

## 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				
London Fire Panel Upgrade, Phase 2				
Solicitation No.			Date	
01B46-15-0029			2015-05-22	
Client Reference No.				
1112-143910-P14				
File No.				
01B46-15-0029				
Solicitation Closes:				
Day of Week	Month	Day	Year	Time
Monday	June	8	2015	02:00
Time of Day			Time Zone	
<input type="radio"/> AM <input checked="" type="radio"/> PM			EDT	
F.O.B				
<input type="radio"/> Plant <input checked="" type="radio"/> Destination <input type="radio"/> Other				
Address Enquiries to:				
Gabriel Le Plouffe				
Title:				
Contracting Officer				
Email:				
gabriel.leplouffe@agr.gc.ca				
Telephone Number		Ext.	Fax Number	
514 315-6123			514 283-3143	
Destination				
Agriculture and Agri-Food Canada Southern Crop Protection and Food Research Centre 1391 Sandford Street London, Ontario, N5V 4T3				

**Instructions: See Herein**

Delivery Required		Delivery Offered
September 30, 2015		
Vendor / Firm Name and Address		
Telephone Number		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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- Certificate of Insurance
- Labour and Material Payment Bond
- Performance Bond
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## Appendix "A"

### GENERAL INSTRUCTIONS TO BIDDERS

## GENERAL INSTRUCTIONS TO BIDDERS

- GI01 Completion of Bid
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- GI14 Conflict of Interest – Unfair Advantage

### **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 Friday,            May,            29            , 2015 at  
10:00  AM  PM EDT.

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

Interested bidders are to meet at:

Agriculture and Agri -Food Canada  
Southern Crop Protection and Food Research Centre  
1391 Sandford Street  
London, Ontario, N5V 4T3

### **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 one ( 1 ), 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 Work generally involves upgrading existing and installing new fire monitoring and annunciation devices in main building, and installing underground cable link from fire panels in outbuildings to panel in main building.					
Solicitation Number 01B46-15-0029			File / Project Number 1112-143910-P14		
<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>2015-09-30</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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**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
  - GC8.8.4 Appointment of Project Mediator
  - GC8.8.5 Confidentiality
  - 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 & PLANS

<u>SECTION</u>	<u>DESCRIPTION</u>	<u>PAGES</u>
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**END OF INDEX**

**PART 1 : GENERAL**

**1.01 REQUIREMENTS INCLUDED**

- .1 The General Requirements, Division 01, and any Supplementary General Requirements of the Contract shall form a part of this Division.
- .2 The requirements of this Section shall apply to and govern the work of this Division and shall be read as an integral part of each Section.
- .3 The Electrical Drawings and these Specifications are complementary to each other and each forms a part of this contract. In the event of discrepancies between Drawings and Specifications, the more restrictive conditions shall apply unless a written clarification is obtained from the Consultant.
- .4 Misinterpretation of any requirement of the Drawings or Specifications will not relieve this Division of responsibility to complete the work. If in doubt, contact the Consultant for written clarification. If clarification is not sought the Consultant's decision shall be final and binding on the Contractor.
- .5 Related Work
  - .1 Submittals Section 16011

**1.02 SYSTEM DESCRIPTION**

- .1 Supply all labour, tools, equipment, materials and transportation required for the installation and proper operation of the complete systems as shown on the Drawings, as specified herein, or as reasonably inferable from both.
- .2 Work to be Supplied and Installed

The work of this Division includes, but is not limited to supply and installation of the following systems:

Fire Alarm System  
Renovations and Removal of Existing Equipment

**1.03 SYSTEM DESCRIPTION**

- .1 Rooms that are regularly occupied will require coordination for access. A Request shall be made for access minimum 2 weeks prior to the access date. Requests for access to Lab and Cold Rooms require a minimum of 1 month prior to access date. Refer to attached Appendix 1, for list of occupied rooms.
- .2 Common spaces (corridors and service spaces) are considered 'unoccupied' and may be accessed at any time, so long as all work is conducted such that disturbing noise is not generated and a safe path of travel is maintained for occupants.
- .3 After hours work shall be coordinated with AAFC.

**1.04 WORKMANSHIP**

- .1 Only first class workmanship by skilled electricians will be accepted, not only with regards

to durability, and safety, but also with regard to its neatness of installation, and overall accessibility. Present a neat and clean installation on completion to the satisfaction of the Consultant. Any unsatisfactory workmanship shall be replaced at no extra cost.

- .2 Employ a competent foreman to supervise the work.
- .3 Employ qualified and experienced trades people employed to perform specific work such as installation or testing of specific systems including fire alarm systems, special systems, etc.
- .4 At all times, a licenced electrician holding a valid journeyman certificate in Ontario is to be on site while physical work is being performed. Certificate shall be provided prior to the commencement of work as per Section 16011 – Submittals.
- .5 At all times, a Certified Fire Alarm Electrician is to be on site while physical work is being performed. Certificate shall be provided prior to the commencement of work as per Section 16011 – Submittals.

#### 1.05 DRAWINGS

- .1 Drawings, which accompany these specifications, are diagrammatic and show the power distribution, number and general location of the electrical equipment, outlets and required circuiting. They do not show all structural and mechanical details, and are not intended to be shop or working drawings.
- .2 Do not scale drawings but use only dimensions, which are shown. Where exact building dimensions and details are required, use only figured dimensions on the Architectural or Structural Drawings or job site dimensions.
- .3 Make alterations to device and equipment locations as required; co-ordinate with other trades at no extra cost.
- .4 No deviations from the Drawings or Specifications will be permitted without written authorization from the Consultant.

#### 1.06 RECORD & SHOP DRAWINGS

- .1 Provide record drawings and shop drawings in accordance with Section 16011, Submittals.

#### 1.07 PERMITS AND FEES

- .1 Obtain and pay for all permits and fees required for the execution and inspection of the electrical work and pay all charges incidental to such permits. A building permit and electrical permit will be required prior to executing the work.
- .2 Arrange and pay for any special inspection of equipment specified if and when required.
- .3 On completion of the electrical work, obtain and submit to the Consultant the Electrical Safety Authority Final Unconditional Inspection certificate together with the maintenance manuals.

#### 1.08 RULES AND REGULATIONS

- .1 Provide all materials and installation in accordance with the latest editions of the National

Building Code of Canada, Canadian Electrical Code, CSA Standards and Bulletins, the Electrical Safety Authority, The Ontario Fire Marshal and any other more restrictive requirements of all applicable Municipal and Provincial Codes and Regulations.

- .2 The Contract Drawings show the minimum standard acceptable regardless of any lesser standards set by any Codes or Regulations having jurisdiction.

#### 1.09 CO-OPERATION OF TRADES

- .1 Read Specifications and Drawings of other trades and conform with their requirements before proceeding with any work specified in this Division related to the other trades.
- .2 Co-operate with all other trades on the job, so that all equipment can be satisfactorily installed, and so that no delay is caused to any other trade.

#### 1.10 ABBREVIATIONS & DEFINITIONS

- .1 Abbreviations used on Electrical Drawings and in this Division are generally listed below:

OBC	Ontario Building Code
CSA	Canadian Standards Association
FHP	Fractional Horse Power
C	Conduit
E.C.	Empty Conduit
Trans.	Transformer
F @	Fused at
SP (DP)	Single Pole (Double Pole)
3P	Three Pole
SN	Solid Neutral
Disc. Sw	Disconnect Switch
LP	Lighting Panel
PP	Power Panel
DP	Distribution Panel
WP	Weatherproof
MH	Mounting Height
OESC	Ontario Electrical Safety Code
NFPA	National Fire Protection Association
NFC	National Fire Code
EEMAC	Electrical Equipment Manufacturer's Association of Canada
ANSI	American National Standards Institute
ULC	Underwriter Laboratories of Canada
RT	Rain Tight
FA	Fire Alarm
EXP	Explosion Proof

- .2 Wherever the words "approved", "satisfactory", "directed", "permitted", "inspected", "instructed", "required", "submit", "order", or similar words or phrases are used in the specification, it shall be understood, unless the context implies otherwise, that the words "by (to) the Consultant" follows.
- .3 Wherever the word "provide" is used in this specification or on the drawings, it shall be understood, unless the context implies otherwise, that it is equivalent to "supply and install".

#### 1.11 OPERATING AND MAINTENANCE MANUALS

- .1 Submit operating and maintenance manuals in accordance with Section 16011,



## Submittals.

1.12 INSPECTION

- .1 All work and materials covered by these Specifications shall be subject to inspection at any time, by the Consultant or the Owner's Representative.
- .2 If the Consultant or Owner's representative finds that any material or workmanship does not conform with these specifications undertake to correct such workmanship within 5 days of notification by the Consultant.

1.13 DAMAGE TO OTHER WORK

- .1 This Trade shall be responsible for all damages to his own work or the work of other trades caused by the execution of work by this Division.
- .2 Provide protective covers on or around equipment and materials to prevent damage during construction.

**PART 2 : PRODUCTS**2.01 MATERIALS AND EQUIPMENT

- .1 All materials and equipment are to be new, conform to CSA Standards and be approved for their intended use by the authority having jurisdiction.
- .2 Material or equipment specified by technical description shall be provided with the best commercial qualities obtainable for the purposes described.
- .3 Maintain uniformity of manufacturer, type, and style, within a particular group of equipment or class or type of fixture.

**PART 3 : EXECUTION**3.01 GENERAL REQUIREMENTS

- .1 The location of any panels, equipment, outlet, raceway and wiring may be changed by the Consultant if the new location is within a limit of 3 metres (10') radius of the original location. Provide changes without extra cost if requested before installation.
- .2 Do not install wall-mounted equipment at locations where built-in furniture or other equipment is to be installed. In cases of conflict, install equipment above the built-in furniture and clear the trim by approximately 150 mm (6") unless otherwise instructed by the Consultant.
- .3 Arrange for openings in the walls and floors for transportation and installation of equipment. Extra charges for cutting and making good of walls or floors for the work will not be accepted.

3.02 STORAGE OF MATERIALS

- .1 Provide proper facilities for a workshop, tool shop, office space and protection of materials and equipment. Coordinate location with AAFC.
- .2 Store all material, equipment, panels, luminaires, etc. in a dry, clean place and cover as

necessary to preserve factory finish.

### 3.03 WASTE AND SURPLUS MATERIALS

- .1 Keep the premises free of accumulation of waste and surplus materials.
- .2 On completion of the contract, this Division shall remove all tools, scaffolding, surplus material, scrap and debris resulting from the work of this Division from the site.
- .3 Clean all equipment such as panel boxes, luminaires, switches receptacles, etc., of all dirt, dust and paint at the time of final acceptance of the work.

### 3.04 SLEEVES, HOLES AND PATCHING

- .1 Holes through exterior walls and/or roof are to be properly flashed and made weather-proof.
- .2 All cutting, patching, sleeves and grouting is to be done by fully qualified craftsmen of that respective trade. All costs for cutting and patching required by this Division are to be included in the tender.
- .3 All cutting, patching, sleeving, etc. shall be carried out under the direct supervision of the General Contractor, and to the satisfaction of the Consultant.

### 3.05 GROUNDING AND TESTING

- .1 Provide a complete bonding system throughout. All bonds are not shown on the drawings.
- .2 Under this Section, test all equipment and wiring supplied and installed in this contract at any time requested by the Consultant. Provide all meters, materials and labour to carry out these tests. All readings shall conform to the requirements of the Local and Provincial codes which apply to this Specification.
- .3 Test May Include:
  - .1 Ground fault insulation resistance.
  - .2 Continuity of metal raceways.
  - .3 Operation of each piece of equipment and system for correct function.
- .4 Written records of the tests performed indicating date of test, equipment name, purpose of test, device used for testing and measured results. Include test results in maintenance manuals.

### 3.06 CORROSION, PROTECTION & TOUCH-UP

- .1 Provide prime and paint finish on exterior ferrous metal.
- .2 All priming shall be free of runs or drips. Scratches, chipped or rough items will not be accepted. Sand smooth and refinish.
- .3 All shop painted equipment damaged in transit or during installation shall be touched-up to match existing finishes.

- .4 Provide protection of installed materials from abuse and damage during construction. Provide all necessary protective coatings or shields to prevent damage to installed equipment until final acceptance by the Owner.

### 3.07 EQUIPMENT IDENTIFICATION

- .1 Labels shall be 3 mm (1/8") thick lamacoid plates, black with 6 mm (1/4") white lettering, mechanically fastened to the equipment.
- .2 Mount nameplates on the top inside cover on all panels and on the front cover of equipment for the respective system.
- .3 The wording on these plates shall conform generally with that used in these Specifications and on the Drawings.
- .4 Mechanically fasten nameplates directly on the equipment. For small size equipment install nameplates on the wall above or under equipment.
- .5 Submit the wording for all nameplates to the Consultant for approval prior to make-up and installation.
- .6 Colour code all conduits and metallic sheathed cables according to the following standards:
  - .1 Colour to be min. 25 mm (1") band of plastic tape or spray bomb.
  - .2 Colour code at entrance/exit to wall, ceiling, or floor and minimum 15 m (50') intervals.
  - .3 Systems colour code for conduits and metallic cables.  
Red - Fire Alarm

### 3.08 MOUNTING AND MOUNTING HEIGHTS

- .1 Provide all supports and bases for the work of this trade. Every conduit run shall have at least one support. Only approved conduit supports shall be used.
- .2 Support every outlet box, junction box, panel tub, etc. independent of conduits running to it.
- .3 No piece of equipment shall be mounted on a wall or panel with the underside of the equipment less than 460 mm (18") above the floor except for equipment over 1650 mm (5'-6") high which shall be mounted with the top side of the equipment 2100 mm (7'-0") above the floor or as directed in the field.
- .4 Panels for mounting of equipment shall consist of #10 gauge steel on an angle iron frame. The complete panel is to be thoroughly cleaned of all dirt, rust and loose material and be given two coats of grey enamel before mounting any equipment.
- .5 Install switches, receptacles, outlets, etc., on one common centre line, one above the other, when shown on the drawings in a grouping.
- .6 Dimensions refer to the centre line of equipment above the finished floor unless otherwise shown or specified. Mounting heights in stairwells refer to the floor, landing or stair tread directly below the equipment.

.7 Install equipment at heights as directed on legend:

.1	Fire Alarm System	
	Manual Pull Stations	47" (1200 MM) O/C
	Signal Devices	90" (2280 MM) O/C
	End of Line Resistors	60" (1520 MM) O/C

**END OF SECTION**

**PART 1 : GENERAL**

**1.01 REQUIREMENTS INCLUDED**

- .1 Shop drawings and product data
- .2 Working/Interference drawings
- .3 As-built drawings
- .4 Operating and maintenance manuals including extended warranties.
- .5 Related Work
  - .1 Basic Materials and Methods Section 16100
  - .2 Fire Stopping Section 16195
  - .3 Fire Alarm System Section 16721

**1.02 ADMINISTRATIVE**

- .1 Submit to Consultant submittals listed for review. Submit with reasonable promptness and in an orderly sequence so as to not cause delay in the construction schedule. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default is allowed.
- .2 Work affected by the submittal not to proceed until the review is complete unless an approval is obtained from the Consultant.
- .3 Review submittals prior to submission to the Consultant. This review represents that necessary requirements have been determined and verified, and that each submittal has been checked and co-ordinated with the requirements of the Contract Documents.
- .4 Prior to commencement of work, submit qualifications of tradesmen who will be working on site in accordance with Section 16010 – General Electrical Provisions.
- .5 Prior to commencement of work, submit qualifications of fire alarm technician who will perform work on the fire panel in accordance with Section 16721 – Fire Alarm System
- .6 Prior to commencement of work, submit qualifications of fire stopping contractor. Note: All firestopping shall be installed by a STI factory trained technician and member in good standing of the Firestop Contractors International Association. All existing fire stopping was installed by Spectrum Interior Contracting Inc. (Randy Diestelmann MCPM, PMI, Office #519-974-0484)

**1.03 FIRE SAFETY PLAN**

- .1 Provide a Fire Safety Plan, specific to the work location, in accordance with NBC, Division B, Article 8.1.1.3, NFC Article 5.6.1.3, 5.6.1.13, 5.6.1.14 and 5.6.1.17 prior to commencement of work. The plan shall be coordinated with, and integrated into, the existing Facility's Emergency Procedures and Evacuation Plan in place at the site. Departmental Representative will provide Facility's Emergency Procedures and Evacuation Plan. Deliver two copies of the Fire Safety Plan to the Departmental

Representative not later than 14 days before commencing work.

- .2 Fire Safety Plan shall incorporate requirements of fire watch as outlined in Section 16721 – Fire Alarm System.

#### 1.04 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with the General Requirements of Division 1 and as required in various sections of these specifications and on the drawings.
- .2 Shop drawings to be submitted with a cover sheet(s) on the Contractor's letterhead listing the following information:
  - Project:
  - Owner/Client:
  - Architect:
  - Mechanical/Electrical Consultant:
  - General Contractor:
  - Electrical Contractor:
  - Supplier
  - Specification Section
  - Materials or Equipment submitted

Include space for review stamps by Consultant, General Contractor, and Electrical Contractor.
- .3 Prepare and submit for review, where specified, shown or considered necessary by the Consultant, shop drawings showing details of work as follows:
  - .1 Fabrication and erection dimension.
  - .2 Sections, arrangements and details which indicate complete construction as well as interconnections with other work.
  - .3 Location and type of anchors and fastenings.
  - .4 Materials including gauges, thickness, sizes and finishes.
  - .5 Descriptive names of equipment and mechanical and electrical characteristics when applicable.
  - .6 Data verifying that superimposed loads will not affect function, appearance, and safety of work shown on shop drawings as well as other work interconnected.
  - .7 Manufacturer's names, model numbers, ratings, power requirements, equipment layout / device arrangement.
  - .8 Complete wiring, point to point diagrams and conduit layouts.
- .4 Submit shop drawings, unless otherwise specified in form of electronic Portable Document Files (PDF). Files are to be separated by the specification section to which they apply. The file name as per below.
- .5 Manufacturer's printed data sheets for standard items are acceptable providing pertinent characteristics are identified and relate to specified items. Submit electronic Portable Document Files (PDF). Files are to be separated by the specification section to which

they apply. The file name is to be as follows:

ProjectNumber – Shop Drawing – Specification Section – Title – Submission Number.pdf

**Ex.: 01B46-14-0035 – Shop Drawing – 16700 – Fire Alarm System – Submission1.pdf**

- .6 Check shop drawings and data sheets, before submission as follows:
  - .1 Against contract documents and other applicable shop drawings, to ensure that work adjacent to and affecting other work is accurately detailed.
  - .2 To ensure that work shown on shop drawings conforms to requirements of Contract Documents.
  - .3 Enclose notice in writing of any variations from requirements of Contract Documents.
- .7 Indicate on shop drawings that they have been checked by applying stamp "checked and certified correct for construction", including date and Contractor's signature. Drawings and details submitted without such stamp or whenever it is evident that drawings have not been checked (despite approval stamp) will not be reviewed and will be returned to Contractor.
- .8 The Consultant's review of shop drawings and data sheets pertain to general design only. Errors in dimensions, quantities or interference will be marked if noticed, but this will not in any way relieve the Contractor's responsibility to complete the work as shown and specified.
- .9 All shop drawings are to be submitted in Metric dimensions.
- .10 Shop drawings are to be returned with "No Exception Taken", "Make Corrections Noted Resubmission Not Required", "Revise & Resubmit" or "Rejected, Submit Compliant Product/System".

#### 1.05 WORKING/INTERFERENCE DRAWINGS

- .1 Before commencing any work, the Contractor is to prepare working/interference drawings, to ensure that all components, including any components of other divisions, are to be properly accommodated within the spaces provided, ensuring all clearances required by jurisdictional authorities and for proper maintenance are indicated and maintained.
- .2 Prepare drawings to indicate co-ordination and method of installation of a system with other systems where their relationship is critical. Ensure all details of equipment, apparatus and connections are co-ordinated.
- .3 As an alternative to preparing interference drawings, regularly scheduled meetings on site with all associated trades are to be conducted as necessary but not less than one per week.
- .4 Failure to co-ordinate with all other trades could result in reworking of installed equipment, conduit or wiring at the discretion of the Consultant. Any reworking to accommodate the installation of other trades to be performed at no extra cost.

#### 1.06 AS-BUILT DRAWINGS

- .1 As-built drawings are to be maintained in accordance with the general requirements of Division 1.
- .2 The Consultant is to provide this Division with an extra set of white prints on which to show clearly in red ink, as the job progresses, all changes and deviations from the plans, including all changes as part of change orders, site instructions or site condition.
- .3 Record location of concealed mechanical and electrical services and components. Dimension and reference all concealed and buried mechanical and electrical services from visible and accessible permanent features of structure.
- .4 Maintain as-built drawings on site for periodic review by Consultant.
- .5 Submit a complete set of record drawings, marked "as-built" and dated.

