

## INVITATION TO TENDER

**RETURN BIDS TO:**

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

Agriculture and Agri-Food Canada (AAFC)  
 Central Experimental Farm (CEF)  
 K.W. Neatby Building #20 (Main Entrance)  
 960 Carling Avenue, Ottawa, ON K1A 0C6  
 Attn: Daniel Lafreniere  
 Solocitation #20-1147

**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 Roof replacement - Building 12 , CEF, Ottawa		
Solicitation No. 20-1147		Date 2020-11-20
Client Reference No. CEF20 008		
File No. 20-1147		
Solicitation Closes: Monday, December 7, 2020, at 02:00 PM, EST.		
F.O.B <input type="radio"/> Plant <input checked="" type="radio"/> Destination <input type="radio"/> Other		
Address Enquiries to: Daniel Lafreniere		
Title: Senior Contracts Officer		
Email: daniel.lafreniere@canada.ca		
Telephone Number	Ext.	Fax Number
613 759-6876		
Destination Agriculture and Agri-Food Canada Central Experimental Farm 960 Carling Ave. Ottawa ON K1A 0C6		

**Instructions: See Herein**

Delivery Required	Delivery Offered	
Vendor / Firm Name and Address		
Telephone Number	Ext.	Fax Number
Name and title of person authorized to sign on behalf of Vendor / Firm (type or print)		
Signature _____		Date _____

**ISSUING OFFICE**

Agriculture and Agri-Food Canada  
 Integrated Services  
 Ottawa, Ontario  
 K1A 0C6

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### SI01 BID DOCUMENTS

- 1) The following are the bid documents:
  - (a) SPECIAL INSTRUCTIONS TO BIDDERS;
  - (b) INSTRUCTIONS TO BIDDERS - Form A5319-E; and,
  - (c) BID AND ACCEPTANCE FORM - Form A5312-E and any attachments thereto.

Canada reserves the right to revise or amend the Bid Documents prior to the date set for opening bids. Such revisions or amendments, if any, will be announced by an addendum or addenda to the documents.

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. The Contracting Officer for the purpose of this bid is:  
  
Daniel Lafreniere
- 2) Except for the approval of alternative materials as described in IB14 of the 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.
- 3) 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.
- 4) All enquiries and other communications related to this bid sent throughout the solicitation period are to be directed ONLY to the Contracting Officer. Non-compliance with this requirement during the solicitation period can, for that reason alone, result in disqualification of a bid.

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

### **SI03 NON-MANDATORY SITE VISIT**

- 1) Before submitting their bid, the Contractor shall examine the jobsite, construction and storage areas, compare drawings and specifications with existing conditions, and fully satisfy themselves as to all data and matters required for the completion of the contract.
- 2) There will be a site visit on Friday, November, 27, 2020 from 08:00 AM to 04:00 PM EST.

The work site is a publicly accessible area (exterior only), therefore, AAFC encourages the bidders to visit the site on their own, on the date and between the hours specified. Interested bidders are to proceed to building 12, CEF Ottawa.

### **SI04 REVISION OF BID**

- 1) A bid may be revised by letter in accordance with IB10 of the INSTRUCTIONS TO BIDDERS.

### **SI05 BID RESULTS**

- 1) Following bid closing, bid results may be obtained from the bid receiving office by email at [daniel.lafreniere@canada.ca](mailto:daniel.lafreniere@canada.ca).

### **SI06 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.

### **SI07 CONSTRUCTION DOCUMENTS**

- 1) The successful contractor will be provided with one paper copy of the sealed and signed drawings, 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.

### **SI08 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:
  - Unscreened personnel may be used for the work. Unscreened personnel will require an escort provided by AAFC.

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

### **SI09 INTEGRITY PROVISIONS – DECLARATION OF CONVICTED OFFENCES**

As applicable, pursuant to IB18 of the Declaration of Convicted Offences, paragraph 10 (copied below) of the General Instruction AAFC / AAC5319, the Bidder must provide with its bid, a completed Declaration Form, to be given further consideration in the procurement process.

