP-4-2L-P1R-840-UNV-LN
  - .7 Model: Lithonia WL2-18L-D20-LP840
- .2 Type N1411-T8-K12
  - .1 recessed fluorescent luminaire for T-grid ceiling system
  - .2 1'x4' size
  - .3 1 lamp cross-section
  - .4 hinged and latched frame. 3¼" shallow profile
  - .5 white paint interior
  - .6 K12 acrylic prismatic diffuser
  - .7 120V instant start electronic ballast

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- .8 Model: Peerless LACH3-14G-132-12-120-MR
- .9 Model: BJTake BJTTF-1X4-1LP-32WT8-UNV-K12-WHAL
- .10 Model: Visioneering MRCTB1X4-1T832N120-K12
  
- .3 Type N1411-T8-K12-AL+
  - .1 recessed fluorescent luminaire for T-grid ceiling system
  - .2 1'x4' size
  - .3 1 lamp cross-section
  - .4 hinged and latched frame. 3¼" shallow profile
  - .5 upgraded aluminum 95% reflective interior
  - .6 K12 acrylic prismatic diffuser
  - .7 120V instant start electronic ballast
  - .8 Model: Peerless LACH3-14G-132-12-120-SPEC
  - .9 Model: BJTake BJTTF-1X4-1LP-32WT8-UNV-K12-AL+
  - .10 Model: Visioneering MRCTB1X4-1T832N120-K12-VF1
  
- .4 Type N1411-SW-AL+
  - .1 surface-mount; ceiling or wall
  - .2 4' length.semi-wrap style
  - .3 1 lamp cross-section
  - .4 upgraded aluminum 95% reflective interior
  - .5 120V instant start electronic ballast
  - .6 Model: BJTake BJT7000-4-1LP-32WT8-UNV-N-AL+
  - .7 Model: Peerless: SQ1-DIR-4-132-OP2-MW-120-IS
  
- .5 Type N1411-T5HO-VAP
  - .1 high performance vapour proof luminaire
  - .2 4' length
  - .3 IP66 rating
  - .4 polycarbonate or fiberglass construction body
  - .5 impact resistant
  - .6 polycarbonate lense
  - .7 1 lamp cross-section
  - .8 120V program rapid start electronic ballast
  - .9 Model: Beghelli BS100T5HO-4-HT-154W-120V
  - .10 Model: BJTake BJTVPL-4-154-T5HO-10WH-4-HGR
  - .11 Model: Peerless AP2W-4-1-54-LCP-HT-MB-120-IS
  
- .6 Type N1411-T8-K12-DW
  - .1 recessed fluorescent luminaire for T-grid ceiling system
  - .2 1'x4' size
  - .3 1 lamp cross-section
  - .4 hinged and latched frame. 3¼" shallow profile
  - .5 white paint interior
  - .6 K12 acrylic prismatic diffuser
  - .7 120V instant start electronic ballast
  - .8 drywall mounting flange
  - .9 Model: Peerless LACH3-14G-132-12-120-Drywall Flange Kit
  - .10 Model: BJTake BJTTF-1X4-1LP-32WT8-UNV-K12-WHAL-Drywall Flange Kit
  - .11 Model: Visioneering MRCTB1X4-1T832N120-K12 Drywall Flange Kit

- .7 Type N1411-T8-VAP
  - .1 high performance vapour proof luminaire
  - .2 IP66 rating
  - .3 polycarbonate or fiberglass construction body
  - .4 impact resistant
  - .5 polycarbonate lense
  - .6 1 lamp cross-section
  - .7 120V instant start electronic ballast
  - .8 Model: Beghelli BS100T5HO-4-HT-132-120V
  - .9 Model: BJTake BJTVPL-4-132-T8-10WH-4-HGR
  - .10 Model: Peerless AP2W-4-132-LCP-HT-MB-120-IS
  
- .8 Type N1421-T8-VAP
  - .1 high performance vapour proof luminaire
  - .2 IP66 rating
  - .3 polycarbonate or fiberglass construction body
  - .4 impact resistant
  - .5 polycarbonate lense
  - .6 2 lamp cross-section
  - .7 120V instant start electronic ballast
  - .8 Model: Beghelli BS100T5HO-4-HT-232-120V
  - .9 Model: BJTake BJTVPL-4-232-T8-10WH-4-HGR
  - .10 Model: Peerless AP2W-4-232-LCP-HT-MB-120-IS
  
- .9 Type N1821T-SW-AL+
  - .1 surface-mount; ceiling or wall
  - .2 8' length.tandem configuration
  - .3 semi-wrap style
  - .4 1 lamp cross-section
  - .5 upgraded alumimum 95% reflective interior
  - .6 120V instant start electronic ballast
  - .7 Model: BJTake BJT7000-8-232-UNV-N-AL+
  - .8 Model: Peerless: (2) SQ1-DIR-4-132-OP2-MW-120-IS
  
- .10 Type N1821T-SW-AL+ -HIC
  - .1 surface-mount; ceiling or wall
  - .2 8' length.tandem configuration
  - .3 semi-wrap style
  - .4 1 lamp cross-section
  - .5 upgraded alumimum 95% reflective interior
  - .6 120V instant start electronic ballast
  - .7 high ceiling mount
  - .8 Model: BJTake BJT7000-8-232-UNV-N-AL+
  - .9 Model: Peerless: (2) SQ1-DIR-4-132-OP2-MW-120-IS
  
- .11 Type N1821T-T5HO-VAP
  - .1 high performance vapour proof luminaire
  - .2 IP66 rating
  - .3 8' length.tandem configuration

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- .4 polycarbonate or fiberglass construction body
- .5 impact resistant
- .6 polycarbonate lense
- .7 1 lamp cross-section
- .8 120V program rapid start electronic ballast
- .9 Model: Beghelli (2) BS100T5HO-4-HT-154W-120V
- .10 Model: BJTake BJTVPL-8-254-T5HO-10WH-4-HGR
- .11 Model: Peerless AP2W-8-254-LCP-HT-MB-120-IS
  
- .12 Type N1821T-T8-VAP
  - .1 high performance vapour proof luminaire
  - .2 IP66 rating
  - .3 polycarbonate or fiberglass construction body
  - .4 impact resistant
  - .5 8' length.tandem configuration
  - .6 polycarbonate lense
  - .7 1 lamp cross-section
  - .8 120V instant start electronic ballast
  - .9 Model: Beghelli (2) BS100T5HO-4-HT-132-120V
  - .10 Model: BJTake BJTVPL-8-232-T8-10WH-4-HGR
  - .11 Model: Peerless AP2W-8-232-LCP-HT-MB-120-IS
  
- .13 Type N22-LED-Troffer
  - .1 edge lit 2'x2' Panel
  - .2 100,000 hour life at L70 standards
  - .3 CRI>80
  - .4 CT: 4100K
  - .5 Input power: 36W
  - .6 Lumens: 3375
  - .7 aluminum housing
  - .8 IC rated
  - .9 Model: MaxLite MLFP22EP3641
  - .10 Model: GE ET22-0-B3-A-V-WHTE
  - .11 Model: Nova NPD-E2243-40-WH
  
- .14 Type N2421-T8-K12
  - .1 recessed fluorescent luminaire for T-grid ceiling system
  - .2 2'x4' size
  - .3 2 lamp cross-section
  - .4 hinged and latched frame. 3¼" shallow profile
  - .5 white paint interior
  - .6 K12 acrylic prismatic diffuser
  - .7 120V instant start electronic ballast
  - .8 Model: Peerless LACH3-24G-232-12-120-MR
  - .9 Model: BJTake BJTTF-2X4-2LP-32WT8-UNV-K12-WHAL
  - .10 Model: Visioneering MRCTB2X4-2T832N120-K12
  
- .15 Type N2421-T8-K12-REL
  - .1 recessed fluorescent luminaire for T-grid ceiling system
  - .2 2'x4' size



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- .3 2 lamp cross-section
- .4 hinged and latched frame. 3¼" shallow profile
- .5 white paint interior
- .6 K12 acrylic prismatic diffuser
- .7 120V instant start electronic ballast
- .8 REL relocate fixture as directed
- .9 Model: Peerless LACH3-24G-232-12-120-MR
- .10 Model: BJTake BJTTF-2X4-2LP-32WT8-UNV-K12-WHAL
- .11 Model: Visioneering MRCTB2X4-2T832N120-K12
  
- .16 Type N2462-HB-T5HO-VAP
  - .1 high performance vapour proof luminaire
  - .2 IP66 rating
  - .3 4' length
  - .4 fiberglass construction body
  - .5 polycarbonate lense
  - .6 6 lamp cross-section
  - .7 120V program rapid start electronic ballast
  - .8 Model: Peerless AP4-HB-4-654-PC-HT-CH-120-PRS
  - .9 Model: BJTake BJT-VP-4-654-UNV-AL+-PC-10'BK-4-HGR10
  - .10 Model: Metalux VT4-654-T5HO-M-PC-347V-EHT2-SPEC.ALUM.REF
  
- .17 Type NEX-LED-GRN-RM
  - .1 LED running man sign
  - .2 aluminum construction
  - .3 CSA NBC2010, C22.2 No. 141 compliance
  - .4 universal voltage 120V / 347V
  - .5 2.0W input power
  - .6 universal DC input voltage from 6V to 24V
  - .7 Model – Beghelli MC-LED-1-OLR-C-UDC
  - .8 Model – StanPro RMS-0-WH-UDC
  - .9 Model – Lumacell LA-1-W-U-TP
  
- .18 Type NEX-LED-GRN-RM-COMBO
  - .1 LED running man sign
  - .2 aluminum construction
  - .3 CSA NBC2010, C22.2 No. 141 compliance
  - .4 universal voltage 120V / 347V
  - .5 2.0W input power
  - .6 maintenance free battery
  - .7 Model – Beghelli QR-RM-6-36-LED-OLR-M-2SR
  - .8 Model – StanPro PRMXL-6-36-3RJ-1-2N
  - .9 Model – Lumacell LSC-28-W-2-LD1-AT
  
- .19 Type NEX-LED-RED
  - .1 aluminum construction
  - .2 CSA NBC2010, C22.2 No. 141 compliance
  - .3 universal voltage 120V / 347V
  - .4 2.0W input power
  - .5 universal DC input voltage from 6V to 24V

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- .6 Model – Beghelli QR-E-LED-R-1-M-AT
- .7 Model – StanPro SLEXX-C-1-WH-UDC
- .8 Model – Lumacell LER-450-UNV

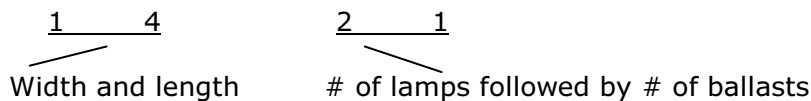
1.6 LIGHTING CONTROLS

- .1 Type LC-LINE-PIR-CRNR-MNT
  - .1 line voltage switching
  - .2 digital PIR detection
  - .3 no neutral required
  - .4 corner mount
  - .5 no power switching unit required
  - .6 Model: SensorSwitch WVR-2P-WH
- .2 Type LC-LINE-PIR-Fixt Mnt
  - .1 line voltage switching
  - .2 digital PIR detection
  - .3 no neutral required
  - .4 corner.wall mount
  - .5 no power switching unit required
  - .6 Model: SensorSwitch CMRB-120
  - .7 Model: WattStopper HB350-B-HBL-3
  - .8 Model: Hubbel HMHB21U
- .3 Type LC-LINE-PIR-CRNR-MNT
  - .1 line voltage switching
  - .2 digital PIR detection
  - .3 no neutral required
  - .4 wall mount
  - .5 no power switching unit required
  - .6 Model: SensorSwitch WVR-2P-WH
- .4 Type LC-LV-PIR-Ceil Mnt.
  - .1 passive infrared occupancy control
  - .2 ceiling mount
  - .3 low voltage
  - .4 360 degree coverage pattern
  - .5 requires control unit
  - .6 Model: SensorSwitch CM-9-PP20-2P
  - .7 Model: Hubbell ATP600C-CU300A
  - .8 Model: WattStopper CI-205-1-BZ-50
- .5 Type LC-LV-PIR-Cor-Ceil Mnt.
  - .1 passive infrared occupancy control
  - .2 corridor application
  - .3 ceiling mount
  - .4 low voltage
  - .5 360 degree extended coverage pattern
  - .6 requires control unit
  - .7 Model: SensorSwitch CM10-PP20-2P

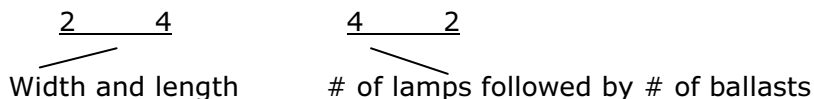
- .6 Type LC-LV-PIR-HiC
  - .1 passive infrared occupancy control
  - .2 high ceiling application
  - .3 ceiling mount
  - .4 low voltage
  - .5 360 degree coverage pattern
  - .6 requires control unit
  - .7 Model: SensorSwitch CM6-PP20-2P
  - .8 Model: WattStopper HB-300-HBL3-BZ-50
  
- .7 Type LC-WS-PIR-AUTO
  - .1 passive infrared technology occupancy control
  - .2 wall switch. 120V
  - .3 Ivory colour
  - .4 auto control with no manual button
  - .5 Model: Hubbell AP1277I1N
  
- .8 Type LC-WS-PIR-AUTO-MAN
  - .1 passive infrared technology occupancy control
  - .2 wall switch. 120V
  - .3 Ivory colour
  - .4 auto control with manual button
  - .5 Model: Hubbell AP1277I1
  - .6 Model: WattStopper PW-100-I
  - .7 Model: SensorSwitch WSX-IV
  
- .9 Type LC-WS-US-AUTO-MAN
  - .1 ultrasonic technology occupancy control
  - .2 wall switch. 120V
  - .3 Ivory colour
  - .4 auto control with manual button
  - .5 Model – Hubbell AU1277I1
  - .6 Model – SensorSwitch WSX-IV

1.7 FIXTURE CODING

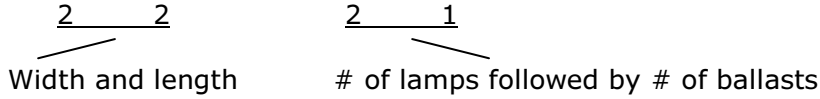
- .1 **Overview.** The fixture coding system uses a simple alpha-numeric coding system to describe the physical dimensions, the number and type of ballast and lamps used as well as alphabetical suffixes that provide further descriptions of lense type, fixture type etc. The codes used in this project can easily be deciphered by following the general coding methodology provided below.
- .2 **Fixture Dimension.** The first two numbers in the code description, describe the width and the nominal length of the fixture. A 1421 fixture, (pronounce one-four-two-one) is 1' wide by 4' long and thus the first two numerals of its code is 1 and 4. It is important to note that the first number only indicates the approximate width and is to serve as a general guide. For example, a one lamp commercial strip fixture that has a width of only 5" by 4' long would also be designated as a 1-4 type fixture. fixture coding system uses a simple alpha-numeric coding system to describe the physical dimensions, the number and type of ballast and lamps used as well as alphabetical suffixes that provide further descriptions of lense type, fixture type etc. The codes used in this project can easily be deciphered by following the general coding methodology provided below.
- .3 **Number of Lamps and Ballasts.** The next two numbers in the code indicate the number of lamps and ballasts used. A 1421 has 2 lamps and a single ballast thus the last two numerals -2-1. For example, a 2442 is a 2' by 4' fixture with 4 lamps and 2 ballasts.
- .4 **Lamp Types.** All fluorescent retrofits on this project are a conversion from existing T12 or T8 fluorescent lamps to standard 32 watt T8 fluorescent lamps.
- .5 **Additional Suffixes.** Note that from time to time additional suffixes have been added to further assist in describing the fixture's retrofit condition. For example, -LBF is used to indicate a **L**ow **B**allast **F**actor ballast is used.
- .6 **Example 1.** The following is an example of a code for a 1'x 4' fixture with two lamps and one ballast; fixture Code 1421:



- .7 **Example 2.** The following is an example of a code for a 2'x 4' fixture with 4 lamps and 2 ballasts; fixture Code 2442:



- .8 **Example 3.** The following is an example of a code for a 2'x 2' fixture with two T8 lamps and one ballast; fixture Code 2221-T8:



- .9 **Voltage Prefix.** To identify fixture voltage in the retrofit code, a prefix has been added to the very beginning of the code.

The prefix '1-' represents fixtures that are 120 Volt and the prefix '3-' represents 347 Volt fixtures. For example, a 1-1421 is a 120V 1' x 4' fixture with 2 lamps and one ballast. If the prefix were '3-' as in 3-1421, the 3- would signify the fixture to be 347V.

- .10 **Specific Code Descriptions.** Specific Code Descriptions and Scope of Work for each retrofit are provided in Appendix A - Retrofit Code Summary.

- .11 **Abbreviations in Coding.**

<u>Code</u>	<u>Description</u>
1- , 3-	Voltage Prefix for 120V (1- ) and 347V ( 3- )
AUX_P	Auxiliary Relay Pack
BAF	Fixture with straight-bladed baffled louvers
BOX	Surface mount box type fluorescent fixture
CAG	Strip fixture with wire-guard
CF	<u>C</u> ompact <u>F</u> luorescent lamp
CUB	Fixture with opal cube wrap lense
DC	Daylight Control
DEC	Decommission sockets
DECOM	Decommission fixture, remove ballast and lamps, leave fixture body in place
DELETE	Delete fixture and make safe
DIM	Dimming Control
DIR	Direct Lighting
HAL	Halogen Lamp
HBF	<u>H</u> igh <u>B</u> allast <u>F</u> actor instant start ballast
HIC	High Ceiling (ceiling exceeds 18')
IND	Indirect Lighting
K12	Acrylic Lense; prismatic pattern no. 12
IND	Industrial strip fixture with open white reflector
LBF	<u>L</u> ow <u>B</u> allast <u>F</u> actor instant start ballast
LC	<u>L</u> ighting <u>C</u> ontrol - type of occupancy sensor designated follows this code.
LED	<b>L</b> ight <b>E</b> mitting <b>D</b> iode
LV	<b>L</b> ow <b>V</b> oltage
N/A	Not applicable, no access or not available
N/C	No change
PAR30	Lamp Reflector Designation
PIR	Passive Infrared
PC	Photo-cell

Lighting Retrofit Project

Section 16500

R	Reflector Installation
R30	Lamp Reflector Designation
RL	Re_Lamp fixture - Lamp replacement only.
SD	Shared_Double; a common 2-lamp ballast powering two 1-lamp continuously row mounted fixtures
SQ	Squared_Double; a common 4-lamp ballast powering two 2-lamp continuously row mounted fixtures
STR	Commercial Strip fixture
T	Used to designate <b>Tandem</b> fixture (4' lamps end to end in a 8' body ie. 1821- <b>T</b> -T8-STR)
T8	T8 lamp/ballast technology
TC	Time Control
+TILE	Install one new tile in T-bar ceiling
US	Ultrasonic
W	Designates <b>Wide</b> body style fixture
WRA	Wrap Style Lense Fixture
WS	Wall-Switch

<u>Usage</u>	<u>Description</u>
ARN	Arena
AUD	Auditorium
AUX	Auxiliary Room
CAF	Cafeteria
CHA	Change Room
COMP	Computer Room
CON	Conference Room
CORR	Corridor
DIS	Display Case
ELECT	Electrical Room
ELV	Elevator
EXT	Exterior
FAID	First Aid
FOY	Foyer
HALL	Hallway
JCL	Janitors Closet
KIT	Kitchen
LIB	Library
LOB	Lobby
LOU	Lounge
LUNCH	Lunch
MECH	Mechanical Room
MEET	Meeting Room
MPR	Multi-Purpose Room
N/A	Not Applicable
OFF	Office
PLAY	Playroom
RCP	Reception
SERVE	Servery
SHIPPING	Shipping Area
STA	Stairway

Lighting Retrofit Project

Section 16500

STO	Storage
STUDY	Study Room
TSK	Task Room
VAULT	Safe
VES	Vestibule
WC	Water Closet
WORK	Work Room

<u>Mounting</u>	<u>Description</u>
AC	Aircraft Cable
CHA	Chain
FIX	Lighting Fixture
PEN	Pendant
REC	Recessed
STE	Stem
SUR	Surface
TRK	Track
WALL	Wall

<u>Lense</u>	<u>Description</u>
BAF	Baffle
CAG	Cage
CUB	Cube
EXR	Exit Red Panel
GLA	Glass
KEY	Keyless socket
IND	Indirect
K12	K12 lense
LOU	Louver
NON	None
OPL	Opal
PAR	Paracube
P06	Pot Light 6"
P07	Pot Light 7"
STR	Strip fixture - no lense
VAL	Valance
VAP	Vapour wet location
WRA	Wrap

<u>Ceiling Type</u>	<u>Description</u>
ACO	Acoustic Tile
CEM	Cement
DRY	Drywall
N/A	Not Applicable
PLA	Plaster
STL	Open Steel Structure
TBA	T-Bar
WOD	Wood

## APPENDIX A - RETROFIT CODE SUMMARY



AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT

RETROFIT CODE SUMMARY BY BUILDING

Building No.	Retrofit Code	Retrofit Qty.
103	1421-T8-LampChange	4
	N1421-T8-VAP	9
	N1821T-T5HO-VAP	31
	N2421-T8-K12	2
103 Total		46
104	N1411-T5HO-VAP	2
	N1821T-T5HO-VAP	38
104 Total		40
136	1421-T8-LBF	31
	Delete	1
	LED-SI-12W-A19	7
	LED-SI-17W-A21	1
	N1411-SW-AL+	10
136 Total		50
146	N2462-HB-T5HO-VAP	6
146 Total		6
22	1411-T8	1
	1411-T8-LampChange	7
	1421-T8-LampChange	39
	1421-T8-LBF	70
	2421-T8	106
	Delete	6
	LED-12W-PAR30	22
	LED-7W-MR16	18
	LED-LIN-2ft	9
	LED-PAR20-FL-Dim	7
	LED-SI-12W-A19	22
	LED-SI-17W-A21	4
	N/C	22
	N1411-SW-AL+	71
	N1411-T8-VAP	10
	N1821T-SW-AL+	5
	N1821T-SW-AL+-HIC	1
	N22-LED-Troffer	22
	N2421-T8-K12	525
	N2421-T8-K12-REL	1
NEX-LED-RED	1	
22 Total		969

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT

RETROFIT CODE SUMMARY BY BUILDING

Building No.	Retrofit Code	Retrofit Qty.
34	1411-T8-LampChange	1
	1421-T8-LampChange	4
	2421-T8	30
	2421-T8-DecSoc	29
	2421-T8-LampChange	24
	Delete+Tile	12
	LED-SI-12W-A19	3
	LED-SI-17W-A21	3
	N1411-K12	4
	N1411-SW-AL+	15
	N1411-T8-VAP	1
	N1821T-SW-AL+	4
	N2421-T8-K12	8
	NEX-LED-GRN-RM	6
34 Total		144
45	LED-SI-12W-A19	1
	N1411-T8-VAP	35
45 Total		36
60	2421-T8-DecSoc	9
	2421-T8-LBF	4
	2441-T8-LBF	2
	LED-12W-PAR30	5
	LED-SI-12W-A19	13
	N/C	1
	N1411-SW-AL+	44
	N1411-T8-VAP	7
	NEX-LED-GRN-RM	5
60 Total		90
76	1421-T8-LampChange	39
	LED-SI-12W-A19	22
	N/C	10
76 Total		71
88	1421-T8-LBF	4
	2421-T8-DecSoc	2
	LED-12w-PAR20-Dim	14
	LED-SI-12W-A19	29
	N1411-T8-VAP	98
	N1821T-T8-VAP	16
	NEX-LED-GRN-RM	13
	NEX-LED-GRN-RM-COMBO	1
88 Total		177

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT

RETROFIT CODE SUMMARY BY BUILDING

Building No.	Retrofit Code	Retrofit Qty.
91	1411-T8	17
	1421-T8-LampChange	9
	1421-T8-LBF	9
	LED-LIN-2ft	1
	LED-SI-12W-A19	39
	N/C	11
	N1411-T8-VAP	74
91 Total		160
97	1421-T8-LampChange	7
	2421-T8-DecSoc	31
	Delete+Tile	14
	LED-7W-MR16	11
	N/C	4
	N1411-K12	44
	N1411-SW-AL+	2
N2421-T8-K12	6	
97 Total		119
99	1421-T8-LBF	13
	2421-T8-DecSoc	21
	2441-T8-LBF	14
	Delete	2
	LED-SI-12W-A19	22
	N/C	8
	N1411-K12	22
	N1411-K12-AL+	6
	N1411-SW-AL+	2
	N1411-T5HO-VAP	16
	N1411-T8-K12-DW	7
	N1411-T8-VAP	21
	N1421-T8-VAP	16
N1821T-SW-AL+	2	
99 Total		172
Grand Total		2080

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT

RETROFIT CODE SUMMARY BY BUILDING

Building No.	Retrofit Code	Retrofit Qty.
	Lighting Control	
103	CBS	2
	LC-LINE-PIR-Crn-Mnt	1
	LC-LV-PIR-Ceil-Mnt	1
	LC-LV-PIR-HiC	5
	LC-WS-PIR-AUTO	1
	LC-WS-PIR-AUTO-MAN	1
	None	0
103 Total		11
104	LC-LV-PIR-HiC	8
104 Total		8
136	CBS	2
	LC-LINE-PIR-Wall Mnt	1
	LC-WS-PIR-AUTO	4
	LC-WS-PIR-AUTO-MAN	6
	None	2
136 Total		15
146	LC-LINE-PIR-Fixt Mnt	6
146 Total		6
22	CBS	32
	LC-LINE-PIR-Crn-Mnt	3
	LC-LINE-PIR-Fixt Mnt	3
	LC-LV-PIR-Ceil-Mnt	68
	LC-LV-PIR-Cor-Ceil-Mnt	4
	LC-WS-PIR-AUTO	18
	LC-WS-PIR-AUTO-MAN	40
	LC-WS-US-AUTO-MAN	1
	None	1
22 Total		170
34	CBS	7
	LC-LINE-PIR-Fixt Mnt	4
	LC-LV-PIR-Ceil-Mnt	16
	LC-WS-PIR-AUTO	3
	LC-WS-PIR-AUTO-MAN	7
	LC-WS-US-AUTO-MAN	4
	None	0
34 Total		41
45	LC-LINE-PIR-Fixt Mnt	3
	LC-LINE-PIR-Wall Mnt	1
	LC-LV-PIR-Ceil-Mnt	2
	LC-LV-PIR-Cor-Ceil-Mnt	2
	LC-WS-PIR-AUTO-MAN	1
	None	0
45 Total		9