1.07 MAINTENANCE DATA AND OPERATING INSTRUCTIONS

- .1 Submit three (3) copies of Operation and Maintenance Manual individually bound in suitable sized hard backed three-ring binders.
- .2 Operation and maintenance manuals shall be provided in electronic format in addition to the bound hardcopies required above.
- .3 Front cover of each binder to be suitably lettered as follows:

OPERATION AND MAINTENANCE MANUAL FOR  
(Project Name)  
  
(Owners Name)  
(Date)
- .4 Provide plastic tab indices for all sections of the manual, provide separate sections for each major piece of equipment and for groups of smaller products.
- .5 Provide master index at the beginning of each binder indicating all items included in each section.
- .6 Provide list of names, addresses and telephone numbers of equipment suppliers, Installing Contractors, General Contractors, Architect and Consulting Engineer.
- .7 Provide final review shop drawings of each manufactured item in addition to the operating and maintenance instructions.
- .8 Operating instructions to include:
  - .1 General description of each electrical system.
  - .2 Step by step procedure to follow in commissioning each piece of equipment.
  - .3 Schematic control diagrams for each separate system.
  - .4 Drawings of each control panel identifying all components on the panels and their function.
  - .5 All electrical equipment wiring diagrams.



- .9 Maintenance instructions are to include:
  - .1 Manufacturer's maintenance instructions for each item of electrical equipment installed under this Division. Instructions are to include installation instructions, parts numbers and lists, name of supplier and maintenance instructions.
  - .2 Summary list of each item of electrical equipment requiring maintenance, indicating the name of the equipment item, maintenance required and frequency of maintenance.
- .10 Provide written warranty on the Contractor's letterhead addressed to the Owner, copied to the General Contractor.
- .11 Provide a comprehensive list of all ip addresses assigned in the panel as well as a description and the location of each device. List shall be provided as a Microsoft Excel file as part of the electronic format operation and maintenance manuals and in printed format in the bound hardcopies.
- .12 Fire alarm system shall be verified in conformance with CAN/ULC-S537, "Verification of Fire Alarm Systems". Include verification certificate, verification report with no deficiencies and any warranty certificates.
- .13 Provide verification from the installing contractor that all fire rated assemblies have been maintained and all penetrations are properly stopped in accordance with the manufacturers installation instructions

1.08 EXTENDED WARRANTIES

- .1 The contractor is to submit extended warranties for specific materials and/or work specified in their respective sections.
- .2 Extended warranties are to be issued on the General Contractor's letterhead, under seal, and issued in the name of the owner.

**END OF SECTION**

**PART 1 : GENERAL****1.01 REQUIREMENTS INCLUDED**

- .1 Conform to General Conditions, Supplementary General Conditions and Sections of Division 01, as applicable.
- .2 Conform to General Electrical Provisions, Section 16010 as applicable.
- .3 Related Work
  - .1 Submittals Section 16011

**1.02 SCOPE OF WORK**

- .1 Work to be Supplied and Installed
  - .1 Raceways
  - .2 Conductors
  - .3 Armoured Cable
  - .4 Wire Connections and Devices
  - .5 Outlet Boxes
  - .6 Pull and Junction Boxes
  - .7 Supporting Devices
  - .8 Access Panels

**1.03 QUALITY ASSURANCE**

- .1 Install all equipment to the minimum of Canadian Electrical Code and local standards, unless stricter standards are indicated on the drawings or in this specification. In all situations the more restrictive standard of material and installation shall apply.

**1.04 REFERENCES**

- .1 CSA Standards
 

C22.2 No. 62	Surface Raceways and Lighting Fixture Raceways and Fittings.
C22.2 No. 83	Electrical Metallic Tubing.
C22.2 No. 35	Extra-Low-Voltage Control Circuit Cables, Low-Energy Control Cable, Extra-Low-Voltage Control Cables.
C22.2 No. 38	Thermoset Insulated Wires and Cables.
C22.2 No. 51	Armoured Cables.
C22.2 No. 75	Thermoplastic-Insulated Wires and Cables.
C22.2 No. 18	Outlet boxes, Conduit Boxes and Fittings.
C22.2 No. 40	Cutout, Junction and Pull Boxes.
C22.2 No. 65	Wire Connectors.

**1.05 SUBMITTALS**

- .1 Submit shop drawings for the following pieces of equipment:
  - .1 Fire Rated Access Panels
- .2 Submit to the Engineer, in writing, a schedule of proposed feeders to be used if different

than those specified on the drawings or in this specification.

## **PART 2 : PRODUCTS**

### **2.01 GENERAL**

- .1 Where an alternate manufacturer is proposed for use, the proposed item must meet all qualifications of the specification.
- .2 All materials/equipment of similar type shall be of one manufacturer.

### **2.02 RACEWAYS**

- .1 Provide raceway type as detailed on drawings. Where type is not specified, raceways shall be provided in accordance with Section 12 of the Canadian Electrical Code.
- .2 Provide all empty raceways and raceway systems complete with outlet boxes, coverplates, nylon fish wire, bushings, caps, etc.
- .3 Size all raceways to suit the number and type of conductors and of sufficient size to permit easy removal of conductors at any time. Where raceway sizes are shown on the drawings, these sizes are minimum and in no case shall they be reduced.
- .4 Colour code surface and exposed parts of raceways and all conduits as specified in Section 16010.
- .5 Where conduit cross expansion joints of building, provide expansion joints for conduit c/w grounding straps.

### **2.03 CONDUCTORS**

- .1 Use R-90, RW-90, or T90 copper conductor building wires rated at 600 Volt, X-Link insulation.
- .2 Where a particular type of insulation is specified, or shown, that type of wire shall be used.
- .3 Use minimum # 12 copper wire unless otherwise specified. Minimum wire size is #10 for runs greater than 25m (82').
- .4 All conductors shall be colour coded consistent with the Canadian Electrical Code, and Section 16010.
- .5 Conductors up to and including # 10 may be solid copper. Larger conductors shall be stranded.
- .6 Size conductors for a maximum of 2% voltage drop from the supplying panel to the farthest outlet in the circuit.
- .7 All joints must be approved solderless pressure connectors or insulated crimped connections terminated in boxes or fittings of adequate size.

### **2.04 WIRE CONNECTIONS AND DEVICES**

- .1 Install wire connectors as per Manufacturer and OESC requirements.

## 2.05 OUTLET BOXES

- .1 Use outlet boxes to suit device and OESC requirements.
- .2 Multiple-gang boxes shall be of one piece construction. Sectional boxes will not be permitted.

## 2.06 PULL BOXES AND JUNCTION BOXES

- .1 Size pull boxes and junction boxes for the dimensions and cubic inch capacity as required by the O.E.S.C. for the application or as shown on the drawings.
- .2 Pull boxes and junction boxes shall be constructed of code gauge steel, primed and painted, complete with screw-on or hinged covers.
- .3 Junction boxes in hazardous locations shall be approved for such locations.

## 2.07 CABINETS - EQUIPMENT ENCLOSURES

- .1 Cabinets to be code gauge steel, prime coated, c/w locking door flush lock and latch assembly and concealed flush hinges.

## 2.08 SUPPORTING DEVICES

- .1 Every conduit or cable shall have at least one support. Only approved conduit supports will be accepted. Perforated pipe straps, tie wrap or wood support for conduits or outlet boxes etc., will not be accepted.
- .2 Single conduit runs: Galvanized conduit straps, ring bolt type hangers or P.V.C. saddles.
- .3 Horizontal multiple raceways runs: Conduit rack with minimum 25 percent spare capacity. Trapeze style hanger on threaded rod.
- .4 Vertical multiple raceway runs: Electrical strut fastened to structure.

## 2.09 BACKBOARDS

- .1 All backboards to be 19 mm, good one side, fir plywood prime painted white and finish painted with two coats of ANSI #61 grey enamel paint.
- .2 Size of backboard to be as indicated on drawings but in no case shall the backboard be less than 150 mm (6") larger in length and width than the piece of equipment which it supports.

## 2.10 ACCESS PANELS

- .1 Sheet steel construction with factory applied prime coat of paint. Positive latch system. Minimum 18 gauge steel.
- .2 Provide hinged doors for all access panels with a size of 450mm x 450mm (18" x 18") or larger.
- .3 Where the access door is located in a fire rated assembly or a fire separation having a fire resistance rating, provide access doors which are ULC listed for the required fire resistance rating allowed by the National Building Code of Canada.

## 2.11 WIRING DEVICES AND COVERPLATES

- .1 Coverplates
  - .1 Coverplates shall be stainless steel.

## **PART 3 : EXECUTION**

### 3.01 GENERAL

- .1 All equipment, devices and panels to be mounted plumbed-true.
- .2 All equipment and panel labels to be mounted level.
- .3 Provide a separate conductor and raceway system for each separate system.
- .4 All installations shall be in accordance with the Canadian Electrical Code, National Building Code and all local codes and standards.

### 3.02 RACEWAYS

- .1 Locate raceways at least 150 mm (6") clear of steam pipe, flues and similar items.
- .2 All conduit and raceways to be concealed in all finished areas. Exposed raceways and conduit are permitted only in service areas, utility rooms such as Mechanical and Electrical Rooms. Where exposed, they shall be neatly grouped and installed parallel to the building lines.
- .3 Conduit must be plugged and kept clean and dry during installation and be free from kinks or foreign matter.
- .4 Where the Consultant determines additional support is required, this shall be provided without additional cost to the Owner.
- .5 Provide pull boxes every 30 m (100') of conduit run to facilitate installation of conductors.
- .6 Provide sleeves through floors for all conduits or cables passing through the floor. Sleeves shall extend 100 mm (4") above the finished floor. Caulk and make watertight on completion of work. Sleeves penetrating fire separations shall be caulked with an approved material to maintain the integrity of the separation.
- .7 Underground raceways shall be sealed/drained in accordance with Canadian Electrical Code, Section 22.

### 3.03 ARMOURED CABLE

- .1 Provide acceptable insulating bushings between armour and conductors at all terminations.
- .2 Provide acceptable cable straps within 300 mm (12") of any box or fitting and at 1.5 m (5') or less intervals throughout its length.
- .3 Single conductor cables shall be installed as per manufacturer's recommendations to achieve desired rating of conductors.

- .4 Support individual conductors with non-ferrous straps and hangers.
- .5 Where aluminum armour comes in contact with copper piping a permanent non-metallic sleeve shall be installed.

### 3.04 CONDUCTORS

- .1 Wire or cable used for feeders shall be free of splices.
- .2 Systems of different voltages shall be installed in separate raceways.

### 3.05 WIRE CONNECTIONS AND DEVICES

- .1 All pressure connectors shall be tightened to the manufacturers stated pressures for the wire size used.

### 3.06 OUTLET BOXES

- .1 See drawing legend for mounting heights.
- .2 Mount all boxes, plumbed-true on vertical installations. Mount level on horizontal installations.
- .3 All boxes to be installed flush mounted except in service areas, utility rooms such as Mechanical and Electrical Rooms.
- .4 All boxes to be supported independent of conduits or cables.
- .5 Test all boxes for continuity of ground through the box where the conduit is the grounding means.
- .6 Openings in all boxes shall be punched or cut, no burning of holes allowed.
- .7 Fill all K.O. openings not used with proper filler plates.
- .8 Keep access doors to a minimum by locating equipment in easily accessible locations.
- .9 A variation of location of 3 m (10') shall be provided without cost to the Owner if requested before installation of equipment. Confirm location prior to installation.

### 3.07 PULL BOXES AND JUNCTION BOXES

- .1 Install pull and junction boxes so they are supported independent of raceways.
- .2 Install pull boxes after every 30 m (100') of continuous raceway.
- .3 Locate pull boxes above accessible ceiling spaces in inconspicuous locations wherever possible.
- .4 Colour code pull boxes to indicate system involved.

### 3.08 EQUIPMENT ENCLOSURES

- .1 Mount all surface mounted equipment enclosures on an approved fire rated backing, or uni-strut channels.

- .2 All recessed enclosures shall have trim for recessed mounting.
- .3 Enclosures mounted in finished areas shall be finished to match.
- .4 Terminate wiring in screw type terminal blocks or strips.

### 3.09 SUPPORTING DEVICES

- .1 Install supporting devices to maintain headroom and clearances as described for conduits and conductors. Maintain a neat appearance and follow building lines where possible.

### 3.10 ACCESS PANELS

- .1 Provide access panels where required for electrical equipment concealed in walls, partitions or floors. Location and type of access panels shall be to the Consultant's approval.
- .2 Paint access panels to match surrounding decor or as directed by the Consultant on site.

### 3.11 WIRING DEVICES AND COVERPLATES

- .1 Mount all devices plumb and level against supporting wall.
- .2 Do not mount devices back to back.

**END OF SECTION**

## **PART 1 : GENERAL**

### **1.01 REQUIREMENTS INCLUDED**

- .1 Conform to the General Electrical Provisions, Section 16010 as applicable.

### **1.02 RELATED WORK SPECIFIED ELSEWHERE**

- .1 Submittals Section 16011
- .2 Basic Materials and Methods Section 16100

### **1.03 QUALITY ASSURANCE**

- .1 Conform to the National Building Code of Canada.
- .2 Conform to CAN4-S115-M "Standard Method of Fire Tests of Fire Stop Systems".

### **1.04 SUBMITTALS**

- .1 Submit shop drawings in accordance with Section 16011, paragraph 1.4 for the following items:
  - .1 Product Data: For each type of through-penetration firestop system product indicated.
  - .2 System Drawings: Submit documentation from a qualified third-party testing agency that is applicable to each through-penetration firestop system configuration for construction and penetrating items.
  - .3 Product Certificates: Certificate of conformance signed by manufacturers of through-penetration firestop system products certifying that products comply with requirements.

### **1.05 SUMMARY**

- .1 Fire separation drawings have been included as part of these drawings and specifications. All penetrations of fire separations shall be firestopped in accordance with these specifications, applicable codes and the manufacturer's recommended installation instructions. Refer to Appendix 2 – Fire Rated Separation Drawings for details and locations.
- .2 All firestopping shall be installed by a STI factory trained technician and member in good standing of the Firestop Contractors International Association.
- .3 All existing fire stopping was installed by Spectrum Interior Contracting Inc. (Randy Diestelmann MCPM, PMI, Office #519-974-0484)

## **PART 2 : PRODUCTS**

### **2.01 FIRESTOPPING, GENERAL**

- .1 Provide through-penetration firestop systems that are compatible with one another, with the substrates forming openings, and with the items, if any, penetrating through-



penetration firestop systems, under conditions of service and application, as demonstrated by through-penetration firestop system manufacturer based on testing and field experience.

- .2 Provide components for each through-penetration firestop system that are needed to install fill materials. Use only components specified by the firestopping manufacturer and approved by the qualified testing agency for the designated fire-resistance-rated systems.

## 2.02 ACCEPTABLE MANUFACTURERS

- .1 Subject to compliance with through-penetration firestop systems (XHEZ) listed in Volume 2 of the UL Fire Resistance Directory, provide products of the following manufacturers as identified below:
  - .1 Acceptable Manufacturer: Specified Technologies Inc., 200 Evans Way, Somerville, NJ 08876. Tel: (800) 992-1180, Fax: (908) 526-9623, Email: specseal@stifirestop.com, Website: www.stifirestop.com.
  - .2 Substitutions: Not permitted.
- .2 Obtain firestop systems for each type of penetration and construction condition indicated only from a single manufacturer.

## 2.03 MATERIALS

- .1 General: Use only through-penetration firestop system products that have been tested for specific fire-resistance-rated construction conditions conforming to construction assembly type, penetrating item type, annular space requirements, and fire-rating involved for each separate instance.
- .2 Latex Sealants: Single component latex formulations that upon cure do not re-emulsify during exposure to moisture, the following products are acceptable:
  - .1 Specified Technologies, Inc. (STI) SpecSeal Series SSS Intumescent Sealant
  - .2 Specified Technologies, Inc. (STI) SpecSeal Series LCI Intumescent Sealant
  - .3 Specified Technologies, Inc. (STI) SpecSeal Series LC Endothermic Sealant
  - .4 Specified Technologies, Inc. (STI) SpecSeal Series AS Elastomeric Spray
- .3 Firestop Devices: Factory-assembled steel collars lined with intumescent material sized to fit specific outside diameter of penetrating item, the following products are acceptable:
  - .1 Specified Technologies, Inc. (STI) SpecSeal Series SSC Firestop Collars
  - .2 Specified Technologies, Inc. (STI) SpecSeal Series LCC Firestop Collars
- .4 Firestop Putty: Intumescent, non-hardening, water resistant putties containing no solvents, inorganic fibers or silicone compounds, the following products are acceptable:
  - .1 Specified Technologies, Inc. (STI) SpecSeal Series SSP Firestop Putty

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- .5 Firestop Putty Pads: Intumescent, non-hardening putty pads to be installed on metallic and nonmetallic electrical switch and receptacle boxes to reduce horizontal separation between boxes to less than 24", the following products are acceptable:
- .1 Specified Technologies, Inc. (STI) SpecSeal Series SSP Firestop Putty Pads
- .6 Wrap Strips: Single component intumescent elastomeric strips faced on both sides with a plastic film, the following products are acceptable:
- .1 Specified Technologies, Inc. (STI) SpecSeal Series RED2 Wrap Strip
  - .2 Specified Technologies, Inc. (STI) SpecSeal Series BLU2 Wrap Strip
- .7 Firestop Pillows: Re-enterable, non-curing, mineral fiber core encapsulated with an intumescent coating contained in a flame retardant poly bag, the following products are acceptable:
- .1 Specified Technologies, Inc. (STI) SpecSeal Series SSB Firestop Pillows
- .8 Mortar: Portland cement based dry-mix product formulated for mixing with water at Project site to form a non-shrinking, water-resistant, homogenous mortar, the following products are acceptable:
- .1 Specified Technologies, Inc. (STI) SpecSeal Series SSM Firestop Mortar
- .9 Silicone Sealants: Moisture curing, single component, silicone elastomeric sealant for horizontal surfaces (pourable or nonsag) or vertical surface (nonsag), the following products are acceptable:
- .1 Specified Technologies, Inc. (STI) SpecSeal SIL300 Silicone Firestop Sealant
  - .2 Specified Technologies, Inc. (STI) SpecSeal SIL300SL Self-Leveling Silicone Firestop Sealant
- .10 Silicone Foam: Multicomponent, silicone-based liquid elastomers, that when mixed, expand and cure in place to produce a flexible, non-shrinking foam, the following products are acceptable:
- .1 Specified Technologies, Inc. (STI) Pensil 200 Silicone Foam
- .11 Composite Sheet: Intumescent material sandwiched between a galvanized steel sheet and steel wire mesh protected with aluminum foil, the following products are acceptable:
- .1 Specified Technologies, Inc. (STI) SpecSeal CS Composite Sheet
- .12 Cast-In-Place Firestop Device: Single component molded firestop device installed on forms prior to concrete placement with totally encapsulated, tamper-proof integral firestop system and smoke sealing gasket, the following products are acceptable:
- .1 Specified Technologies, Inc. (STI) SpecSeal CD Cast-In Firestop Device
- .13 Firestop Plugs: Re-enterable, foam rubber plug impregnated with intumescent material for use in blank openings and cable sleeves, the following products are acceptable:

- .1 Specified Technologies, Inc. (STI) SpecSeal Series FP Firestop Plug
- .14 Fire-Rated T Rating Collar Device: Louvered steel collar system with synthetic aluminized polymer coolant wrap installed on metallic pipes where T Ratings are required by applicable building code requirements, the following products are acceptable:
  - .1 Specified Technologies, Inc. (STI) SpecSeal T-Collar Device
- .15 Fire-Rated Cable Grommet: Molded two-piece grommet made from plenum grade polymer with a foam inner core for sealing individual cable penetrations up to 0.27 in. (7 mm) diameter, the following products are acceptable:
  - .1 Specified Technologies, Inc. (STI) Ready Firestop Grommet

### **PART 3 : EXECUTION**

#### **3.01 PREPARATION**

- .1 Examination of Conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion.
- .2 Surfaces to which firestop materials will be applied shall be free of dirt, grease, oil, scale, laitance, rust, release agents, water repellents, and any other substances that may inhibit optimum adhesion.
- .3 Provide masking and temporary covering to prevent soiling of adjacent surfaces by firestopping materials.
- .4 Do not proceed until unsatisfactory conditions have been corrected.