#### *Declaration of Convicted Offences*

*Where a Bidder or its Affiliate is unable to certify that it has not been convicted of any of the offences referenced under the Canadian Offences Resulting in Legal Incapacity, the Canadian Offences and the Foreign Offences subsections, the Bidder must provide with its bid the completed Declaration Form, to be given further consideration in the procurement process.*

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### **IB01    Completion of Bid**

- 1) The bid shall be:
  - (a) submitted on the BID AND ACCEPTANCE FORM provided by AAFC 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 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 IB11, 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. Initials shall be original(s). 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 or electronic copies of bids are not acceptable.

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

### **IB02 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.

### **IB03 Applicable Taxes**

- 1) Bidders are not to include any amounts for Applicable Taxes (Goods and Services Tax (GST), Harmonized Sales Tax (HST) or Quebec Sales Tax (QST), whichever is applicable. Any amount levied in respect of Applicable Taxes shall be billed as a separate item in a progress claim submitted by the Contractor, and shall be paid to the Contractor in addition to the amount approved by Canada for work performed under the Contract. The Contractor shall be required to remit the appropriate amount to the appropriate tax authority in accordance with the applicable legislation.

### **IB04 Tax to Be Included**

- 1) 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.

### **IB05 Capital Development and Redevelopment Charges**

- 1) For the purposes of GC1.5 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.

### **IB06 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.

### **IB07 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 submitting the lowest acceptable bid 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 may result in the disqualification of its bid.

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

### **IB08 Bid Security Requirements**

- 1) **NO** bid security is required for this solicitation notice.

### **IB09 Submission of Bid**

- 1) The BID AND ACCEPTANCE FORM, duly completed, shall be enclosed and sealed in an envelope provided by the Bidder, and shall be addressed and submitted to the office designated on the Front Page of the BID AND ACCEPTANCE 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/File Number;
  - (b) Name of Bidder;
  - (c) Return address; and
  - (d) Closing Date and Time.
- 4) Subject to paragraph 6) of IB11, failure to comply with paragraphs 1), 2) and 3) of IB09 shall render the bid liable to disqualification. Timely and correct delivery of bids is the sole responsibility of the Bidder.

### **IB10 Revision of Bid**

- 1) A bid submitted in accordance with these instructions may be revised by letter 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 bid. The letter shall:
  - (a) be on the Bidder's letterhead or bear a signature that identifies the Bidder;
  - (b) for the lump sum portion of a bid, clearly identify the amount of the current revision. The total aggregate sum of all revisions submitted, including the current revision, shall be shown separately; and
  - (c) for the Price Per Unit portion of a bid, clearly identify the change(s) in the Price(s) per Unit and the specific Item(s) to which each change applies. If a revision is to be applied to a specific Item that was previously amended then, in addition to the amount of the current revision, the total aggregate sum of all revisions submitted, including the current revision, for that Item shall be shown separately.
- 2) A letter submitted to confirm an earlier revision shall be clearly identified as "CONFIRMATION ONLY" for each contemplated change.
- 3) 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).

### **IB11 Acceptance 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 IB11, Canada may reject a bid if any of the following circumstances is present:



## 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 of 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) with respect to current or prior transactions with Canada
    - (i) the Bidder is bankrupt or if, for whatever reason, its activities are rendered inoperable for an extended period;
    - (ii) 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;
    - (iii) 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
    - (iv) 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)(d)(iv) of IB11, 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 IB11, 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 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) If Canada intends to reject a bid pursuant to a provision of paragraphs 1), 2), 3) or 4) of IB11, other than subparagraph 2)(b) of IB11, Canada shall so inform the Bidder and provide the Bidder ten (10) days within which to make representations, prior to 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.

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

### **IB12 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.

### **IB13 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 IB13, 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 IB13 shall result in disqualification of the bid.