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT

RETROFIT CODE SUMMARY BY BUILDING

Building No.	Retrofit Code	Retrofit Qty.
60	CBS	4
	LC-LV-PIR-Ceil-Mnt	5
	LC-WS-PIR-AUTO	3
	LC-WS-PIR-AUTO-MAN	9
	LC-WS-US-AUTO-MAN	8
	None	0
60 Total		29
76	CBS	5
	LC-WS-PIR-AUTO	2
	LC-WS-PIR-AUTO-MAN	1
	None	0
76 Total		8
88	CBS	3
	LC-LINE-PIR-Fixt Mnt	2
	LC-WS-PIR-AUTO	5
	LC-WS-PIR-AUTO-MAN	5
	None	0
88 Total		15
91	CBS	5
	LC-LV-PIR-Ceil-Mnt	3
	LC-WS-PIR-AUTO	6
	LC-WS-PIR-AUTO-MAN	2
	None	0
91 Total		16
97	CBS	4
	LC-LV-PIR-Ceil-Mnt	12
	LC-WS-PIR-AUTO	3
	LC-WS-PIR-AUTO-MAN	12
	None	1
97 Total		32
99	CBS	5
	LC-LV-PIR-Ceil-Mnt	11
	LC-WS-PIR-AUTO	2
	LC-WS-PIR-AUTO-MAN	6
	None	0
99 Total		24
Grand Total		384

## APPENDIX B - INSTALLATION SCHEDULE

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM						
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type
1	136	001	Storage	1	100A19	Plaster	8	120 Adequate	1	LED-SI-12W-A19	Surface	None	1	None
2	136	001 ST	Stairs	1	100A19	Plaster	8	120 Adequate	1	LED-SI-12W-A19	Surface	None	1	None
3	136	002	Storage	1	150A21	Plaster	8	120 Adequate	1	LED-SI-17W-A21	Surface	Industrial Refl	1	LC-WS-PIR-AUTO-MAN
4	136	003	Storage	2	100A19	Plaster	8	120 Overlit	2	N1411-SW-AL+	Surface	None	1	LC-WS-PIR-AUTO-MAN
5	136	003	Storage	1	2442-T12	Plaster	8	120 Overlit	1	Delete	NA	NA	0	None
6	136	004	Storage	1	CF15-SI	Plaster	8	120 Adequate	1	LED-SI-12W-A19	Surface	None	1	CBS
7	136	005	Mechanical	1	150A21	Plaster	8	120 Adequate	1	LED-SI-12W-A19	Surface	None	0	None
8	136	007	Corridor	2	100A19	Plaster	8	120 Adequate	2	LED-SI-12W-A19	Surface	None	1	LC-WS-PIR-AUTO
9	136	008	Storage	3	1421-T12	Plaster	8	120 Adequate	3	1421-T8-LBF	Surface	Vapor Proof	1	LC-LINE-PIR-Wall Mnt
10	136	008	Storage	2	1421-T12	Plaster	8	120 Adequate	2	N1411-SW-AL+	Surface	Wrap	1	CBS
11	136	009	Corridor	6	1421-T12	Plaster	8	120 Adequate	6	1421-T8-LBF	Surface	Vapor Proof	0	None
12	136	009 ST	Stairs	1	100A19	Plaster	8	120 Underlit	1	LED-SI-12W-A19	Surface	Vapor Proof	0	None
13	136	010	Mechanical	3	1421-T12	Plaster	9	120 Adequate	3	1421-T8-LBF	Surface	Vapor Proof	0	None
14	136	100	Lobby	1	1421-T12	Plaster	10	120 Adequate	1	N1411-SW-AL+	Surface	Wrap	0	None
15	136	101	Washroom	1	100A19	Plaster	8	120 Underlit	1	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
16	136	102	Office	2	1421-T12	Plaster	8	120 Underlit	2	N1411-SW-AL+	Surface	Wrap	2	LC-WS-PIR-AUTO-MAN
17	136	103	Corridor	1	1421-T12	Plaster	8	120 Adequate	1	N1411-SW-AL+	Surface	Wrap	0	None
18	136	104	Corridor	2	1421-T12	Drywall	7	120 Adequate	2	1421-T8-LBF	Surface	Vapor Proof	1	LC-WS-PIR-AUTO
19	136	105	Mechanical	2	1421-T12	Drywall	8	120 Adequate	2	1421-T8-LBF	Surface	Vapor Proof	1	LC-WS-PIR-AUTO
20	136	106	Washroom	1	100A19	Plaster	8	120 Underlit	1	N1411-SW-AL+	Surface	Wrap	0	None
21	136	107	Lab	8	1421-T12	Plaster	7	120 Adequate	8	1421-T8-LBF	Recessed	Vapor Proof	1	LC-WS-PIR-AUTO
22	136	110	Corridor	3	1421-T12	Drywall	7	120 Adequate	3	1421-T8-LBF	Surface	Vapor Proof	0	None
23	136	111	Mechanical	4	1421-T12	Drywall	8	120 Adequate	4	1421-T8-LBF	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
24	34	101	Office	3	2421-T8	T-Bar	8	120 Adequate	3	2421-T8-LampChange	Recessed	K12	1	LC-WS-US-AUTO-MAN
25	34	102	Office	2	2421-T12	T-Bar	8	120 Underlit	2	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
26	34	103	Office	2	2421-T12	T-Bar	8	120 Underlit	2	2421-T8	Recessed	K12	1	LC-WS-US-AUTO-MAN
27	34	104	Office	2	2421-T12	T-Bar	8	120 Underlit	2	2421-T8	Recessed	K12	1	LC-WS-US-AUTO-MAN
28	34	104 COR	Corridor	2	2421-T12	T-Bar	8	120 Overlit	2	2421-T8	Recessed	K12	0	None
29	34	104 COR	Corridor	1	EX-LED-GRN-RM	Plaster	9	120 NA	1	NEX-LED-GRN-RM	Wall	Exit	0	None
30	34	105	Office	2	2421-T12	T-Bar	8	120 Underlit	2	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
31	34	105	Office	2	2421-T8	T-Bar	8	120 Underlit	2	2421-T8-LampChange	Recessed	K12	1	CBS
32	34	105 ST	Stairs	2	1411-T12	Plaster	10	120 Underlit	2	N1411-SW-AL+	Surface	Wrap	1	CBS
33	34	106	Lunch Room	2	2421-T8	T-Bar	8	120 Adequate	2	2421-T8-LampChange	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
34	34	106 COR	Corridor	1	2421-T8	T-Bar	8	120 Overlit	1	2421-T8-LampChange	Recessed	K12	0	None
35	34	107	Office	2	2421-T8	T-Bar	8	120 Underlit	2	2421-T8-LampChange	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
36	34	107	Office	1	2421-T12	T-Bar	8	120 Underlit	1	2421-T8	Recessed	K12	1	CBS
37	34	107 COR	Corridor	1	1421-T12	Plaster	9	120 Underlit	1	N1411-SW-AL+	Surface	Wrap	0	None
38	34	108	Office	2	1421-T12	Plaster	10	120 Underlit	2	N1411-SW-AL+	Surface	Wrap	1	CBS

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM							
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type	
39	34	108	Office	4	1421-T12	Plaster	10	120	Underlit	2	N1821T-SW-AL+	Surface	Wrap	2	LC-LINE-PIR-Fixt Mnt
40	34	108 COR	Corridor	1	1411-T12	Plaster	9	120	Underlit	1	N1411-SW-AL+	Surface	Wrap	0	None
41	34	108 COR	Corridor	1	EX-2x7wCFL	Plaster	9	120	NA	1	NEX-LED-GRN-RM	Wall	Exit	0	None
42	34	108 ST	Stairs	1	1411-T12	Plaster	14	120	Underlit	1	N1411-SW-AL+	Chain	Wrap	0	None
43	34	109	Meeting Room	5	2442-T12	T-Bar	9	120	Adequate	5	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
44	34	200	Office	1	2421-T12	T-Bar	8	120	Underlit	1	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
45	34	200	Office	1	2421-T8	T-Bar	8	120	Underlit	1	2421-T8-LampChange	Recessed	K12	1	CBS
46	34	200 COR	Corridor	2	2421-T8	T-Bar	8	120	Adequate	2	2421-T8-LampChange	Recessed	K12	0	None
47	34	200a	Office	1	2421-T12	T-Bar	8	120	Underlit	1	2421-T8	Recessed	K12	1	LC-WS-US-AUTO-MAN
48	34	200a	Office	1	2421-T8	T-Bar	8	120	Underlit	1	2421-T8-LampChange	Recessed	K12	1	CBS
49	34	201	Office	2	1421-T12	Plaster	9	120	Underlit	2	N1821T-SW-AL+	Recessed	K12	2	LC-LINE-PIR-Fixt Mnt
50	34	202	Meeting Room	2	2421-T12	T-Bar	8	120	Underlit	2	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
51	34	203	Office	2	2421-T12	T-Bar	8	120	Underlit	2	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
52	34	204	Office	2	2421-T12	T-Bar	9	120	Underlit	2	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
53	34	204 COR	Corridor	2	1411-T12	Plaster	9	120	Adequate	2	N1411-SW-AL+	Surface	Wrap	0	None
54	34	204 COR	Office	1	EX-LED-Red	T-Bar	9	120	NA	1	NEX-LED-GRN-RM	Wall	Exit	0	None
55	34	205	Office	2	2421-T12	T-Bar	9	120	Underlit	2	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
56	34	206	Office	2	2421-T12	T-Bar	9	120	Underlit	2	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
57	34	207	Office	3	2421-T8	T-Bar	9	120	Underlit	3	2421-T8-LampChange	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
58	34	207	Office	1	EX-LED-Red	T-Bar	9	120	NA	1	NEX-LED-GRN-RM	Wall	Exit	0	None
59	34	208	Office	4	2421-T8	T-Bar	9	120	Underlit	4	2421-T8-LampChange	Recessed	K12	2	LC-LV-PIR-Ceil Mnt
60	34	208	Office	4	2421-T12	T-Bar	9	120	Underlit	4	2421-T8	Recessed	K12	1	CBS
61	34	210	Washroom	2	2221-U6-T12	T-Bar	8	120	Adequate	2	Delete+Tile	NA	NA	0	None
62	34	210	Washroom	2	No Fixt	T-Bar	8	120	Adequate	2	N1411-K12	Recessed	K12	1	LC-WS-PIR-AUTO
63	34	211	Washroom	2	2221-U6-T12	T-Bar	8	120	Adequate	2	Delete+Tile	NA	NA	0	None
64	34	211	Washroom	2	No Fixt	T-Bar	8	120	NA	2	N1411-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
65	34	300	Attic	3	150A21	Wood	8	120	Underlit	3	LED-SI-17W-A21	Surface	None	0	None
66	34	B01	Janitor	1	100A19	Concrete	6	120	Adequate	1	LED-SI-12W-A19	Wall	None	0	None
67	34	B01 COR	Corridor	1	1421-T12	Plaster	9	120	Adequate	1	N1411-SW-AL+	Chain	Wrap	0	None
68	34	B02	Office	3	2421-T8	T-Bar	7	120	Adequate	3	2421-T8-LampChange	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
69	34	B02a	Storage	2	1421-T12	Plaster	9	120	Adequate	2	N1411-SW-AL+	Chain	Wrap	1	LC-WS-PIR-AUTO-MAN
70	34	B03	Mechanical	1	1421-T8	Plaster	9	120	Adequate	1	1421-T8-LampChange	Chain	Vapor Proof	0	None
71	34	B03 COR	Corridor	1	1421-T8	Plaster	9	120	Adequate	1	1421-T8-LampChange	Chain	Vapor Proof	0	None
72	34	B03a	Janitor	1	1421-T8	Plaster	9	120	Adequate	1	1421-T8-LampChange	Chain	Vapor Proof	0	None
73	34	B03b	Washroom	2	2421-T12	T-Bar	7	120	Adequate	2	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO
74	34	B03b	Washroom	1	60A19	Drywall	7	120	Adequate	1	LED-SI-12W-A19	Recessed	Opal	0	None
75	34	B03c	Washroom	1	2421-T12	T-Bar	7	120	Adequate	1	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
76	34	B03c COF	Corridor	1	60A19	T-Bar	7	120	Underlit	1	LED-SI-12W-A19	Recessed	Glass	0	None



AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM							
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type	
77	34	B04	Office	15	2442-T8	T-Bar	8	120	Adequate	15	2421-T8-DecSoc	Recessed	K12	2	LC-LV-PIR-Ceil Mnt
78	34	B04	Office	1	EX-2x7wCFL	T-Bar	8	120	NA	1	NEX-LED-GRN-RM	Pendant	Exit	0	None
79	34	B04a	Storage	1	1411-T8	Plaster	8	120	Adequate	1	1411-T8-LampChange	Surface	Opal	0	None
80	34	B05	Office	10	2442-T8	T-Bar	8	120	Adequate	10	2421-T8-DecSoc	Recessed	K12	0	None
81	34	B05	Office	1	EX-2x7wCFL	T-Bar	8	120	NA	1	NEX-LED-GRN-RM	Pendant	Exit	0	None
82	34	B05 COR	Corridor	1	1421-T12	Plaster	9	120	Underlit	1	N1411-SW-AL+	Chain	Wrap	0	None
83	34	B05a	Office	1	2442-T8	T-Bar	8	120	Adequate	1	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
84	34	B05b	Office	1	2442-T8	T-Bar	8	120	Adequate	1	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
85	34	B05c	Electrical	1	1421-T8	Plaster	7	120	Adequate	1	1421-T8-LampChange	Surface	Wire Guard	0	None
86	34	B05c	Electrical	1	100A19	Plaster	7	120	Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	0	None
87	34	B05d	Telecom	1	1421-T12	Plaster	8	120	Adequate	1	N1411-SW-AL+	Wall	Wrap	0	None
88	34	B06	Lunch Room	2	2242-T12	T-Bar	8	120	Overlit	2	Delete+Tile	Recessed	K12	0	None
89	34	B06	Lunch Room	5	2442-T12	T-Bar	8	120	Overlit	5	Delete+Tile	Recessed	K12	0	None
90	34	B06	Lunch Room	3	No Fixt	T-Bar	8	120	Overlit	3	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO
91	34	B07	Meeting Room	2	2442-T8	T-Bar	7	120	Overlit	2	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
92	34	B07	Meeting Room	1	2221-U6-T8	T-Bar	7	120	Overlit	1	Delete+Tile	Recessed	K12	0	None
93	34	B07a	Mechanical	1	1421-T12	Plaster	9	120	Underlit	1	N1411-SW-AL+	Pendant	Wrap	0	None
94	60	100	Vestibule	1	1411-T12	T-Bar	8	120	Underlit	1	N1411-SW-AL+	Surface	Wrap	0	None
95	60	101	Office	4	2441-T8	T-Bar	8	120	Overlit	4	2421-T8-DecSoc	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
96	60	102	Meeting Room	4	2441-T8	T-Bar	8	120	Overlit	4	2421-T8-DecSoc	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
97	60	102a	Vault	1	1421-T5HO	T-Bar	8	120	Adequate	1	N/C	Surface	Vapor Proof	1	CBS
98	60	103	Office	2	2441-T8	T-Bar	8	120	Overlit	2	2441-T8-LBF	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
99	60	104	Washroom	5	65PAR30	T-Bar	8	120	Overlit	5	LED-12W-PAR30	Recessed	None	1	LC-WS-PIR-AUTO
100	60	105	Telecom	1	1421-T12	Drywall	8	120	Adequate	1	N1411-SW-AL+	Surface	Wrap	0	None
101	60	106	Office	2	1421-T12	T-Bar	8	120	Underlit	2	N1411-SW-AL+	Surface	Wrap	1	LC-WS-US-AUTO-MAN
102	60	107	Office	4	1421-T12	T-Bar	8	120	Underlit	4	N1411-SW-AL+	Surface	Wrap	2	LC-WS-US-AUTO-MAN
103	60	108	Office	2	1421-T12	T-Bar	8	120	Underlit	2	N1411-SW-AL+	Surface	Wrap	1	LC-WS-US-AUTO-MAN
104	60	109	Office	2	1421-T12	T-Bar	8	120	Underlit	2	N1411-SW-AL+	Surface	Wrap	1	LC-WS-US-AUTO-MAN
105	60	110	Office	2	1421-T12	T-Bar	8	120	Underlit	2	N1411-SW-AL+	Surface	Wrap	1	LC-WS-US-AUTO-MAN
106	60	111	Office	2	1421-T12	T-Bar	8	120	Underlit	2	N1411-SW-AL+	Surface	Wrap	1	LC-WS-US-AUTO-MAN
107	60	111 COR	Corridor	2	1421-T12	T-Bar	8	120	Adequate	2	N1411-SW-AL+	Surface	Wrap	0	None
108	60	111 COR	Corridor	1	1421-T8	T-Bar	8	120	Adequate	1	N1411-SW-AL+	Surface	Wrap	0	None
109	60	111 COR	Corridor	1	EX-LED-Red	T-Bar	8	120	NA	1	NEX-LED-GRN-RM	Wall	Exit	0	None
110	60	111 VES	Vestibule	1	1421-T8	T-Bar	8	120	Adequate	1	N1411-SW-AL+	Surface	Wrap	0	None
111	60	112	Office	2	1421-T12	T-Bar	8	120	Underlit	2	N1411-SW-AL+	Surface	Wrap	1	LC-WS-US-AUTO-MAN
112	60	113	Kitchen	1	1421-T12	Drywall	8	120	Adequate	1	N1411-SW-AL+	Surface	Wrap	0	None
113	60	113 COR	Corridor	3	1411-T12	T-Bar	8	120	Overlit	3	N1411-SW-AL+	Surface	Wrap	0	None
114	60	113 COR	Corridor	1	1421-T8	T-Bar	8	120	Overlit	1	N1411-SW-AL+	Surface	Wrap	0	None

**AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11**

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM							
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type	
115	60	113 COR	Corridor	2	EX-LED-Red	T-Bar	8	120	NA	2	NEX-LED-GRN-RM	Wall	Exit	0	None
116	60	114	Washroom	1	1421-T8	T-Bar	8	120	Overlit	1	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO
117	60	114 COR	Corridor	1	1421-T8	Drywall	8	120	Overlit	1	N1411-SW-AL+	Surface	Wrap	0	None
118	60	115	Lunch Room	2	1421-T12	Wood	8	120	Underlit	2	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
119	60	116	Lobby	2	2421-T12	T-Bar	8	120	Adequate	2	2421-T8-LBF	Recessed	K12	0	None
120	60	116a	Storage	1	60A19	Plaster	8	120	Adequate	1	LED-SI-12W-A19	Wall	None	0	None
121	60	117	Storage	3	100A19	Wood	9	120	NA	3	LED-SI-12W-A19	Surface	None	1	LC-WS-PIR-AUTO-MAN
122	60	201	Office	1	1421-T12	Plaster	8	120	Underlit	1	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
123	60	201 COR	Corridor	2	2421-T12	Plaster	9	120	Adequate	2	2421-T8-LBF	Recessed	K12	0	None
124	60	201 COR	Corridor	1	EX-2x25	Plaster	9	120	Adequate	1	NEX-LED-GRN-RM	Pendant	Exit	0	None
125	60	202	Office	3	1421-T12	Plaster	8	120	Underlit	3	N1411-SW-AL+	Surface	Wrap	1	LC-LV-PIR-Ceil Mnt
126	60	202	Office	3	1421-T12	Plaster	8	120	Underlit	3	N1411-SW-AL+	Surface	Wrap	1	LC-LV-PIR-Ceil Mnt
127	60	202	Office	1	EX-1x25	Plaster	8	120	Underlit	1	NEX-LED-GRN-RM	Wall	Exit	1	LC-LV-PIR-Ceil Mnt
128	60	203	Office	3	1421-T12	Plaster	8	120	Underlit	3	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
129	60	205	Office	2	1421-T12	Plaster	7	120	Adequate	2	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
130	60	205 COR	Corridor	1	1411-T12	Plaster	9	120	Adequate	1	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
131	60	206	Washroom	1	2441-T8	T-Bar	8	120	Overlit	1	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO
132	60	ATTIC 1	Attic	2	100A19	Wood	8	120	Underlit	2	LED-SI-12W-A19	Surface	None	0	None
133	60	ATTIC 2	Attic	2	100A19	Wood	8	120	Underlit	2	LED-SI-12W-A19	Surface	None	0	None
134	60	ATTIC 3	Attic	1	100A19	Wood	8	120	Underlit	1	LED-SI-12W-A19	Surface	None	0	None
135	60	ATTIC 4	Attic	2	100A19	Wood	8	120	Underlit	2	LED-SI-12W-A19	Surface	None	0	None
136	60	ATTIC 4 C	Attic	2	100A19	Wood	8	120	Underlit	2	LED-SI-12W-A19	Surface	None	0	None
137	60	B01	Storage	3	1411-T8	Wood	7	120	Underlit	3	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
138	60	B02	Telecom	1	1411-T12	Wood	7	120	Underlit	1	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
139	60	B03	Mechanical	1	1421-T12	Wood	7	120	Underlit	1	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
140	60	B04	Electrical	1	1421-T12	Wood	7	120	Underlit	1	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
141	60	B04	Electrical	1	100A19	Wood	7	120	Underlit	1	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
142	146	100	Garage	6	400HPS	Steel	21	120	Adequate	6	N2462-HB-T5HO-VAP	AC	Vapor Proof	6	LC-LINE-PIR-Fixt Mnt
143	104	100	Garage	38	1821-T12	Plaster	18	120	Adequate	38	N1821T-T5HO-VAP	AC	Vapor Proof	4	LC-LV-PIR-HiC
144	104	100	Garage	2	1421-T12	Plaster	18	120	Adequate	2	N1411-T5HO-VAP	AC	Vapor Proof	4	LC-LV-PIR-HiC
145	103	100	Garage	18	1821-T12	Wood	14	120	Underlit	18	N1821T-T5HO-VAP	AC	Vapor Proof	3	LC-LV-PIR-HiC
146	103	100a	Shop	1	1411-T12	Wood	8	120	Underlit	1	N1421-T8-VAP	Chain	Opal	0	None
147	103	101	Garage	13	1821-T12	Wood	14	120	Underlit	13	N1821T-T5HO-VAP	Chain	Industrial Refl	2	LC-LV-PIR-HiC
148	103	102	Shop	4	1421-T8	Drywall	14	120	Adequate	4	1421-T8-LampChange	Surface	Vapor Proof	1	LC-LINE-PIR-CrnR Mnt
149	103	103	Locker Room	2	2441-T8	T-Bar	8	120	Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
150	103	104	Shop	4	1421-T12	Fixed Tile	8	120	Underlit	4	N1421-T8-VAP	Surface	Vapor Proof	1	LC-LV-PIR-Ceil Mnt
151	103	105	Shop	2	1421-T12	Fixed Tile	8	120	Underlit	2	N1421-T8-VAP	Surface	Vapor Proof	1	CBS
152	103	106	Washroom	1	1421-T12	Wood	8	120	Underlit	1	N1421-T8-VAP	Surface	Vapor Proof	1	CBS

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM							
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type	
153	103	106 COR	Corridor	1	1421-T12	Wood	8	120	Underlit	1	N1421-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO
154	22	100VES	Vestibule	2	1421-T12	Plaster	10	120	Adequate	2	1421-T8-LBF	Wall	Opal	0	None
155	22	102	Washroom	1	2441-T8	T-Bar	8	120	Overlit	1	N2421-T8-K12	Recessed	K12	1	CBS
156	22	102a	Vestibule	1	1221-T12	Plaster	8	120	Overlit	1	LED-LIN-2ft	Surface	Opal	1	LC-WS-PIR-AUTO
157	22	102COR	Corridor	5	2421-T12	T-Bar	7	120	Underlit	5	N2421-T8-K12	Recessed	K12	0	None
158	22	102COR	Corridor	4	2421-T12	T-Bar	7	120	Underlit	4	N2421-T8-K12	Recessed	K12	0	None
159	22	102COR	Corridor	1	EX-LED-Red	T-Bar	7	120	Underlit	1	N/C	Pendant	Exit	0	None
160	22	103	Janitor	1	100A19	Plaster	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	0	None
161	22	105	Lab	6	2442-T12	T-Bar	8	120	Underlit	6	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
162	22	106	Washroom	1	2441-T8	T-Bar	8	120	Overlit	1	N2421-T8-K12	Recessed	K12	1	CBS
163	22	106a	Vestibule	1	1221-T12	Plaster	8	120	Overlit	1	LED-LIN-2ft	Surface	Opal	1	LC-WS-PIR-AUTO
164	22	108	Office	4	1421-T12	Plaster	9	120	Underlit	4	N1411-SW-AL+	Surface	Wrap	1	LC-WS-US-AUTO-MAN
165	22	110	Office	4	1421-T12	Plaster	9	120	Underlit	4	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
166	22	111	Lab	7	2432-T12	T-Bar	8	120	Underlit	7	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
167	22	111	Lab	1	1421-T12	T-Bar	8	120	Underlit	1	1421-T8-LBF	Wall	Wrap	1	CBS
168	22	118	Lab	6	2421-T12	T-Bar	8	120	Underlit	6	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Cor-Ceil-Mnt
169	22	119	Lab	10	2421-T12	T-Bar	8	120	Underlit	10	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
170	22	123	Lab	8	2432-T12	T-Bar	8	120	Underlit	8	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
171	22	123a	Lab	1	2441-T8	T-Bar	8	120	Overlit	1	N2421-T8-K12	Recessed	K12	0	None
172	22	125	Lab	9	2432-T12	T-Bar	8	120	Underlit	9	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
173	22	125a	Vestibule	1	1421-T12	T-Bar	8	120	Underlit	1	1421-T8-LBF	Recessed	K12	1	CBS
174	22	126	Lab	16	2421-T12	T-Bar	8	120	Adequate	16	N2421-T8-K12	Recessed	K12	2	LC-LV-PIR-Cor-Ceil-Mnt
175	22	126a	Storage	1	100A19	Plaster	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	0	None
176	22	126COR	Corridor	2	2421-T12	T-Bar	7	120	Underlit	2	N2421-T8-K12	Recessed	K12	0	None
177	22	127	Walk-in Cooler	10	1421-T12	Laminate	8	120	Adequate	10	N1411-T8-VAP	Surface	Vapor Proof	0	None
178	22	127	Walk-in Cooler	2	EX-LED-Red	Laminate	8	120	NA	2	N/C	Wall	Exit	0	None
179	22	127ST	Stairs	3	1421-T12	Plaster	10	120	Adequate	3	N1411-SW-AL+	Surface	Wrap	0	None
180	22	127ST	Stairs	2	1421-T12	Plaster	10	120	Adequate	1	N1821T-SW-AL+	Surface	Wrap	0	None
181	22	127ST	Stairs	2	1421-T12	Plaster	14	120	Adequate	1	N1821T-SW-AL+-HIC	Surface	Wrap	0	None
182	22	128	Meeting Room	4	1421-T12	Plaster	9	120	Underlit	4	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
183	22	128a	Office	4	1421-T12	Plaster	9	120	Underlit	4	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
184	22	128b	Storage	1	100A19	Plaster	8	120	NA	1	LED-SI-12W-A19	Surface	None	0	None
185	22	129	Lab	18	2432-T12	T-Bar	8	120	Underlit	18	N2421-T8-K12	Recessed	K12	2	LC-LV-PIR-Ceil-Mnt
186	22	130	Office	4	1421-T12	Plaster	9	120	Underlit	4	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
187	22	132	Lab	6	2421-T12	T-Bar	8	120	Underlit	6	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
188	22	136	Lab	2	2421-T12	T-Bar	8	120	Underlit	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
189	22	136a	Office	1	2421-T12	T-Bar	8	120	Underlit	1	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
190	22	136a	Office	1	2421-T12	T-Bar	8	120	Underlit	1	N2421-T8-K12-REL	Recessed	K12	1	CBS