#### **3.02 THROUGH-PENETRATION FIRESTOP SYSTEM INSTALLATION**

- .1 General Requirements: Install through-penetration firestop systems in accordance with the conditions of testing and classification as specified in the published design.
- .2 Manufacturer's Instructions: Comply with manufacturer's instructions for installation of through-penetration firestop systems products.
  - 1. Seal all openings or voids made by penetrations to ensure an air and water resistant seal.
  - 2. Protect materials from damage on surfaces subjected to traffic.
- .3 All firestopping installations shall be performed by a STI factory trained technician who is a member in good standing of Firestop Contractors International Association.

#### **3.03 FIELD QUALITY CONTROL**

- .1 Keep areas of work accessible until inspection by authorities having jurisdiction.
- .2 Where deficiencies are found, repair or replace through-penetration firestop systems so they comply with requirements.

- .3 Provide letter from installing firestopping contractor certifying that the firestopping products have been installed in conformance with manufacturer's recommendations.

3.04 ADJUSTING AND CLEANING

- .1 Remove equipment, materials and debris, leaving area in undamaged, clean condition.
- .2 Clean all surfaces adjacent to sealed openings to be free of excess through-penetration firestop system materials and soiling as work progresses.

**END OF SECTION**

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**PART 1 : GENERAL**

**1.01 GENERAL REQUIREMENTS**

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- .1 Conform to General Conditions, Supplementary General Conditions and Sections of Division 01, as applicable.
- .2 Conform to General Electrical Provisions, Section 16010 as applicable.
- .3 Related Work
  - .1 Submittals Section 16011
  - .2 Basic Materials and Methods Section 16100
  - .3 Fire Alarm System Section 16721

**1.02 SYSTEM DESCRIPTION**

- .1 Work Supplied and Installed by This Division
  - .1 All excavation, fill, and backfill, including repair of surfaces, ie. pavement, sod, concrete, etc., required for the installation of underground services, as outlined on the drawings.
  - .2 Installation of all necessary raceways and conductors as outlined on the drawings.

**1.03 REFERENCES**

- .1 Regulatory Agencies
  - .1 Electrical Safety Authority.

**PART 2 : PRODUCTS**

**2.01 GENERAL**

- .1 All conduits, cables, wire, etc. to be as specified on the drawings and under Sections 16100 Basic Materials and Methods and 16721 Fire Alarm System.

**PART 3 : EXECUTION**

**3.01 INSTALLATION**

- .1 Co-ordinate all site work with the Owner.
- .2 All buried ducts to be surrounded in 6" (150 mm) of sand in non-vehicular areas.

- .3 Provide mechanical protection or encase ducts in 2" (50 mm) of concrete where ducts pass under vehicular areas.
- .4 Where directional drilling is utilized, raceways shall maintain a minimum depth of 600mm below vehicular traffic, 450mm in all other areas.
- .5 Seal and drain all underground ducts as required by Canadian Electrical Code (Section 22).

**END OF SECTION**

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**PART 1 : GENERAL**

**1.01 REQUIREMENTS INCLUDED**

- .1 Conform to General Conditions, Supplementary General Conditions and Sections of Division 01, as applicable.
- .2 Conform to General Electrical Provisions, Section 16010 as applicable.
- .3 Related Work
  - .1 Submittals Section 16011
  - .2 Basic Methods and Materials Section 16100
- .4 A fire watch shall be provided during all periods in which a fully functioning and verified fire alarm system is not in place. Fire watch shall commence as soon as the fire alarm system is disturbed until a valid verification certificate is provided to AAFC. It is intended to have a significant portion of wiring and devices roughed-in prior to disturbing the fire alarm system.
- .5 Fire watch shall be completed by Commissionaires Great Lakes, 1730 Dundas Street, London, Ontario, N5W 3E2. Contact is Ben (519) 433-6763 x246. AAFC will pay for a total of 21 days of fire watch services. Any further fire watch requirements shall be the financial responsibility of the Contractor. All fire watch shall be arranged by the contractor and coordinated with AAFC.

**1.02 SYSTEM DESCRIPTION**

- .1 Work to be Supplied and Installed
  - .1 Extend the existing Building 14/15 fire alarm control panel as indicated on the drawings. The existing Chubb Edwards EST3 control panel and annunciator shall remain.
  - .2 The existing Building 14/15 'Class B' notification appliance circuit shall be extended to include new notification appliances as shown on the drawings.
  - .3 The existing Building 14/15 'Class B' initiation device circuits shall be disconnected and removed. All new devices and existing devices shown to be replaced shall be fully addressable devices connected to the existing fire alarm control panel via new DCL 'Style C' wiring.
  - .4 Provide new conventional fire alarm system in Garage Building 16 and provide interconnection with Building 14/15 as outlined on the drawings and in these specifications.
  - .5 Provide new conventional fire alarm system in Farm House Building 11 and provide interconnection with Building 14/15 as outlined on the drawings and in these specifications.

**1.03 QUALITY ASSURANCE**

- .1 Warranty

- .1 Provide a one year warranty on all components and wiring including any required labour. Start of warranty period shall be upon completion of system verification.
- .2 All work on the existing fire alarm control panel shall be completed by a technician who is factory trained to perform work on the existing Edwards fire alarm control panel. Factory training shall have taken place within the last 12 months.
- .3 Installing electrician shall be on site at all times

#### 1.04 REFERENCES

- .1 CAN/ULC-S524-06, Standard for the Installation of Fire Alarm Systems.
- .2 CAN/ULC-S526-07, Visible Signal Devices for Fire Alarm Systems, Including Accessories.
- .3 CAN/ULC-S527-11, Standard for Control Units for Fire Alarm Systems.
- .4 CAN/ULC-S528-05, Manual Stations for Fire Alarm Systems, Including Accessories.
- .5 CAN/ULC-S529-09, Smoke Detectors for Fire Alarm Systems.
- .6 CAN/ULC-S530-M91(R1999), Heat Actuated Fire Detectors for Fire Alarm Systems.
- .7 CAN/ULC-S531-02, Standard for Smoke Alarms.
- .8 CAN/ULC-S537-04, Standard for the Verification of Fire Alarm Systems.
- .9 CAN/ULC-S561-03, Standard for Installation and Services for Fire Signal Receiving Centres and Systems.
- .10 NBCC 2010, National Building Code of Canada.

#### 1.05 SUBMITTALS

- .1 Submit shop drawings for all fire alarm equipment prior to commencement of work.
- .2 Submit three copies of instruction sheets for servicing and operation of the equipment, including any schematic diagrams, prior to completion and acceptance of the system.
- .3 Submit operation and maintenance manuals in accordance with Section 16011 Submittals, detailing the following additional information.
  - .1 System actual sequence of operations and functional description.
  - .2 Maintenance and troubleshooting instructions and schedule in accordance with CAN/ULC-S537.
  - .3 Fire alarm system shall be verified in conformance with CAN/ULC-S537, "Verification of Fire Alarm Systems". Provide verification certificate, verification report with no deficiencies and any warranty certificates.
  - .4 Name, address, and telephone number of service representative of manufacturer



to be contacted during warranty.

.4 Shop Drawings:

.1 Indicate on shop drawings:

- .1 Detail assembly and internal wiring diagrams for Control Unit, Consoles and Auxiliary cabinets.
- .2 Overall system riser wiring diagram identifying control equipment, initiating zones, signaling circuits; identifying terminations, terminal numbers, conductors and raceways.
- .3 Details for devices.
- .4 Details and performance specifications for control, annunciation and peripherals with item by item cross reference to specification for compliance.
- .5 Step-by-step operating sequence, cross referenced to specification for compliance
- .6 Local power supply calculations shall be submitted as stated in CAN/ULC-S527.

**PART 2 : PRODUCTS**

**2.01 ACCEPTABLE MANUFACTURERS**

- .1 The existing Building 14/15 Chubb Edwards EST3 fire alarm control panel and signalling devices shall remain. All new devices and equipment shall be ULC listed as compatible with the existing Chubb Edwards equipment.
- .2 Supply all system components from the same manufacturer.

**2.02 MATERIALS/PRODUCTS/EQUIPMENT**

.1 Local Control Panel (Buildings 11 and 16)

- .1 The control panel shall include all required hardware, software and system programming to provide a complete and operational system. The control panel shall assure that life safety takes precedence among all panel activities.
- .2 The control panel shall include the following capacities:
  - .1 Conventional device support for up to 10 Class B or 5 Class A input circuits and 4 Class B or 2 Class A NAC circuits.
- .3 Each Input Circuit shall be programmable for any one of the following operations:
  - .1 Compatible with smoke detectors without verification and with instant activation of contact devices,
  - .2 waterflow with and without 15 second retard and with and without supervisory operation,
  - .3 supervisory latching,

- 
- .4 monitor operation.
  - .4 Include Form "C" alarm, supervisory, monitor and trouble relays in the control panel rated at 1.0 amp each
  - .5 Support remote programmable relays. Remote relays shall be connected using one single pair of serial communication wires and one pair for 24 Vdc power. Relays shall be configurable for common or zoned activation. Zoned operation shall provide an individual relay for each IDC circuit. Common operation shall dedicate a relay each to Alarm, Trouble, Supervisory, Monitor and Power Loss. Each module shall provide five Form "C" relays rated at 1 amp each. Each system shall support up to two zoned and two common banks of relays.
  - .6 Support up to 2 fully supervised remote LED annunciators.
  - .7 Support an internal, panel mount digital dialer (DACT) with multiple communication protocols and integral LCD that is powered from the control panels regular and standby power supplies.
  - .8 The control panel shall include the following features:
    - .1 Be capable of full system programming through the front panel.
    - .2 Be capable of uploading the system program from the CPU to a laptop.
    - .3 Provide an operator interface display that shall include functions required to annunciate, command and control system functions.
    - .4 Provide discreet system control switches for Reset, Alarm Silence, Panel Silence, Walk Test, Alarm Relay Disconnect, Drill and Individual Input and Output Circuit Disable switches.
    - .5 The systems Walk Test mode shall provide testing by circuit without creating a real alarm condition. Walk Test may be conducted in the audible or silent mode. In the audible mode, the NAC circuits shall sound a pulse corresponding to the zone in test and then automatically reset. Troubles shall sound a distinct one-second pulse burst. Non-selected test zones shall activate as programmed if an alarm is received. The Walk Test feature shall automatically terminate after 30 minutes of inactivity.
  - .9 Notification Appliance Circuits:
    - .1 Provide as indicated on the plans, supervised hard-wired Notification Appliance (Signal) Circuits (NAC) for the control of 24Vdc notification appliances.
    - .2 Each NAC shall be capable of supporting 1.5 amps of load and may be programmed common to any input or specific to an input zone or group of zones.
    - .3 NAC's shall be programmable for 3 different signal rates: steady 24 Vdc, temporal (3-3-3) or Genesis synchronized 2-wire output. The Genesis setting shall allow 2-wire horns strobes to be installed on one pair of wire with individual horn on/off control and full strobe circuit synchronization. Activating Alarm silence shall silence the horns but maintain the strobes until the system is reset.
  - .10 Power Supply
    - .1 The system power supply shall provide a minimum of 3 amps @

- 24Vdc. The system shall have the capability of adding a second 3.0 amp power supply.
- .2 All standby batteries shall be continuously monitored by the system. Low battery and disconnection of battery power supply conditions shall immediately annunciate as a trouble signal.
- .11 Integrated DACT Dialer with Operators' LCD Interface:
- .1 An optional integrated Digital Alarm Communicator Transmitter (DACT) shall provide communications, modem capability and LCD display functions.
- .2 The DACT shall be capable of transmitting event messages to a primary and secondary central monitoring station receiver.
- .3 The system shall be capable of transmitting information via Contact ID or SIA 4/2 protocols using single or dual line operation.
- .12 The modules integrated Liquid Crystal Display (LCD) shall provide the system operator with detailed information about the off-normal status of the installed Fire Alarm / Life Safety System. The LCD shall automatically display that status of the system on a 2 line x 16 character (32-character total) front panel display visible with the door closed.
- .13 The following status functions shall be annunciated by the LCD Display:
- .1 When the Fire Alarm / Life Safety System is in the "Normal" Mode, the panel shall display: current date and time, a two-line custom system title, and a summary of the systems alarm history.
- .2 The LCD display shall detail event, zone, diagnostic and programming information.
- .14 The modem function of the module shall allow the systems program to be uploaded and/or downloaded locally or from a remote location via the phone line. The modem shall be configurable to accept programming on incoming calls or be set to call a preprogrammed number before communicating remotely.
- .15 The DACT module shall be capable of comparing the current version programming to a previous version using a compare utility. The utility shall generate a difference report indicating what changes have been made in hardware and software correlations.
- .16 The system shall be fully programmable through the front panel for the following features:
- .1 Auto signal silence timer
- .2 Resettable Aux power
- .3 Signal Silence/Reset inhibit timer
- .4 NACs silenceable by alarm silence or reset only
- .5 IDC type as described above
- .6 NAC type as described above

.2 Equipment Enclosures

Provide cabinet(s) of sufficient size to accommodate the aforementioned equipment. The cabinet(s) shall be equipped with locks and transparent door panel(s) providing freedom from tampering yet allowing full view of the various lights and controls.

.3 Local Power Supply

- .1 The control panel shall receive 120 VAC power (as noted on the plans) via a dedicated fused disconnect circuit.
- .2 The system shall be provided with sufficient battery capacity to operate the entire system upon loss of normal 120 VAC power in a normal supervisory mode for a period of twenty-four (24) hours with 30 minutes of alarm operation at the end of this period. The system shall automatically transfer to the standby batteries upon power failure. All battery charging and recharging operations shall be automatic.
- .3 All circuits requiring system operating power shall be 24VDC and shall be individually fused at the control panel.
- .4 Batteries shall be 24V, rechargeable, gelled electrolyte, totally sealed using self generating process requiring no water addition, fully charged with all interconnections ready for service. Maintenance free, long-life guaranteed by battery manufacturers for minimum 2 years from date of Substantial Performance. Batteries to provide power to ULC and CSA requirements. (Batteries to clearly indicate manufacturing date).
- .5 Incorporate above batteries and charger within control panel.
- .6 The incoming power to the system shall be supervised so that any power failure must be audibly and visibly indicated at the control panel and the remote annunciator. A green "power on" LED shall be displayed continuously while incoming power is present.
- .7 The system batteries shall be supervised so that a low battery condition or disconnection of the battery shall be audibly and visibly indicated at the control panel and the remote annunciator.

.4 Addressable Device Types

- .1 Addressable Manual Pull Stations
  - .1 All manual pull stations shall be teardrop shape made from die-cast zinc and finished with red epoxy powder-coat paint.  
All manual pullstations shall be Chubb Edwards SIGA-270.
- .2 Intelligent Heat Detector Head
  - .1 All heat detectors shall have fixed temperature (57°C) and rate-of-rise (9°C/min) heat sensing elements. The readings of each sensor shall be evaluated over time to make alarm decisions.  
All heat detectors shall be Chubb Edwards SIGA-HRSI.
- .3 Intelligent Smoke Detector Head
  - .1 All detectors shall have ionization, photoelectric and heat type fire sensing elements. The readings of each sensor shall be evaluated over time to make alarm decisions.  
All detectors shall be Chubb Edwards SIGA-IPHS.
- .4 Intelligent Duct Smoke Detector

- .1 All duct smoke detectors shall have photoelectric fire sensing elements. The readings the sensor shall be evaluated over time to make alarm decisions. Sampling tube shall be sized appropriately for the duct which the detector is installed. Provide magnetically operated remote test station for each duct smoke detector, located for convenient testing or as shown on drawings.  
Detectors - Chubb Edwards SIGA-SD.  
Remote test stations - Chubb Edwards SIGA-TRM.
- .5 Isolation Modules
  - .1 Shall be provided to automatically isolate wire-to-wire short circuit. The isolator module shall limit the number of modules or detectors that may be rendered inoperative by a short circuit on the SLC loop segment or branch.
  - .2 If a wire-to-wire short occurs, the isolator module shall automatically open-circuit (disconnect) the SLC. When the short circuit condition is corrected, the isolator module shall automatically reconnect the isolated section.
  - .3 Where available, fault isolation modules should be located in a fire separated electrical room.
  - .4 Fault isolation modules shall be so identified on the coverplate.
  - .5 Fault isolation modules shall be located and installed as per CAN/ULC-S524 and zones as stated in NBC 2010 Article 3.2.4.9  
Chubb Edwards SIGA-IM.
- .8 I/O Modules
  - .1 Input/Output modules shall be used for monitoring of waterflow, valve tamper and non-addressable detectors, and specific modules shall be selected based on the device in which they are connecting to. All input/output modules shall be Chubb Edwards.
- .5 Conventional Device Types
  - .1 Conventional Manual Pull Stations
    - .1 All manual pull stations shall be teardrop shape made from die-cast zinc and finished with red epoxy powder-coat paint.  
Chubb Edwards 270-SPOW.
  - .2 Conventional Heat Detector Head
    - .1 All heat detectors shall have fixed temperature (58°C) and rate-of-rise (9°C/min) heat sensing elements. The readings of each sensor shall be evaluated over time to make alarm decisions.  
Chubb Edwards EC2ORRU-3.
  - .3 Conventional Smoke Detector Head
    - .1 All detectors shall be low profile, photoelectric plug-in type.  
Chubb Edwards EC30U-3.
- .6 Alarm Signal Appliances (Speakers and Strobes)
  - .1 Alarm speakers, strobes and combination speaker strobes shall broadcast high

quality, integrated, emergency voice communications, as well as alert and alarm tone signals.

Chubb Edwards 757 Series

.7 Lightning Protection Unit

- .1 Metal oxide varistor, sized to protect alarm initiating and alarm signal modules from any damage resulting from transients or lightning strikes, and as recommended by manufacturer.

.8 End of Line Device

- .1 Mounted on painted red metal single gang plate with terminal strips providing four screw terminals at the rear of plate.
- .2 Provide lamacoid nameplate on front identifying zone.

.10 Fire Alarm Graphic

- .1 Full colour mylar film of building indicating street, building floors and fire alarm zones corresponding to the fire alarm annunciator. Provide a solid backing and enclose in an extruded aluminum metal frame with a minimum 1/8" (3mm) plexiglass cover. Graphic is to be bolted or screwed securely to the wall in location(s) as indicated on drawings. Graphic must be approved by Consultant and local fire authorities before manufacture.

2.03 FIRE ALARM WIRES AND CABLES

- .1 Audio/Visual Signal Circuit Wiring - solid copper conductors, type FAS105, rated 600Volt XLPE insulation in approved raceways. Minimum #14 AWG.
- .2 Addressable loops and Initiation Circuit Wiring – solid copper conductors, type FAS105, 300V PVC flame retardant jacket, shielded. Canada Wire - Securex. Minimum wire size shall be #18 AWG.
- .3 Coordinate and confirm fire alarm system wiring requirements with fire alarm system manufacturer's installation requirements and listing requirements.
- .4 All wires and cables shall be listed and/or approved by a nationally recognized testing agency for use with a protective signalling system.
- .5 All analog voice speaker circuits shall be twisted/shielded pair to eliminate cross talk as required by manufacturers listing.
- .6 Install all equipment to the minimum of Canadian Electrical Code, the National Building Code and local standards, unless stricter standards are indicated on the drawings or in this specification. In all situations the more restrictive standard of material and installation shall apply.

**PART 3 : EXECUTION**

3.01 INSTALLATION

- .1 All work on the existing fire alarm control panel shall be completed by a technician who is factory trained to perform work on the existing Chubb Edwards fire alarm control panel.

Factory training shall have taken place within the last 12 months.