### **IB14 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 bid period, alternative materials may be considered provided full technical data is received in writing by the Contracting Officer at least 5 calendar days prior to the bid closing date.

### **IB15 Income Tax Requirement**

- 1) Payments made under applicable contracts must be reported by Canada for taxation purposes. To comply with this requirement, the successful bidder shall provide to Canada immediately upon award: its legal name; address; and Revenue Canada identifier (SIN, BN, GST/HST, T2N number) as is applicable.

### **IB16 Contingency Fees**

- 1) The Bidder declares that the Bidder has not, directly or indirectly, paid or agreed to pay, and will not, directly or indirectly, pay a contingency fee to any individual for the solicitation, negotiation or obtaining of the contract if the payment of the fee would require the individual to file a return under section 5 of the *Lobbying Act*.

### **IB17 Status of the Bidder**

- 1) The Bidder declares that the Bidder has not been convicted of an offence, other than an offence for which a pardon has been granted, under section 121, 124 or 418 of the *Criminal Code*.

### **IB18 Integrity Provisions - Bids Over \$10,000.00**

## INSTRUCTIONS TO BIDDERS (Continued)

- 1) Ineligibility and Suspension Policy (the "Policy"), and all related Directives, are incorporated by reference into, and form a binding part of the procurement process. The Supplier must comply with the Policy and Directives, which can be found at [Ineligibility and Suspension Policy](#).
- 2) Under the Policy, charges and convictions of certain offences against a Supplier, its affiliates or first tier subcontractors, and other circumstances, will or may result in a determination by Public Works and Government Services Canada (PWGSC) that the Supplier is ineligible to enter, or is suspended from entering into a contract with Canada. The list of ineligible and suspended Suppliers is contained in PWGSC's Integrity Database. The Policy describes how enquiries can be made regarding the ineligibility or suspension of Suppliers.
- 3) In addition to all other information required in the procurement process, the Supplier must provide the following:
  - a. by the time stated in the Policy, all information required by the Policy described under the heading "Information to be Provided when Bidding, Contracting or Entering into a Real Property Agreement"; and
  - b. with its bid / quote / proposal, a complete list of all foreign criminal charges and convictions pertaining to itself, its affiliates and its proposed first tier subcontractors that, to the best of its knowledge and belief, may be similar to one of the listed offences in the Policy. The list of foreign criminal charges and convictions must be submitted using an Integrity Declaration Form, which can be found at [Declaration form for procurement](#).
- 4) Subject to subsection 5, by submitting a bid / quote / proposal in response a request by AAFC, the Supplier certifies that:
  - a. it has read and understands the [Ineligibility and Suspension Policy](#);
  - b. it understands that certain domestic and foreign criminal charges and convictions, and other circumstances, as described in the Policy, will or may result in a determination of ineligibility or suspension under the Policy;
  - c. it is aware that Canada may request additional information, certifications, and validations from the Supplier or a third party for purposes of making a determination of ineligibility or suspension;
  - d. it has provided with its bid / quote / proposal a complete list of all foreign criminal charges and convictions pertaining to itself, its affiliates and its proposed first tier subcontractors that, to the best of its knowledge and belief, may be similar to one of the listed offences in the Policy;
  - e. none of the domestic criminal offences, and other circumstances, described in the Policy that will or may result in a determination of ineligibility or suspension, apply to it, its affiliates and its proposed first tier subcontractors; and
  - f. it is not aware of a determination of ineligibility or suspension issued by PWGSC that applies to it.
- 5) Where a Supplier is unable to provide any of the certifications required by subsection 4, it must submit with its bid/ quote / proposal a completed Integrity Declaration Form, which can be found at [Declaration form for procurement](#).
- 6) Canada will declare non-responsive any bid / quote / proposal in respect of which the information requested is incomplete or inaccurate, or in respect of which the information contained in a certification or declaration is found by Canada to be false or misleading in any respect. If Canada

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

establishes after award of the Contract that the Supplier provided a false or misleading certification or declaration, Canada may terminate the Contract for default. Pursuant to the Policy, Canada may also determine the Supplier to be ineligible for award of a contract for providing a false or misleading certification or declaration.