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM						
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type
191	22	137	Lab	3	2441-T8	T-Bar	8	120 Adequate	3	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
192	22	139	Vestibule	1	1421-T12	T-Bar	8	120 Adequate	1	1421-T8-LBF	Recessed	K12	0	None
193	22	140	Lab	8	2421-T12	T-Bar	8	120 Underlit	8	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
194	22	141	Lab	13	2421-T12	T-Bar	8	120 Underlit	13	N2421-T8-K12	Recessed	K12	2	LC-LV-PIR-Ceil-Mnt
195	22	142	Washroom	2	2221-U6-T8	T-Bar	8	120 Overlit	2	N22-LED-Troffer	Recessed	Opal	1	LC-WS-PIR-AUTO
196	22	142a	Vestibule	1	CF15-SI	T-Bar	7	120 Overlit	1	N22-LED-Troffer	Recessed	Opal	1	CBS
197	22	143	Electrical	1	100A19	Plaster	7	120 Underlit	1	LED-SI-12W-A19	Surface	None	0	None
198	22	146	Washroom	2	2221-U6-T8	T-Bar	8	120 Overlit	2	N22-LED-Troffer	Recessed	Opal	1	LC-WS-PIR-AUTO
199	22	146a	Vestibule	1	100A19	T-Bar	7	120 Overlit	1	N22-LED-Troffer	Recessed	Opal	1	CBS
200	22	146COR	Corridor	4	2421-T12	T-Bar	7	120 Underlit	4	N2421-T8-K12	Recessed	K12	0	None
201	22	146COR	Corridor	4	2421-T12	T-Bar	7	120 Underlit	4	N2421-T8-K12	Recessed	K12	0	None
202	22	146COR	Corridor	1	EX-LED-Red	T-Bar	7	120 NA	1	N/C	Pendant	Exit	0	None
203	22	148	Mechanical	8	1421-T12	Steel	10	120 Underlit	8	1421-T8-LBF	Chain	None	0	None
204	22	201	Lab	8	2421-T12	T-Bar	8	120 Underlit	8	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
205	22	201COR	Corridor	4	2421-T12	T-Bar	7	120 Underlit	4	N2421-T8-K12	Recessed	K12	0	None
206	22	201COR	Corridor	3	2421-T12	T-Bar	7	120 Underlit	3	N2421-T8-K12	Recessed	K12	0	None
207	22	201COR	Corridor	2	EX-LED-Red	T-Bar	7	120 Underlit	2	N/C	Pendant	Exit	0	None
208	22	202	Lab	13	2421-T12	T-Bar	8	120 Underlit	13	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
209	22	203	Lab	4	2421-T12	T-Bar	8	120 Underlit	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
210	22	204	Lab	2	2421-T12	T-Bar	8	120 Underlit	2	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
211	22	205	Office	4	2421-T12	T-Bar	8	120 Adequate	4	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
212	22	206	Lab	8	2421-T12	T-Bar	8	120 Underlit	8	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
213	22	206	Lab	14	2421-T12	T-Bar	8	120 Underlit	14	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
214	22	207	Walk-in Cooler	1	100A19	Laminate	7	120 Adequate	1	LED-SI-12W-A19	Wall	Glass JJ	0	None
215	22	208	Walk-in Cooler	1	100A19	Laminate	7	120 Adequate	1	LED-SI-12W-A19	Wall	Glass JJ	0	None
216	22	209	Mechanical	1	2421-T12	T-Bar	8	120 Underlit	1	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
217	22	209COR	Corridor	4	2421-T12	T-Bar	8	120 Underlit	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Cor-Ceil-Mnt
218	22	210	Lab	2	2421-T12	T-Bar	8	120 Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
219	22	212	Lab	2	2421-T12	T-Bar	8	120 Underlit	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
220	22	213	Lab	18	2421-T12	T-Bar	8	120 Underlit	18	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
221	22	213	Lab	8	2421-T12	T-Bar	8	120 Underlit	8	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
222	22	213COR	Corridor	2	2421-T12	T-Bar	7	120 Adequate	2	N2421-T8-K12	Recessed	K12	0	None
223	22	215	Office	2	2421-T12	T-Bar	8	120 Underlit	2	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
224	22	216	Lab	2	2421-T12	T-Bar	8	120 Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
225	22	216	Lab	1	2221-U6-T8	T-Bar	8	120 Adequate	1	N22-LED-Troffer	Recessed	Opal	1	CBS
226	22	216	Lab	15	2421-T12	T-Bar	8	120 Underlit	15	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
227	22	216a	Lab	2	2421-T12	T-Bar	8	120 Underlit	2	N2421-T8-K12	Recessed	K12	1	CBS
228	22	216a	Lab	1	2421-T12	T-Bar	8	120 Underlit	1	Delete	Recessed	K12	1	CBS

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM							
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type	
229	22	223	Mechanical	6	1421-T12	Steel	10	120	Underlit	6	1421-T8-LBF	Chain	None	0	None
230	22	224	Washroom	2	2221-U6-T8	T-Bar	8	120	Overlit	2	N22-LED-Troffer	Recessed	Opal	1	CBS
231	22	224a	Vestibule	1	1221-T12	Plaster	8	120	Overlit	1	LED-LIN-2ft	Surface	Opal	1	LC-WS-PIR-AUTO
232	22	224COR	Corridor	5	2421-T12	T-Bar	7	120	Adequate	5	N2421-T8-K12	Recessed	K12	0	None
233	22	224COR	Corridor	4	2421-T12	T-Bar	7	120	Adequate	4	N2421-T8-K12	Recessed	K12	0	None
234	22	224COR	Corridor	2	EX-LED-Red	T-Bar	7	120	Adequate	2	N/C	Pendant	Exit	0	None
235	22	225	Storage	1	100A19	Plaster	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	0	None
236	22	226	Washroom	2	2221-U6-T8	T-Bar	8	120	Overlit	2	N22-LED-Troffer	Recessed	Opal	1	CBS
237	22	226a	Vestibule	1	1221-T12	Plaster	8	120	Overlit	1	LED-LIN-2ft	Surface	Opal	1	LC-WS-PIR-AUTO
238	22	228	Office	4	2421-T12	T-Bar	8	120	Adequate	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
239	22	229	Office	3	2421-T12	T-Bar	8	120	Adequate	3	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
240	22	231	Office	4	2421-T12	T-Bar	8	120	Adequate	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
241	22	232	Office	3	2421-T12	T-Bar	8	120	Adequate	3	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
242	22	233	Office	4	2421-T12	T-Bar	8	120	Adequate	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
243	22	234	Office	2	2421-T12	T-Bar	8	120	Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
244	22	235	Office	9	2421-T12	T-Bar	8	120	Adequate	9	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
245	22	235	Office	7	50PAR20	T-Bar	8	120	Adequate	7	LED-PAR20-FL-Dim	Recessed	None	1	CBS
246	22	235a	Storage	1	1421-T12	T-Bar	8	120	Adequate	1	N1411-SW-AL+	Chain	None	0	None
247	22	243	File Room	10	2421-T12	T-Bar	8	120	Underlit	10	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
248	22	243a	Storage	1	1421-T12	Plaster	8	120	Adequate	1	N1411-SW-AL+	Surface	Wrap	0	None
249	22	244	Storage	1	2421-T12	T-Bar	8	120	Underlit	1	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
250	22	245	Office	2	2421-T12	T-Bar	8	120	Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
251	22	246	Office	3	2421-T12	T-Bar	8	120	Adequate	3	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
252	22	247	Office	2	2421-T12	T-Bar	8	120	Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
253	22	248	File Room	2	2421-T12	T-Bar	8	120	Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
254	22	248a	Office	2	2421-T12	T-Bar	8	120	Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
255	22	249	File Room	4	2421-T12	T-Bar	8	120	Adequate	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
256	22	250	Office	4	2421-T12	T-Bar	8	120	Adequate	4	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
257	22	254	Washroom	1	2442-T12	T-Bar	8	120	Adequate	1	N2421-T8-K12	Recessed	K12	1	CBS
258	22	254a	Vestibule	1	1221-T12	Plaster	8	120	Overlit	1	LED-LIN-2ft	Surface	Opal	1	LC-WS-PIR-AUTO
259	22	255	Janitor	1	100A19	Plaster	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	0	None
260	22	256	Washroom	1	2441-T8	T-Bar	8	120	Overlit	1	N2421-T8-K12	Recessed	K12	1	CBS
261	22	256a	Vestibule	1	1221-T12	Plaster	8	120	Overlit	1	LED-LIN-2ft	Surface	Opal	1	LC-WS-PIR-AUTO
262	22	302	Washroom	1	2441-T8	T-Bar	8	120	Overlit	1	N2421-T8-K12	Recessed	K12	1	CBS
263	22	302a	Vestibule	1	1211-T12	Plaster	8	120	Adequate	1	LED-LIN-2ft	Surface	Opal	1	LC-WS-PIR-AUTO
264	22	302COR	Corridor	1	EX-LED-Red	T-Bar	7	120	Underlit	1	N/C	Pendant	Exit	0	None
265	22	302COR	Corridor	4	2421-T12	T-Bar	7	120	Underlit	4	N2421-T8-K12	Recessed	K12	0	None
266	22	302COR	Corridor	3	2421-T12	T-Bar	7	120	Underlit	3	N2421-T8-K12	Recessed	K12	0	None

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM						
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type
267	22	302ST	Stairs	6	1421-T12	Plaster	10	120 Adequate	6	N1411-SW-AL+	Surface	Wrap	0	None
268	22	302ST	Stairs	1	1421-T12	Plaster	10	120 Adequate	1	N1411-SW-AL+	Wall	Wrap	0	None
269	22	305	File Room	2	1421-T8	T-Bar	8	120 Adequate	2	1421-T8-LampChange	Recessed	K12	2	LC-WS-PIR-AUTO
270	22	305a	Office	2	1421-T8	T-Bar	8	120 Adequate	2	1421-T8-LampChange	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
271	22	306	Washroom	1	2441-T8	T-Bar	8	120 Adequate	1	N2421-T8-K12	Recessed	K12	1	CBS
272	22	306a	Vestibule	1	1211-T12	Plaster	8	120 Adequate	1	LED-LIN-2ft	Surface	Opal	1	LC-WS-PIR-AUTO
273	22	308	Lab	6	1421-T8	T-Bar	8	120 Overlit	6	1421-T8-LampChange	Recessed	K12	0	None
274	22	308a	Office	2	1421-T8	T-Bar	8	120 Overlit	2	1421-T8-LampChange	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
275	22	309	Lab	13	2421-T12	T-Bar	8	120 Underlit	13	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
276	22	311	Corridor	5	2421-T12	T-Bar	8	120 Underlit	5	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
277	22	313	Lab	4	1421-T12	Plaster	10	120 Underlit	4	N1411-SW-AL+	Surface	Wrap	1	LC-LINE-PIR-Cmr-Mnt
278	22	314	Meeting Room	18	50MR16	Steel	9	120 Adequate	18	LED-7W-MR16	Pendant	None	1	LC-LV-PIR-Ceil Mnt
279	22	314	Meeting Room	5	1421-T8-Dimming	Steel	9	120 Adequate	5	1421-T8-LampChange	Wall	Opal	1	CBS
280	22	314	Meeting Room	7	1411-T8-Dimming	Steel	9	120 Adequate	7	1411-T8-LampChange	Wall	None	1	CBS
281	22	315	Lab	4	1421-T12	Plaster	10	120 Underlit	4	N1411-SW-AL+	Surface	Wrap	1	LC-LINE-PIR-Cmr-Mnt
282	22	315	Lab	8	1421-T12	Plaster	10	120 Underlit	4	N1821T-SW-AL+	Surface	Wrap	1	LC-LINE-PIR-Cmr-Mnt
283	22	315	Lab	3	50R20	Plaster	10	120 Underlit	3	Delete	Surface	None	1	None
284	22	315a	Office	2	1421-T12	Plaster	10	120 Underlit	2	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
285	22	315b	Lab	5	1421-T12	Laminate	8	120 Underlit	5	1421-T8-LBF	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
286	22	315c	Walk-in Cooler	2	1421-T5HO	Laminate	7	120 Adequate	2	N/C	Surface	Vapor Proof	0	None
287	22	316	Office	4	1421-T12	Plaster	9	120 Underlit	4	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
288	22	318	Office	4	1421-T12	Plaster	9	120 Underlit	4	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
289	22	321	Lab	7	2421-T8	T-Bar	8	120 Adequate	7	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
290	22	321	Lab	4	2421-T12	T-Bar	8	120 Adequate	4	N2421-T8-K12	Recessed	K12	1	CBS
291	22	322	Lunch Room	9	2441-T8	T-Bar	8	120 Overlit	9	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
292	22	322A	Lunch Room	3	2441-T8	T-Bar	8	120 Overlit	3	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
293	22	322COR	Corridor	2	2421-T12	T-Bar	7	120 Adequate	2	N2421-T8-K12	Recessed	K12	0	None
294	22	322ST	Stairs	2	1421-T12	Plaster	9	120 Adequate	2	N1411-SW-AL+	Surface	Wrap	0	None
295	22	322ST	Stairs	2	2421-T12	T-Bar	9	120 Adequate	2	N2421-T8-K12	Recessed	K12	0	None
296	22	324	Office	4	1421-T12	Plaster	9	120 Adequate	4	N1411-SW-AL+	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
297	22	327	Office	2	2421-T8	T-Bar	8	120 Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
298	22	328	Lab	4	2432-T12	T-Bar	8	120 Underlit	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
299	22	328a	Office	2	2432-T12	T-Bar	8	120 Underlit	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
300	22	330	Lab	7	2432-T12	T-Bar	8	120 Underlit	7	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
301	22	331	Lab	11	2421-T8	T-Bar	8	120 Adequate	11	N2421-T8-K12	Recessed	K12	2	LC-LV-PIR-Ceil-Mnt
302	22	331	Lab	2	2421-T12	T-Bar	8	120 Adequate	2	N2421-T8-K12	Recessed	K12	0	None
303	22	331	Lab	2	65PAR38	T-Bar	8	120 Adequate	2	Delete	NA	NA	0	None
304	22	332	Lab	8	2421-T12	T-Bar	8	120 Underlit	8	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM							
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type	
305	22	333	Lab	8	2421-T8	T-Bar	8	120	Adequate	8	N2421-T8-K12	Recessed	K12	2	LC-LV-PIR-Ceil-Mnt
306	22	333	Lab	3	2421-T12	T-Bar	8	120	Underlit	3	N2421-T8-K12	Recessed	K12	1	CBS
307	22	333	Lab	1	No Fixt	T-Bar	8	120	NA	1	N2421-T8-K12	Recessed	K12	1	CBS
308	22	333a	Office	1	2421-T8	T-Bar	8	120	Adequate	1	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
309	22	334	Washroom	2	2221-U6-T8	T-Bar	8	120	Overlit	2	N22-LED-Troffer	Recessed	Opal	1	CBS
310	22	334a	Vestibule	1	60A19	T-Bar	8	120	Adequate	1	LED-SI-12W-A19	Recessed	Opal	1	LC-WS-PIR-AUTO
311	22	336	Washroom	2	2221-U6-T8	T-Bar	8	120	Overlit	2	N22-LED-Troffer	Recessed	Opal	1	CBS
312	22	336a	Vestibule	1	60A19	T-Bar	8	120	Adequate	1	LED-SI-12W-A19	Recessed	Opal	1	LC-WS-PIR-AUTO
313	22	336ST	Stairs	1	1421-T12	Plaster	10	120	Adequate	1	N1411-SW-AL+	Wall	Wrap	0	None
314	22	336ST	Stairs	11	1421-T12	Plaster	10	120	Adequate	11	N1411-SW-AL+	Surface	Wrap	0	None
315	22	338COR	Corridor	4	2421-T12	T-Bar	7	120	Underlit	4	N2421-T8-K12	Recessed	K12	0	None
316	22	338COR	Corridor	1	1421-T8	T-Bar	7	120	Underlit	1	1421-T8-LampChange	Recessed	K12	0	None
317	22	338COR	Corridor	1	EX-LED-Red	T-Bar	7	120	Underlit	1	N/C	Pendant	Exit	0	None
318	22	338COR	Corridor	1	100A19	Plaster	7	120	Adequate	1	LED-SI-12W-A19	Recessed	None	0	None
319	22	338COR	Corridor	4	2421-T12	T-Bar	7	120	Underlit	4	N2421-T8-K12	Recessed	K12	0	None
320	22	340	Mechanical	3	1421-T12	Steel	10	120	Adequate	3	1421-T8-LBF	Chain	None	0	None
321	22	340	Mechanical	4	1421-T8	Steel	10	120	Adequate	4	1421-T8-LampChange	Chain	Wire Guard	0	None
322	22	401	Mechanical	1	1421-T12	Concrete	12	120	Underlit	1	1421-T8-LBF	Chain	Industrial Refl	1	LC-WS-PIR-AUTO
323	22	401	Mechanical	5	1421-T12	Concrete	12	120	Underlit	5	1421-T8-LBF	Chain	Industrial Refl	0	None
324	22	402	Elevator Room	1	1421-T12	Concrete	12	120	Underlit	1	1421-T8-LBF	Chain	Industrial Refl	0	None
325	22	A07	Meeting Room	6	65PAR30	Drywall	9	120	Adequate	6	LED-12W-PAR30	Recessed	None	1	LC-WS-PIR-AUTO-MAN
326	22	A07COR	Corridor	10	65PAR30	Drywall	9	120	Adequate	10	LED-12W-PAR30	Recessed	None	0	None
327	22	A07COR	Corridor	6	65PAR30	Drywall	9	120	Adequate	6	LED-12W-PAR30	Recessed	None	0	None
328	22	A07COR	Corridor	1	EX-LED-Red	Drywall	9	120	NA	1	N/C	Pendant	Exit	0	None
329	22	A08	Washroom	2	1421-T12	Drywall	9	120	Underlit	2	1421-T8-LBF	Wall	Louver	1	LC-WS-PIR-AUTO
330	22	A09	Office	4	2421-T12	T-Bar	9	120	Adequate	4	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
331	22	A10	Office	4	2421-T12	T-Bar	9	120	Adequate	4	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
332	22	A11	Office	4	2421-T12	T-Bar	9	120	Adequate	4	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
333	22	A12	Office	2	2421-T12	T-Bar	9	120	Adequate	2	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
334	22	A14	Lab	7	2421-T12	T-Bar	9	120	Adequate	7	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
335	22	A14	Lab	1	2221-U6-T8	T-Bar	9	120	Adequate	1	N22-LED-Troffer	Recessed	Opal	1	CBS
336	22	A14a	Office	2	2421-T12	T-Bar	9	120	Adequate	2	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
337	22	A15	Lab	9	2421-T12	T-Bar	9	120	Underlit	9	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
338	22	A18	Office	3	2421-T12	T-Bar	9	120	Underlit	3	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
339	22	A19	Office	4	2421-T12	T-Bar	9	120	Underlit	4	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
340	22	A20	Office	4	2421-T12	T-Bar	9	120	Underlit	4	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
341	22	A20COR	Corridor	6	2421-T12	T-Bar	9	120	Underlit	6	2421-T8	Recessed	K12	0	None
342	22	A20COR	Corridor	4	2421-T12	T-Bar	9	120	Underlit	4	2421-T8	Recessed	K12	0	None

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM						
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type
343	22	A20COR	Corridor	2	EX-LED-Red	T-Bar	9	120 NA	2	N/C	Pendant	Exit	0	None
344	22	A22	Lab	5	2421-T12	T-Bar	9	120 Underlit	5	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
345	22	A23	Lab	5	2421-T12	T-Bar	9	120 Underlit	5	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
346	22	A23	Lab	1	1421-T12	T-Bar	9	120 Underlit	1	1421-T8-LBF	Recessed	K12	1	CBS
347	22	A24	Lab	31	2421-T12	T-Bar	9	120 Underlit	31	2421-T8	Recessed	K12	3	LC-LV-PIR-Ceil-Mnt
348	22	A25	Office	4	2421-T12	T-Bar	9	120 Underlit	4	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
349	22	A25a	Office	2	2421-T12	T-Bar	9	120 Underlit	2	2421-T8	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
350	22	A26	Lab	4	2421-T12	T-Bar	9	120 Underlit	4	2421-T8	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
351	22	A28	Walk-in Cooler	1	100A19	Laminate	7	120 Underlit	1	LED-SI-12W-A19	Wall	Glass JJ	0	None
352	22	A29	Walk-in Cooler	1	100A19	Laminate	7	120 Underlit	1	LED-SI-12W-A19	Wall	Glass JJ	0	None
353	22	A29COR	Corridor	2	2421-T12	T-Bar	9	120 Adequate	2	2421-T8	Recessed	K12	0	None
354	22	B02	Office	10	2421-T8	T-Bar	9	120 Adequate	10	N2421-T8-K12	Surface	K12	1	LC-LV-PIR-Ceil-Mnt
355	22	B02COR	Corridor	4	2421-T12	T-Bar	7	120 Underlit	4	N2421-T8-K12	Recessed	K12	0	None
356	22	B02COR	Corridor	3	2421-T12	T-Bar	7	120 Underlit	3	N2421-T8-K12	Recessed	K12	0	None
357	22	B02COR	Corridor	1	EX-LED-Red	T-Bar	7	120 NA	1	N/C	Pendant	Exit	0	None
358	22	B03	Lab	1	2421-T12	T-Bar	8	120 Adequate	1	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
359	22	B04	Office	3	2421-T8	T-Bar	9	120 Adequate	3	N2421-T8-K12	Surface	K12	1	LC-WS-PIR-AUTO-MAN
360	22	B05	Lab	4	2421-T8	T-Bar	8	120 Adequate	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
361	22	B05	Lab	1	2221-U6-T8	T-Bar	8	120 Adequate	1	N22-LED-Troffer	Recessed	Opal	1	CBS
362	22	B05a	Lab	3	2421-T8	T-Bar	8	120 Adequate	3	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
363	22	B05b	Lab	2	2421-T8	T-Bar	8	120 Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
364	22	B05C	Lab	2	2421-T8	T-Bar	8	120 Adequate	2	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
365	22	B06	Lab	4	1421-T8	T-Bar	8	120 Adequate	4	1421-T8-LampChange	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
366	22	B06a	Office	1	2442-T12	T-Bar	8	120 Adequate	1	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
367	22	B07	Electrical	2	1421-T12	Concrete	8	120 Adequate	2	1421-T8-LBF	Chain	Industrial Refl	0	None
368	22	B07a	Electrical	2	100A19	Concrete	8	120 Underlit	2	LED-SI-17W-A21	Wall	None	0	None
369	22	B08	Telecom	1	1421-T12	Plaster	10	120 Adequate	1	1421-T8-LBF	Pendant	Industrial Refl	0	None
370	22	B10	Lab	4	2442-T12	T-Bar	8	120 Underlit	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
371	22	B11	Mechanical	2	1421-T12	Concrete	8	120 Underlit	2	1421-T8-LBF	Chain	Industrial Refl	0	None
372	22	B11	Mechanical	1	1411-T12	Concrete	8	120 Underlit	1	1411-T8	Wall	None	0	None
373	22	B12	Lab	4	2442-T12	T-Bar	8	120 Underlit	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
374	22	B12a	Mechanical	1	100A19	Plaster	10	120 NA	1	LED-SI-12W-A19	Wall	None	0	None
375	22	B12COR	Corridor	3	2421-T12	T-Bar	7	120 Underlit	3	N2421-T8-K12	Recessed	K12	0	None
376	22	B12COR	Corridor	4	2421-T12	T-Bar	7	120 Underlit	4	N2421-T8-K12	Recessed	K12	0	None
377	22	B12COR	Corridor	1	EX-LED-Red	T-Bar	7	120 NA	1	N/C	Pendant	Exit	0	None
378	22	B13	Janitor	1	2442-T12	T-Bar	9	120 Adequate	1	N2421-T8-K12	Recessed	K12	0	None
379	22	B15	Shipping Receiving	3	1421-T5HO	Plaster	9	120 Overlit	3	N/C	Surface	Vapor Proof	3	LC-LINE-PIR-Fixt Mnt
380	22	B15	Shipping Receiving	1	1421-T5HO	Plaster	9	120 Overlit	1	N/C	Surface	Vapor Proof	0	None



AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM							
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type	
381	22	B15a	Office	3	2442-T12	T-Bar	9	120	Overlit	3	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
382	22	B15a	Office	1	1421-T12	T-Bar	9	120	Overlit	1	1421-T8-LBF	Surface	Vapor Proof	1	CBS
383	22	B16	Walk-in Cooler	5	100A19	Laminate	7	120	Underlit	5	LED-SI-12W-A19	Surface	None	0	None
384	22	B16a	Mechanical	1	200A21	Laminate	7	120	Underlit	1	N1411-SW-AL+	Chain	Wrap	0	None
385	22	B16a	Mechanical	2	1421-T12	Laminate	7	120	Underlit	2	N1411-SW-AL+	Surface	Wrap	0	None
386	22	B17	Chemical Storage	7	1421-T12	Concrete	8	120	Adequate	7	1421-T8-LBF	Pendant	Glass	0	None
387	22	B17	Chemical Storage	1	1421-T12	Concrete	8	120	Adequate	1	1421-T8-LBF	Pendant	Glass	0	None
388	22	B17a	Vestibule	1	CF25	Concrete	8	120	Adequate	1	LED-SI-17W-A21	Pendant	Glass	0	None
389	22	B17b	Chemical Storage	1	1421-T12	Concrete	8	120	Adequate	1	1421-T8-LBF	Pendant	Glass	0	None
390	22	B17b	Chemical Storage	4	1421-T12	Concrete	8	120	Adequate	4	1421-T8-LBF	Pendant	Glass	0	None
391	22	B17c	Chemical Storage	1	100A19	Concrete	8	120	Adequate	1	LED-SI-17W-A21	Wall	Glass	0	None
392	22	B18	Lab	6	2421-T8	T-Bar	8	120	Adequate	6	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
393	22	B19	Storage	9	2421-T8	T-Bar	8	120	Adequate	9	N2421-T8-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
394	22	B20	Lab	4	2421-T8	T-Bar	9	120	Adequate	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
395	22	B20	Lab	1	1421-T8	T-Bar	9	120	Adequate	1	1421-T8-LampChange	Recessed	K12	1	CBS
396	22	B20	Lab	4	2421-T8	T-Bar	8	120	Adequate	4	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil-Mnt
397	22	B20	Lab	1	1421-T8	T-Bar	8	120	Adequate	1	1421-T8-LampChange	Recessed	K12	1	CBS
398	22	B22	Locker Room	1	2421-T8	T-Bar	8	120	Adequate	1	N2421-T8-K12	Recessed	K12	0	None
399	22	B22a	Lab	6	2421-T8	T-Bar	8	120	Adequate	6	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
400	22	B22b	Storage	1	1421-T8	Plaster	8	120	Adequate	1	1421-T8-LampChange	Chain	Wire Guard	0	None
401	22	B23	Mechanical	5	1421-T12	Concrete	10	120	Adequate	5	1421-T8-LBF	Chain	Industrial Refl	0	None
402	22	B23	Mechanical	1	1421-T12	Concrete	10	120	Adequate	1	1421-T8-LBF	Chain	Industrial Refl	0	None
403	22	B23a	Electrical	1	1221-T8	Plaster	8	120	Overlit	1	LED-LIN-2ft	Surface	Opal	0	None
404	22	B26	Washroom	2	2221-U6-T8	T-Bar	9	120	Adequate	2	N22-LED-Troffer	Recessed	Opal	1	LC-WS-PIR-AUTO
405	22	B26	Washroom	2	CF15-SI	T-Bar	9	120	Adequate	2	LED-SI-12W-A19	Recessed	Opal	1	CBS
406	22	B26	Washroom	1	60A19	T-Bar	9	120	Adequate	1	LED-SI-12W-A19	Recessed	Opal	1	CBS
407	22	B28	Washroom	3	2221-U6-T8	T-Bar	9	120	Adequate	3	N22-LED-Troffer	Recessed	Opal	1	LC-WS-PIR-AUTO
408	22	B31	Mechanical	10	1421-T8	Steel	14	120	Underlit	10	1421-T8-LampChange	Chain	Wire Guard	0	None
409	22	B31COR	Corridor	5	2421-T12	T-Bar	7	120	Underlit	5	N2421-T8-K12	Recessed	K12	0	None
410	22	B31COR	Corridor	4	2421-T12	T-Bar	7	120	Underlit	4	N2421-T8-K12	Recessed	K12	0	None
411	22	B31COR	Corridor	1	EX-LED-Red	T-Bar	7	120	NA	1	N/C	Pendant	Exit	0	None
412	22	B32	Mechanical	8	1421-T12	Steel	14	120	Underlit	8	1421-T8-LBF	Chain	Wire Guard	0	None
413	22	B32	Mechanical	1	EX-2x25	Steel	14	120	NA	1	NEX-LED-RED	Pendant	Exit	0	None
414	88	101	Washroom	1	2442-T12	T-Bar	7	120	Adequate	1	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO
415	88	101 COR	Corridor	1	1421-T12	Wood	9	120	Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	0	None
416	88	101 COR	Corridor	1	1421-T8	Wood	9	120	Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	0	None
417	88	102	Washroom	1	2442-T12	T-Bar	7	120	Adequate	1	2421-T8-DecSoc	Recessed	K12	0	None
418	88	103	Mechanical	5	1421-T8	Wood	9	120	Adequate	5	N1411-T8-VAP	Surface	Vapor Proof	0	None

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM						
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type
419	88	104	Dairy Barn	32	1421-T8	Wood	9	120 Adequate	16	N1821T-T8-VAP	Surface	Vapor Proof	0	None
420	88	104	Dairy Barn	18	1421-T12	Wood	9	120 Adequate	18	N1411-T8-VAP	Surface	Vapor Proof	0	None
421	88	104	Dairy Barn	1	EX-2x25	Wood	9	120 NA	1	NEX-LED-GRN-RM	Surface	Vapor Proof	0	None
422	88	104	Dairy Barn	2	EX-LED-Red	Wood	9	120 NA	2	NEX-LED-GRN-RM	Surface	Vapor Proof	0	None
423	88	105	Office	2	1421-T8	Drywall	8	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
424	88	106	Mechanical	2	1421-T8	Drywall	8	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
425	88	107	Mechanical	2	1421-T8	Drywall	8	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
426	88	108	Dairy Barn	2	EX-LED-Red	Wood	9	120 NA	2	NEX-LED-GRN-RM	Surface	Vapor Proof	0	None
427	88	108	Dairy Barn	20	1421-T8	Wood	9	120 Adequate	20	N1411-T8-VAP	Surface	Vapor Proof	0	None
428	88	108	Dairy Barn	6	1421-T12	Wood	9	120 Adequate	6	N1411-T8-VAP	Surface	Vapor Proof	0	None
429	88	109	Mechanical	6	1421-T12	Wood	9	120 Adequate	6	N1411-T8-VAP	Surface	Vapor Proof	0	None
430	88	110	Mechanical	2	1421-T8	Plaster	8	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	0	None
431	88	111	Dairy Barn	3	1421-T8	Wood	8	120 Adequate	3	N1411-T8-VAP	Surface	Vapor Proof	0	None
432	88	111 COR	Corridor	2	1421-T12	Wood	8	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	0	None
433	88	111 COR	Corridor	2	EX-LED-Red	Wood	8	120 NA	2	NEX-LED-GRN-RM	Pendant	Exit	0	None
434	88	111a	Office	1	1421-T8	Wood	8	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
435	88	112	Locker Room	1	1421-T12	Wood	8	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO
436	88	112a	Washroom	1	1421-T8	Wood	8	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
437	88	113	Locker Room	1	1421-T12	Wood	8	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO
438	88	113a	Shower	1	CF15-SI	Laminate	8	120 NA	1	LED-SI-12W-A19	Recessed	Opal	1	LC-WS-PIR-AUTO
439	88	113a	Washroom	1	1421-T12	Wood	8	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO
440	88	114	Dairy Barn	2	1421-T12	Wood	9	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	0	None
441	88	114	Dairy Barn	1	1421-T8	Wood	9	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	0	None
442	88	114 COR	Corridor	5	1421-T12	Wood	8	120 Adequate	5	N1411-T8-VAP	Surface	Vapor Proof	0	None
443	88	114 COR	Corridor	1	100A19	Wood	8	120 Adequate	1	LED-SI-12W-A19	Pendant	Industrial Refl	0	None
444	88	114 COR	Corridor	3	EX-LED-Red	Wood	8	120 NA	3	NEX-LED-GRN-RM	Pendant	Exit	0	None
445	88	115	Dairy Barn	1	1421-T12	Wood	9	120 Underlit	1	N1411-T8-VAP	Surface	Vapor Proof	1	LC-LINE-PIR-Fixt Mnt
446	88	115	Electrical	1	1421-T8	Wood	9	120 Underlit	1	N1411-T8-VAP	Surface	Vapor Proof	1	LC-LINE-PIR-Fixt Mnt
447	88	116	Storage	2	1421-T8	Wood	8	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
448	88	117	Lab	6	1421-T8	Wood	9	120 Adequate	6	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
449	88	118	Classroom	4	1421-T8	Wood	10	120 Adequate	4	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
450	88	118	Classroom	14	75R30	Wood	10	120 Adequate	14	LED-12w-PAR20-Dim	Surface	None	0	None
451	88	118	Classroom	1	100A19	Wood	10	120 Adequate	1	LED-SI-12W-A19	Pendant	Industrial Refl	0	None
452	88	118	Classroom	1	EX-LED-Red	Wood	10	120 NA	1	NEX-LED-GRN-RM	Wall	Exit	0	None
453	88	118	Classroom	1	EX-LED-Red-Batt-2Head	Wood	10	120 NA	1	NEX-LED-GRN-RM-COMBO	Wall	Exit	0	None
454	88	200	Attic	9	100A19	Wood	20	120 Adequate	9	LED-SI-12W-A19	Surface	Glass	0	None
455	88	200 ST	Stairs	2	100A19	Wood	8	120 Adequate	2	LED-SI-12W-A19	Wall	Glass	0	None
456	88	200 ST	Stairs	1	1421-T12	Wood	8	120 Adequate	1	N1411-T8-VAP	Wall	Vapor Proof	0	None

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM							
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type	
457	88	200 ST	Stairs	1	EX-LED-Red	Wood	8	120	NA	1	NEX-LED-GRN-RM	Pendant	Exit	0	None
458	88	200a	Attic	4	1421-T12	Wood	20	120	Adequate	4	1421-T8-LBF	Surface	Wrap	0	None
459	88	201	Attic	15	100A19	Wood	20	120	Adequate	15	LED-SI-12W-A19	Surface	Glass	0	None
460	88	201	Attic	1	EX-LED-Red	Wood	20	120	NA	1	NEX-LED-GRN-RM	Wall	Exit	0	None
461	76	100	Classroom	6	1421-T8	Wood	13	120	Underlit	6	1421-T8-LampChange	Surface	Wrap	0	None
462	76	100	Classroom	1	EX-LED-Red	Wood	13	120	NA	1	N/C	Wall	Exit	0	None
463	76	101	Classroom	2	EX-LED-Red	Wood	13	120	NA	2	N/C	Wall	Exit	0	None
464	76	101	Classroom	9	1421-T8	Wood	13	120	Underlit	9	1421-T8-LampChange	Surface	Wrap	0	None
465	76	102	Lab	2	1421-T8	Wood	13	120	Underlit	2	1421-T8-LampChange	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
466	76	102 COR	Corridor	2	100A19	Wood	13	120	Underlit	2	LED-SI-12W-A19	Pendant	Industrial Refl	0	None
467	76	102 COR	Corridor	1	EX-LED-Red	Wood	13	120	NA	1	N/C	Wall	Exit	0	None
468	76	103	Washroom	3	1421-T8	Wood	13	120	Adequate	3	1421-T8-LampChange	Surface	Wrap	1	CBS
469	76	103 COR	Corridor	2	CF13x2	Wood	13	120	Underlit	2	N/C	Surface	Opal	1	CBS
470	76	103 ST	Stairs	1	100A19	Wood	13	120	Underlit	1	LED-SI-12W-A19	Pendant	Industrial Refl	0	None
471	76	103 ST	Stairs	1	EX-LED-Red	Wood	13	120	NA	1	N/C	Wall	Exit	0	None
472	76	104	Washroom	3	1421-T8	Wood	13	120	Adequate	3	1421-T8-LampChange	Surface	Wrap	1	CBS
473	76	B00	Storage	11	100A19	Wood	8	120	Adequate	11	LED-SI-12W-A19	Surface	Glass JJ	0	None
474	76	B00	Storage	3	1421-T8	Wood	8	120	Adequate	3	1421-T8-LampChange	Surface	None	0	None
475	76	B00	Storage	2	EX-LED-Red	Wood	8	120	NA	2	N/C	Wall	Exit	0	None
476	76	B00 COR	Corridor	1	100A19	Wood	8	120	Adequate	1	LED-SI-12W-A19	Surface	Glass JJ	0	None
477	76	B00 COR	Storage	1	EX-LED-Red	Wood	8	120	NA	1	N/C	Wall	Exit	0	None
478	76	B00 ST	Stairs	1	100A19	Wood	8	120	Adequate	1	LED-SI-12W-A19	Surface	Glass JJ	0	None
479	76	B00 ST	Stairs	1	1421-T8	Wood	8	120	Adequate	1	1421-T8-LampChange	Surface	Wire Guard	0	None
480	76	B00-1	Storage	1	100A19	Wood	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	0	None
481	76	B00-1a	Storage	1	100A19	Wood	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	0	None
482	76	B00-2	Storage	1	150A21	Wood	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	0	None
483	76	B00-3	Storage	1	150A21	Wood	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	0	None
484	76	B00-4	Storage	1	150A21	Wood	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	0	None
485	76	B01	Electrical	4	1421-T8	Drywall	8	120	Adequate	4	1421-T8-LampChange	Surface	Wire Guard	1	CBS
486	76	B02	Storage	4	1421-T8	Drywall	8	120	Adequate	4	1421-T8-LampChange	Surface	Wire Guard	1	LC-WS-PIR-AUTO
487	76	B02	Storage	1	100A19	Drywall	8	120	Adequate	1	LED-SI-12W-A19	Surface	None	1	CBS
488	76	B03	Storage	4	1421-T8	Drywall	8	120	Adequate	4	1421-T8-LampChange	Surface	Wire Guard	1	LC-WS-PIR-AUTO
489	97	100	Lunch Room	8	1421-T12	T-Bar	8	120	Adequate	8	N1411-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
490	97	100 VES	Vestibule	1	1421-T12	Plaster	8	120	Underlit	1	N1411-SW-AL+	Surface	Wrap	0	None
491	97	100 VES	Vestibule	1	1411-T8	Plaster	8	120	Underlit	1	N1411-SW-AL+	Surface	Wrap	0	None
492	97	100 VES	Vestibule	2	CF9	Plaster	8	120	Underlit	2	N/C	Surface	Opal	0	None
493	97	101	Office	4	2442-T12	T-Bar	8	120	Underlit	4	2421-T8-DecSoc	Recessed	Louver	1	LC-LV-PIR-Ceil Mnt
494	97	101	Office	1	2441-T8	T-Bar	8	120	Underlit	1	2421-T8-DecSoc	Recessed	Louver	1	CBS

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM						
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type
495	97	102	Office	4	1421-T12	T-Bar	8	120 Adequate	4	N1411-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
496	97	103	Office	2	1421-T12	T-Bar	8	120 Adequate	2	N1411-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
497	97	104	Office	9	1421-T12	T-Bar	8	120 Adequate	9	Delete+Tile	NA	NA	0	None
498	97	104	Office	5	No Fixt	T-Bar	8	120 NA	5	N2421-T8-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
499	97	104	Office	1	EX-LED-Red	T-Bar	8	120 NA	1	N/C	Wall	Exit	0	None
500	97	105	Office	2	1421-T12	T-Bar	8	120 Adequate	2	N1411-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
501	97	106	Office	3	1421-T12	T-Bar	8	120 Adequate	3	N1411-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
502	97	107	Office	5	1421-T12	T-Bar	8	120 Adequate	5	N1411-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
503	97	108	Office	6	1421-T12	T-Bar	8	120 Adequate	6	N1411-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
504	97	108	Office	1	1421-T12	T-Bar	8	120 Adequate	1	Delete+Tile	NA	NA	0	None
505	97	108	Office	1	No Fixt	T-Bar	8	120 Adequate	1	N1411-K12	Recessed	K12	1	CBS
506	97	109	Office	2	1421-T12	T-Bar	8	120 Adequate	2	N1411-K12	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
507	97	109	Office	1	1421-T12	T-Bar	8	120 Adequate	1	Delete+Tile	NA	NA	0	None
508	97	109	Office	1	No Fixt	T-Bar	8	120 Adequate	1	N1411-K12	Recessed	K12	1	CBS
509	97	110	Office	8	1421-T12	T-Bar	8	120 Adequate	8	N1411-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
510	97	110	Office	2	1421-T12	T-Bar	8	120 Adequate	2	Delete+Tile	NA	NA	0	None
511	97	B01	Meeting Room	3	2441-T8	T-Bar	7	120 Overlit	3	2421-T8-DecSoc	Recessed	Louver	1	LC-WS-PIR-AUTO-MAN
512	97	B02	Storage	2	1421-T8	Concrete	9	120 Adequate	2	1421-T8-LampChange	Chain	Wire Guard	1	LC-WS-PIR-AUTO-MAN
513	97	B02 COR	Corridor	1	2442-T12	T-Bar	7	120 Overlit	1	2421-T8-DecSoc	Recessed	K12	1	None
514	97	B02a	Electrical	1	1421-T8	Concrete	9	120 Adequate	1	1421-T8-LampChange	Chain	Wire Guard	0	None
515	97	B02b	Shower	3	50MR16	Drywall	7	120 Adequate	3	LED-7W-MR16	Recessed	None	1	LC-WS-PIR-AUTO-MAN
516	97	B02c	Shower	3	50MR16	Drywall	7	120 Adequate	3	LED-7W-MR16	Recessed	None	1	LC-WS-PIR-AUTO-MAN
517	97	B03	Kitchen	2	2442-T12	T-Bar	7	120 Adequate	2	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
518	97	B03	Kitchen	1	2221-U6-T8	T-Bar	7	120 Adequate	1	Delete+Tile	NA	None	0	None
519	97	B03	Kitchen	1	No Fixt	T-Bar	7	120 Adequate	1	N2421-T8-K12	Recessed	K12	1	CBS
520	97	B03a	Washroom	2	1421-T8	T-Bar	7	120 Overlit	2	N1411-K12	Recessed	K12	1	LC-WS-PIR-AUTO
521	97	B03c	Washroom	5	50MR16	Drywall	7	120 Adequate	5	LED-7W-MR16	Recessed	None	1	LC-WS-PIR-AUTO
522	97	B03c	Mechanical	3	1421-T8	Plaster	9	120 Adequate	3	1421-T8-LampChange	Wall	Wire Guard	1	LC-WS-PIR-AUTO-MAN
523	97	B04	Janitor	1	1211-T12	Drywall	7	120 Adequate	1	N/C	Surface	Wire Guard	0	None
524	97	B05	Telecom	1	1421-T8	Drywall	8	120 Adequate	1	1421-T8-LampChange	Wall	Wire Guard	0	None
525	97	B06	Office	8	2442-T12	T-Bar	8	120 Adequate	8	2421-T8-DecSoc	Recessed	Louver	4	LC-LV-PIR-Ceil Mnt
526	97	B07	Office	4	2442-T12	T-Bar	8	120 Adequate	4	2421-T8-DecSoc	Recessed	Louver	1	LC-LV-PIR-Ceil Mnt
527	97	B08	Office	4	2442-T12	T-Bar	8	120 Adequate	4	2421-T8-DecSoc	Recessed	Louver	1	LC-LV-PIR-Ceil Mnt
528	97	B09	Storage	2	2441-T8	T-Bar	8	120 Overlit	2	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
529	97	B09 VES	Vestibule	2	2441-T8	T-Bar	8	120 Overlit	2	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO
530	99	100	Office	15	2442-T12	T-Bar	10	120 Adequate	15	2421-T8-DecSoc	Recessed	K12	4	LC-LV-PIR-Ceil Mnt
531	99	100	Office	1	EX-LED-Red	T-Bar	10	120 NA	1	N/C	Pendant	Exit	0	None
532	99	101	Office	6	1421-T12	T-Bar	11	120 Underlit	6	N1411-K12-AL+	Recessed	K12	1	LC-LV-PIR-Ceil Mnt

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM						
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type
533	99	102	Office	6	1421-T12	T-Bar	11	120 Underlit	6	N1411-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
534	99	103	Office	2	2442-T12	T-Bar	9	120 Adequate	2	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
535	99	104	Office	2	2442-T12	T-Bar	9	120 Adequate	2	2421-T8-DecSoc	Recessed	K12	1	LC-WS-PIR-AUTO-MAN
536	99	105	Office	2	2441-T8	T-Bar	9	120 Overlit	2	2421-T8-DecSoc	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
537	99	106	Washroom	3	1421-T12	Drywall	7	120 Adequate	3	N1411-T8-K12-DW	Recessed	K12	1	LC-WS-PIR-AUTO
538	99	106	Washroom	1	1421-T12	Drywall	7	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
539	99	106	Washroom	1	60A19	Drywall	7	120 Adequate	1	LED-SI-12W-A19	Recessed	Glass	1	CBS
540	99	106 COR	Corridor	1	1421-T12	Drywall	7	120 Adequate	1	N1411-T8-K12-DW	Recessed	K12	0	None
541	99	107	Washroom	3	1421-T12	Drywall	7	120 Adequate	3	N1411-T8-K12-DW	Recessed	K12	1	LC-WS-PIR-AUTO
542	99	107	Washroom	1	1421-T12	Drywall	7	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
543	99	107	Washroom	1	60A19	Drywall	7	120 Adequate	1	LED-SI-12W-A19	Recessed	Opal	1	CBS
544	99	108	Lab	12	2442-T12	T-Bar	10	120 Adequate	12	2441-T8-LBF	Recessed	K12	2	LC-LV-PIR-Ceil Mnt
545	99	108a	Walk-in Cooler	8	100A19	Laminate	10	120 Underlit	8	LED-SI-12W-A19	Surface	Glass JJ	0	None
546	99	109b	Walk-in Cooler	8	100A19	Laminate	10	120 Underlit	8	LED-SI-12W-A19	Surface	Glass JJ	0	None
547	99	110	Lab	16	1421-T12	T-Bar	10	120 Underlit	16	N1411-K12	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
548	99	110a	Lab	2	2441-T8	T-Bar	10	120 Underlit	2	2441-T8-LBF	Recessed	K12	1	LC-LV-PIR-Ceil Mnt
549	99	111 COR	Corridor	4	1421-T12	Plaster	13	120 Adequate	2	N1821T-SW-AL+	Pendant	Wrap	0	None
550	99	111 COR	Corridor	1	EX-LED-Red	Plaster	13	120 NA	1	N/C	Wall	Exit	0	None
551	99	111 ST	Stairs	2	1411-T12	Concrete	10	120 Adequate	2	N1411-SW-AL+	Surface	Wire Guard	0	None
552	99	111 ST	Stairs	1	EX-LED-Red	Concrete	10	120 NA	1	N/C	Pendant	Exit	0	None
553	99	B00	Shop	6	1821-T12	Concrete	10	120 Underlit	12	N1421-T8-VAP	Surface	Vapor Proof	0	None
554	99	B00	Shop	2	1411-T8	Concrete	10	120 Underlit	2	N1411-T8-VAP	Chain	Vapor Proof	0	None
555	99	B00	Shop	2	1411-T8	Concrete	10	120 Underlit	2	Delete	NA	NA	0	None
556	99	B00a	Storage	3	1421-T8	Concrete	10	120 Adequate	3	1421-T8-LBF	Pendant	Wire Guard	0	None
557	99	B00b	Seed Lab	1	1421-T8	Concrete	10	120 Adequate	1	1421-T8-LBF	Pendant	Vapor Proof	0	None
558	99	B00c	Seed Lab	1	1421-T8	Concrete	10	120 Adequate	1	1421-T8-LBF	Pendant	Vapor Proof	0	None
559	99	B00d	Seed Lab	1	1421-T8	Concrete	10	120 Adequate	1	1421-T8-LBF	Pendant	Vapor Proof	0	None
560	99	B00e	Seed Lab	1	1421-T8	Concrete	10	120 Adequate	1	1421-T8-LBF	Pendant	Vapor Proof	0	None
561	99	B01	Mechanical	2	1821-T12	Concrete	10	120 Underlit	4	N1411-T8-VAP	Surface	None	1	LC-WS-PIR-AUTO-MAN
562	99	B02	Lab	5	1421-T8	Concrete	10	120 Adequate	5	1421-T8-LBF	Pendant	Wire Guard	1	LC-WS-PIR-AUTO-MAN
563	99	B03	Storage	2	1421-T12	Concrete	10	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
564	99	B04	Shop	2	1421-T12	Concrete	10	120 Adequate	2	N1421-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
565	99	B04	Shop	2	1421-T8	Concrete	10	120 Adequate	2	N1421-T8-VAP	Surface	Vapor Proof	1	CBS
566	99	B05	Shop	5	1821-T12	Concrete	10	120 Adequate	10	N1411-T8-VAP	Surface	Vapor Proof	0	None
567	99	B05	Shop	1	1421-T8	Concrete	10	120 Adequate	1	1421-T8-LBF	Surface	Wire Guard	0	None
568	99	B05	Shop	1	2442-T12	Concrete	10	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	0	None
569	99	B05-1	Walk-in Cooler	2	1821-T12-VHO	Fiberglass Panel	7	120 Adequate	4	N1411-T5HO-VAP	Surface	Vapor Proof	0	None
570	99	B05-2	Walk-in Cooler	2	1821-T12-VHO	Fiberglass Panel	7	120	4	N1411-T5HO-VAP	Surface	Vapor Proof	0	None

**AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11**

Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM						
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type
571	99	B05-3	Walk-in Cooler	4	1421-T12	Fiberglass Panel	7	120	4	N1411-T5HO-VAP	Surface	Vapor Proof	0	None
572	99	B05-A	Walk-in Cooler	1	100A19	Fiberglass Panel	7	120	1	LED-SI-12W-A19	Wall	Glass JJ	0	None
573	99	B05-B	Walk-in Cooler	2	1821-T12-VHO	Fiberglass Panel	7	120	4	N1411-T5HO-VAP	Surface	Vapor Proof	0	None
574	99	B06	Mechanical	3	1421-T8	Concrete	10	120 Adequate	3	N/C	Surface	Vapor Proof	0	None
575	99	B06	Mechanical	1	100A19	Concrete	10	120 Adequate	1	LED-SI-12W-A19	Pendant	Industrial Refl	0	None
576	99	B06	Mechanical	2	1421-T5HO	Concrete	10	120 Adequate	2	N/C	Surface	Vapor Proof	0	None
577	99	B07	Mechanical	2	100A19	Concrete	10	120 Adequate	2	LED-SI-12W-A19	Surface	None	0	None
578	91	100	Pig Barn	6	1421-T12	Steel	8	120 Underlit	6	N1411-T8-VAP	Surface	Vapor Proof	0	None
579	91	100	Pig Barn	1	EX-LED-Red	Steel	8	120 NA	1	N/C	Wall	Exit	0	None
580	91	100	Pig Barn	3	1421-T8	Steel	8	120 Underlit	3	N1411-T8-VAP	Surface	Vapor Proof	0	None
581	91	101	Pig Barn	12	1421-T12	Steel	8	120 Underlit	12	N1411-T8-VAP	Surface	Vapor Proof	0	None
582	91	101	Pig Barn	2	1421-T8	Steel	8	120 Underlit	2	N1411-T8-VAP	Surface	Vapor Proof	0	None
583	91	101	Pig Barn	6	1411-T12	Steel	8	120 Underlit	6	1411-T8	Surface	Opal	0	None
584	91	101	Pig Barn	3	EX-LED-Red	Steel	8	120 NA	3	N/C	Wall	Exit	0	None
585	91	102	Classroom	14	1421-T8	Steel	8	120 Underlit	14	N1411-T8-VAP	Surface	Vapor Proof	2	LC-LV-PIR-Ceil Mnt
586	91	102	Classroom	4	1421-T8	Steel	8	120 Underlit	4	1421-T8-LBF	Surface	Opal	1	CBS
587	91	102	Classroom	1	EX-LED-Red	Steel	8	120 NA	1	N/C	Wall	Exit	0	None
588	91	102 COR	Corridor	2	1421-T8	Steel	8	120 Underlit	2	N1411-T8-VAP	Surface	Vapor Proof	0	None
589	91	102 COR	Corridor	2	EX-LED-Red	Steel	8	120 NA	2	N/C	Wall	Exit	0	None
590	91	102 VES	Vestibule	1	1411-T12	Steel	8	120 Adequate	1	1411-T8	Surface	Opal	0	None
591	91	102 VES	Vestibule	1	EX-LED-Red	Steel	8	120 NA	1	N/C	Wall	Exit	0	None
592	91	103	Mechanical	2	1421-T8	Steel	8	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO-MAN
593	91	104	Lobby	3	1421-T12	Steel	8	120 Adequate	3	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
594	91	104	Lobby	1	1421-T8	Steel	8	120 Adequate	1	N1411-T8-VAP	Surface	Vapor Proof	1	CBS
595	91	104	Lobby	1	EX-LED-Red	Steel	8	120 NA	1	N/C	Wall	Exit	0	None
596	91	104	Lobby	2	1421-T8	Steel	8	120 Underlit	2	1421-T8-LBF	Surface	Wrap	1	LC-WS-PIR-AUTO-MAN
597	91	105	Washroom	1	1421-T8	Steel	8	120 Adequate	1	1421-T8-LampChange	Surface	PolyCarb	1	LC-WS-PIR-AUTO
598	91	106	Healthcare	2	1421-T8	Steel	8	120 Adequate	2	1421-T8-LampChange	Surface	PolyCarb	1	LC-WS-PIR-AUTO
599	91	106	Healthcare	1	200A21	Steel	8	120 Adequate	1	LED-SI-12W-A19	Surface	Glass JJ	0	None
600	91	106a	Telecom	1	200A21	Steel	8	120 Adequate	1	LED-SI-12W-A19	Surface	Glass JJ	0	None
601	91	107	Washroom	3	1421-T8	Steel	8	120 Adequate	3	1421-T8-LampChange	Surface	PolyCarb	1	LC-WS-PIR-AUTO
602	91	107	Washroom	1	1421-T8	Steel	8	120 Adequate	1	1421-T8-LBF	Surface	Opal	1	CBS
603	91	108	Washroom	3	1421-T8	Steel	8	120 Adequate	3	1421-T8-LampChange	Surface	PolyCarb	1	LC-WS-PIR-AUTO
604	91	108	Washroom	1	1421-T8	Steel	8	120 Adequate	1	1421-T8-LBF	Surface	Opal	1	CBS
605	91	109	Storage	2	1421-T12	Steel	8	120 Adequate	2	N1411-T8-VAP	Surface	Vapor Proof	1	LC-LV-PIR-Ceil Mnt
606	91	109 COR	Corridor	6	1411-T12	Steel	8	120 Adequate	6	1411-T8	Surface	Opal	0	None
607	91	109 COR	Corridor	4	1411-T8	Steel	8	120 Adequate	4	1411-T8	Surface	Opal	0	None
608	91	109 COR	Corridor	2	EX-LED-Red	Steel	8	120 NA	2	N/C	Pendant	Exit	0	None