- .2 Wiring for fire alarm system shall be installed in metallic raceways (EMT conduit unless noted otherwise). Flexible metallic raceways may be utilized for drops to devices installed in drop ceilings (length not to exceed 3000mm).
- .3 Provide fire stop material around all exposed conduits which penetrate fire walls or fire separations. See Section 16195 – Firestopping for details.
- .4 Install wiring for alarm initiating circuits in separate raceway system from the alarm signal circuits.
- .5 Splicing of conductors is not permitted under any circumstances.
- .6 Wire all alarm signals in accordance with requirements by manufacturer and operation. Install resistor for signal circuit in suitable box adjacent to last signal device. If diodes are used, install in outlet box of last signal device of signal circuit and indicate on signal.
- .7 Provide required number of signal circuits and wire alternately. Meaning that signals on same circuit shall not be horizontally adjacent to each other.
- .8 Ensure continuity of ground through all raceways from ground bus in control panel to each device junction box.
- .9 Clear all wiring of shorts, opens and grounds on completion of work.
- .10 Mount detectors on ceiling as per CAN/ULC-S524-06 standard unless otherwise specified herein with minimum and maximum distances as required for respective type of detector, at highest point where variations in ceiling height exist. Do not mount detectors on sides, undersides, or less than 600 mm from walls, beams, joints, ducts, open web steel joists or any structure projecting below actual ceiling height and less than 900 mm from air handling or heating outlets (600 mm from air exhaust inlet).
- .11 Should interference from obstruction, lamp positions, air outlets or heat radiating surfaces be encountered in locating any detector where shown, locate detector as near as possible to shown position, clear of obstacles, but maintain a clear space of 600 mm on ceiling, below and around.
- .12 Identify signal circuit, alarm initiating circuit, auxiliary circuit and all other wiring at fire alarm control panel, annunciator, terminal boxes or elsewhere on completion of work with appropriate marking labels. Mark single conductors with suitable self adhesive tape, indelible numbered markers, identify cables with a clear polyester tag, attaches with a self-locking TY-RAP.
- .13 Provide, install and connect wiring and interconnecting wires and cables as specified herein, as required by control panel manufacturer and as shown on Drawings.

### 3.02 SYSTEM OPERATION

#### Buildings 14/15

- .1 The existing fire alarm control panel shall continue to operate as it does existing, with the following additions and changes:
  - .1 The new addressable initiation devices shall be programmed into the system and utilized. The existing conventional circuits shall be removed.

- .2 Additional signalling devices shall operate in the same fashion as the existing devices operate.
- .3 An alarm in building 11 or 16 shall cause a trouble alert at the Building 14 annunciator. Building 14 control panel shall transmit an alarm signal to the Central Monitoring. All interconnection wiring shall be supervised.
- .4 A trouble signal in Building 11 or 16 shall cause a trouble alert at the Building 14 annunciator. Building 14 control panel shall transmit a trouble signal to the Central Monitoring. All interconnection wiring shall be supervised.
- .5 An alarm in buildings 14/15 shall cause an alarm in buildings 11 and 16. All interconnection wiring shall be supervised.
- .6 Upon 'alarm', 'trouble' and 'supervisory' condition, a signal shall be sent to the fire department as per CAN/ULC-S561, "Installation and Services for Fire Signal receiving Centres and Systems". Provide all connections as required.
- .7 This fire alarm control panel shall have degraded mode and stand-alone capability in accordance with CAN/ULC S524-06 Section 4.3.

#### Buildings 11 and 16

- .2 The Alarm activation of any area smoke detector, heat detector, manual pull station, shall cause the following functions to automatically occur:
  - .1 Supervision as per NBC 2010 Article 3.2.4.10 and 3.2.5.18; NFPA 20, 'Installation of Stationary Pumps for Fire Protection'.
  - .2 Emergency Generator as per CAN/CSA-C282.
  - .3 Standpipe and hose valve, if tampered.
  - .4 The internal audible device shall sound at the control panel.
  - .5 Activate audible notification appliances throughout the building as programmed.
  - .6 Activate visual strobe notification appliances throughout the building. The visual strobe shall continue to flash until the system has been reset.
  - .7 All automatic events programmed to the alarm point shall be executed and the associated outputs activated (ie Trouble signal shall be sent to the Building 14/15 control panel.) All interconnection wiring shall be supervised.
- .3 The activation of Building 14/15 alarm shall cause the alarm of this building to activate. All interconnection wiring shall be supervised.
- .4 The trouble activation of any internal or field device or wiring fault shall cause the following functions to occur:
  - .1 The internal audible device shall sound at the control panel and/or remote annunciator.
  - .2 Any remote or local annunciator LED's associated with the trouble zone shall be illuminated.
  - .3 Transmit trouble signal to Building 14/15 fire alarm control panel. All interconnection wiring shall be supervised.
- .5 The Status activation (monitor) of any fire pump or generator, shall cause the following functions to automatically occur:
  - .1 The internal audible device shall sound at the control panel and/or remote annunciator.
  - .2 Any remote or local annunciator LED's associated with the status zone shall be illuminated.
  - .3 A signal shall be sent to the Building 14/15 fire alarm control panel. All interconnection wiring shall be supervised.



- .6 These fire alarm control panels shall have degraded mode and stand-alone capability in accordance with CAN/ULC S524-06 Section 4.3.

### 3.03 FIELD QUALITY CONTROL

- .1 Only directly prior to verification, all smoke detector protection shall be removed, and all smoke detectors shall be thoroughly cleaned.
- .2 Inspect and check each individual device in entire system for proper connection, supervision and function in accordance with CAN/ULC S537. Any detector, manual pull station and signal not installed within requirements of CAN/ULC-S524 shall be identified in remarks column of verification report and be brought to the Consultant's attention prior to his acceptance test. Obtain a verification certificate and verification report from verifying agency showing each device checked, and that this work has been carried out. Utilize standard verification forms similar to Canadian Fire Alarm Association (C.F.A.A.) forms.
- .3 Inspection and checking shall include smoke testing of each ionization or photoelectric smoke detector when installed with similar material found in area protected. Submit smoke detectors sensitivity calibration reading, as read on place of installation as part of verification report.
- .4 Arrange with Consultant, manufacturer of control equipment and all other installers of related and connected equipment to have a final functional acceptance test, giving ample notice to all parties concerned to be present.
- .5 Tests may include:
  - .1 Spot check of devices to ensure proper connections and supervision.
  - .2 Operation of an alarm initiating device on each detection circuit to verify required operation of alarm devices, annunciator and other installations.
  - .3 Testing of all signal devices for correct operation and function.
  - .4 Testing of smoke detector with similar material found in area to be protected.
- .6 Provide two @ 2.0 hour (4 hours total) familiarization and instruction period, to familiarize user and/or appointed representatives, with working and function of system and equipment.
- .7 All testing methods are to be ULC approved. Do not use open flame or methods which will damage detectors. All testing methods are to be approved by the engineer prior to actual testing.

### 3.04 COMMISSIONING AS A WHOLE

- .1 Where life safety systems and fire protection systems are installed to comply with the provisions of the NBC or the NFC, the commissioning of these integrated systems must be performed as a whole to ensure the proper operation and inter-relationship between systems in accordance with NBC 2010 Article 3.2.4.6
- .2 It shall be the responsibility of the contractor to engage the sprinkler contractor, coordinate and pay for testing of all flow switches, pressure switches and supervised valves to ensure their operation, their interconnection with the fire alarm system and the proper operation of the fire alarm system.

**END OF SECTION**

**PART 1 : GENERAL**

**1.01 REQUIREMENTS INCLUDED**

- .1 Conform to Division 01, General Conditions and Section 16010, General Electrical Provisions as applicable.
- .2 Related Work
  - .1 Submittals Section 16011

**1.02 DESCRIPTION**

- .1 Changes and alterations to existing facilities and equipment caused by the work of this division.

**1.03 EXISTING EQUIPMENT**

- .1 All existing fire alarm equipment and associated wiring and conduit shall be removed from the renovated area unless noted otherwise on drawings.
- .2 All existing equipment removed shall be handed over to the Owners and/or discarded at their discretion.

**1.04 FAMILIARIZATION**

- .1 It is this contractors responsibility to visit the site and become thoroughly familiar with the existing building, equipment and systems prior to submitting tender price.

**PART 3 : EXECUTION**

**3.01 GENERAL**

- .1 Provide under this Section for the relocation or re-routing of existing conduits and other electrical equipment remaining which are exposed during the work.
- .2 It is the responsibility of this division to patch and repair all surfaces affected by work of this trade. All patching and repairs must be done by an approved means acceptable to the Consultant.

**3.02 WIRING**

- .1 Wiring shall be concealed in walls and ceilings in public areas.
- .2 Remove all existing unused wiring and conduit.

**END OF SECTION**

**LIST OF OCCUPIED SPACES**

Room #	Use	1 <sup>st</sup> & 2 <sup>nd</sup>
		Floor North Lab Wing
010	Service	General Storage
013	Service	Equipment Storage
014	Service	Service
017	Service	Preparation
018	Service	Warewashing
0015	Lab	Workshop Tool Room
0016	Office	Office
112	Office	Research Office 1
114	Office	Research Office 2
115	Office	Research Office 3
117	Office	Research Office 4
118	Lab	Genetics
119	Lab	Genetics
120	Lab	Plant Pathology
121	Lab	Plant Pathology
122	Lab	Instrument Room 4
123	Lab	Instrument Room 3
124	Service	X-ray
125	Service	Microscope Room
130	Lab	Instrument Room 2
131	Lab	Instrument Room 1
134	Office	Research Office
135	Office	Office
136	Office	Office
137	Lab	Tissue Culture 2
138	Lab	Tissue Culture 1
139	Lab	Equipment Room
204	Office	Office (hallway cubicles x 4)
212	Office	Research Office 5
213	Office	Comp Write-up 3
214	Office	Research Office 6
215	Office	Research Office 7
216	Office	Comp Write-up 4
217	Office	Research Office 8
218	Lab	Photobacteriology
219	Lab	Molecular Biology (fungi)
220	Lab	Insect Molecular Biology
221	Lab	Plant Biochemistry
222	Lab	Instrument Room 8
223	Lab	Instrument Room 7
225	Service	Polaroid Room
230	Lab	Instrument Room 6
231	Lab	Instrument Room 5
234	Office	Seminar Room
236	Lab	Lab - ??
237	Service	Tissue Culture 2
238	Lab	Tissue Culture 1
239	Lab	Radioisotope Laboratory
		<b>1<sup>st</sup> Floor South Lab Wing</b>
1002	Service	Incubator/Instrument

1008	Office	Office
1009	Lab	Soil Ecology
1010	Lab	Tulgren Funnel
1012	Service	Cell Transfer
1013	Office	Office
1014	Lab	Plant Genetic Transformation
1015	Service	Incubator/Instrument
1016	Office	Office
1017	Lab	Fungal Ecology
1018	Lab	Biological Control of Insects
1018.1	Office	Office
1019	Service	Service Room
1020	Service	Service Room
1021.1	Office	Office (Hallway Cubicle x 2)
1021.2	Office	Office (Halleay Cubicle x 2)
1028	Service	Incubator/Instrument
1029	Office	Office
1030	Service	Post Treatment
1031	Lab	Plant Gene Expression
1032	Lab	Applied Entomology
1033	Office	Office
1034	Office	Office
1035	Lab	insect Toxicology
1037	Service	Topical Application
1037.1	Office	Office
1038	Service	Post Treatment
1039	Lab	Contact Application
1040	Office	Office
1041	Lab	Genomics
<b>Administration</b>		
1049	Meeting	Boardroom
1050	Meeting	Open Admin area / Library
1051	Office	Office
1052	Office	Office
1053	Office	Open Office
1053.1	Office	Office
1053.2	Office	Office
1053.3	Office	Office
1053.4	Office	Office
1053.5	Office	Office
1054	Meeting	Meeting Room
1055	Cafeteria	Seminar Room
1056	Cafeteria	Staff Lounge
1058	Office	Office - IT
1059	Service	Fax/Photocopy/Supplies
1060	Office	Computer Server / work shop
1077	Office	Office
<b>Headerhouse &amp; Insectory Wing</b>		
1081	Office	Office/storage
1090	Lab	Microscope Room
1096	Service	General Stores
1099	Lab	Preparation
1101	Office	Office
1102	Lab	Lab - Insect Production
1103	Office	Office

1110	Service	Service Rm - Parasite Clean-up
1119	Service	Service Room - Pest Clean-up
GH3#	Service	Greenhouse #3
<b>B15 Soil Ecology Wing</b>		
1205	Lab	Lab
1206	Office	Office - Research
1207	Office	Office
1209	Lab	Lab
1211	Service	Equipment Room
1213	Office	Office
1214	Office	Office
1217	Office	Office
1218	Lab	Lab
1219	Lab	Lab
1220	Office	Office
1221	Office	Office
<b>2<sup>nd</sup> Floor South Lab Wing</b>		
2007	Lab	Instrument
2008	Lab	Environmental Chemistry
2009	Service	Tumbler
2010	Office	Office
2013	Lab	Chemistry Support
2014	Lab	Isolation
2015	Lab	Inoculation
2018	Lab	Soil Microbiology
2019	Office	Office
2020	Lab	Media Preparation
2026.1	Office	Office
2026.2	Office	Office (hallway Cubicle x 2)
2032	Lab	Extraction
2033	Office	Office
2035	Office	Analytical Organic Chemistry
2036	Office	Office Write-up
2037	Lab	Instrument
2038	Lab	Analytical Chemistry Services
2040	Lab	Solvent Distillation
2041	Lab	Sample Preparation
2043	Lab	Instrument
2044	Lab	Chemistry - natural product
2045	Office	Office
2046	Office	Office

<b>North Headerhouse / Greenhouse Complex</b>		
160	Office	Greenhouse Technician
153	Service	North Headerhouse
GH#4	Service	Greenhouse #4
GH#5	Service	Pesticide-Free Greenhouse #5

**exp** Services Inc.

**Project No.: 01B46-14-0035**

London Fire Panel Upgrade, Phase II

Appendix 2

**Fire Rated Separation Drawings**

Page 1 of 1

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**Fire Rated Separation Drawings**















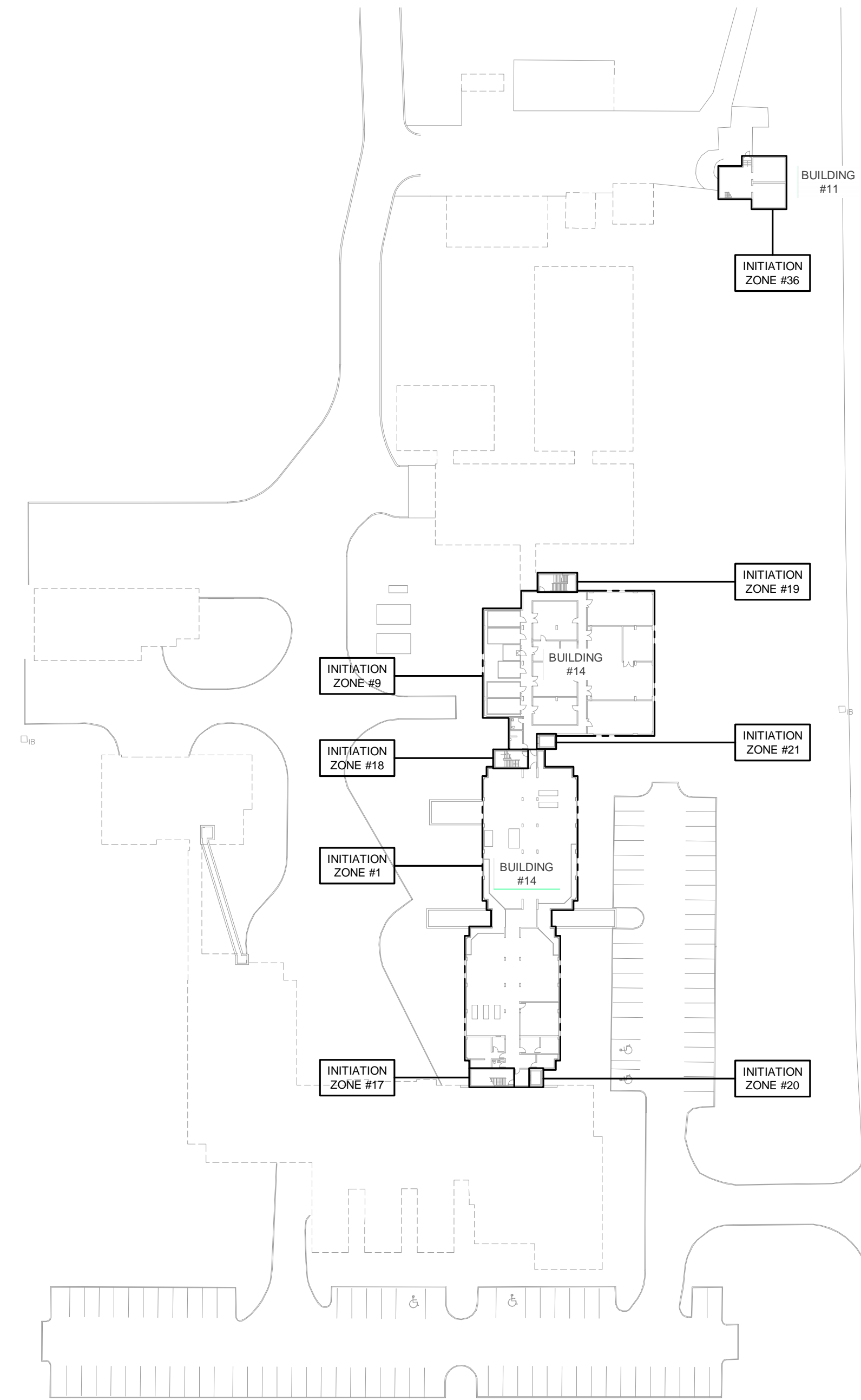




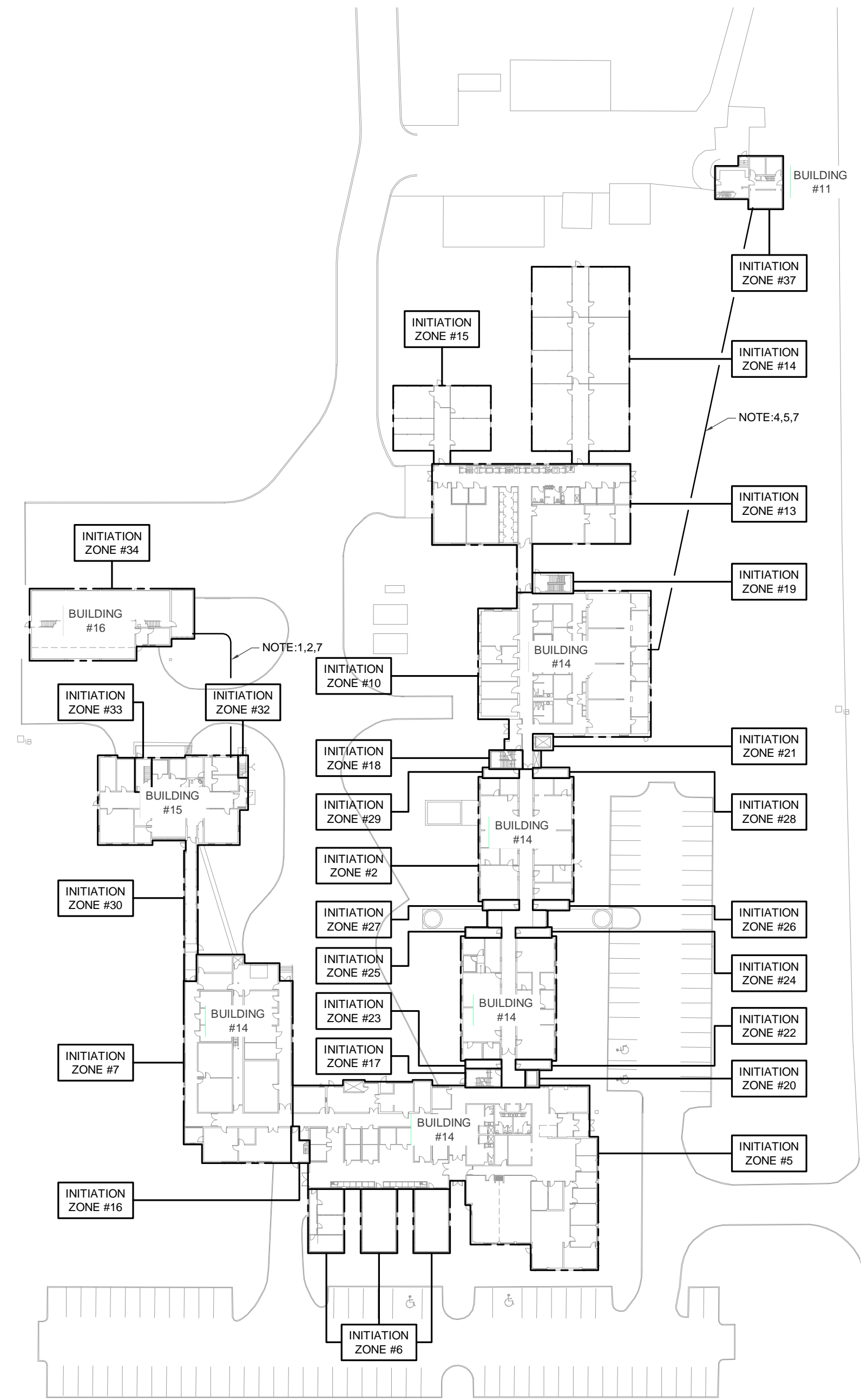








**BASEMENT FLOOR PLAN - ZONING**  
SCALE - 1:750



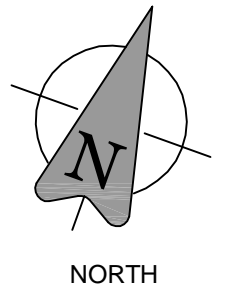
**FIRST FLOOR PLAN - ZONING**  
SCALE - 1:750