Ineligibility and Suspension Policy - <http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>

Declaration form for procurement - <http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>

### **IB19 Code of Conduct for Procurement - Bid**

- 1) The Code of Conduct for Procurement provides that Bidders must respond to bid solicitations in an honest, fair and comprehensive manner, accurately reflect their capacity to satisfy the requirements set out in the bid solicitation and resulting contract, submit bids and enter into contracts only if they will fulfill all obligations of the Contract. By submitting a bid, the Bidder is certifying that it is complying with the Code of Conduct for Procurement. Failure to comply with the Code of Conduct for Procurement may render the bid non-responsive.



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## GENERAL CONDITIONS FOR MINOR WORKS

### GC 1 GENERAL PROVISIONS

#### GC 1.1 Definition

- "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", "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;
- "Contractor" means a person, with whom Canada enters into a Contract to do the Work;
  - "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;
- "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" 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 trades person in practicing a trade;
- "Work" means everything that is necessary to be done, furnished or delivered by the Contractor to perform the Contract in accordance with the Contract Documents;

#### GC 1.2 Contract Documents

1. In interpreting the Contract, in the event of discrepancies or conflicts between anything in the Drawings and Specifications or Scope of Work and the General Conditions, the General Conditions govern.
2. In interpreting the Drawings and Specifications, in the event of discrepancies or conflicts between:
  - (a) the Drawings and Specifications, the Specifications govern;
  - (b) the Drawings, the Drawings with the largest scale govern; and
  - (c) figured dimensions and scaled dimensions, the figured dimensions govern.

#### GC 1.3 Assignment

1. This Contract shall not be assigned without the written consent of Canada.

#### GC 1.4 Subcontracting

1. The Contractor shall:
  - (a) not subcontract the whole or any part of the Work without the written consent of the Departmental Representative except for subcontracts specified in the Contract; and
  - (b) ensure that all subcontracts entered into at any tier shall incorporate all the terms and conditions of the Contract that can reasonably be applied thereto.

## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

### **GC 1.5 Laws, Permits and Taxes**

1. The Contractor shall comply with all legislative and regulatory provisions whether federal, provincial, territorial or municipal applicable to the performance of the Work 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.
2. Unless otherwise provided for in the Contract, the Contractor shall obtain all permits and hold all certificates and licenses required for the performance of the Work.
3. Applicable Taxes will be paid by Canada at time when a progress payment is being made. 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.
4. 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.

### **GC 1.6 Former Public Office Holders**

1. No former public office holder who is not in compliance with the post-employment provisions of the Conflict of Interest and Post-Employment Code for Public Office Holders shall derive a direct benefit from the Contract.

### **GC 1.7 Status of the Contractor**

1. The Contractor is engaged as an independent Contractor for the sole purpose of performing the Work. Neither the Contractor nor any of its personnel is engaged as an employee, servant or agent of Canada. The Contractor is responsible for all deductions and remittances required by law in relation to its employees including those required for Canada or Quebec Pension Plans, employment insurance, workers' compensation, and income tax.
2. The Contractor declares that the Contractor has not been convicted of an offence, other than an offence for which a pardon has been granted, under section 121, 124 or 418 of the Criminal Code.

### **GC 1.8 Contingency Fees**

1. The Contractor declares that the Contractor has not, directly or indirectly, paid or agreed to pay, and will not, directly or indirectly, pay a contingency fee to any individual for the solicitation, negotiation or obtaining of the contract if the payment of the fee would require the individual to file a return under section 5 of the *Lobbying Act*.

### **GC 1.9 Disclosure of Basic Information**

1. The Contractor consents, in the case of a contract that has a value in excess of \$10,000, to the public disclosure of basic information, other than information described in any of paragraphs 20(1)(a) to (d) of the Access to Information Act, relating to the contract.

## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

### **GC 1.10 Integrity Provisions - Contracts over \$10,000.00**

- 1) The Ineligibility and Suspension Policy (the "Policy") and all related Directives are incorporated into, and form a binding part of the Contract. The Contractor must comply with the provisions of the Policy and Directives, which can be found on Public Works and Government Services Canada's website at Ineligibility and Suspension Policy. (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>).

### **GC 1.11 Code of Conduct for Procurement - Contracts Over \$10,000.00**

- 1) The Contractor agrees to comply with the Code of Conduct (<http://www.tpsgc-pwgsc.gc.ca/app-acq/cndt-cndct/contexte-context-eng.html>) for Procurement and to be bound by its terms for the period of the Contract.

## **GC 2 ADMINISTRATION OF THE CONTRACT**

### **GC 2.1 Departmental Representative's Rights and Obligations**

1. The Departmental Representative shall:
  - (a) have access to the Work at all times;
  - (b) decide questions regarding what has been done or what the Contractor is required to do;
  - (c) decide questions regarding the acceptability of the quality or quantity of any Labour, Plant or Material used or consumed in the execution of the Work; and
  - (d) decide questions regarding the timing and scheduling of the Work.

### **GC 2.2 Contractor's Superintendent and Workers**

1. The Contractor shall keep a competent superintendent and capable and skilled workers on the site of the Work at all times during the progress of the Work. If, in the opinion of the Departmental Representative, the superintendent or the workers are deemed to be unacceptable because of incompetence, improper conduct or security risk, they shall be removed from the site of the Work and replaced forthwith.

### **GC 2.3 Records to be Kept by the Contractor**

1. The Contractor shall maintain and keep intact complete records relating to the Work together with all tender calls, quotations, contracts, correspondence, invoices and any payment of fees or other compensation for the solicitation, negotiating or obtaining of the contract until the expiration of two (2) years after the date that a Certificate of Completion is issued or the final invoice is paid if no Certificate of Completion is issued. The Contractor shall, upon request from the Departmental Representative, make said records available for copy, audit or inspection to any person(s) acting on behalf of Canada.
2. The Contractor shall cause all Subcontractors, and all other Persons or entities directly or indirectly involved with the Work, to comply with the requirements of GC 2.3.1.

### **GC 2.4 Notices**

1. Any notice shall be in writing and may be delivered by hand, by courier, by registered or regular mail, or by facsimile or other electronic means that provides a paper record of the text of the notice. The notice shall be addressed to the party for whom it is intended at the address in the Contract or at the last address from which the sender has received notice in accordance with this



## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

section. Any notice shall be deemed to be effective on the day it is received at that address or four (4) days after being sent, whichever is the earlier.

### **GC 3 EXECUTION OF THE WORK**

#### **GC 3.1 Material, Plant, and Real Property Become the Property of Canada**

1. All Material and Plant used or consumed for the purposes of the Work shall be the property of Canada. The Material and Plant shall be used only for the purposes of the Work, and shall not be removed from the site of the Work until so approved by the Departmental Representative.
2. The Contractor shall be liable for all loss or damage to Material or Plant that is the property of Canada by virtue of this section.

#### **GC 3.2 Cooperation with Other Contractors**

1. The Contractor shall cooperate fully with other contractors or workers sent onto the site of the Work by the Departmental Representative.
2. If, at the time the Contract was executed: the Contractor could not have reasonably foreseen the sending of other contractors or workers onto the site of the Work; and, the Contractor incurs extra costs in complying with GC 3.2.1; and, the Contractor gives written notice of claim for the extra costs within ten (10) days from the date upon which the other contractors or workers were sent onto the site of the Work; then, Canada shall pay an additional amount to the Contractor, calculated pursuant to GC 5.7.