AAFC-CEF OTTAWA LIGHTING RETROFIT PROJECT NO.1314144210P11

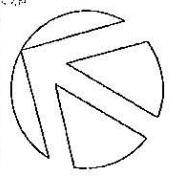
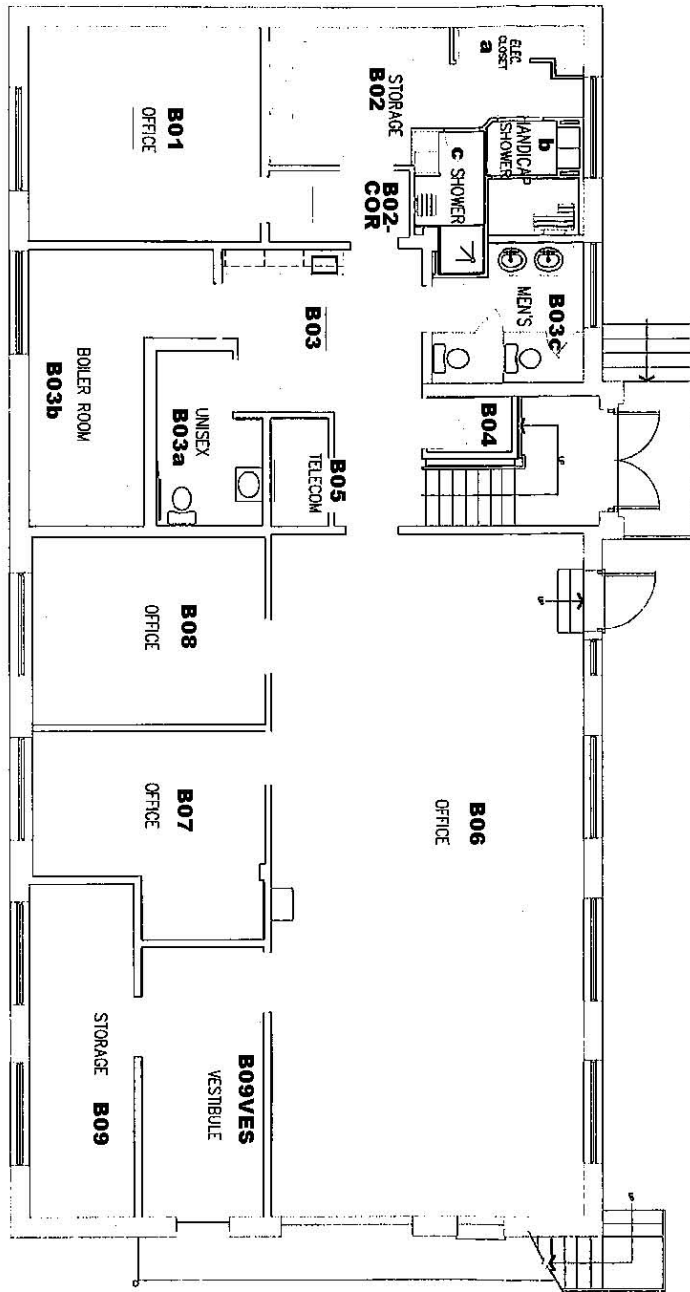
Item No.	Bldg. No.	Room No.	Usage	EXISTING LIGHTING SYSTEM				RETROFIT LIGHTING SYSTEM							
				Qty	Code	Ceiling	Height	(V) Level	Qty	Code	Mount	Lense	Qty	Sensor Type	
609	91	110	Livestock Barn	13	1421-T12	Steel	8	120	Adequate	13	N1411-T8-VAP	Surface	Vapor Proof	0	None
610	91	110	Livestock Barn	4	1421-T8	Steel	8	120	Adequate	4	N1411-T8-VAP	Surface	Vapor Proof	0	None
611	91	111	Mechanical	4	1421-T12	Steel	8	120	Underlit	4	N1411-T8-VAP	Surface	Vapor Proof	0	None
612	91	111 COR	Corridor	4	1421-T12	Steel	8	120	Adequate	4	N1411-T8-VAP	Surface	Vapor Proof	0	None
613	91	112	Shop	2	1421-T12	Steel	8	120	Underlit	2	N1411-T8-VAP	Surface	Vapor Proof	1	LC-WS-PIR-AUTO
614	91	112a	Laundry	1	1421-T12	Steel	8	120	Underlit	1	1421-T8-LBF	Surface	Wrap	1	LC-WS-PIR-AUTO
615	91	112b	Washroom	1	1221-T12	Drywall	7	120	Underlit	1	LED-LIN-2ft	Surface	Opal	0	None
616	91	200	Attic	35	CF26-SI	Wood	8	120		35	LED-SI-12W-A19	Surface	Glass JJ	0	None
617	91	200 ST	Stairs	2	100A19	Wood	8	120	Underlit	2	LED-SI-12W-A19	Surface	Glass JJ	0	None
618	45	101	Lunch Room	3	1421-T12	Concrete	7	120		3	N1411-T8-VAP	Surface	Vapor Proof	1	LC-LINE-PIR-Wall Mnt
619	45	101 COR	Corridor	1	1421-T12	Concrete	8	120		1	N1411-T8-VAP	Surface	Vapor Proof	0	None
620	45	102	Office	2	1421-T12	Concrete	8	120	Adequate	2	N1411-T8-VAP	Surface	Opal	1	LC-WS-PIR-AUTO-MAN
621	45	103	Shop	13	1421-T12	Concrete	8	120	Underlit	13	N1411-T8-VAP	Surface	Opal	2	LC-LV-PIR-Cor-Ceil Mnt
622	45	103	Shop	6	1421-T12	Concrete	8	120	Underlit	6	N1411-T8-VAP	Surface	Opal	1	LC-LV-PIR-Ceil Mnt
623	45	103	Shop	1	1421-T12	Concrete	8	120	Underlit	1	N1411-T8-VAP	Surface	Opal	0	None
624	45	104	Shop	6	1421-T12	Concrete	8	120	Underlit	6	N1411-T8-VAP	Surface	Opal	1	LC-LV-PIR-Ceil Mnt
625	45	B01	Locker Room	3	1421-T12	Concrete	7	120		3	N1411-T8-VAP	Surface	Vapor Proof	3	LC-LINE-PIR-Fixt Mnt
626	45	B01 ST	Stairs	1	100A19	Concrete	7	120		1	LED-SI-12W-A19	Surface	None	0	None

2087

2080

## APPENDIX C - FLOOR PLANS

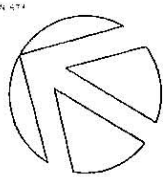
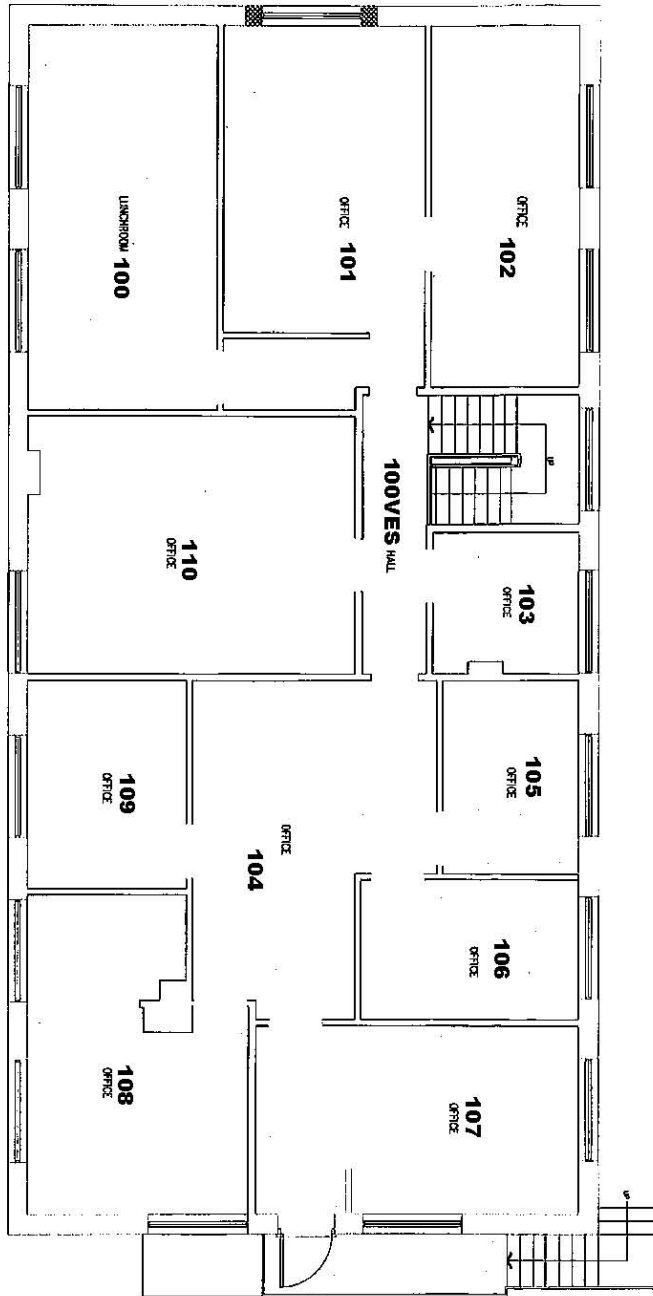




**BASEMENT FLOOR PLAN**

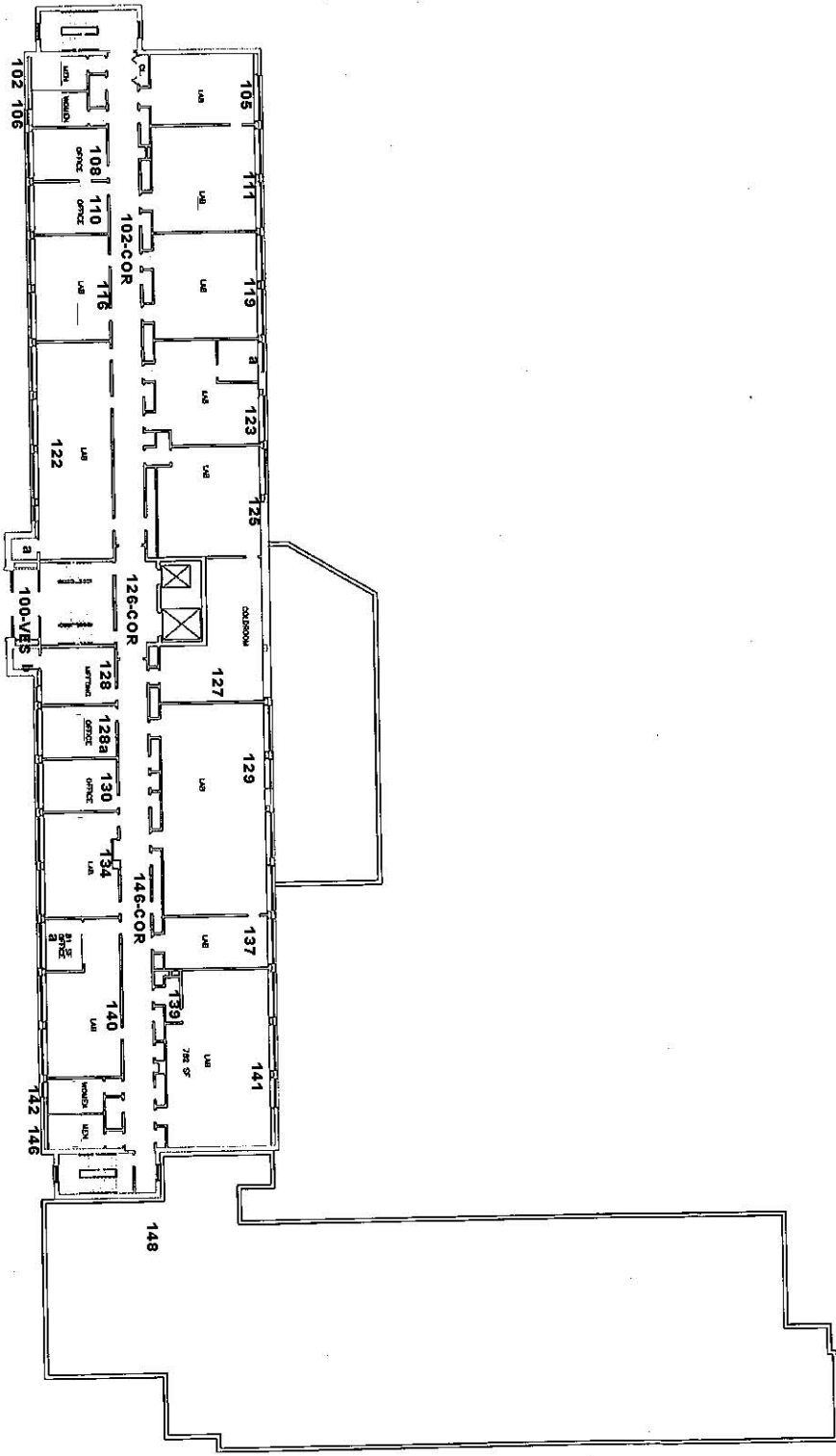
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SCALE 1/8" = 1'-0"	JOB DRAWING NO. 97-NuBSMT-CVT

AGRICULTURE CANADA	
CENTRAL EXPERIMENTAL FARM	
GOVERNMENT SERVICES SHOP	No.97
1 of 1	



DRAWING <b>GROUND FLOOR PLAN</b>		DEPARTMENT AGRICULTURE CANADA	
DATE JAN 16/07		OFFICE CENTRAL EXPERIMENTAL FARM	
SCALE 1/8" = 1'-0"		BUILDING GOVERNMENT SERVICES SHOP -- No.97	
DRAWN BY DA		SHEET NO. 2 OF 2	
PROJECT NO. 97-GRND			

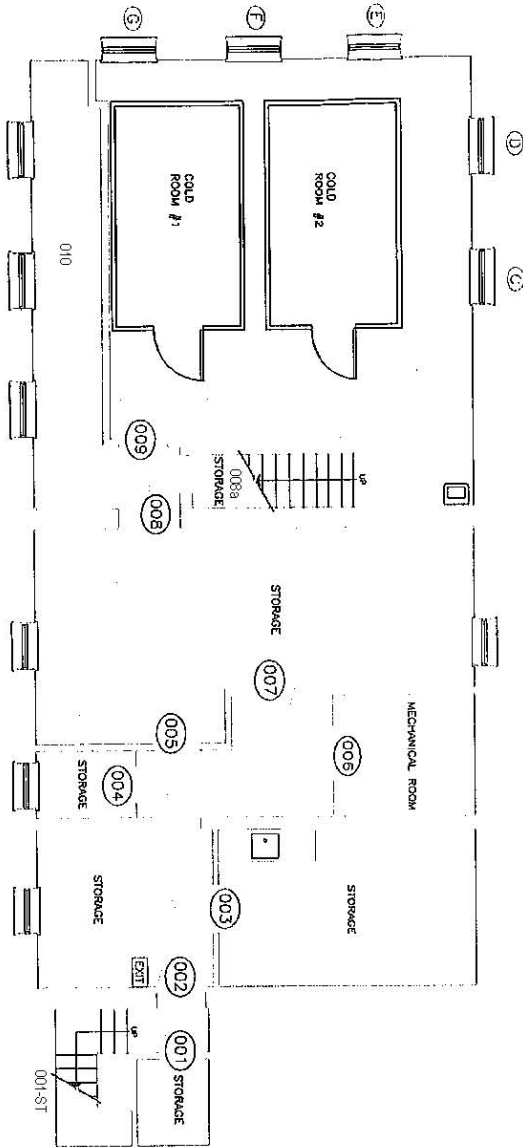




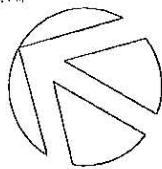
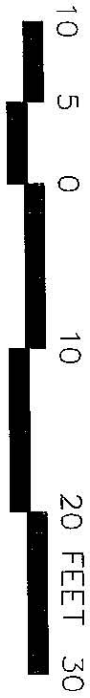
**BUILDING 22 1ST FLOOR PLAN**







BASEMENT FLOOR



**BASEMENT PLAN**

DATE: NOV. 16, 1994  
SCALE: 1/8" = 1'-0"

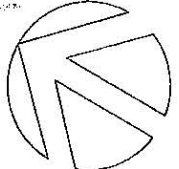
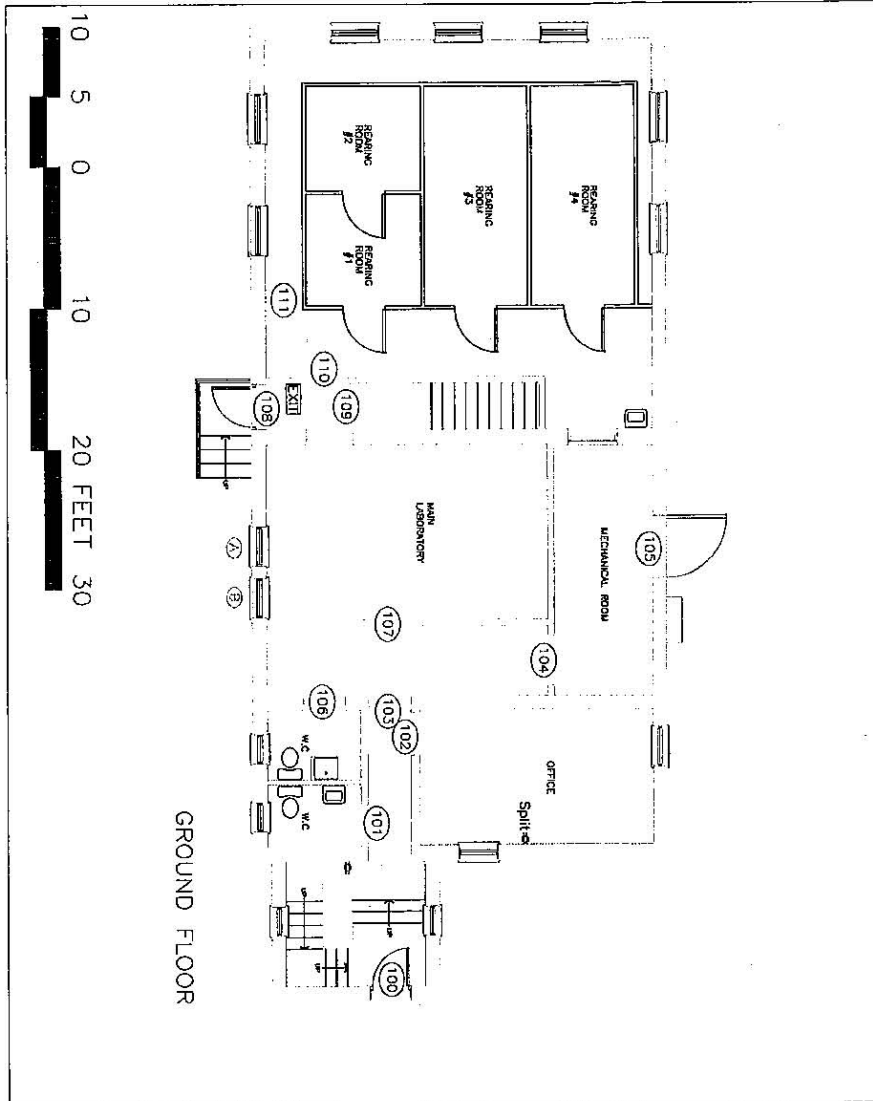
DRAWN BY: HT  
DRAWING NO.: 136-BSMT

DEPARTMENT: AGRICULTURE CANADA

STATION: CENTRAL EXPERIMENTAL FARM

PROJECT: LABORATORY BUILDING -- No.136

1 OF 2

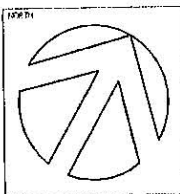
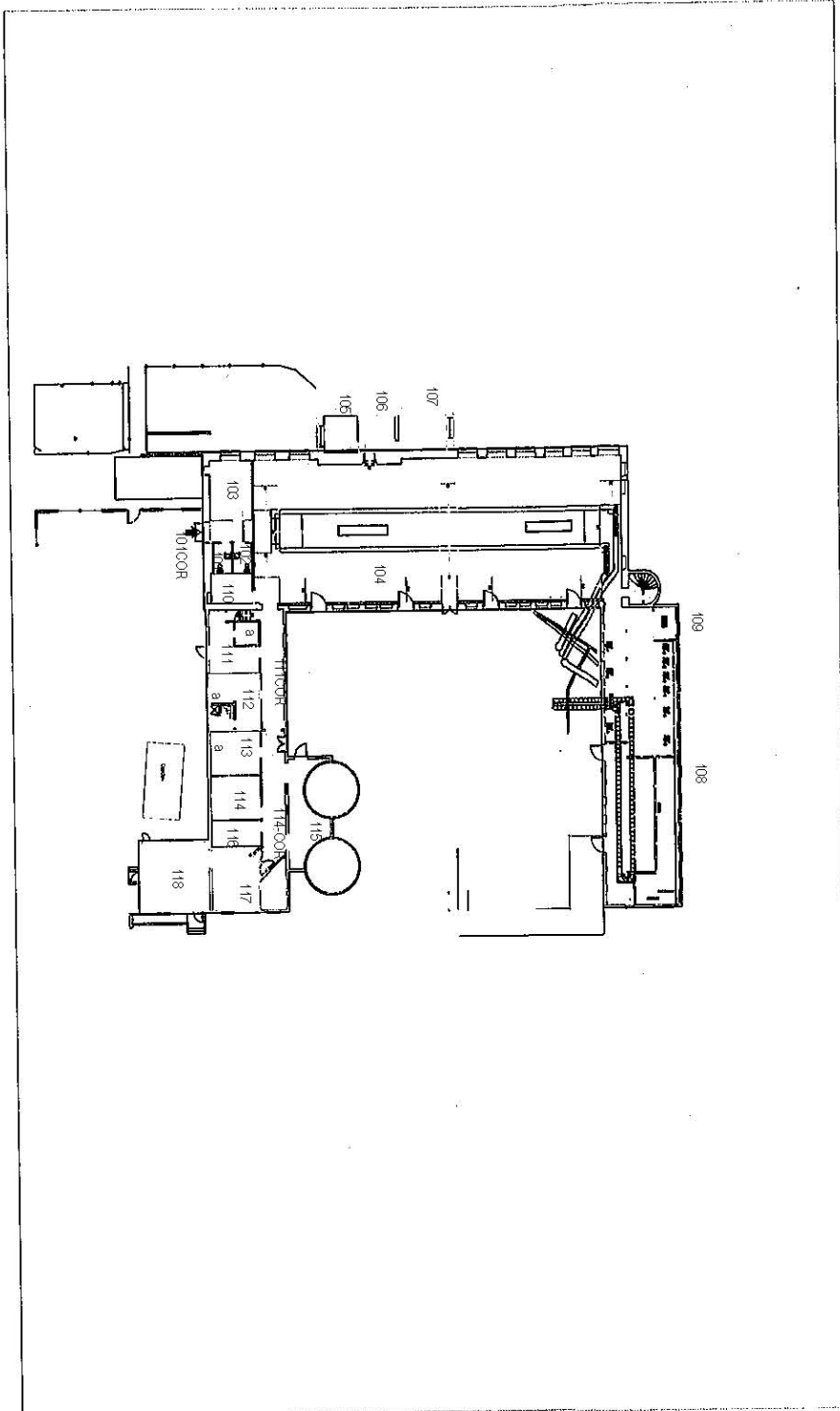