ELECTRICAL LEGEND		
SYMBOL	DESCRIPTION	MOUNTING HEIGHT
<b>POWER</b>		
[Symbol]	ELECTRICAL LIGHTING OR POWER PANEL	76" AFF TO TOP
[Symbol]	ELECTRICAL EQUIPMENT PANEL AS NOTED	AS NOTED
[Symbol]	DUPLEX RECEPTACLE	18" AFF
[Symbol]	JUNCTION BOX	AS NOTED
[Symbol]	ELECTRICAL EQUIPMENT OR DEVICE AS NOTED	-
[Symbol]	CIRCUITING	-
[Symbol]	CONDUIT	-
[Symbol]	DATA OUTLET (x INDICATES # OF OUTLETS AT THIS LOCATION)	18" AFF
<b>FIRE ALARM</b>		
[Symbol]	FIRE ALARM MANUAL PULL STATION	47" AFF
[Symbol]	FIRE ALARM SIGNAL APPLIANCE 6" OR 10" GONG	90" AFF
[Symbol]	FIRE ALARM HORN/STROBE	90" AFF
[Symbol]	FIRE ALARM HORN/SPEAKER	90" AFF
[Symbol]	FIRE ALARM STROBE	90" AFF
[Symbol]	CEILING MOUNTED FIRE ALARM SPEAKER	CEILING
[Symbol]	SMOKE DETECTOR	CEILING
[Symbol]	SMOKE DUCT DETECTOR	IN DUCT
[Symbol]	SMOKE ALARM	CEILING
[Symbol]	HEAT DETECTOR 194° FIXED TEMPERATURE	CEILING
[Symbol]	HEAT DETECTOR 135° RATE OF RISE	CEILING
[Symbol]	ELECTRO-MAGNETIC DOOR HOLD OPEN DEVICE	WALL OR FLOOR
[Symbol]	FLOW SWITCH	AS NOTED
[Symbol]	PRESSURE SWITCH	AS NOTED
[Symbol]	SUPERVISORY VALVE	AS NOTED
<b>ABBREVIATIONS</b>		
AFF	ABOVE FINISHED FLOOR	
WG	WIREGUARD	
WP	WEATHERPROOF	
EXP	EXPLOSION PROOF	
N	NEW DEVICE IN NEW LOCATION	
R	EXISTING TO BE REMOVED	
<b>LEGEND NOTES:</b>		
1. THIS IS A STANDARD LEGEND. ALL SYMBOLS MAY NOT NECESSARILY BE USED ON DRAWINGS.		
2. STANDARD MOUNTING HEIGHTS SHOWN ON LEGEND SHALL BE USED, UNLESS NOTED OTHERWISE.		

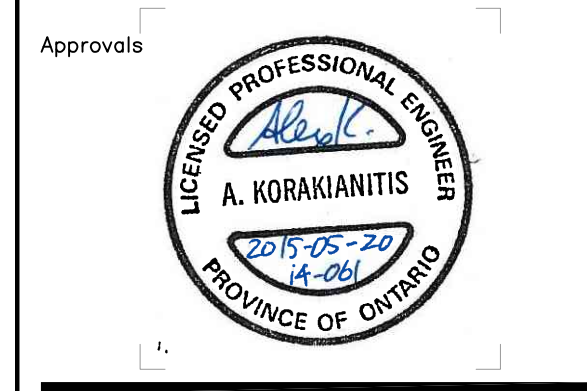
- NOTES:**
- PROVIDE 2 @ 41mm UNDERGROUND RACEWAY FROM BUILDING 14 CONTROL PANEL TO BUILDING 16 CONTROL PANEL TO FACILITATE THE DCL STYLE 'C' DATA COMMUNICATIONS LINK. EXTERIOR RACEWAY SHALL BE DIRECTIONAL DRILLED BENEATH ASPHALT ROADWAY. BACKFILL ANY TRENCHED GRASS AREAS AND SOD TO MATCH EXISTING RACEWAYS SHALL BE SEPARATED BY A MINIMUM OF 1200mm WHERE INSTALLED HORIZONTALLY AND 300mm WHERE INSTALLED VERTICALLY BOTH IN AND OUTSIDE THE BUILDING. ROUTING NOT SHOWN WITHIN THE BUILDING.
  - PROVIDE NETWORK DATA COMMUNICATION LINK STYLE 'C' WIRING AND CONNECT BUILDING 11 FIRE ALARM CONTROL PANEL TO BUILDING 16 FIRE ALARM CONTROL PANEL. REFER TO SPECIFICATION SECTION 16721 FOR INITIATION SEQUENCE.
  - DELETED.
  - PROVIDE 2 @ 41mm UNDERGROUND RACEWAY FROM BUILDING 11 CONTROL PANEL TO BUILDING 14 CONTROL PANEL TO FACILITATE THE DCL STYLE 'C' DATA COMMUNICATIONS LINK. EXTERIOR RACEWAY SHALL BE DIRECTIONAL DRILLED A MINIMUM OF 600mm BENEATH ASPHALT ROADWAY. BACKFILL ANY TRENCHED GRASS AREAS AND SOD TO MATCH EXISTING RACEWAYS SHALL BE SEPARATED BY A MINIMUM OF 1200mm WHERE INSTALLED HORIZONTALLY AND 300mm WHERE INSTALLED VERTICALLY BOTH IN AND OUTSIDE THE BUILDING. ROUTING NOT SHOWN WITHIN THE BUILDING.
  - PROVIDE NETWORK DATA COMMUNICATION LINK STYLE 'C' WIRING AND CONNECT BUILDING 14 FIRE ALARM CONTROL PANEL TO BUILDING 16 FIRE ALARM CONTROL PANEL. REFER TO SPECIFICATION SECTION 16721 FOR INITIATION SEQUENCE.
  - DELETED.
  - PROVIDE LIGHTNING / SURGE PROTECTION ON EACH CONDUCTOR LEAVING / ENTERING THE BUILDING.

CONTRACTOR IS TO CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE PROJECT, AND TO REPORT ANY DISCREPANCIES TO THE CONSULTANTS BEFORE PROCEEDING WITH THE WORK. DRAWINGS ARE NOT TO BE SCALED. THE CONTRACT DOCUMENTS REMAIN THE PROPERTY OF THE CONSULTANTS AND SHALL BE RETURNED UPON COMPLETION OF THE PROJECT.

CEILING TYPE LEGEND	
SYMBOL	DESCRIPTION
[Symbol]	SUSPENDED ACOUSTIC CEILING TILE
[Symbol]	EXPOSED CEILING
[Symbol]	PLASTER CEILING



NO.	DATE	DESCRIPTION
6	2015.05.20	ISSUED FOR TENDER
5	2015.03.17	ISSUED FOR PERMIT
4	2015.02.09	ISSUED FOR FINAL REVIEW
3	2015.01.26	ISSUED FOR OWNER'S REVIEW
2	2014.11.24	ISSUED FOR OWNER'S REVIEW
1	2014.08.22	ISSUED FOR OWNER'S REVIEW



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Project Title  
**LONDON FIRE PANEL UPGRADE PROJECT, PHASE II**  
LONDON, ONTARIO

exp Project # **14-061**  
Designed: AS Drawn: BR Checked: AK  
Date: MAY 2015 Scale: 1:750

Sheet Title  
**SITE PLAN - FIRE ALARM DEMOLITION & NEW**

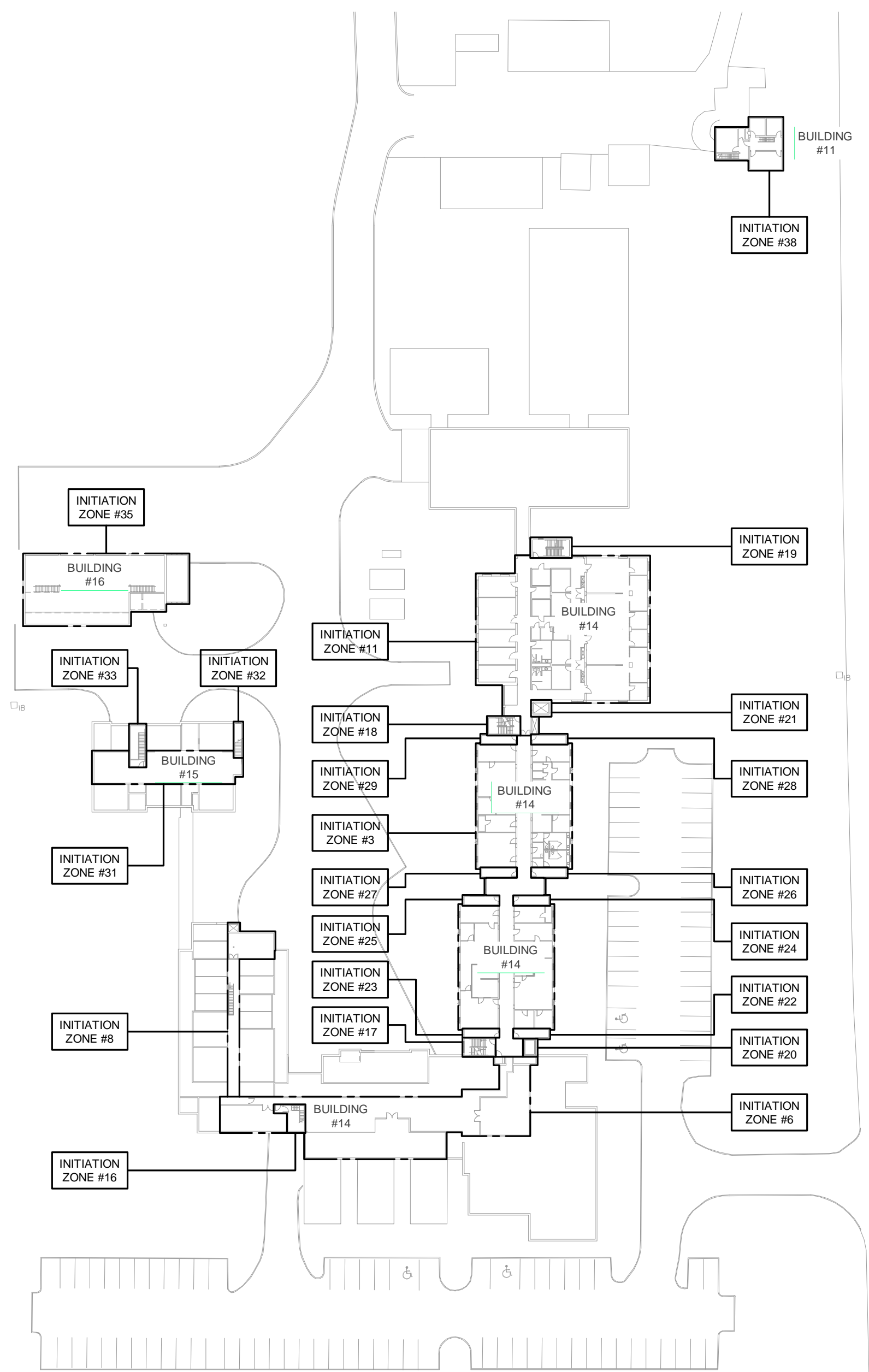
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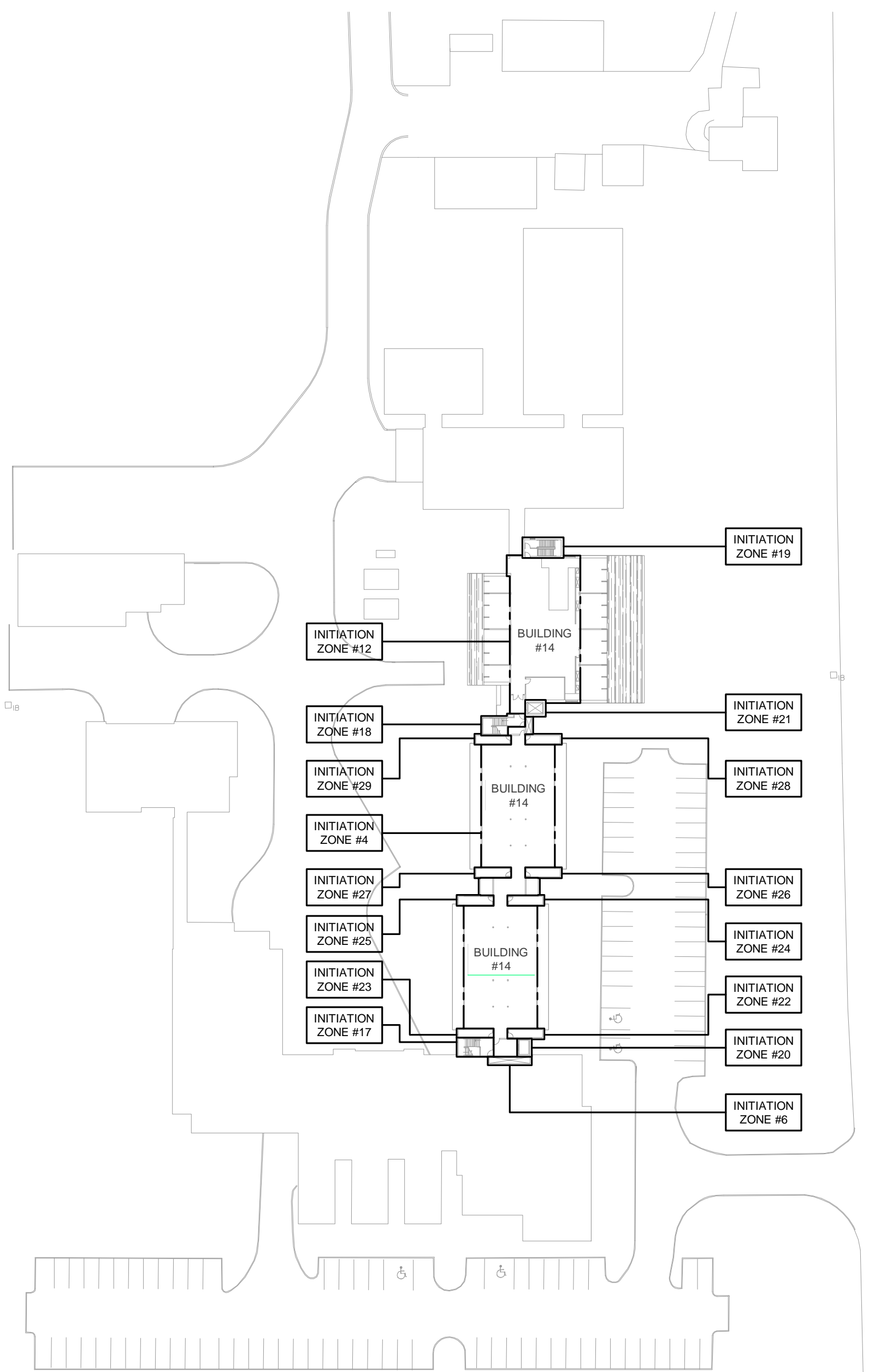
FIRE ALARM SCHEDULE - BUILDING 16					
CIRCUIT	ALARM	SIGNAL	AUXILIARY	TROUBLE	DESCRIPTION
1	•				ENTIRE FLOOR AREA
2	•				BUILDING 14/15 ALARM
1		•			SIGNAL CIRCUIT
1			•		LARGE SCALE NETWORK CONNECTION
1				•	BUILDING 16 - GENERATOR RUNNING
2				•	BUILDING 16 - GENERATOR TROUBLE
3				•	BUILDING 11 - IN ALARM

FIRE ALARM SCHEDULE - BUILDING 11					
CIRCUIT	ALARM	SIGNAL	AUXILIARY	TROUBLE	DESCRIPTION
1	•				BASEMENT
2	•				FIRST FLOOR
3	•				SECOND FLOOR
4	•				BUILDING 14/15 ALARM
1		•			SIGNAL CIRCUIT
1			•		LARGE SCALE NETWORK CONNECTION
1				•	BUILDING 16 - IN ALARM

FIRE ALARM SCHEDULE					
CIRCUIT	ALARM	SIGNAL	AUXILIARY	TROUBLE	DESCRIPTION
1	•				BASEMENT SOUTH (BELOW LABS)
2	•				FIRST FLOOR LABS
3	•				SECOND FLOOR LABS
4	•				THIRD FLOOR LOFT
5	•				ADMINISTRATION, SHIPPING AND SOUTH HEADERHOUSE
6	•				SECOND FLOOR LOFT AND GREENHOUSES
7	•				INSECTORY
8	•				INSECTORY LOFT
9	•				BIOTECH BASEMENT
10	•				BIOTECH FIRST FLOOR
11	•				BIOTECH SECOND FLOOR
12	•				BIOTECH PENTHOUSE
13	•				NORTH HEADERHOUSE
14	•				GREENHOUSE 4
15	•				GREENHOUSE 5 (FUTURE)
16	•				SOUTHWEST STAIR
17	•				SOUTH STAIR
18	•				CENTER STAIR
19	•				NORTH STAIR
20	•				SOUTH ELEVATOR
21	•				NORTH ELEVATOR
22	•				SOUTHEAST SHAFT
23	•				SOUTHWEST SHAFT
24	•				CENTER SOUTHEAST SHAFT
25	•				CENTER SOUTHWEST SHAFT
26	•				CENTER NORTHEAST SHAFT
27	•				CENTER NORTHWEST SHAFT
28	•				NORTHEAST SHAFT
29	•				NORTHWEST SHAFT
30	•				LAB BUILDING - FIRST FLOOR
31	•				LAB BUILDING - SECOND FLOOR
32	•				LAB BUILDING - EAST STAIR
33	•				LAB BUILDING - WEST STAIR
34	•				BUILDING 16 - FIRST FLOOR
35	•				BUILDING 16 - SECOND FLOOR
36	•				BUILDING 11 - BASEMENT
37	•				BUILDING 11 - FIRST FLOOR
38	•				BUILDING 11 - SECOND FLOOR
1		•			BUILDING 14 - GENERATOR RUNNING
2		•			BUILDING 14 - GENERATOR TROUBLE
3		•			BUILDING 16 - GENERATOR RUNNING
4		•			BUILDING 16 - GENERATOR TROUBLE
5			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 1
6			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 2
7			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 3
8			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 4
9			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 5
10			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 6
11			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 7
12			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 8
13			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 9
14			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 10
15			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 11
16			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 12
17			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 13
18			•		SUPERVISORY VALVE (BASEMENT MAIN RISER) 14
19			•		SUPERVISORY VALVE (BASEMENT BIOTECH WING)
20			•		SUPERVISORY VALVE (2ND FLOOR LOFTS)
21			•		SUPERVISORY VALVE (INSECTORY)
22			•		SUPERVISORY VALVE (INSECTORY LOFTS)
23			•		SUPERVISORY VALVE (BUILDING 15 FIRST FLOOR)
24			•		SUPERVISORY VALVE (BUILDING 15 SECOND FLOOR)
25			•		SUPERVISORY VALVE (1ST FLOOR LAB WING)
26			•		SUPERVISORY VALVE (NORTH HEADERHOUSE)
27			•		SUPERVISORY VALVE (NORTH HEADERHOUSE)
28			•		SUPERVISORY VALVE (NORTH HEADERHOUSE)
29			•		FIRE PUMP #1 - RUNNING
30			•		FIRE PUMP #1 - LOSS OF PHASE
31			•		FIRE PUMP #1 - PHASE REVERSAL
32			•		FIRE PUMP #1 - ALTERNATE POWER SOURCE
33			•		FIRE PUMP #2 - RUNNING
34			•		FIRE PUMP #2 - LOSS OF PHASE
35			•		FIRE PUMP #2 - PHASE REVERSAL
36			•		FIRE PUMP #2 - ALTERNATE POWER SOURCE
1		•			AHU - 1 SHUTDOWN
2		•			MONITORING CONNECTION
3		•			NETWORK CONNECTION



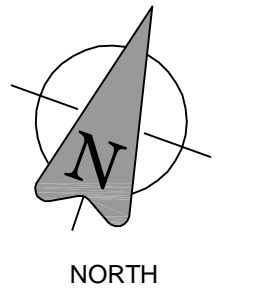
SECOND FLOOR PLAN - ZONING  
SCALE - 1:750



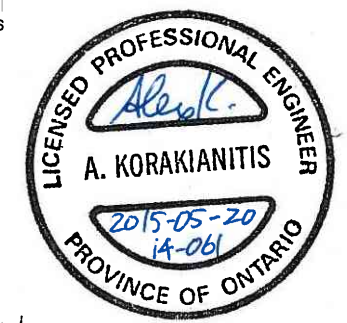
THIRD FLOOR PLAN - ZONING  
SCALE - 1:750

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[Symbol]	EXPOSED CEILING
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NO.	DATE	DESCRIPTION
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3	2015.01.26	ISSUED FOR OWNER'S REVIEW
2	2014.11.24	ISSUED FOR OWNER'S REVIEW
1	2014.08.22	ISSUED FOR OWNER'S REVIEW



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Project Title  
**LONDON FIRE PANEL UPGRADE PROJECT, PHASE II**  
LONDON, ONTARIO

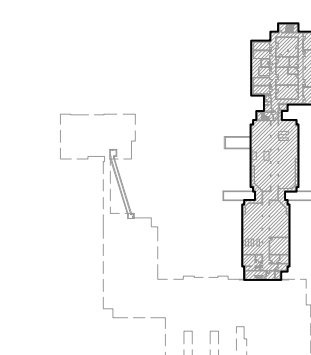
exp Project # 14-061  
Designed: AS Drawn: BR Checked: AK  
Date: MAY 2015 Scale: 1:750

Sheet Title  
**SITE PLAN - FIRE ALARM DEMOLITION & NEW**

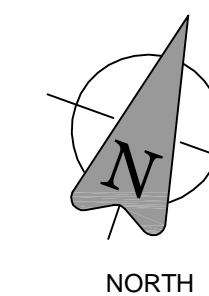
**E002**

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CEILING TYPE LEGEND	
SYMBOL	DESCRIPTION
	SUSPENDED ACOUSTIC CEILING TILE
	EXPOSED CEILING
	PLASTER CEILING



KEY PLAN  
N.T.S.