**CLEANING PLAN  
GROUND FLOOR**

DATE	DATE	DRAWN BY
NOV. 09/06	NTS	DA

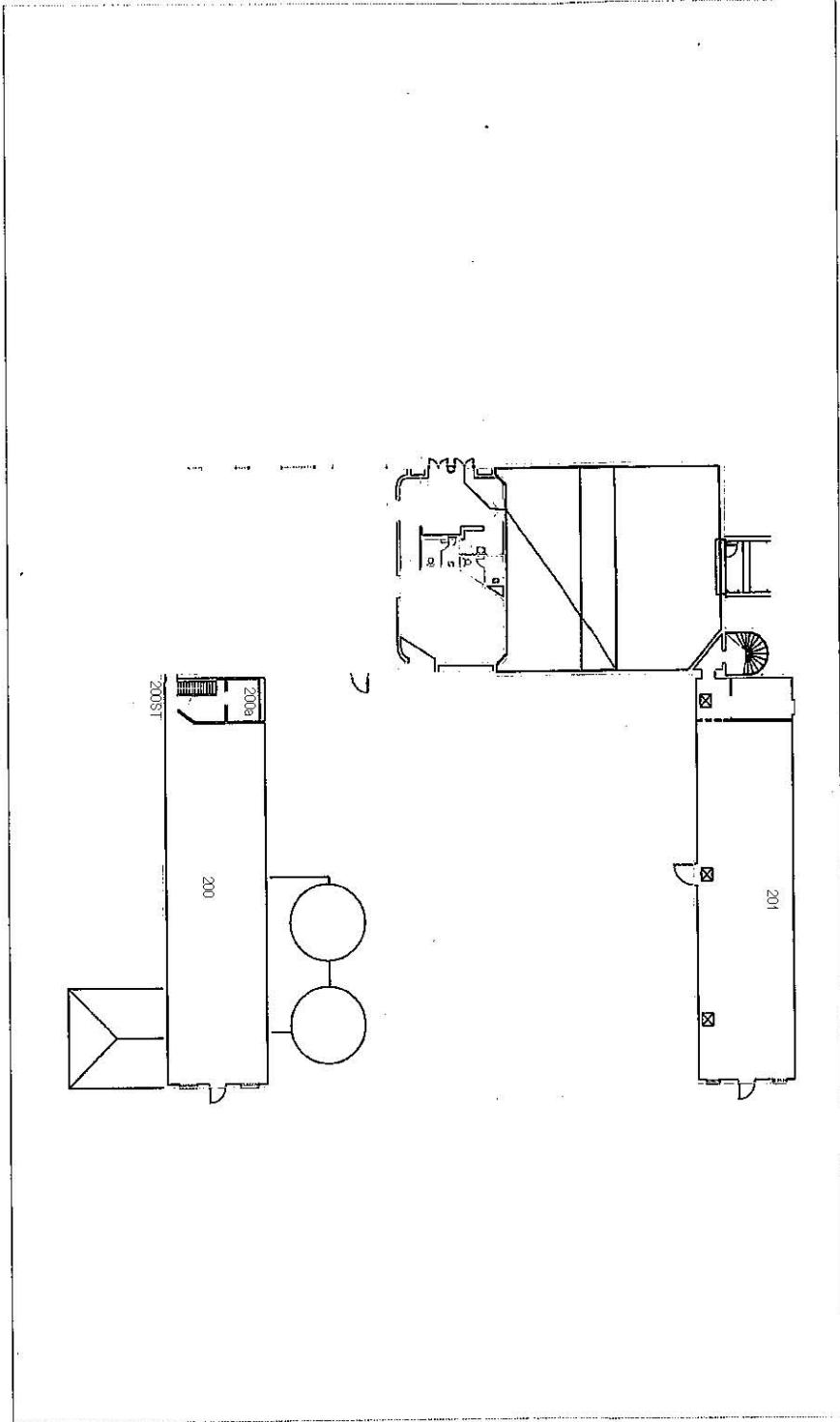
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DEPARTMENT AGRICULTURE AND AGRI-FOOD CANADA	
FACILITY CENTRA, EXPERIMENTAL FARM	
BUILDING LABORATORY BUILDING - No. 136	
NO. DRAWING FILE	SHEET NO.
136-GRND	1




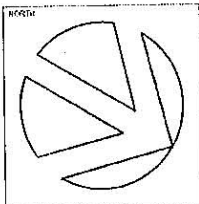
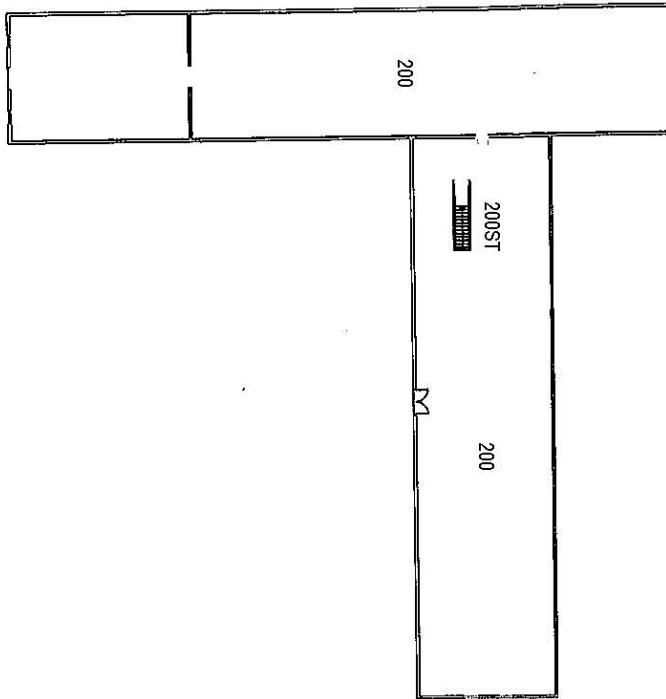


PROJECT <b>GROUND FLOOR PLAN</b>	
DATE MARCH 10, 1995	DRAWN BY CZ
SCALE 1/32" = 1'-0"	CAD DRAWING FILE 88-GRND

DEPARTMENT AGRICULTURE CANADA	
CALPUS CENTRAL EXPERIMENTAL FARM	
BUILDING MAIN DAIRY BARN - No.88	
DRAWING NO.	SHEET NO. 1 OF 2

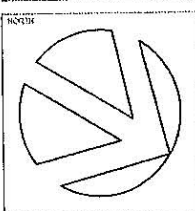
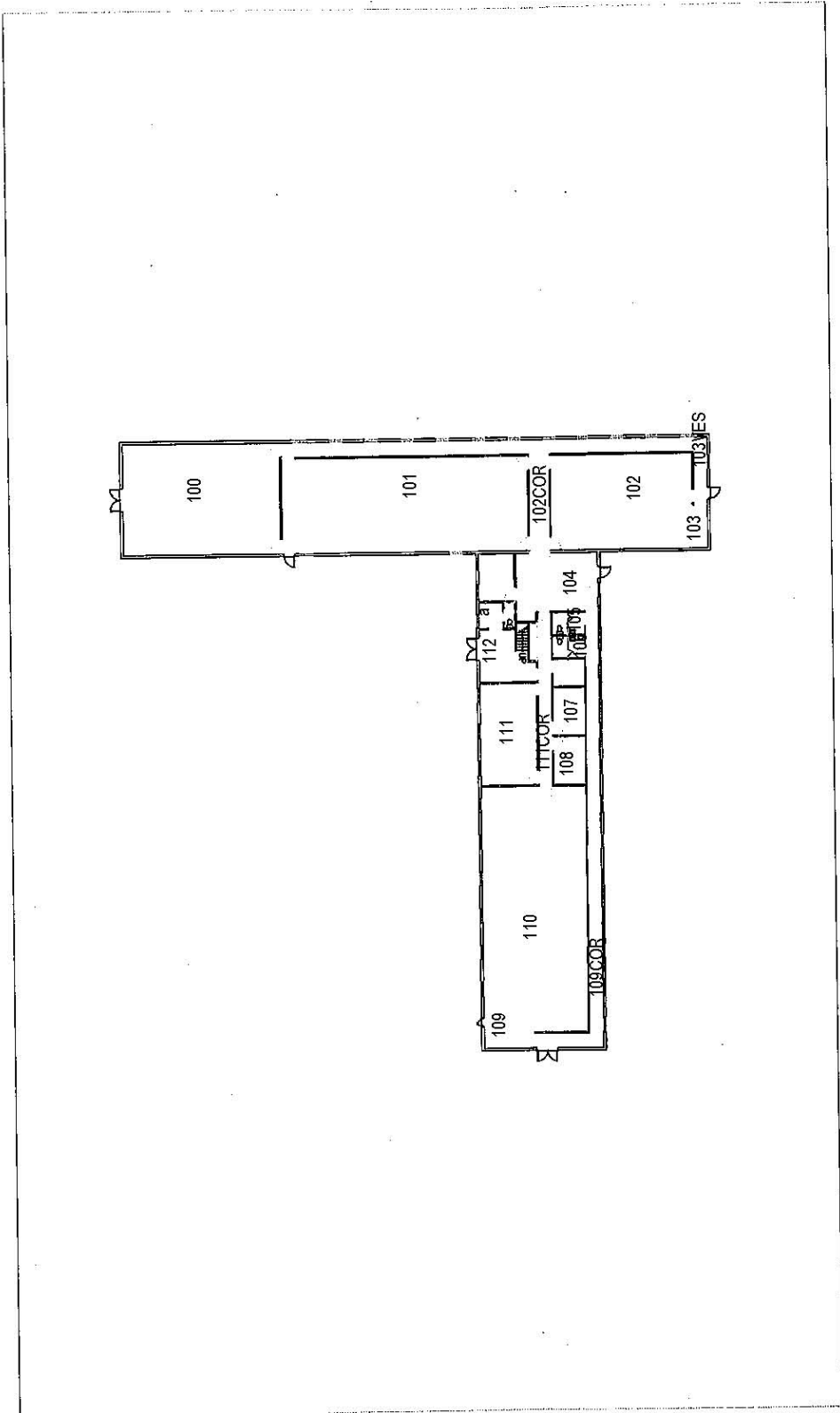


NORTH 	PROJECT <b>SECOND FLOOR PLAN</b>		DEPARTMENT AGRICULTURE CANADA	
			CAMPUS CENTRAL EXPERIMENTAL FARM	
	DATE MARCH 10, 1995	DRAWN BY CZ	BUILDING MAIN DAIRY BARN - No.88	
	SCALE 1/32" = 1'-0"	CAD DRAWING FILE B8-SCND	DRAWING NO. .	SHEET NO. 2 OF 2



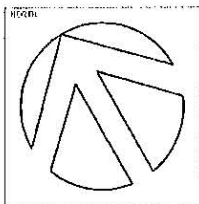
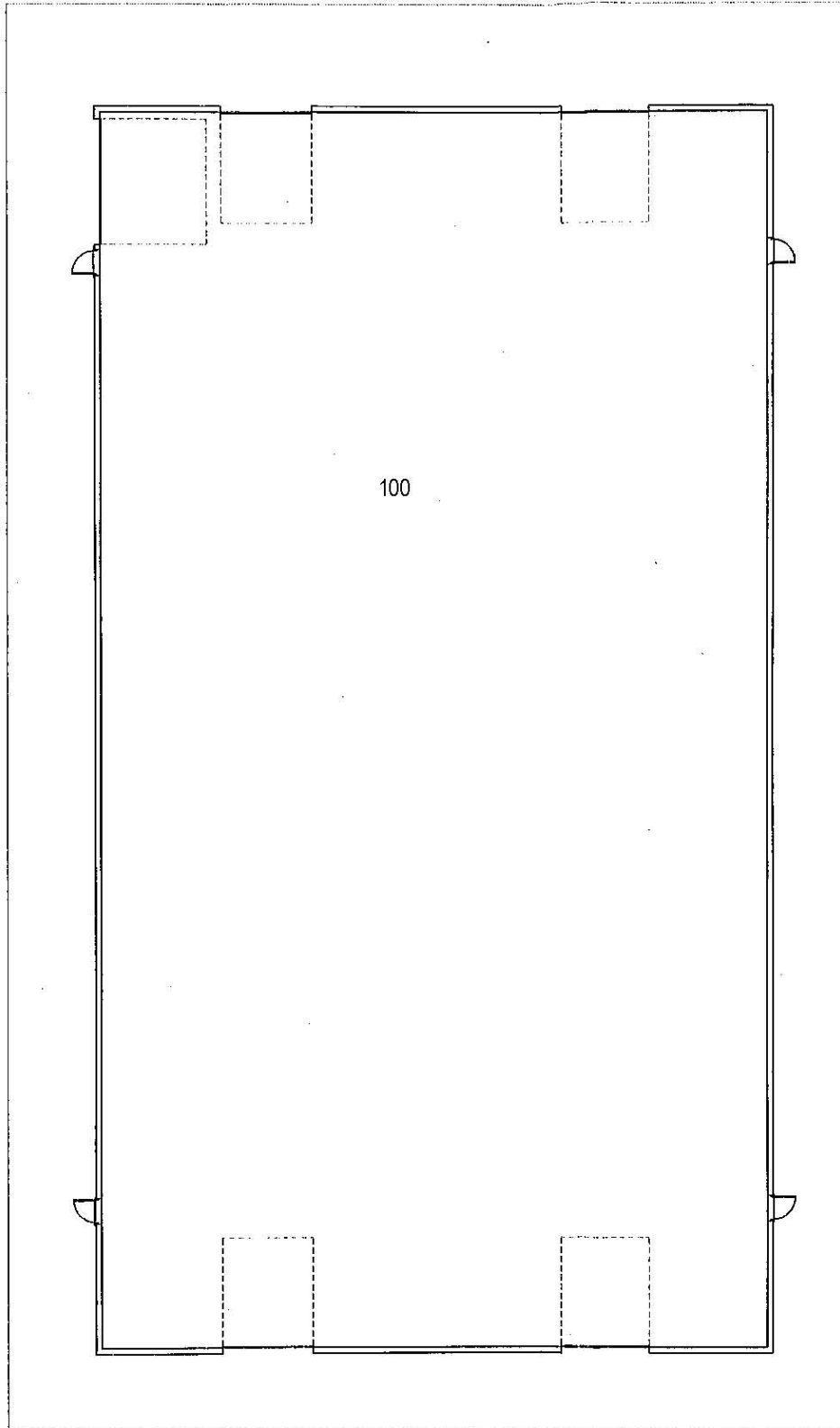
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DATE FEB. 8, 1995	DRAWN BY HT
SCALE 1:400	CAD DRAWING FILE 91-ATTC

DEPARTMENT AGRICULTURE CANADA	
FACILITY CENTRAL EXPERIMENTAL FARM	
BUILDING MAIN PIGGERY BUILDING - No.91	
DRAWING NO. .	SHEET NO. 2 OF 2



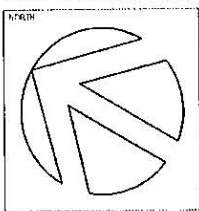
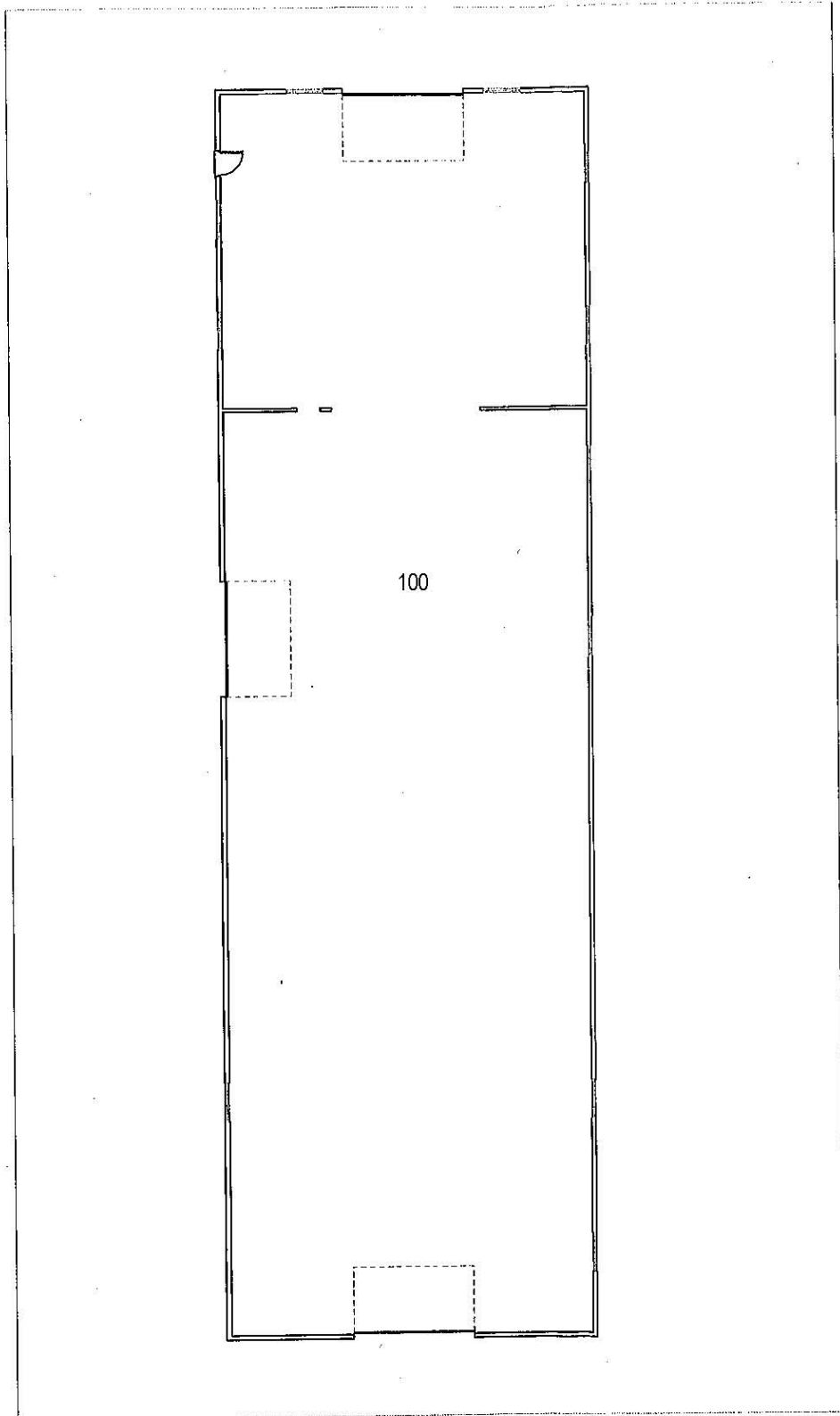
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DATE FEB. 7, 1995	DRAWN BY HT
SCALE 1:400	CAD DRAWING FILE 91-CRND

DEPARTMENT AGRICULTURE CANADA	
CAMPUS CENTRAL EXPERIMENTAL FARM	
BUILDING MAIN PIGGERY BUILDING - No.91	
DRAWING NO. .	SHEET NO. 1 OF 2



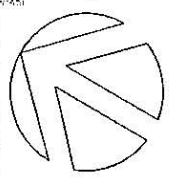
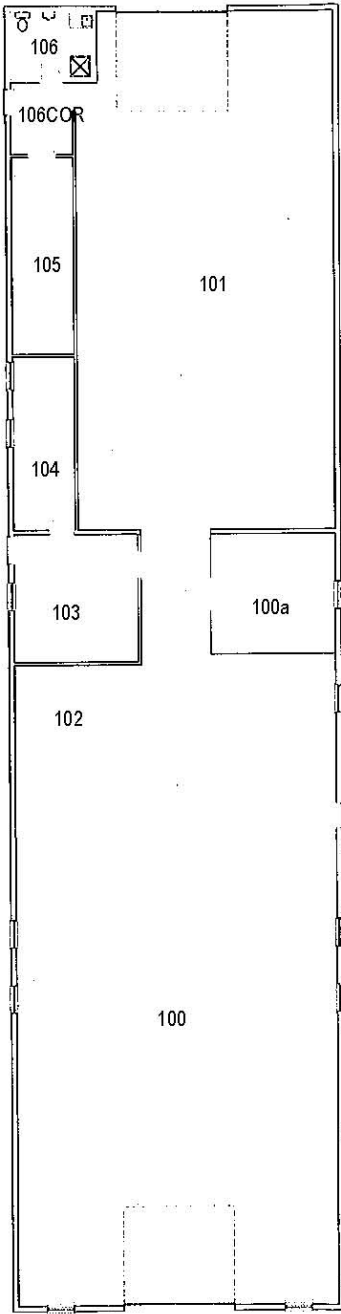
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DATE MARCH 14, 1995	DRAWN BY CZ
SCALE	CAD DRAWING FILE 146-GRND

DEPARTMENT AGRICULTURE CANADA	
EXPERIMENT CENTRAL EXPERIMENTAL FARM	
BUILDING IMPLEMENT SHED - No.146	
DRAWING NO.	SHEET NO. 1 OF 1

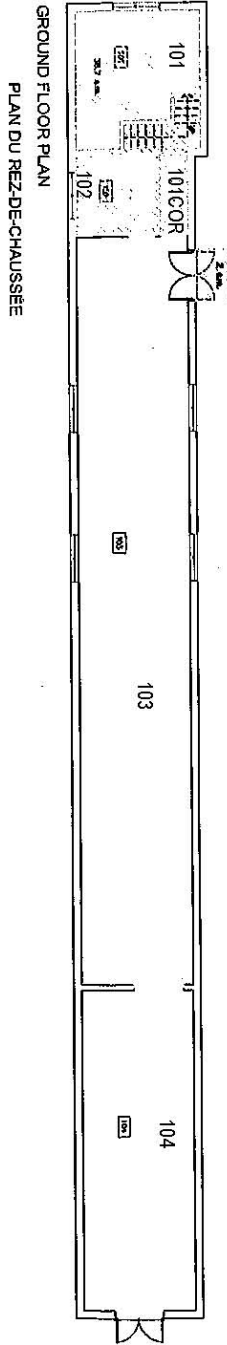


PROJECT <b>GROUND FLOOR PLAN</b>	
DATE	DRAWN BY
FEB. 20, 1995	HT
SCALE	CAD DRAWING FILE
1/16" = 1'-0"	104-GRND

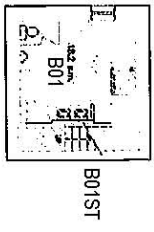
DEPARTMENT AGRICULTURE CANADA	
CAMPUS CENTRAL EXPERIMENTAL FARM	
BUILDING IMPLEMENT SHED - No.104	
DRAWING NO.	SHEET NO.
.	1 OF 1



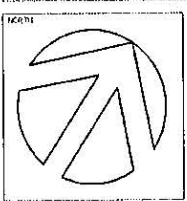
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		<small>COMPLEX</small> CENTRAL EXPERIMENTAL FARM	
<small>DATE</small> NOV. 7/00	<small>DRAWN BY</small> RP	<small>BUILDING</small> IMPLEMENT SHED -- No.103	
<small>SCALE</small> 1/16" = 1'-0"	<small>DOOR SYMBOLS</small> 103-GRND	<small>EXAMINER</small>	<small>DATE</small> 1 OF 1



GROUND FLOOR PLAN  
PLAN DU REZ-DE-CHAUSSEE



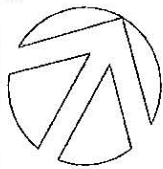
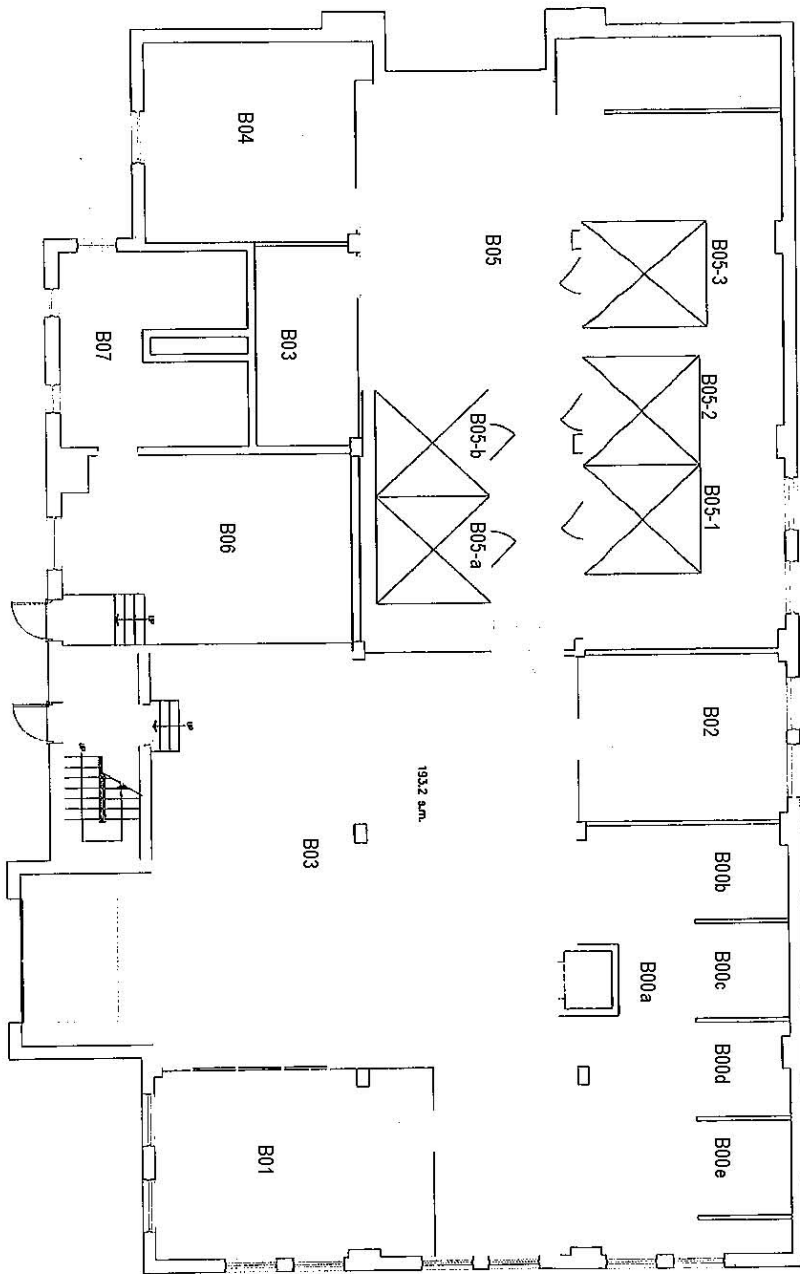
BASEMENT FLOOR PLAN  
PLAN DU SOUS-SOL



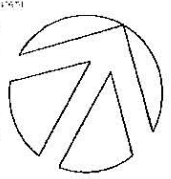
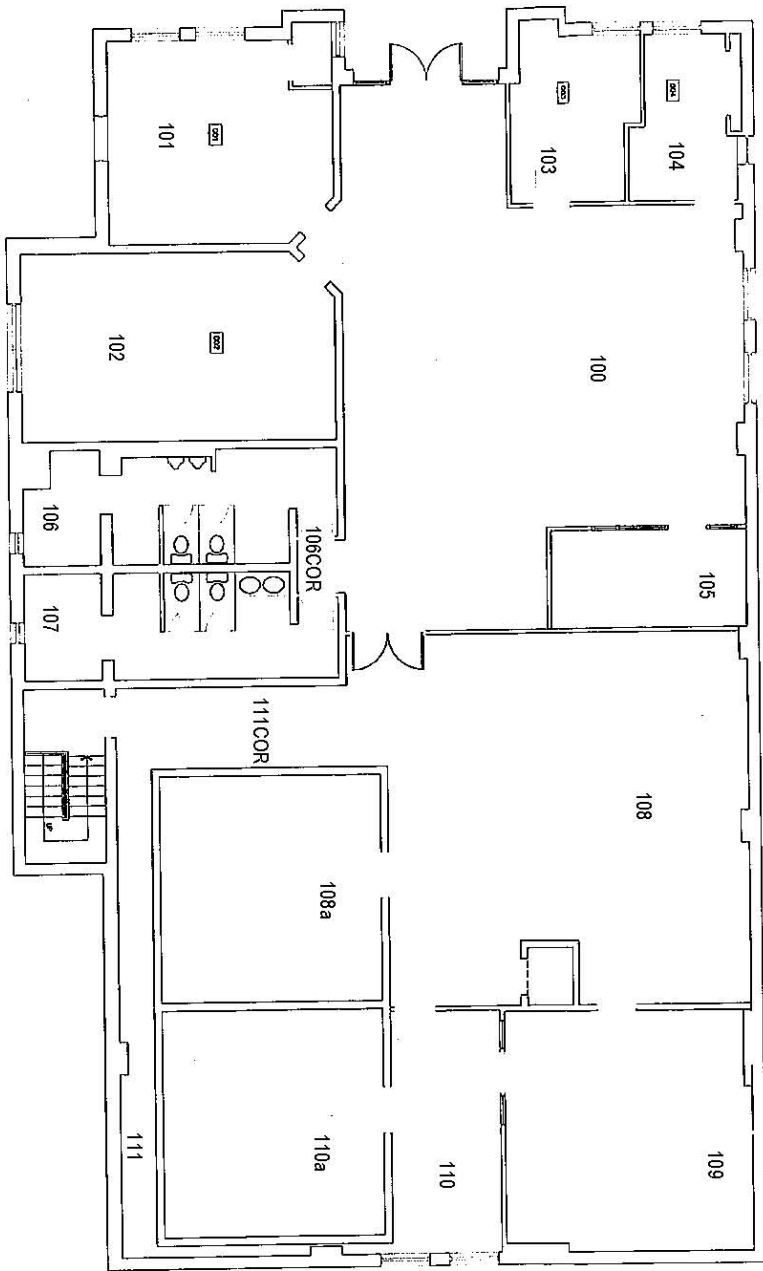
PROJECT <b>BASEMENT PLAN GROUND FLOOR PLAN</b>	
DATE NOV. 7/00	DRAWN BY RP
SCALE 1/16" = 1'-0"	DWG DRAWING FILE 45-GRND