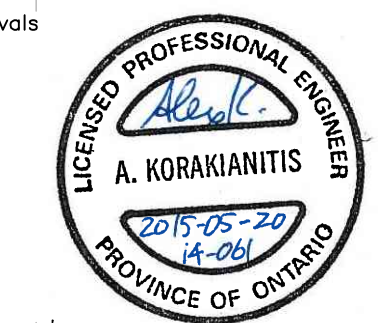


NORTH

Revisions

NO.	DATE	DESCRIPTION
6	2015.05.20	ISSUED FOR TENDER
5	2015.03.17	ISSUED FOR PERMIT
4	2015.02.09	ISSUED FOR FINAL REVIEW
3	2015.01.26	ISSUED FOR OWNER'S REVIEW
2	2014.11.24	ISSUED FOR OWNER'S REVIEW
1	2014.08.22	ISSUED FOR OWNER'S REVIEW

Approvals



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Project Title

**LONDON FIRE PANEL  
UPGRADE PROJECT,  
PHASE II**

LONDON, ONTARIO

exp Project # 14-061

Designed: AS Drawn: BR Checked: AK

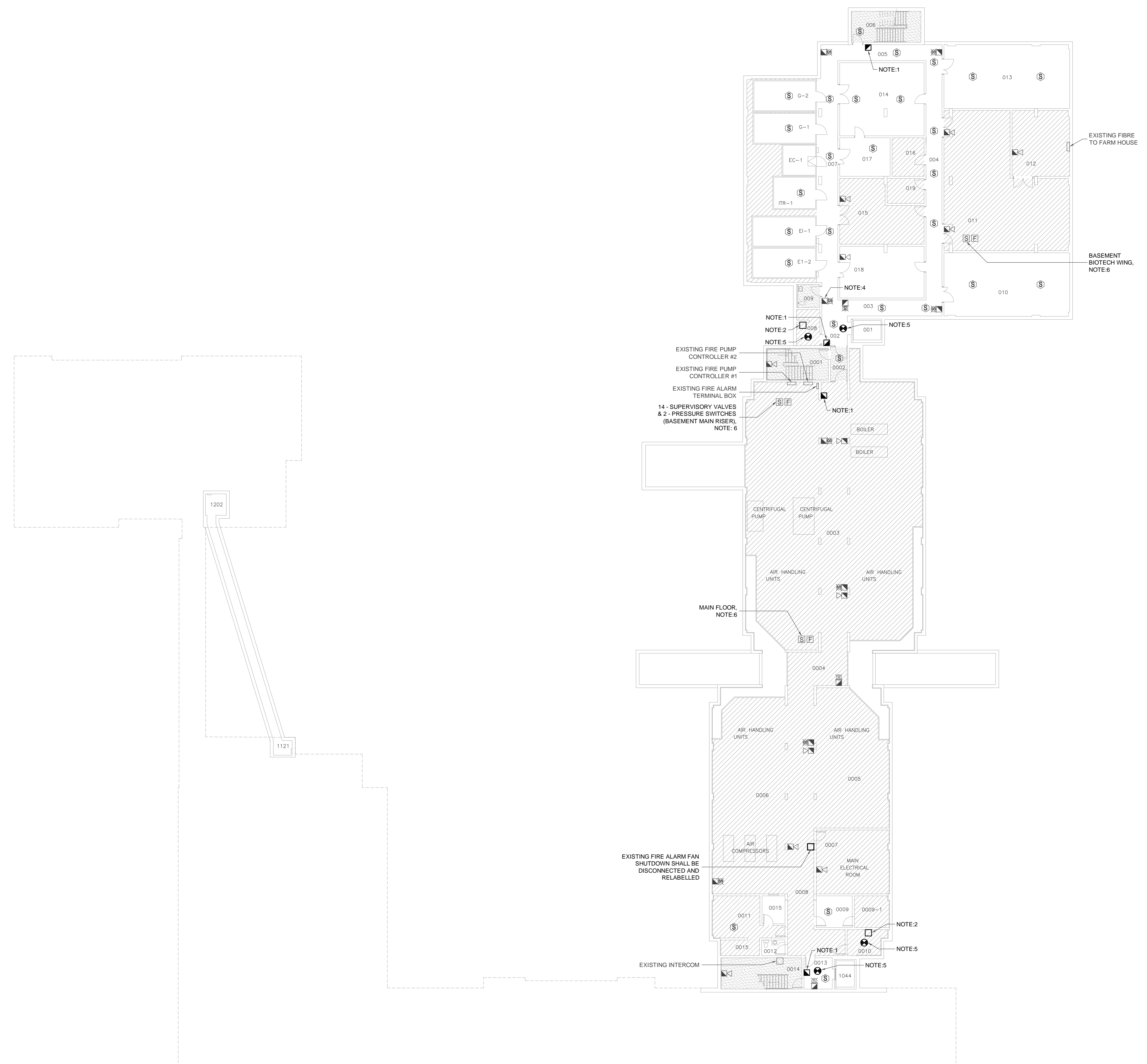
Date: MAY 2015 Scale: 1:200

Sheet Title

**BASEMENT FLOOR  
PLAN - FIRE ALARM  
DEMOLITION & NEW**

**E100**

Sheet Number 3 of 7



- NOTES:**
- EXISTING CONVENTIONAL FIRE ALARM MANUAL PULLSTATION SHALL BE REPLACED WITH NEW ADDRESSABLE MANUAL PULLSTATION AT BARRIER FREE MOUNTING HEIGHT (47" AFF TO CENTRE OF DEVICE).
  - PROVIDE 8 ADDRESSABLE OUTPUT MODULES (1 PER ELEVATOR LOBBY, TOP OF SHAFT, MACHINE ROOM, SHUNT TRIP AND SPARE) FOR CONNECTION TO ELEVATOR. ELEVATOR CONNECTION BY ELEVATOR CONTRACTOR.
  - EXISTING CLASS 'B' INITIATION WIRING SHALL BE REPLACED WITH NEW CLASS 'A' DCLC AS PER CANULC-S24-06.
  - STROBE LIGHT IS PART OF WASHROOM EMERGENCY CALL SYSTEM AND NOT CONNECTED TO THE FIRE ALARM SYSTEM. STROBE SHALL REMAIN.
  - EXISTING CONVENTIONAL DETECTOR SHALL BE REPLACED WITH NEW ADDRESSABLE DETECTOR.
  - PROVIDE ADDRESSABLE INPUT MODULE FOR EACH SUPERVISORY VALVE AND PRESSURE SWITCH. PRESSURE SWITCHES SHALL BE ANNUNCIATED ON THEIR RESPECTIVE ALARM ZONES. SUPERVISORY VALVES SHALL BE ANNUNCIATED DISCRETELY. LABEL ANNUNCIATION PANEL TO MATCH TAG ON SPRINKLER DEVICE.
  - DEVICES SHOWN IN LIGHT LINEWEIGHT ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
  - DEVICES SHOWN IN DARK LINEWEIGHT SHALL BE PROVIDED AS NEW.
  - INITIATION DEVICE LOCATIONS SHALL BE AS PER CANULC-S24-06 (RE: DISTANCE TO WALLS AND HVAC INLET/OUTLET). ADJUST DEVICE LOCATIONS ACCORDINGLY. MAINTAIN A CLEAR SPACE OF AT LEAST 450mm AROUND AND BELOW HVAC DIFFUSER (SUPPLY / RETURN).
  - PROVIDE ISOLATION MODULES ON THE DATA COMMUNICATION LINK WIRING AS PER ULC REQUIREMENTS (MODULES ARE NOT SHOWN ON DRAWINGS). INDICATE LOCATION OF MODULES ON AS-BUILT DRAWINGS.
  - WHERE WALL MOUNTED DEVICE IS INDICATED TO BE REMOVED, REMOVE DEVICE AND PROVIDE STAINLESS STEEL COVERPLATE. WHERE CEILING MOUNTED DEVICE IS INDICATED TO BE REMOVED, PATCH AND PAINT OR REPLACE CEILING TILE AS APPLICABLE.

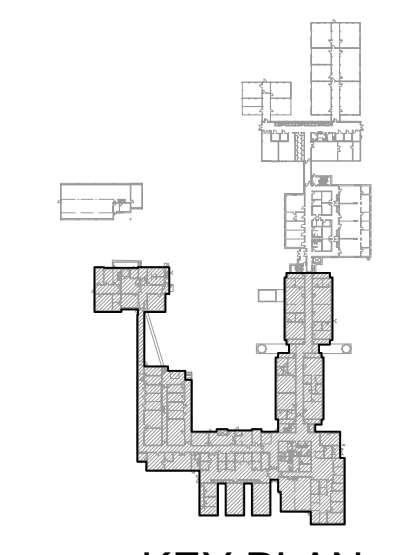
**BASEMENT FLOOR PLAN - FIRE ALARM DEMOLITION & NEW**  
SCALE - 1:200

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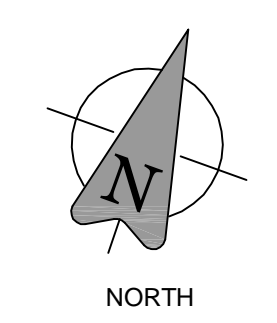


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CEILING TYPE LEGEND	
SYMBOL	DESCRIPTION
[Symbol]	SUSPENDED ACOUSTIC CEILING TILE
[Symbol]	EXPOSED CEILING
[Symbol]	PLASTER CEILING



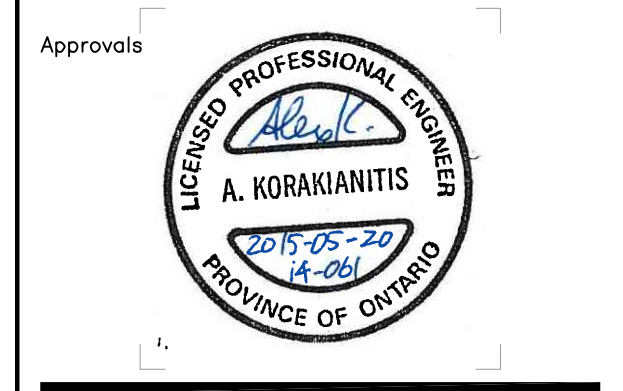
KEY PLAN  
N.T.S.



NORTH

Revisions

NO.	DATE	DESCRIPTION
6	2015.05.20	ISSUED FOR TENDER
5	2015.03.17	ISSUED FOR PERMIT
4	2015.02.09	ISSUED FOR FINAL REVIEW
3	2015.01.28	ISSUED FOR OWNER'S REVIEW
2	2014.11.24	ISSUED FOR OWNER'S REVIEW
1	2014.08.22	ISSUED FOR OWNER'S REVIEW



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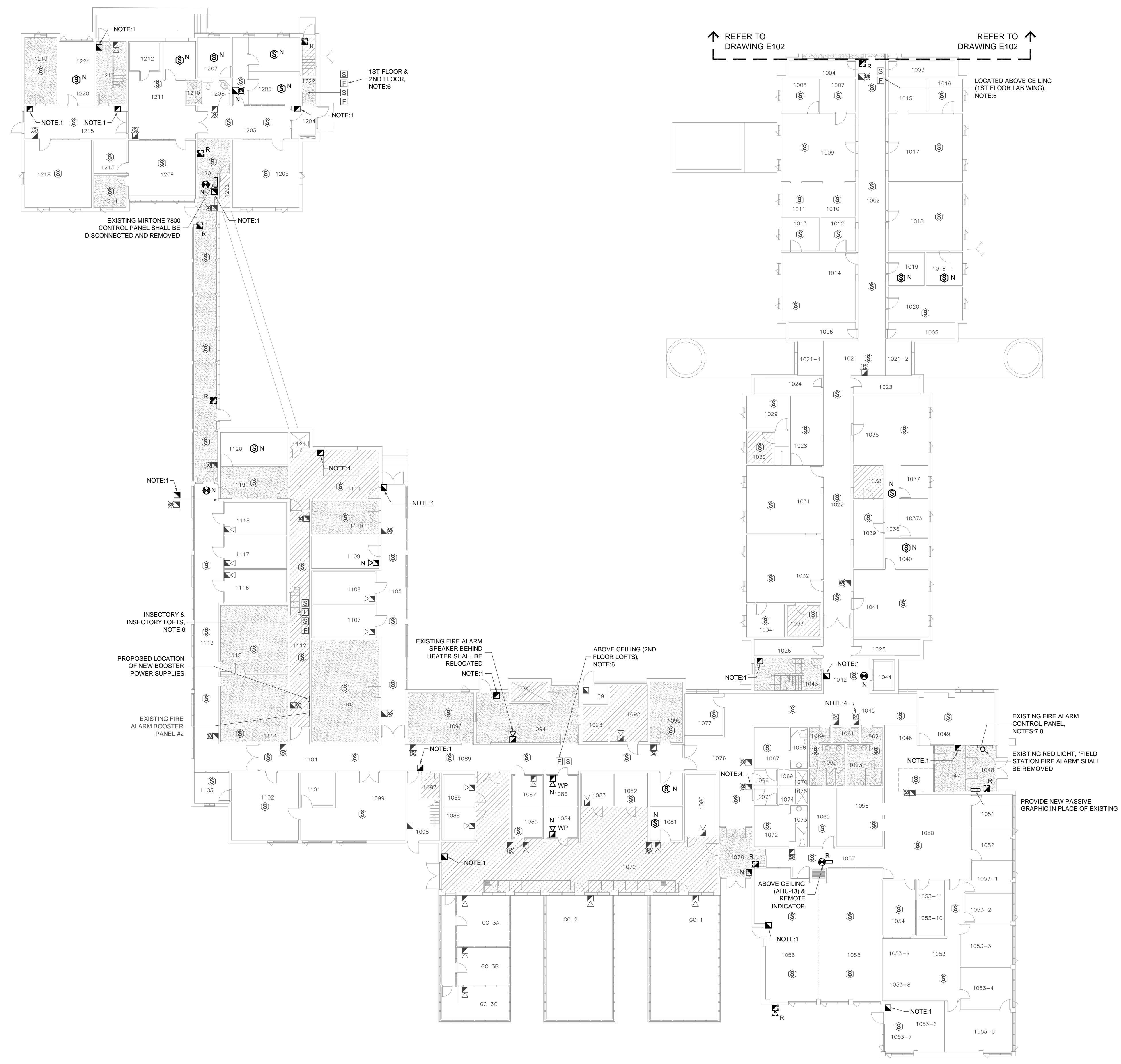
Project Title  
**LONDON FIRE PANEL UPGRADE PROJECT, PHASE II**  
LONDON, ONTARIO

exp Project # 14-061  
Designed: AS Drawn: BR Checked: AK  
Date: MAY 2015 Scale: 1:200

Sheet Title  
**PARTIAL FIRST FLOOR PLAN - FIRE ALARM DEMOLITION & NEW**

**E101**

Sheet Number 4 of 7



PARTIAL FIRST FLOOR PLAN - FIRE ALARM DEMOLITION & NEW  
SCALE - 1:200

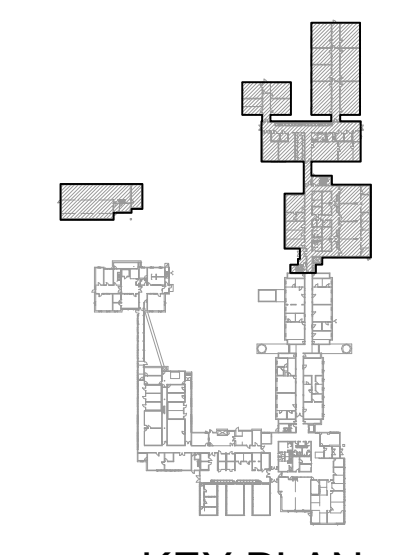
- NOTES:
- EXISTING CONVENTIONAL FIRE ALARM MANUAL PULLSTATION SHALL BE REPLACED WITH NEW ADDRESSABLE MANUAL PULLSTATION AT BARRIER FREE MOUNTING HEIGHT (47" AFF TO CENTRE OF DEVICE).
  - EXISTING CONVENTIONAL FIRE ALARM MANUAL PULLSTATION SHALL BE CONNECTED TO NEW ADDRESSABLE INITIATION LOOP VIA AN ADDRESSABLE INPUT MODULE IN THE HEADER HOUSE CEILING SPACE.
  - PROVIDE ADDRESSABLE INPUT MODULE IN CEILING SPACE AND CONNECTION OF CONVENTIONAL MANUAL PULLSTATION.
  - STROBE LIGHT IS PART OF WASHROOM EMERGENCY CALL SYSTEM AND NOT CONNECTED TO THE FIRE ALARM SYSTEM. STROBE SHALL REMAIN.
  - EXISTING CONVENTIONAL DETECTOR SHALL BE REPLACED WITH NEW ADDRESSABLE DETECTOR.
  - PROVIDE ADDRESSABLE INPUT MODULE FOR EACH SUPERVISORY VALVE AND PRESSURE SWITCH. PRESSURE SWITCHES SHALL BE ANNUNCIATED ON THEIR RESPECTIVE ALARM ZONES. SUPERVISORY VALVES SHALL BE ANNUNCIATED DISCREETLY. LABEL ANNUNCIATION PANEL TO MATCH TAG ON SPRINKLER DEVICE.
  - EXISTING FIRE ALARM CONTROL PANEL SHALL REMAIN. ALL EXISTING SIGNALLING CIRCUITS SHALL REMAIN CONNECTED. ALL INITIATION CIRCUITS SHALL BE REPLACED WITH NEW CLASS A (DCL) AND NEW ADDRESSABLE DEVICES.
  - PROVIDE NETWORK INTERFACE FOR EXISTING FIRE ALARM CONTROL PANEL AND PROGRAM TO ISSUE AN EMAIL TO A PRESCRIBED LIST WHEN AN EVENT OCCURS. PROVIDE NETWORK CONNECTION TO NETWORK INTERFACE FROM NORTH HEADERHOUSE.
  - NEW SIGNALLING DEVICES MAY BE CONNECTED TO EXISTING SIGNALLING ZONES WITH CAPACITY. WHERE CAPACITY IS NOT AVAILABLE, PROVIDE NEW REMOTE BOOSTER POWER SUPPLIES COMPLETE WITH BATTERY BACKUP. PROVIDE CONNECTION TO NEAREST PANELBOARD WITH CAPACITY. ALL BOOSTER POWER SUPPLIES SHALL BE LOCATED IN A 1HR FIRE RATED ROOM.
  - DEVICES SHOWN IN LIGHT LINEWEIGHT ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
  - DEVICES SHOWN IN DARK LINEWEIGHT SHALL BE PROVIDED AS NEW.
  - INITIATION DEVICE LOCATIONS SHALL BE AS PER CANULC-S524-06 (RE: DISTANCE TO WALLS AND HVAC INLET/OUTLET). ADJUST DEVICE LOCATIONS ACCORDINGLY. MAINTAIN A CLEAR SPACE OF AT LEAST 450mm AROUND AND BELOW HVAC DIFFUSER (SUPPLY, RETURN).
  - PROVIDE ISOLATION MODULES ON THE DATA COMMUNICATION LINK WIRING AS PER ILC REQUIREMENTS (MODULES ARE NOT SHOWN ON DRAWINGS). INDICATE LOCATION OF MODULES ON AS-BUILT DRAWINGS.
  - WHERE WALL MOUNTED DEVICE IS INDICATED TO BE REMOVED, REMOVE DEVICE AND PROVIDE STAINLESS STEEL COVERPLATE. WHERE CEILING MOUNTED DEVICE IS INDICATED TO BE REMOVED, PATCH AND PAINT OR REPLACE CEILING TILE AS APPLICABLE.

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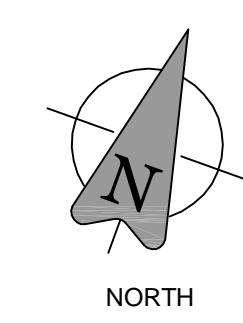


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CEILING TYPE LEGEND	
SYMBOL	DESCRIPTION
	SUSPENDED ACOUSTIC CEILING TILE
	EXPOSED CEILING
	PLASTER CEILING



KEY PLAN  
N.T.S.



Revisions

NO.	DATE	DESCRIPTION
6	2015.05.20	ISSUED FOR TENDER
5	2015.03.17	ISSUED FOR PERMIT
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Project Title  
**LONDON FIRE PANEL UPGRADE PROJECT, PHASE II**  
LONDON, ONTARIO

exp Project # **14-061**

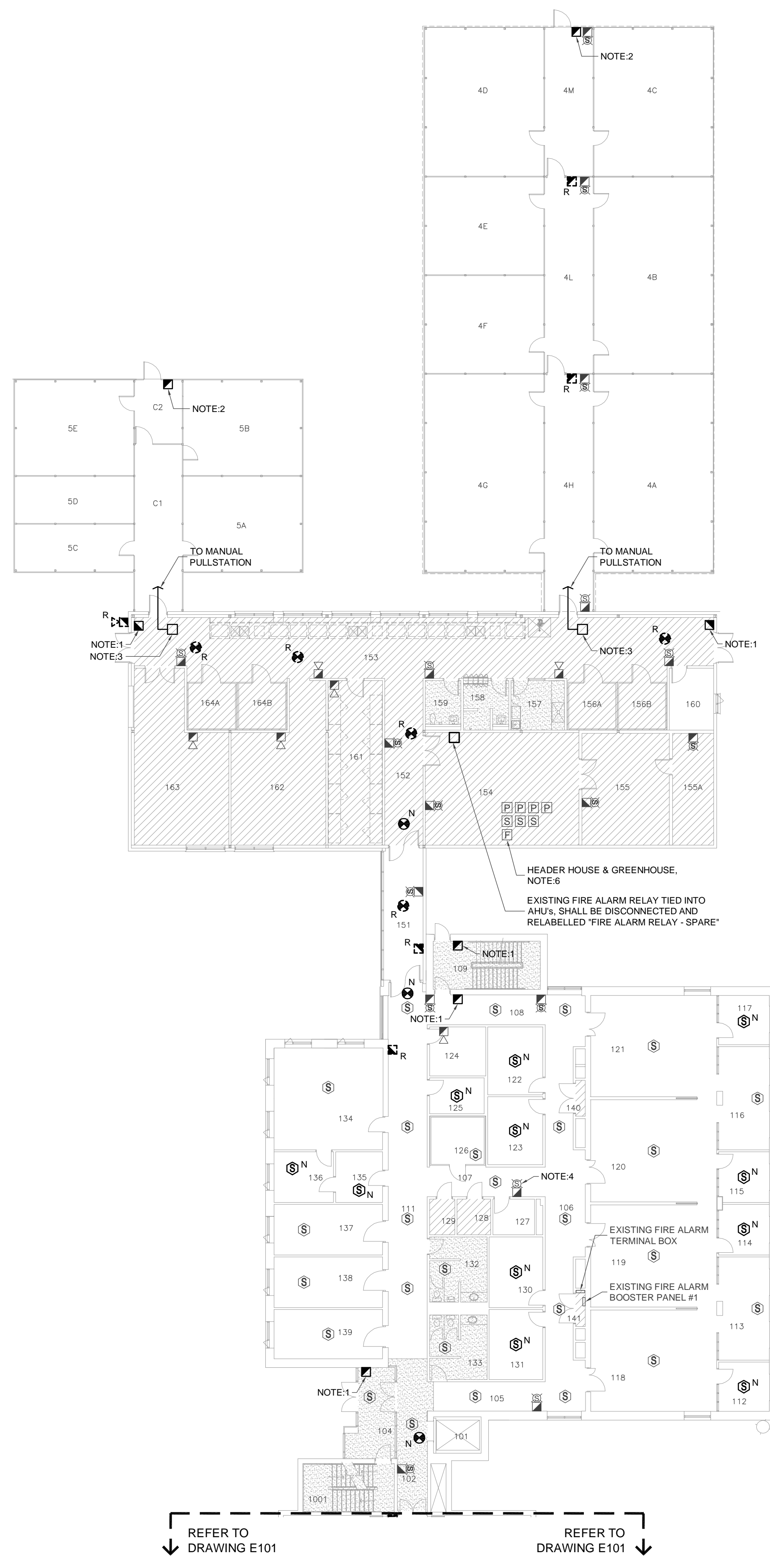
Designed: AS    Drawn: BR    Checked: AK

Date: MAY 2015    Scale: 1:200

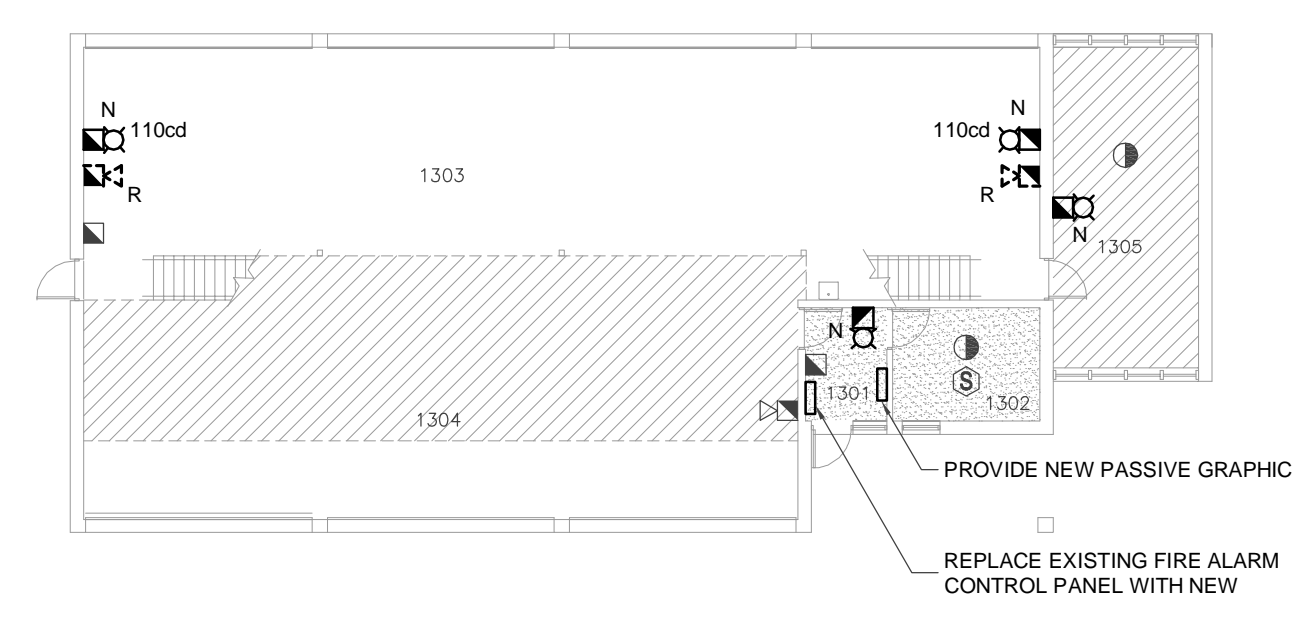
Sheet Title  
**PARTIAL FIRST FLOOR PLAN & GARAGE FLOOR PLAN - FIRE ALARM DEMOLITION & NEW**

**E102**

Sheet Number 5 of 7



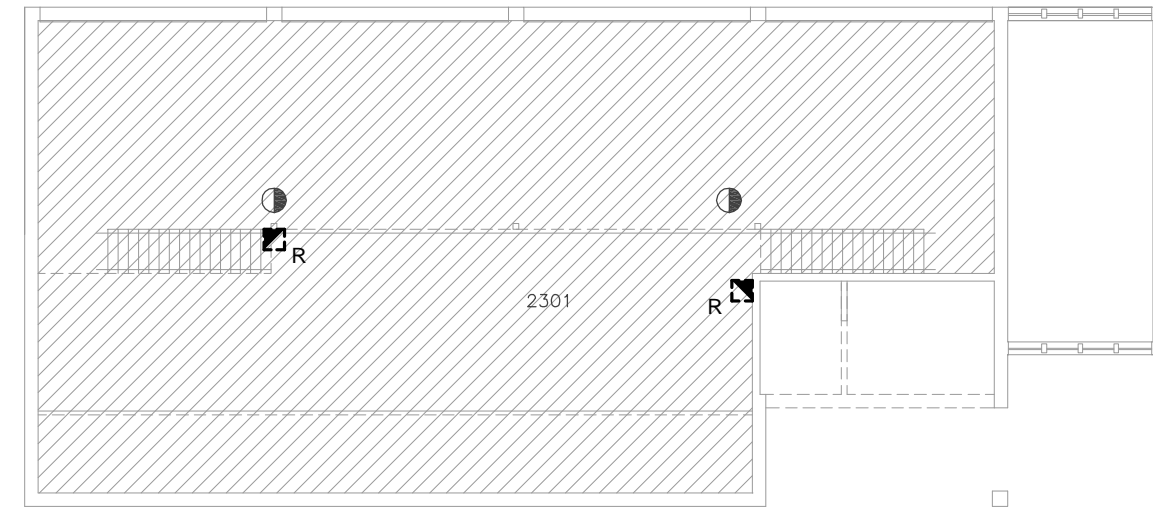
- NOTES:**
- EXISTING CONVENTIONAL FIRE ALARM MANUAL PULLSTATION SHALL BE REPLACED WITH NEW ADDRESSABLE MANUAL PULLSTATION AT BARRIER FREE MOUNTING HEIGHT (47" AFF TO CENTRE OF DEVICE).
  - EXISTING CONVENTIONAL FIRE ALARM MANUAL PULLSTATION SHALL BE CONNECTED TO NEW ADDRESSABLE INITIATION LOOP VIA AN ADDRESSABLE INPUT MODULE IN THE HEADER HOUSE CEILING SPACE. PROVIDE CONNECTION OF EXISTING DOOR MAG LOCKS TO AUXILIARY CONTACT ON PULL STATION. EXTEND WIRING TO EXISTING DOOR MAG LOCK LOCATIONS WHERE PULL STATION HAS BEEN REMOVED.
  - PROVIDE ADDRESSABLE INPUT MODULE IN CEILING SPACE AND CONNECTION OF CONVENTIONAL MANUAL PULLSTATION.
  - STROBE LIGHT IS PART OF WASHROOM EMERGENCY CALL SYSTEM AND NOT CONNECTED TO THE FIRE ALARM SYSTEM. STROBE SHALL REMAIN.
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  - DEVICES SHOWN IN LIGHT LINEWEIGHT ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
  - DEVICES SHOWN IN DARK LINEWEIGHT SHALL BE PROVIDED AS NEW.
  - INITIATION DEVICE LOCATIONS SHALL BE AS PER CANULC-S534-06 (RE: DISTANCE TO WALLS AND HVAC INLET/OUTLET). ADJUST DEVICE LOCATIONS ACCORDINGLY. MAINTAIN A CLEAR SPACE OF AT LEAST 450mm AROUND AND BELOW HVAC DIFFUSER (SUPPLY / RETURN).
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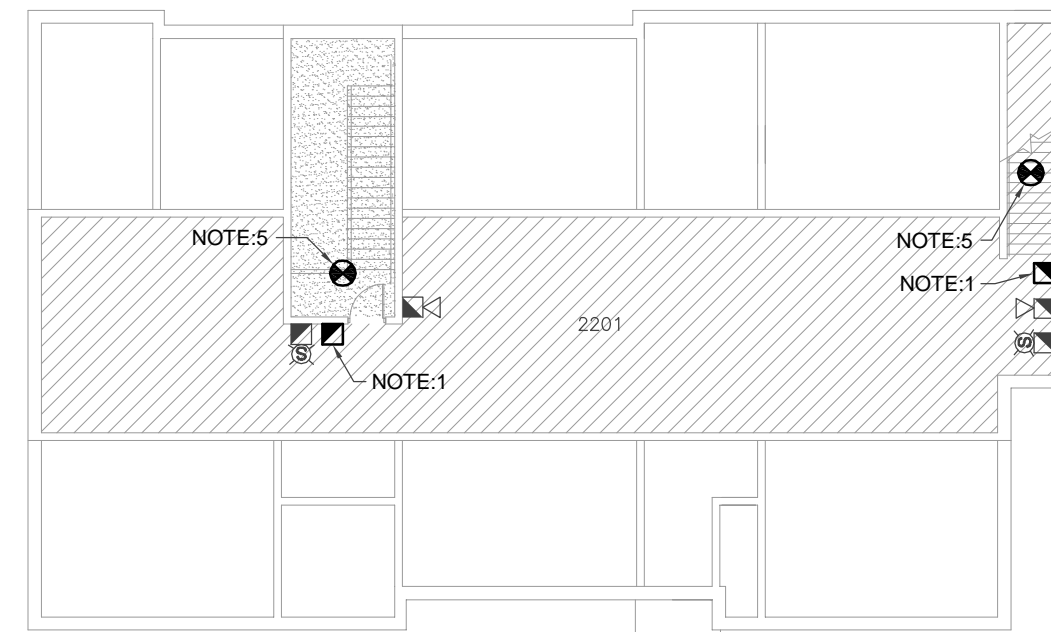
GARAGE FLOOR PLAN - FIRE ALARM DEMOLITION & NEW  
SCALE - 1:200

PARTIAL FIRST FLOOR PLAN - FIRE ALARM DEMOLITION & NEW  
SCALE - 1:200

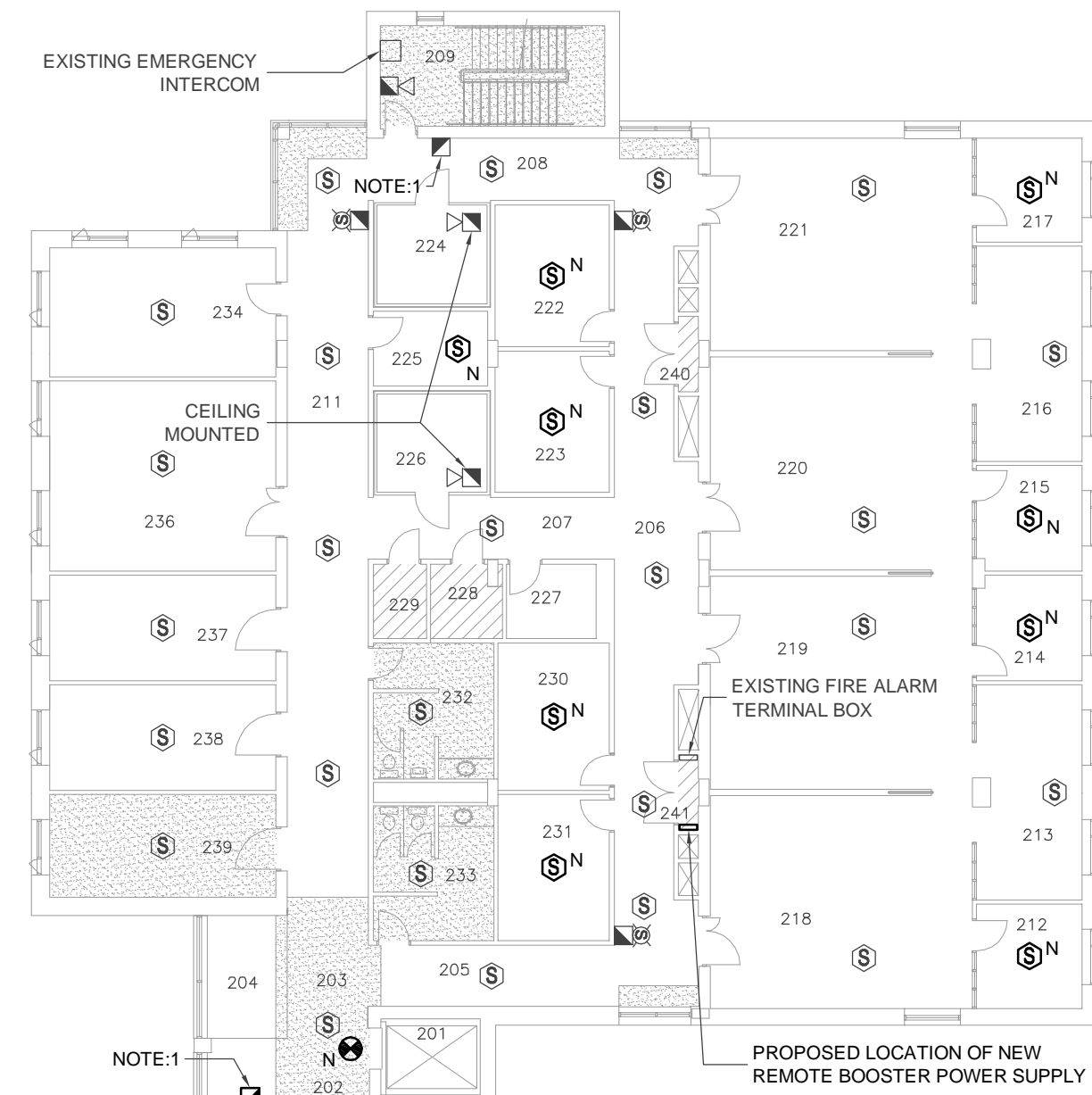




**GARAGE MEZZANINE FLOOR PLAN - FIRE ALARM DEMOLITION & NEW**  
SCALE - 1:200



**SECOND FLOOR PLAN - FIRE ALARM DEMOLITION & NEW**  
SCALE - 1:200

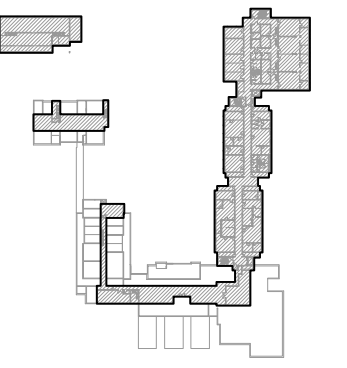


- NOTES:**
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  - PROVIDE ADDRESSABLE INPUT MODULE IN CEILING SPACE AND CONNECTION OF CONVENTIONAL MANUAL PULLSTATION.
  - STROBE LIGHT IS PART OF WASHROOM EMERGENCY CALL SYSTEM AND NOT CONNECTED TO THE FIRE ALARM SYSTEM. STROBE SHALL REMAIN.
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  - DEVICES SHOWN IN LIGHT LINEWEIGHT ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
  - DEVICES SHOWN IN DARK LINEWEIGHT SHALL BE PROVIDED AS NEW.
  - INITIATION DEVICE LOCATIONS SHALL BE AS PER CANULC-S524-06 (RE: DISTANCE TO WALLS AND HVAC INLET/OUTLET). ADJUST DEVICE LOCATIONS ACCORDINGLY. MAINTAIN A CLEAR SPACE OF AT LEAST 450mm AROUND AND BELOW HVAC DIFFUSER (SUPPLY / RETURN).
  - PROVIDE ISOLATION MODULES ON THE DATA COMMUNICATION LINK WIRING AS PER ILC REQUIREMENTS (MODULES ARE NOT SHOWN ON DRAWINGS). INDICATE LOCATION OF MODULES ON AS-BUILT DRAWINGS.
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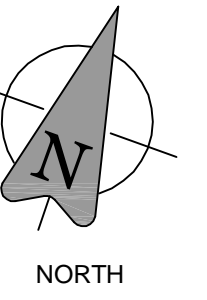
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**CEILING TYPE LEGEND**