DEPARTMENT AGRICULTURE CANADA	
DIVISION CENTRAL EXPERIMENTAL FARM	
BUILDING STORAGE BUILDING - No.45	
DRAWING NO.	SHEET NO. 1 OF 1

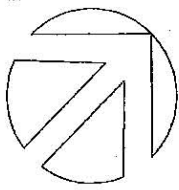
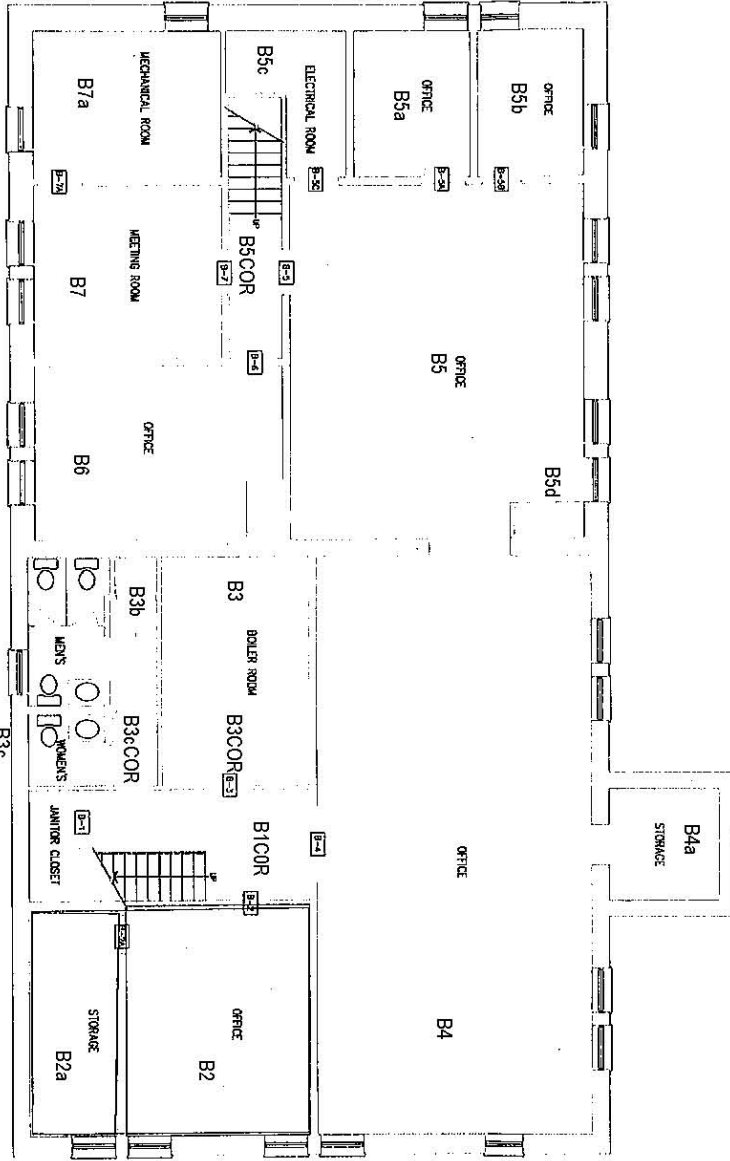




<b>BASEMENT PLAN</b>		AGRICULTURE CANADA	
DATE NOV. 7/00		PROJECT CENTRAL EXPERIMENTAL FARM	
DRAWN BY HT/RP		BUILDING No. 99	
SCALE 3/32" = 1'-0"		SHEET NO. 1 OF 2	



PROJECT <b>GROUND FLOOR</b>		ORGANIZATION AGRICULTURE CANADA	
DATE NOV.7/00		CLIENT CENTRAL EXPERIMENTAL FARM	
SCALE 3/32" = 1'-0"		BUILDING BUILDING - No.99	
DRAWN BY HT/RP		SHEET NO. 2 OF 2	
JOB NUMBER 99-GRND			



**BASEMENT FLOOR PLAN**

DATE: NOV. 7/00

DESIGNED BY: RP

SCALE: 3/32" = 1'-0"

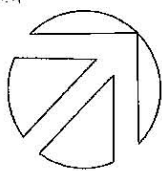
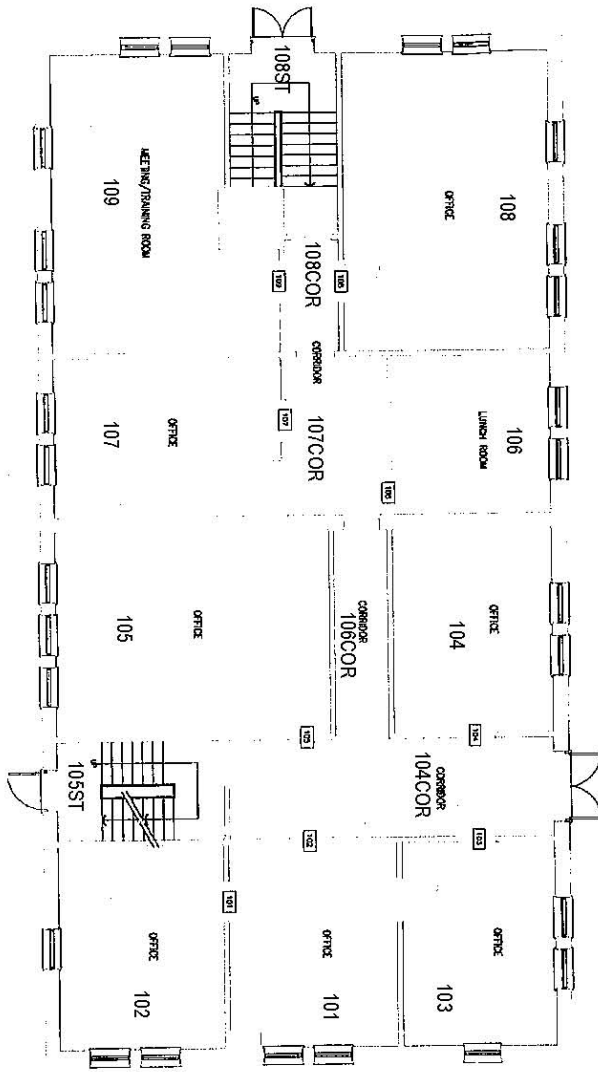
DATE DRAWING FILE: 34-BSMT

AGRICULTURE CANADA

CENTRAL EXPERIMENTAL FARM

GENETICS BUILDING -- No. 34

SHEET NO: 1 OF 3



**GROUND FLOOR PLAN**

DATE  
NOV. 7/00

DESIGNED BY  
RP

SCALE  
3/32" = 1'-0"

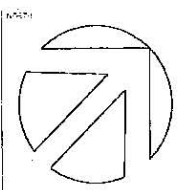
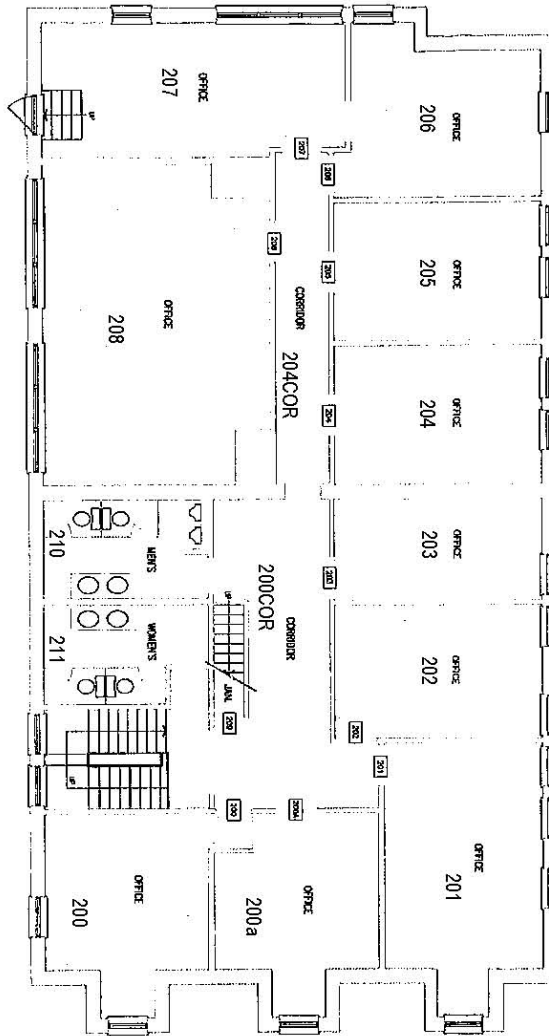
DATE OF PAPER  
34-GRND

AGRICULTURE CANADA

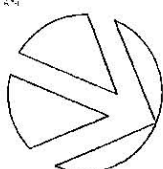
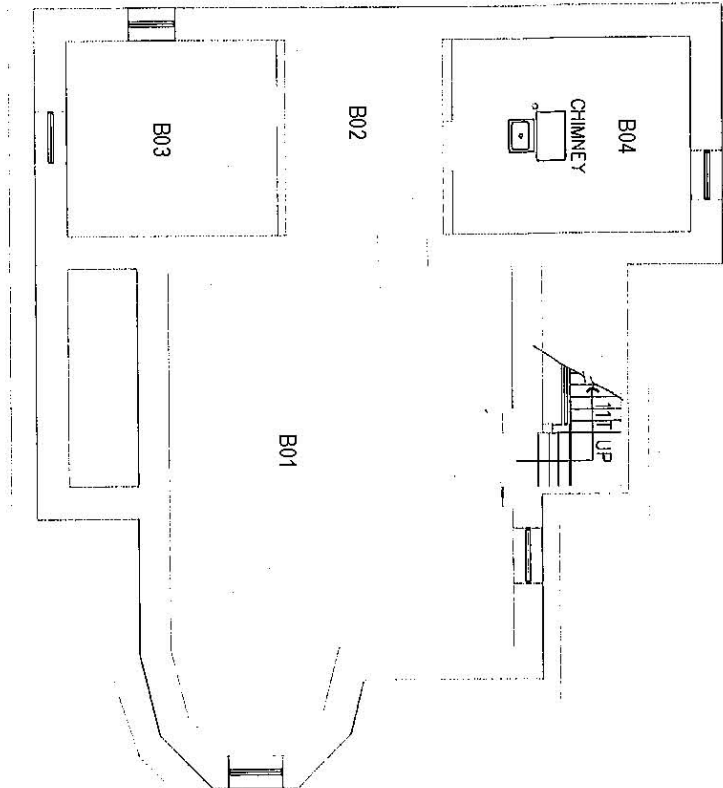
CENTRAL EXPERIMENTAL FARM

GENETICS BUILDING -- No.34

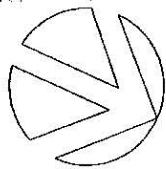
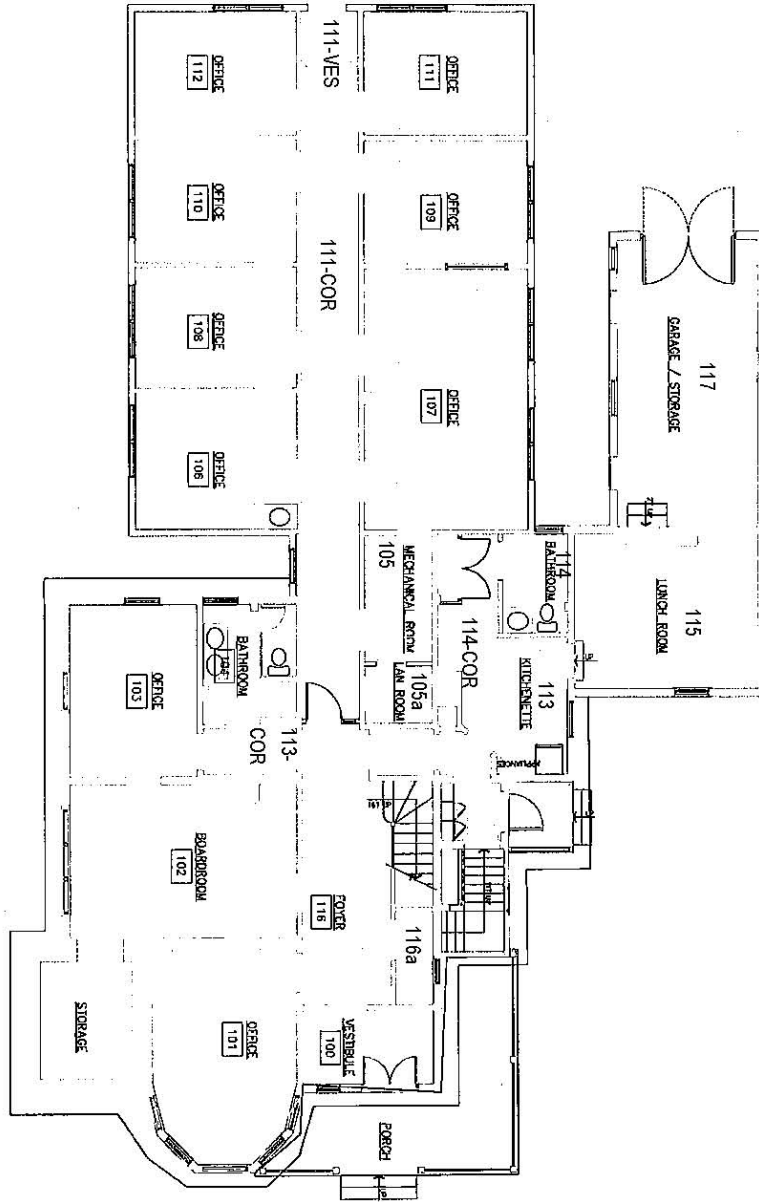
SHEET NO.  
2 OF 3



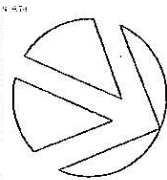
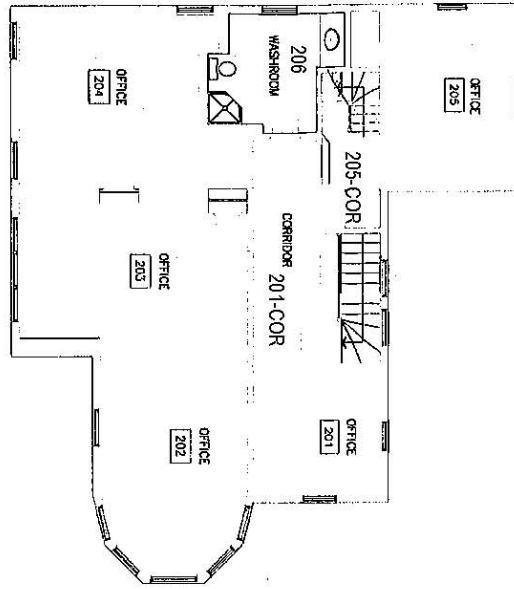
<b>PROJECT</b> <b>SECOND FLOOR PLAN</b>		<b>INSTITUTION</b> AGRICULTURE CANADA	
<b>DATE</b> NOV. 7/00		<b>DRAWN BY</b> RP	
<b>SCALE</b> 3/32" = 1'-0"		<b>PROJECT NO.</b> 34-SCND	
		<b>LOCATION</b> CENTRAL EXPERIMENTAL FARM	
		<b>BUILDING</b> GENETICS BUILDING -- No.34	
		<b>SHEET NO.</b> 3 OF 3	



PROJECT <b>BASEMENT PLAN</b>		CLIENT AGRICULTURE CANADA	
DATE SEPTEMBER 3, 2008		PROJECT CENTRAL EXPERIMENTAL FARM	
SCALE 1/8" = 1'-0"		DRAWING NO. HERITAGE HOUSE - No.60	
DRAWN BY BT/IM		SHEET NO. 1 OF 4	
DATE CHECKED P.P. 60-BSMT			



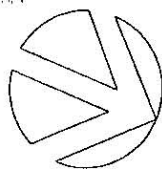
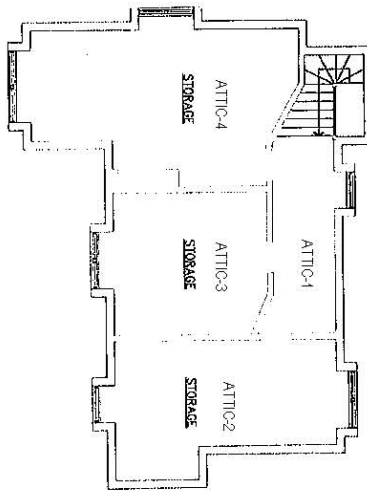
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		SAMPLE CENTRAL EXPERIMENTAL FARM	
DATE NOVEMBER 7, 1997	DRAWN BY RP	BUILDING HERITAGE HOUSE - No.60	
SCALE 3/32" = 1'-0"	PROJECT NUMBER 60-CRNRD	DRAWING NO. 1 OF 1	



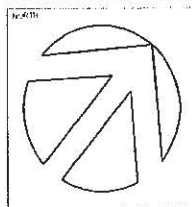
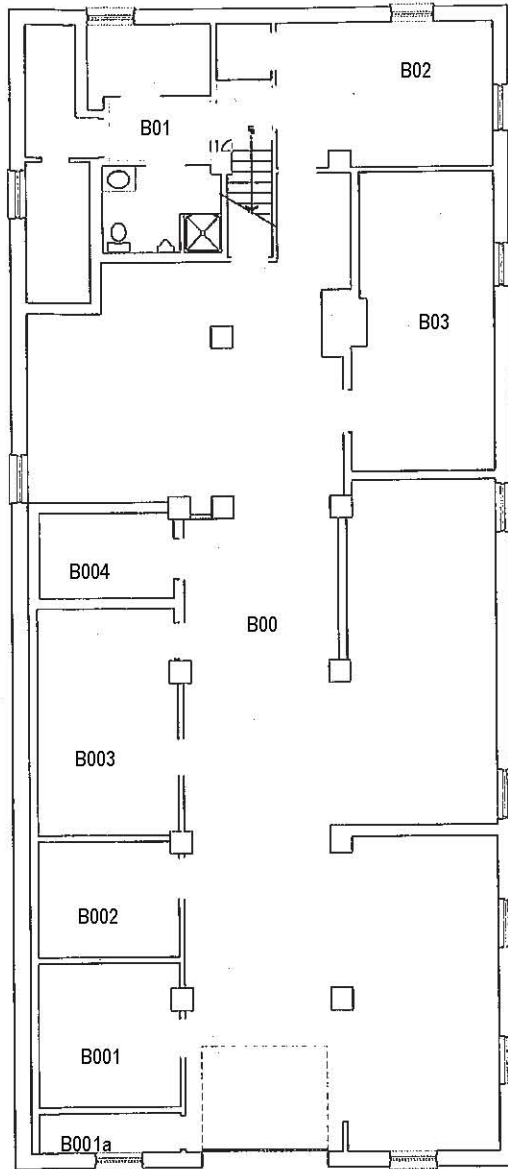
PROJECT <b>SECOND FLOOR PLAN</b>	
DATE NOV. 7/00	DESIGNED BY RP
SCALE 3/32" = 1'-0"	JOB NUMBER 60-SCND

CLIENT AGRICULTURE CANADA	
LOCATION CENTRAL EXPERIMENTAL FARM	
PROJECT NAME HERITAGE HOUSE	PROJECT NO. No.60
DATE 2000	SHEET NO. 2 OF 2



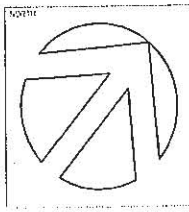
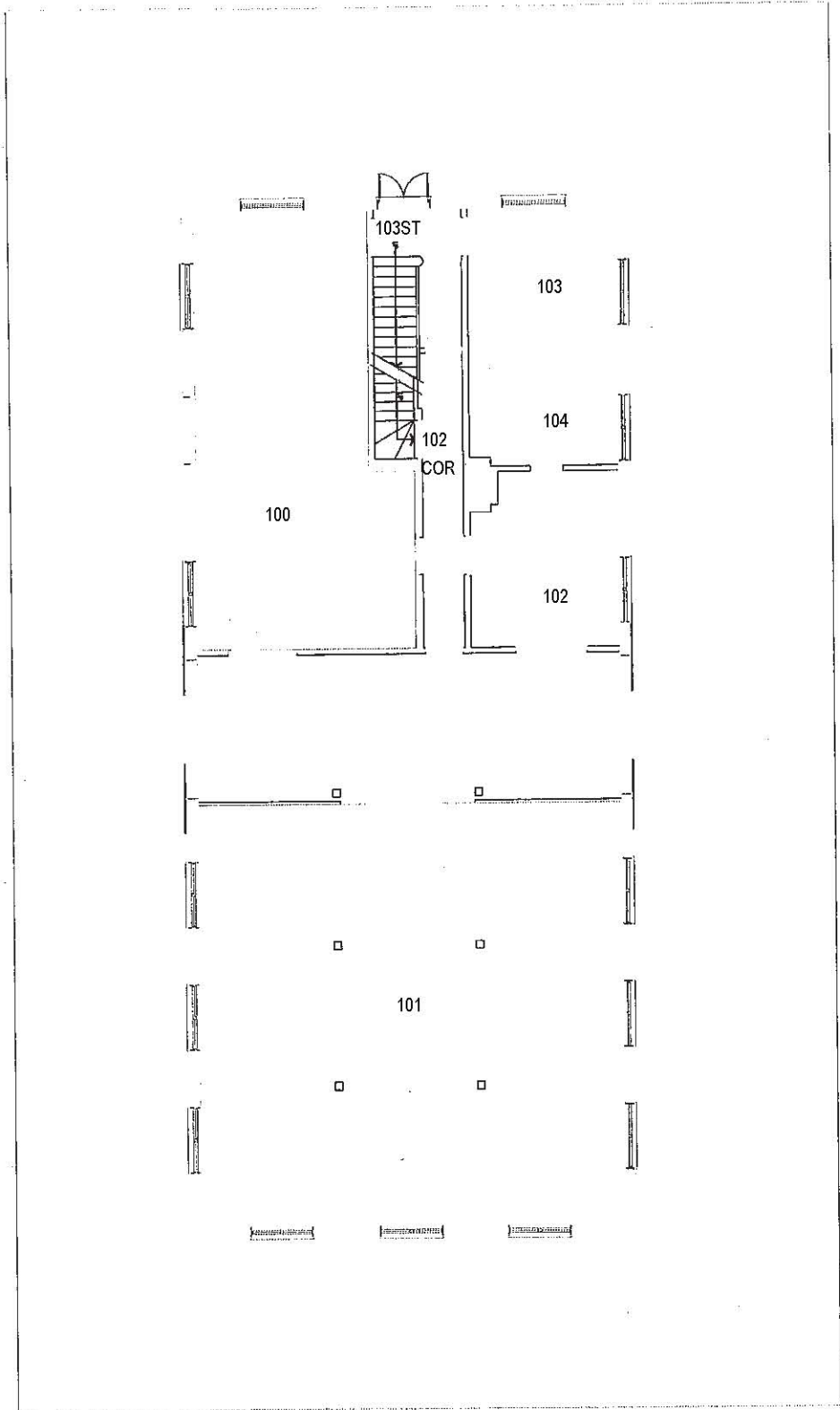


<b>PROJECT</b> <b>THIRD FLOOR PLAN</b>		<b>OFFICER</b> AGRICULTURE CANADA	
<b>DATE</b> AUGUST 4, 1994		<b>CLIENT</b> CENTRAL EXPERIMENTAL FARM	
<b>SCALE</b> $3/32" = 1'-0"$		<b>BUILDING</b> HERITAGE HOUSE - No.60	
<b>DRAWN BY</b> HT		<b>FRAMEWORK</b> 60-THRD	
		<b>SECTION</b> 4 OF 4	



PROJECT <b>BASEMENT FLOOR PLAN</b>	
DATE FEB. 24, 1995	DRAWN BY HT
SCALE 3/32" = 1'-0"	DATE DRAWING FILE 76-BSMT

DEPARTMENT AGRICULTURE CANADA	
CAMPUS CENTRAL EXPERIMENTAL FARM	
BUILDING HERITAGE BARN - No.76	
DRAWING NO.	SHEET NO. 1 OF 5



PROJECT <b>GROUND FLOOR PLAN</b>	
DATE FEB. 24, 1995	DRAWN BY HT
SCALE 3/32" = 1'-0"	CAD DRAWING FILE 76-GRND

DEPARTMENT AGRICULTURE CANADA	
FACILITY CENTRAL EXPERIMENTAL FARM	
BUILDING HERITAGE BARN - No.76	
DRAWING NO. .	SHEET NO. 2 OF 5

## APPENDIX D - DESIGN DRAWINGS





## APPENDIX E - PERSONAL SECURITY SCREENING FORM



## Appendix "F"

### INSURANCE TERMS



## INSURANCE TERMS

- IN1    GENERAL
  - IN1.1    Worker's Compensation
  - IN1.2    Indemnification
  - IN1.3    Proof of Insurance
  - IN1.4    Insured
  - IN1.5    Payment of Deductible
  
- IN2    COMMERCIAL GENERAL LIABILITY
  - IN2.1    Scope of Policy
  - IN2.2    Period of Insurance
  
- IN3    AUTOMOBILE INSURANCE
  - IN3.1    Scope of Policy
  
- IN4    BUILDER'S RISK / INSTALLATION FLOATER
  - IN4.1    Scope of Policy
  - IN4.2    Amount of Insurance
  - IN4.3    Period of Insurance
  - IN4.4    Insurance Proceeds

### **IN1    GENERAL**

#### **IN1.1    Worker's Compensation**

- 1) The Contractor shall provide and maintain Worker's Compensation Insurance in accordance with the legal requirements of the Province or Territory where the work is being carried out.