SYMBOL	DESCRIPTION
	SUSPENDED ACOUSTIC CEILING TILE
	EXPOSED CEILING
	PLASTER CEILING



**KEY PLAN**  
N.T.S.

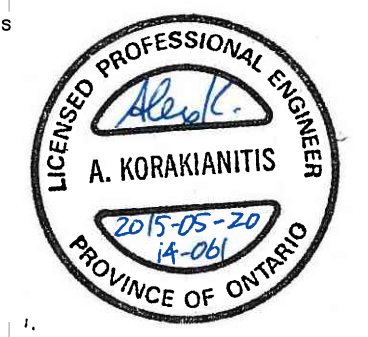


NORTH

Revisions

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6	2015.05.20	ISSUED FOR TENDER
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Project Title

**LONDON FIRE PANEL UPGRADE PROJECT, PHASE II**

LONDON, ONTARIO

exp Project # 14-061

Designed: AS Drawn: BR Checked: AK  
Date: MAY 2015 Scale: 1:200

Sheet Title

**SECOND FLOOR PLAN & GARAGE MEZZANINE FLOOR PLAN - FIRE ALARM DEMOLITION & NEW**

**E103**

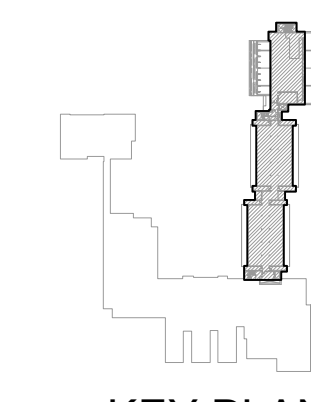
Sheet Number 6 of 7



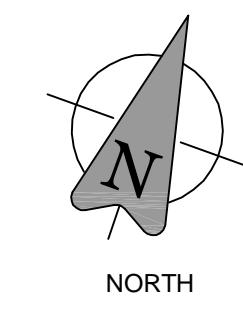
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**CEILING TYPE LEGEND**

SYMBOL	DESCRIPTION
[Symbol]	SUSPENDED ACOUSTIC CEILING TILE
[Symbol]	EXPOSED CEILING
[Symbol]	PLASTER CEILING



**KEY PLAN**  
N.T.S.

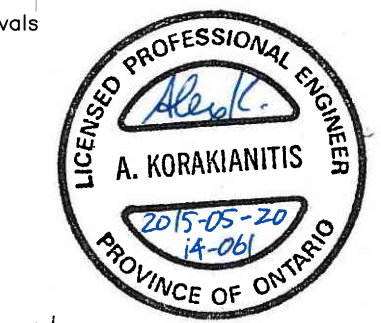


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Approvals



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Project Title

**LONDON FIRE PANEL UPGRADE PROJECT, PHASE II**

LONDON, ONTARIO

exp Project # 14-061

Designed: AS Drawn: BR Checked: AK

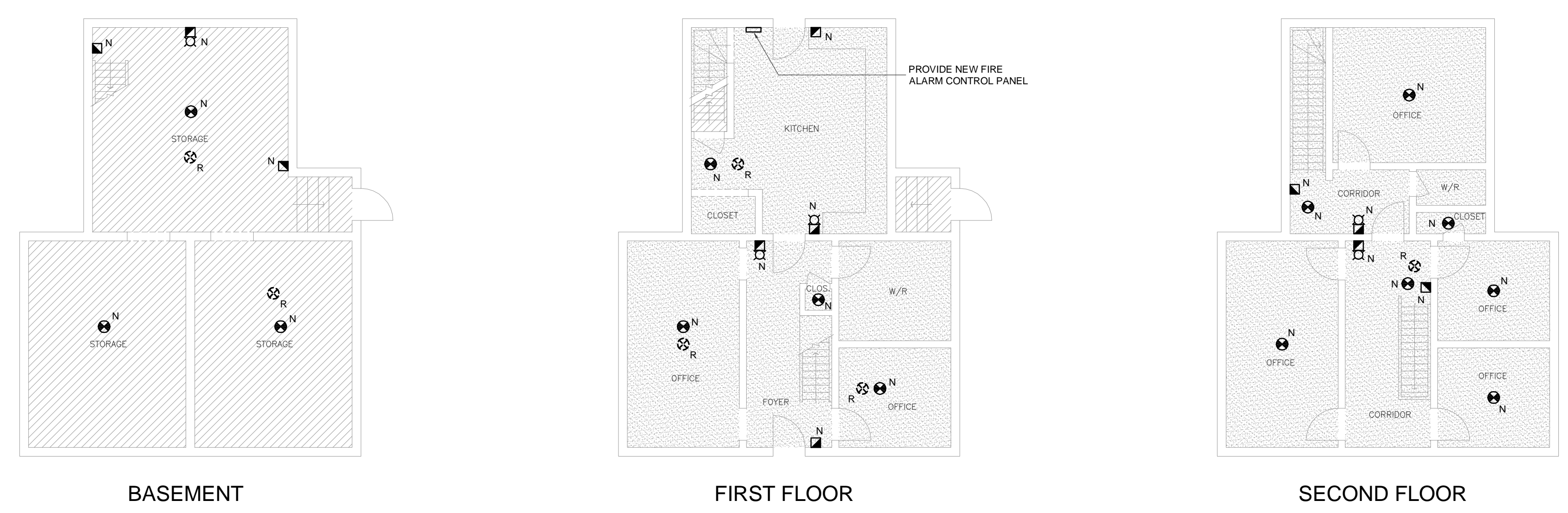
Date: MAY 2015 Scale: AS NOTED

Sheet Title

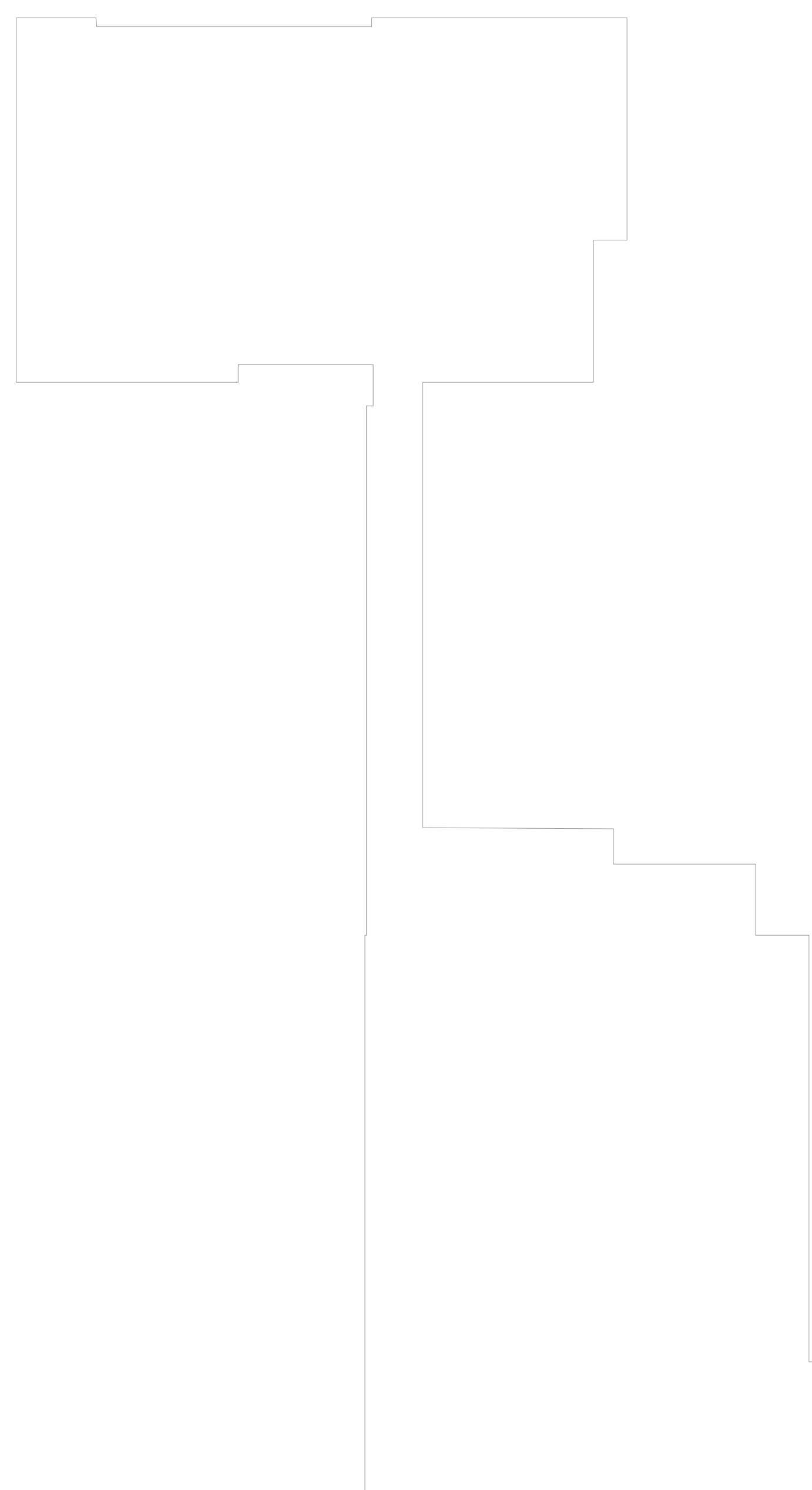
**FARM HOUSE & THIRD FLOOR PLAN - FIRE ALARM DEMOLITION & NEW**

**E104**

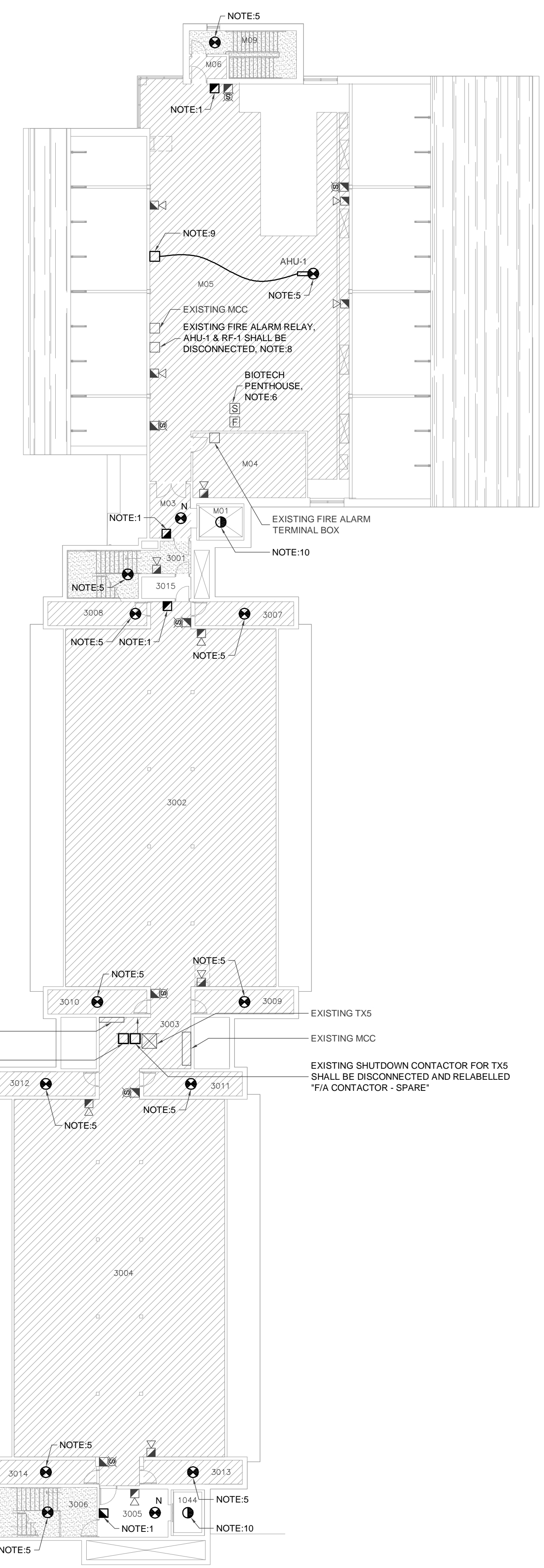
Sheet Number 7 of 7



**FARM HOUSE - FIRE ALARM DEMOLITION & NEW**  
SCALE - 1:100



**THIRD FLOOR PLAN - FIRE ALARM DEMOLITION & NEW**  
SCALE - 1:200



- NOTES:**
- EXISTING CONVENTIONAL FIRE ALARM MANUAL PULLSTATION SHALL BE REPLACED WITH NEW ADDRESSABLE MANUAL PULLSTATION AT BARRIER FREE MOUNTING HEIGHT (47" AFF TO CENTRE OF DEVICE).
  - EXISTING CONVENTIONAL FIRE ALARM MANUAL PULLSTATION SHALL BE CONNECTED TO NEW ADDRESSABLE INITIATION LOOP VIA AN ADDRESSABLE INPUT MODULE IN THE HEADER HOUSE CEILING SPACE.
  - PROVIDE ADDRESSABLE INPUT MODULE IN CEILING SPACE AND CONNECTION OF CONVENTIONAL MANUAL PULLSTATION.
  - STROBE LIGHT IS PART OF WASHROOM EMERGENCY CALL SYSTEM AND NOT CONNECTED TO THE FIRE ALARM SYSTEM. STROBE SHALL REMAIN.
  - EXISTING CONVENTIONAL DETECTOR SHALL BE REPLACED WITH NEW ADDRESSABLE DETECTOR.
  - PROVIDE ADDRESSABLE INPUT MODULE FOR EACH SUPERVISORY VALVE AND PRESSURE SWITCH. PRESSURE SWITCHES SHALL BE ANNUNCIATED ON THEIR RESPECTIVE ALARM ZONES. SUPERVISORY VALVES SHALL BE ANNUNCIATED DISCRETELY. LABEL ANNUNCIATION PANEL TO MATCH TAG ON SPRINKLER DEVICE.
  - NEW SIGNALLING DEVICES MAY BE CONNECTED TO EXISTING SIGNALLING ZONES WITH CAPACITY. WHERE CAPACITY IS NOT AVAILABLE, PROVIDE NEW REMOTE BOOSTER POWER SUPPLIES COMPLETE WITH BATTERY BACKUP. PROVIDE CONNECTION TO NEAREST PANELBOARD WITH CAPACITY. ALL BOOSTER POWER SUPPLIES SHALL BE LOCATED IN A 1HR FIRE RATED ROOM.
  - FIRE ALARM SHUTDOWN RELAY FOR AHU-1 SHALL BE CONNECTED TO ADDRESSABLE OUTPUT MODULE AND PROGRAMMED TO ACTIVATE WITH AHU-1 DUCT SMOKE DETECTOR.
  - PROVIDE DUCT SMOKE DETECTOR REMOTE TEST STATION AT A LOCATION THAT IS CONVENIENT AND ACCESSIBLE FOR TESTING.
  - TEMPERATURE SET POINT SHALL BE LOWER THAN SPRINKLER HEAD SET POINT. CONFIRM SPRINKLER HEAD TEMPERATURE SET POINT PRIOR TO SHOP DRAWING SUBMISSION.
  - DEVICES SHOWN IN LIGHT LINEWEIGHT ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
  - DEVICES SHOWN IN DARK LINEWEIGHT SHALL BE PROVIDED AS NEW.
  - INITIATION DEVICE LOCATIONS SHALL BE AS PER CAN/ULC-S224-06 (RE: DISTANCE TO WALLS AND HVAC INLET/OUTLET). ADJUST DEVICE LOCATIONS ACCORDINGLY. MAINTAIN A CLEAR SPACE OF AT LEAST 450mm AROUND AND BELOW HVAC DIFFUSER (SUPPLY / RETURN).
  - PROVIDE ISOLATION MODULES ON THE DATA COMMUNICATION LINK WIRING AS PER ULC REQUIREMENTS (MODULES ARE NOT SHOWN ON DRAWINGS). INDICATE LOCATION OF MODULES ON AS-BUILT DRAWINGS.
  - WHERE WALL MOUNTED DEVICE IS INDICATED TO BE REMOVED, REMOVE DEVICE AND PROVIDE STAINLESS STEEL COVERPLATE. WHERE CEILING MOUNTED DEVICE IS INDICATED TO BE REMOVED, PATCH AND PAINT OR REPLACE CEILING TILE AS APPLICABLE.



## 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
- Personnel Screening, Consent and Authorization Form

## 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

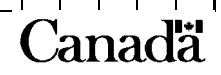
If yes, give name of employer, level and year of screening. \_\_\_\_\_ Y

**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





PERSONNEL SCREENING, CONSENT AND AUTHORIZATION FORM

Surname and full given names	Date of birth	Y	M	D
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**C CONSENT AND VERIFICATION (To be completed by the applicant and authorized Departmental/Agency/Organizational Official)**

Checks Required (See Instructions)	Applicant's initials	Name of official (print)	Official's initials	Official's Telephone number
1. <input type="checkbox"/> Date of birth, address, education, professional qualifications, employment history, personal character references				( )
2. <input type="checkbox"/> Criminal record check				( )
3. <input type="checkbox"/> Credit check (financial assessment, including credit records check)				( )
4. <input type="checkbox"/> Loyalty (security assessment only)				
5. <input type="checkbox"/> Other (specify, see instructions)				( )

**The Privacy Act Statement**

The information on this form is required for the purpose of providing a security screening assessment. It is collected under the authority of subsection 7(1) of the *Financial Administration Act* and the Government Security Policy (GSP) of the Government of Canada, and is protected by the provisions of the *Privacy Act* in institutions that are covered by the *Privacy Act*. Its collection is mandatory. A refusal to provide information will lead to a review of whether the person is eligible to hold the position or perform the contract that is associated with this Personnel Screening Request. Depending on the level of security screening required, the information collected by the government institution may be disclosed to the Royal Canadian Mounted Police (RCMP) and the Canadian Security Intelligence Service (CSIS), which conduct the requisite checks and/or investigation in accordance with the GSP and to entities outside the federal government (e.g. credit bureaus). It is used to support decisions on individuals working or applying to work through appointment, assignment or contract, transfers or promotions. It may also be used in the context of updating, or reviewing for cause, the reliability status, security clearance or site access, all of which may lead to a re-assessment of the applicable type of security screening. Information collected by the government institution, and information gathered from the requisite checks and/or investigation, may be used to support decisions, which may lead to discipline and/or termination of employment or contractual agreements. The personal information collected is described in Standard PIB PSU 917 (Personnel Security Screening) which is used by all government agencies, except the Department of National Defence PIB DND/PPE 834 (Personnel Security Investigation File), RCMP PIB CMP PPU 065 (Security/Reliability Screening Records), CSIS PIB SIS PPE 815 (Employee Security), and PWGSC PIB PWGSC PPU 015 (Personnel Clearance and Reliability Records) used for Canadian Industry Personnel. Personal information related to security assessments is also described in the CSIS PIB SIS PPU 005 (Security Assessments/Advice).

I, the undersigned, do consent to the disclosure of the preceding information including my photograph for its subsequent verification and/or use in an investigation for the purpose of providing a security screening assessment. By consenting to the above, I acknowledge that the verification and/or use in an investigation of the preceding information may also occur when the reliability status, security clearance or site access are updated or otherwise reviewed for cause under the Government Security Policy. My consent will remain valid until I no longer require a reliability status, a security clearance or a site access clearance, my employment or contract is terminated, or until I otherwise revoke my consent, in writing, to the authorized security official.

\_\_\_\_\_  
Signature Date (Y/M/D)

**D REVIEW (To be completed by the authorized Departmental/Agency/Organizational Official responsible for ensuring the completion of sections A, B and C)**

Name and title	Telephone number
Address	Facsimile number

**E APPROVAL (To be completed by authorized Departmental/Agency/Organizational Security Official only)**

I, the undersigned, as the authorized security official, do hereby approve the following level of screening.

Reliability Status

Approved Reliability Status       Not approved

\_\_\_\_\_  
Name and title

\_\_\_\_\_  
Signature      \_\_\_\_\_  
Date (Y/M/D)

Security Clearance (if applicable)

Level I       Level II       Level III       Not recommended

\_\_\_\_\_  
Name and title

\_\_\_\_\_  
Signature      \_\_\_\_\_  
Date (Y/M/D)

Comments

\_\_\_\_\_



**PHOTO**  
(for Level III T.S.,  
and/or upon request  
- see instructions)





## 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.