#### **IN1.2    Indemnification**

- 1) The insurance required by the provisions of these Insurance Terms shall in no way limit the Contractor's responsibility under the Indemnification clause of the General Conditions of the contract. Any additional coverage the Contractor may deem necessary to fulfill his obligations under the aforesaid clause shall be at his own discretion and expense.

#### **IN1.3    Proof of Insurance**

- 1) Before commencement of the Work, and within thirty (30) days after acceptance of its bid, the Contactor shall deposit with Canada a CERTIFICATE OF INSURANCE (form AAFC / AAC5314) available upon request.
- 2) Upon request by Canada, the Contractor shall provide originals or certified true copies of all contracts of insurance maintained by the Contractor pursuant to the provisions contained herein.

#### **IN1.4    Insured**

- 1) Each policy shall insure the Contractor and shall include Her Majesty the Queen in right of Canada, represented by the Minister of Agriculture & Agri-Food Canada as an additional Insured, with respect to liability arising out of the operations of the contractor with regard to the work.

## **INSURANCE TERMS (Continued)**

### **IN1.5 Payment of Deductible**

- 1) The payment of monies up to the deductible amount made in satisfaction of a claim shall be borne by the Contractor.

## **IN2 COMMERCIAL GENERAL LIABILITY**

### **IN2.1 Scope of Policy**

- 1) The insurance coverage provided shall not be less than that provided by IBC Form 2100, as amended from time to time, and shall have:
  - (a) an Each Occurrence Limit of not less than \$5,000,000.00 ;
  - (b) a Products/Completed Operations Aggregate Limit of not less than \$5,000,000.00 ; and
  - (c) a General Aggregate Limit of not less than \$10,000,000.00 per policy year, if the policy is subject to such a limit.
- 2) The policy shall either include or be endorsed to include coverage for the following exposures or hazards if the Work is subject thereto:
  - (a) Blasting.
  - (b) Pile driving and caisson work.
  - (c) Underpinning.
  - (d) Removal or weakening of support of any building or land whether such support be natural or otherwise if the work is performed by the insured contractor.
  - (e) Asbestos.
  - (f) Non-owed Automobile Policy.

### **IN2.2 Period of Insurance**

- 1) Unless otherwise directed in writing by Canada, or, otherwise stipulated elsewhere herein, the policy required herein shall be in force and be maintained from the date of contract award until the day of issue of the Certificate of Completion except that the coverage for Completed Operations Liability shall, in any event, be maintained for a period of at least six (6) years beyond the date of the CERTIFICATE OF SUBSTANTIAL PERFORMANCE.

## **IN3 AUTOMOBILE INSURANCE**

### **IN3.1 Scope of Policy**

- 1) Automobile Liability Insurance in respect of licensed vehicles shall have limits of not less than one million dollars inclusive per occurrence for bodily injury, death, and damage to property.

## **INSURANCE TERMS (Continued)**

### **IN4 BUILDER'S RISK / INSTALLATION FLOATER**

#### **IN4.1 Scope of Policy**

- 1) The insurance coverage provided by a Builder's Risk policy or an Installation Floater policy shall not be less than that provided by IBC Forms 4042 and 4047, as amended from time to time.
- 2) The policy shall permit use and occupancy of the project, or any part thereof, where such use and occupancy is for the purposes for which the project is intended upon completion.
- 3) The policy may exclude or be endorsed to exclude coverage for loss or damage caused by any of the following:
  - (a) Asbestos.
  - (b) Fungi or spores.
  - (c) Cyber.
  - (d) Terrorism.

#### **IN4.2 Amount of Insurance**

- 1) The amount of insurance shall not be less than the sum of the contract value plus the declared value (if any) set forth in the contract documents of all material and equipment supplied by Canada at the site of the project to be incorporated into and form part of the finished Work. If the value of the Work is changed, the policy shall be changed to reflect the revised contract value.

#### **IN4.3 Period of Insurance**

- 1) Unless otherwise directed in writing by Canada, or, stipulated elsewhere herein, the policy required herein shall be in force and be maintained from prior to the commencement of work until the day of issue of the CERTIFICATE OF SUBSTANTIAL PERFORMANCE.

#### **IN4.4 Insurance Proceeds**

- 1) The policy shall provide that the proceeds thereof are payable to Her Majesty or as Canada may direct in accordance with GC 10.2 Insurance Proceeds.
- 2) The Contractor shall, without delay, do such things and execute such documents as are necessary to effect payment of the proceeds.



## Appendix "G"

### CONTRACT DOCUMENTS

## MAJOR WORKS - CONTRACT DOCUMENTS

### SC01 CONTRACT DOCUMENTS

- 1) The following are the contract documents:
  - (a) Contract page when signed by Canada;
  - (b) Duly completed Bid and Acceptance Form and any Appendices attached thereto;
  - (c) Drawings and Specifications;
  - (d) AAFC General Conditions form AAFC / AAC5321-E:
    - (i) GC1 General Provisions
    - (ii) GC2 Administration of the Contract
    - (iii) GC3 Execution and Control of the Work
    - (iv) GC4 Protective Measures
    - (v) GC5 Terms of Payment
    - (vi) GC6 Delays and Changes in the Work
    - (vii) GC7 Default, Suspension or Termination of Contract
    - (viii) GC8 Dispute Resolution
    - (ix) GC9 Contract Security
    - (x) GC10 Insurance
  - (e) Supplementary Conditions, if any;
  - (f) Insurance Terms form AAFC / AAC5315-E;
  - (g) Any amendment issued or any allowable bid revision received before the date and time set for solicitation closing;
  - (h) Any amendment incorporated by mutual agreement between Canada and the Contractor before acceptance of the bid; and
  - (i) Any amendment or variation of the contract documents that is made in accordance with the General Conditions.
- 2) The language of the contract documents shall be the language of the Bid and Acceptance Form submitted.

### SC02 ACCEPTANCE AND CONTRACT

- 1) Upon acceptance of the Contractor's offer by Canada, a binding Contract shall be formed between Canada and the Contractor. The documents forming the Contract shall be the contract documents referred to in SC01 CONTRACT DOCUMENTS.



## Appendix "H"

## CONTRACT

## CONTRACT

### PURCHASING OFFICE

Agriculture and Agri-Food Canada  
 Eastern Service Centre  
 Tender Receiving Unit  
 2001 University Street., Suite 671-TEN  
 Montréal, Quebec  
 H3A 3N2

**Your tender is accepted** 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 construction listed herein and on any attached sheets at the price or prices set out therefor.

Comments

Vendor / Firm Name and Address

Title		
Solicitation / Contract No.		Date
Client Reference No.		
File No.		
Financial Code(s)		<input type="radio"/> GST <input type="radio"/> HST <input type="radio"/> QST
F.O.B Destination		
Applicable Taxes Included		
Destination		
Invoices - Original and two copies to be sent to :		
Address Enquiries to:		
Telephone No.	Ext.	Fax No.
Total Estimated Cost		Currency Type CAD
For the Minister		
_____ Signature		_____ Date



## FORMS

- Bid Bond
- Certificate of Insurance
- Labour and Material Payment Bond
- Performance Bond
- T4-A Certification



## BID BOND

**BOND NUMBER:** \_\_\_\_\_

**AMOUNT:** \_\_\_\_\_

KNOW ALL PERSONS BY THESE PRESENTS, that \_\_\_\_\_ as Principal,  
hereinafter called the Principal, and \_\_\_\_\_ as Surety,

hereinafter called the Surety, are, subject to the conditions hereinafter contained, held and firmly bound unto Her Majesty the Queen in right of Canada as represented by the Minister of Agriculture and Agri-Food, as Oblige, hereinafter called the Crown, in the amount of

\_\_\_\_\_ dollars (\$ \_\_\_\_\_), lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

SIGNED AND SEALED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

WHEREAS, the Principal has submitted a written tender to the Crown, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_,

for \_\_\_\_\_

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are such that if:

- (a) the Principal, should his tender be accepted within the period specified by the Crown, or, if no period be specified, within sixty (60) days after closing date of the tender, does execute within a period specified by the Crown, or, if no period be specified therein, within fourteen (14) days after the prescribed forms are presented to him for signature, execute such further contractual documents, if any, as may be required by the terms of the tender as accepted, and does furnish a Performance Bond and a Labour and Material Payment Bond, each in the amount of 50% of the Contract price and satisfactory to the Crown, or other security acceptable to the Crown, or
- (b) the Principal does pay to the Crown the difference between the amount of the Principal's tender and the amount of the Contract entered into by the Crown for the work, supplies and services which were specified in the said tender, if the latter amount be in excess of the former,

then this obligation shall be void; otherwise it shall remain in full force and effect.

PROVIDED, HOWEVER, that the Surety and the Principal shall not be liable to the Crown for an amount greater than the amount specified in this bond.

PROVIDED FURTHER that the Surety shall not be subject to any suit or action unless such suit or action is instituted and process therefore served upon the Surety at its Head Office in Canada, within twelve (12) months from the date of this bond.

IN TESTIMONY WHEREOF, the Principal has hereto set its hand and affixed its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signature of its authorized signing authority, the day and year first above written.

SIGNED, SEALED AND DELIVERED in the presence of:

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Surety

Note: Affix Corporate seal if applicable.

## CERTIFICATE OF INSURANCE

To be completed by the Insurer

CONTRACT					
Description and location of work					Contract No.
					Project No.
INSURER			BROKER		
Company name			Company name		
Unit/Suite/Apt.	Street number	Number suffix	Unit/Suite/Apt.	Street number	Number suffix
Street name			Street name		
Street type	Street direction	PO Box or Route Number	Street type	Street direction	PO Box or Route Number
Municipality (City, Town, etc.)			Municipality (City, Town, etc.)		
Province/State	Postal/ZIP code		Province/State	Postal/ZIP code	
INSURED			ADDITIONAL INSURED		
Contractor name			Her Majesty the Queen in right of Canada as represented by the Minister of Agriculture and Agri-Food Canada.		
Unit/Suite/Apt.	Street number	Number suffix			
Street name					
Street type	Street direction	PO Box or Route Number			
Municipality (City, Town, etc.)					
Province/State	Postal/ZIP code				
<b>This insurer certifies that the following policies of insurance are at present in force covering all operations of the Insured, in connection with the contract made between the named insured and Her Majesty the Queen in right of Canada, represented by the Minister of Agriculture and Agri-Food Canada.</b>					
POLICY					
Type	Number	Inception date	Expiry date	Limit of liability (\$)	
Commercial General Liability					
Builder's Risk "All Risks"					
Installation Floater "All Risks"					
Other (list)					
Each of these policies includes the coverages and provisions as specified in Insurance Terms and each policy has been endorsed to cover Her Majesty as an Additional Insured. The Insurer agrees to notify Her Majesty and the Named insured in writing thirty (30) days prior to any material change in, or cancellation of any policy or coverage.					
_____		_____		_____	
Name of Insurer's Officer or Authorized Employee		Telephone number		Ext.	
_____		_____		_____	
Signature		Date			

## LABOUR AND MATERIAL PAYMENT BOND

BOND NUMBER: \_\_\_\_\_

AMOUNT: \_\_\_\_\_

KNOW ALL PERSONS BY THESE PRESENTS, that \_\_\_\_\_ as Principal,  
hereinafter called the Principal, and \_\_\_\_\_ as Surety,

hereinafter called the Surety, are, subject to the conditions hereinafter contained, held and firmly bound unto Her Majesty the Queen in right of Canada as represented by the Minister of Agriculture and Agri-Food, as Obligee, hereinafter called the Crown, in the amount of

\_\_\_\_\_ dollars (\$ \_\_\_\_\_), lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

SIGNED AND SEALED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

WHEREAS, the Principal has entered into a Contract with the Crown dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_,  
for \_\_\_\_\_

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are such that, if payment is promptly made to all Claimants who have performed labour or services or supplied material in connection with the Contract and any and all duly authorized modifications and extensions of the Contract that may hereafter be made, notice of which modifications and extensions to the Surety being hereby waived, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. For the purpose of this bond, a Claimant is defined as one having a direct contract with the Principal or any Sub-Contractor of the Principal for labour, material or both, used or reasonably required for use in the performance of the Contract, labour and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone services or rental of equipment (but excluding rental of equipment where the rent pursuant to an agreement is to be applied towards the purchase price thereof) directly applicable to the Contract.
2. For the purpose of this Bond, no payment is required to be made in respect of a claim for payment for labour or services performed or material supplied in connection with the Contract that represents a capital expenditure, overhead or general administration costs incurred by the Principal during the currency or in respect of the Contract.
3. The Principal and the Surety hereby jointly and severally agree with the Crown that if any Claimant has not been paid as provided for under the terms of his contract with the Principal or a Sub-Contractor of the Principal before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's labour or service was done or performed or materials were supplied by such Claimant, the Crown may sue on this bond, have the right to prosecute the suit to final judgment for such sum or sums as may be due and have execution thereon; and such right of the Crown is assigned by virtue of Part VIII of the *Financial Administration Act* to such Claimant.
4. For the purpose of this bond the liability of the Surety and the Principal to make payment to any claimant not having a contract directly with the Principal shall be limited to that amount which the Principal would have been obliged to pay to such claimant had the provisions of the applicable provincial or territorial legislation on lien or privileges been applicable to the work. A claimant need not comply with provisions of such legislation setting out steps by way of notice, registration or otherwise as might have been necessary to preserve or perfect any claim for lien or privilege which the claimant might have had. Any such claimant shall be entitled to pursue a claim and to recover judgment hereunder subject to the terms and notification provisions of the Bond.
5. Any material change in the Contract between the Principal and the Crown shall not prejudice the rights or interest of any Claimant under this Bond who is not instrumental in bringing about or has not caused such change.

6. No suit or action shall be commenced hereunder by any Claimant:

- (a) Unless such Claimant shall have given written notice within the time limits hereinafter set forth to the Principal and the Surety above named, stating with substantial accuracy the amount claimed. Such notice shall be served by mailing the same by registered mail to the Principal and the Surety at any place where an office is regularly maintained for the transaction of business by such persons or served in any manner in which legal process may be served in the Province or other part of Canada in which the subject matter of the Contract is located. Such notice shall be given
  - (i) in respect of any claim for the amount or any portion thereof required to be held back from the Claimant by the Principal or by the Sub-Contractor of the Principal under either the terms of the Claimant's Contract with the Principal or the Claimant's Contract with the Sub-Contractor of the Principal within one hundred and twenty (120) days after such Claimant should have been paid in full under this Contract;
  - (ii) in respect of any claim other than for the holdback or portion thereof referred to above within one hundred and twenty (120) days after the date upon which such Claimant did or performed the last of the service, work or labour or furnished the last of the materials for which such claim is made under the Claimant's Contract with the Principal or a Sub-Contractor of the Principal;
- (b) After the expiration of one (1) year following the date on which the Principal ceased work on the said Contract, including work performed under the guarantees provided in the Contract;
- (c) Other than in a court of competent jurisdiction in the province or district of Canada in which the subject matter of the Contract or any part thereof is situated and not elsewhere, and the parties hereto hereby agree to submit to the jurisdiction of such court.

7. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.

8. The Surety shall not be entitled to claim any moneys relating to the Contract and the liability of the Surety under this Bond shall remain unchanged and, without restricting the generality of the foregoing, the Surety shall pay all valid claims of Claimants under this Bond before any moneys relating to the Contract held by the Crown are paid to the Surety by the Crown.

9. The Surety shall not be liable for a greater sum than the amount specified in this bond.

IN TESTIMONY WHEREOF, the Principal has hereto set its hand and affixed its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signature of its authorized signing authority, the day and year first above written.

SIGNED, SEALED AND DELIVERED in the presence of:

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Surety

Note: Affix Corporate seal if applicable.

## PERFORMANCE BOND

**BOND NUMBER:** \_\_\_\_\_

**AMOUNT:** \_\_\_\_\_

KNOW ALL PERSONS BY THESE PRESENTS, that \_\_\_\_\_ as Principal,  
hereinafter called the Principal, and \_\_\_\_\_ as Surety,

hereinafter called the Surety, are, subject to the conditions hereinafter contained, held and firmly bound unto Her Majesty the Queen in right of Canada as represented by the Minister of Agriculture and Agri-Food, as Obligee, hereinafter called the Crown, in the amount of

\_\_\_\_\_ dollars (\$ \_\_\_\_\_), lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

SIGNED AND SEALED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

WHEREAS, the Principal entered into a Contract with the Crown dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_,  
for \_\_\_\_\_

which Contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are such that, if the Principal shall well and faithfully observe and perform all the obligations on the part of the Principal to be observed and performed in connection with the Contract, then this obligation shall be void, otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. Whenever the Principal shall be, and declared by the Crown to be, in default under the Contract, the Surety shall:
  - (a) if the work is not taken out of the Principal's hands, remedy the default of the Principal,
  - (b) if the work is taken out of the Principal's hands and the Crown directs the Surety to undertake the completion of the work, complete the work in accordance with the Contract provided that if a contract is entered into for the completion of the work,
    - (i) it shall be between the Surety and the completing contractor, and
    - (ii) the selection of such completing contractor shall be subject to the approval of the Crown,
  - (c) if the work is taken out of the Principal's hands and the Crown, after reasonable notice to the Surety, does not direct the Surety to undertake the completion of the work, assume the financial responsibility for the cost of completion in excess of the moneys available to the Crown under the Contract,
  - (d) be liable for and pay all the excess costs of completion of the Contract, and
  - (e) not be entitled to any Contract moneys earned by the Principal, up to the date of his default on the Contract and any holdbacks relating to such earned Contract moneys held by the Crown, and the liability of the Surety under this Bond shall remain unchanged provided, however, and without restricting the generality of the foregoing, upon the completion of the Contract to the satisfaction of the Crown, any Contract moneys earned by the Principal or holdbacks related thereto held by the Crown may be paid to the Surety by the Crown.
2. The Surety shall not be liable for a greater sum than the amount specified in this Bond.
3. No suit or action shall be instituted by the Crown herein against the Surety pursuant to these presents after the expiration of two (2) years from the date on which final payment under the Contract is payable.

IN TESTIMONY WHEREOF, the Principal has hereto set its hand and affixed its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signature of its authorized signing authority, the day and year first above written.

SIGNED, SEALED AND DELIVERED in the presence of:

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Surety

Note: Affix Corporate seal if applicable.



T4-A CERTIFICATION

The Contractor shall complete and submit this T4-A Certification within fourteen (14) calendar days of Notification of Contract award and within fourteen (14) calendar days immediately following any change to the information already provided under the Contract. Failure to provide this information or failure to provide the correct information shall result in a fundamental breach of the Contract.

1. The Contractor shall enter a [ x ] in one of the boxes below opposite the description that best describes its status.

- [ ] A business incorporated either federally or provincially;
[ ] An unincorporated business, either as a sole proprietor or a partnership; or
[ ] An individual.

Note: The information provided in Section 2 must correspond with that provided in Section 1.

Corporate or unincorporated business or individual's name: \_\_\_\_\_

Street Name or Box #: \_\_\_\_\_

City, Town or Village: \_\_\_\_\_

Province: \_\_\_\_\_

Postal Code: \_\_\_\_\_

2. Contractor shall complete Section 2(a) or 2(b) or 2(c), whichever is applicable to its situation.

(a) If incorporated:

Business Number (BN): \_\_\_\_\_, or
GST / HST Number: \_\_\_\_\_, or
T2 Corporation Tax Number (T2N): \_\_\_\_\_, whichever is applicable

(b) If unincorporated:

Social Insurance Number (SIN): \_\_\_\_\_, and
Business Number (BN): \_\_\_\_\_, or
GST / HST Number: \_\_\_\_\_, whichever is applicable

Note: The Unincorporated Business Name must be the same as the name associated with the Revenue Canada Business Number or the GST Number.

(c) If individual:

Social Insurance Number (SIN): \_\_\_\_\_, and
Business Number (BN): \_\_\_\_\_, or
GST / HST Number: \_\_\_\_\_, whichever is applicable

Note: The Individual's Name must be the same as the name associated with the Social Insurance Number.

3. WE HEREBY CERTIFY that I/We have examined the information provided above, including the legal name, address and Revenue Canada identifier (SIN, BN, GST / HST No., T2N), as applicable, and that it is correct and complete, and fully discloses my/our identification.

Contractor's signature Title of Signatory Date



**PERSONNEL SCREENING, CONSENT AND AUTHORIZATION FORM**

OFFICE USE ONLY		
Reference number	Department/Organization number	File number

NOTE: For Privacy Act Statement refer to Section C of this form and for completion instructions refer to attached instructions. Please typewrite or print in block letters.

**A ADMINISTRATIVE INFORMATION (To be completed by the Authorized Departmental/Agency/Organizational Official)**

New   
  Update   
  Upgrade   
  Transfer   
  Supplemental   
  Re-activation

The requested level of reliability/security check(s)

Reliability Status   
 Level I (CONFIDENTIAL)   
 Level II (SECRET)   
 Level III (TOP SECRET)

Other \_\_\_\_\_

**PARTICULARS OF APPOINTMENT/ASSIGNMENT/CONTRACT**

Indeterminate   
 Term   
 Contract   
 Industry   
 Other (specify secondment, assignment, etc.) \_\_\_\_\_

Justification for security screening requirement

Position/Competition/Contract number	Title	Group/Level (Rank if applicable)	
Employee ID number/PRI/Rank and Service number (if applicable)	If term or contract, indicate duration period ▶	From	To
Name and address of department / organization / agency	Name of official	Telephone number ( )	Facsimile number ( )

**B BIOGRAPHICAL INFORMATION (To be completed by the applicant)**

Surname (Last name) \_\_\_\_\_ Full given names (no initials) underline or circle usual name used \_\_\_\_\_ Family name at birth \_\_\_\_\_

All other names used (i.e. Nickname) \_\_\_\_\_

Sex:  Male  Female

Date of birth: Y | M | D      Country of birth \_\_\_\_\_      Date of entry into Canada if born outside Canada: Y | M | D

RESIDENCE (provide addresses for the last five years, starting with the most current)

Home address \_\_\_\_\_ Daytime telephone number ( ) \_\_\_\_\_ E-mail address \_\_\_\_\_

1	Apartment number	Street number	Street name	Civic number (if applicable)	From Y   M	To present
	City		Province or state	Postal code	Country	Telephone number ( )

2	Apartment number	Street number	Street name	Civic number (if applicable)	From Y   M	To Y   M
	City		Province or state	Postal code	Country	Telephone number ( )

Have you previously completed a Government of Canada security screening form?  Yes  No

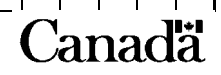
If yes, give name of employer, level and year of screening. \_\_\_\_\_ Y

**CRIMINAL CONVICTIONS IN AND OUTSIDE OF CANADA (see instructions)**

Have you ever been convicted of a criminal offence for which you have not been granted a pardon?  Yes  No

If yes, give details. (charge(s), name of police force, city, province/state, country and date of conviction) \_\_\_\_\_

Charge(s)	Name of police force	City
Province/State	Country	Date of conviction ▶ Y   M   D









## INSTRUCTIONS FOR PERSONNEL SCREENING CONSENT AND AUTHORIZATION FORM TBS/SCT 330-23E (Rev. 2002/02)

Once completed, this form shall be safeguarded and handled at the level of Protected A.

### General:

If space allotted in any portion is insufficient please use separate sheet using same format.

### 1. Section A (Administrative Information) Authorized Departmental/Agency/Organizational Official

The Official, based on instructions issued by the Departmental Security Officer, may be responsible for determining, based on five year background history, what constitutes sufficient verification of personal data, educational and professional qualifications, and employment history. References are to be limited to those provided on the application for employment or equivalent forms.

### SUPPLEMENTAL INFORMATION REQUIREMENTS

Persons who presently hold a SECURITY CLEARANCE and subsequently marry, remarry or commence a common-law partnership, in addition to having to update sections of the *Security Clearance Form (TBS/SCT 330-60)*, are required to submit an original *Personnel Screening, Consent and Authorization Form*, with the following parts completed:

Part A - As set forth in each question

Part B - As set forth in each question, excluding CRIMINAL CONVICTIONS IN AND OUTSIDE OF CANADA.

Part C - Applicant's signature and date only are required

"Other". This should be used to identify if the security screening is for Site Access, NATO, SIGINT etc.

### 2. Section B (Biographical Information)

To be completed by the **applicant**. If more space is required use a separate sheet of paper. Each sheet must be signed.

**Country of Birth - For "NEW" requests, if born abroad of Canadian parents, please provide a copy of your Certificate of Registration of Birth Abroad. If you arrived in Canada less than five years ago, provide a copy of the Immigration Visa, Record of Landing document or a copy of passport.**

- List only criminal convictions for which a pardon has NOT been granted. Include on a separate attached sheet of paper, if more than one conviction. Applicant must include those convictions outside Canada.

- Offences under the *National Defence Act* are to be included as well as convictions by courts-martial are to be recorded.

### 3. Section C (Consent and Verification)

A copy of Section "C" may be released to institutions to provide acknowledgement of consent.

Criminal record checks (fingerprints may be required) and credit checks are to be arranged through the Departmental Security Office or the delegated Officer.

Consent: may be given only by an applicant who has reached the age of majority, otherwise, the signature of a parent or guardian is mandatory.

The age of majority is:

19 years in NFLD., N.S., N.B., B.C., Yukon, Northwest Territories and Nunavut;

18 years in P.E.I., Que., Ont., Man., Sask. and Alta.

The applicant will provide initials in the " applicant's initials box".

The official who carried out the verification of the information will print their name, insert their initials and telephone number in the required space.

- Reliability Screening (for all types of screening identified within Section A): complete numbers 1 and 2 and 3 if applicable.

- Security Clearance (for all types of screening identified within Section A): complete numbers 1 to 4 and 5 where applicable.

- Other: number 5 is used only where prior Treasury Board of Canada Secretariat approval has been obtained.

### 4. Section D (Review)

To be completed by authorized Departmental/Agency/Organizational Official who is responsible for ensuring the completion of sections A to C as requested.

### 5. Section E (Approval)

**Authorized Departmental/Agency/Organizational Security Official** refers to the individuals as determined by departments, agencies, and organizations that may verify reliability information and/or approve/not approve reliability status and/or security clearances. Approved Reliability Status and Level I, II and III, as well as the signature of the authorized security official or manager are added for Government of Canada use only. Applicants are to be briefed, acknowledge, and be provided with a copy of the "Security Screening Certificate and Briefing Form (TBS/SCT 330-47)".

**Note:** Private sector organizations do not have the authority to approve any level of security screening.

**Photographs:** Departments/Agencies/Organizations are responsible for ensuring that three colour photographs of passport size are attached to the form for the investigating agency. Maximum dimensions are 50mm x 70mm and minimum are 43mm x 54mm. The face length from chin to crown of head must be between 25mm x 35mm. The photographs must be signed by the applicant and an authorized security official. The photographs must have been taken within the last six months. It is required for new or upgrade Level III security clearances for identification of the applicant during the security screening investigation by the investigating agency. The investigating agency may in specific incidents request a photograph for a Level I or II clearances when an investigation is required.