#### **GC 3.3 Use of the Work and Cleanup of Site**

1. The Contractor shall maintain the site of the Work in a tidy condition and free from the accumulation of waste material throughout the duration of the Contract.
2. Before the Departmental Representative issues the Certificate of Completion or approves payment of the final invoice, the Contractor shall remove all materials, tools, construction machinery, equipment, waste products and debris from the site of the Work.
3. Where the Work affects occupied portions of a building, the Contractor shall ensure continuity of all building services and shall ensure safe access for all persons requiring access to said building.

#### **GC 3.4 Warranty and Rectification of Defects**

1. Without restricting any warranty or guarantee implied or imposed by law or any extended warranty specified in the Contract, the Contractor shall, upon notice from the Departmental Representative and at its own expense, rectify all defects which appear in the Work within twelve (12) months from the date of issuance of the Certificate of Completion pursuant to GC 5.6.1, or from the date of the negotiable instrument issued as final payment if a Certificate of Completion is not issued, whichever is applicable.
2. The notice referred to in GC 3.4.1 shall be in writing and shall include the number of days within which the defect or fault is to be rectified.
3. The Contractor shall transfer and assign, to Canada, any subcontractor, manufacturer or supplier extended warranties or guarantees implied or imposed by law or contained in the contract documents covering periods beyond the twelve (12) months stipulated above. Extended

## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

warranties or guarantees referred to herein shall not extend the twelve (12) month period whereby the Contractor must rectify and make good any defect or fault that appears in the work or comes to the attention of Canada.

### **GC 4 PROTECTION, HEALTH AND SAFETY**

#### **GC 4.1 Material, Plant and Real Property Supplied by Canada**

1. The Contractor, having care, custody and control of the Work and its site, shall be responsible for any loss or damage, excluding reasonable wear and tear, to any property of Canada arising out of the performance of the Work whether or not such loss arises from causes beyond the Contractor's control.

#### **GC 4.2 Construction Safety**

1. The Contractor shall be responsible for the health and safety of all persons granted access to the site of the Work and for initiating, maintaining and supervising all safety inspections, precautions and programs in connection with the performance of the Work in accordance with the health and safety legislation in force in the Province where the Work is being performed.

### **GC 5 TERMS OF PAYMENT**

#### **GC 5.1 Definitions**

For the purposes of this section:

- Payment Period means a period of thirty (30) days or such other longer period as may be agreed between the Contractor and the Departmental Representative.
- An amount is Due and Payable when it is due and payable by Canada to the Contractor in accordance with the terms of the Contract.
- An amount is Overdue when it remains unpaid after the day upon which it is due and payable.
- Date of Payment means the date of the negotiable instrument of an amount due and payable by the Receiver General for Canada.
- Fixed Price Arrangement means that part of the Contract that prescribes a lump sum as payment for performance of the Work to which it relates.
- Unit Price Arrangement means that part of the Contract that prescribes the product of a Price Per Unit multiplied by a number of Units of Measurement of a Class as payment for performance of the Work to which it relates.
- Price Table means the table set out in the BID AND ACCEPTANCE FORM.
- Bank Rate means the rate of interest established from time to time by the Bank of Canada as the minimum rate at which the Bank of Canada makes short term advances to members of the Canadian Payments Association.
- Average Bank Rate means the simple arithmetic mean of the Bank Rates in effect at 4:00 pm Eastern Time each day during the calendar month which immediately precedes the calendar month in which payment is made.
- Duration of the Work means the number of calendar days required to complete the Work, commencing on the first day following receipt by the Contractor of the fully executed Contract and ending the day on which the Departmental Representative verifies that the Work has been satisfactorily completed.

#### **GC 5.2 Payment - General Provisions**

## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

1. It is a condition precedent to Canada's obligation under GC 5.3.5 that the Contractor has made and delivered to the Departmental Representative, a statutory declaration as described in GC 5.2.2.
2. A statutory declaration in a form acceptable to Canada shall contain a declaration that the Contractor has complied with all lawful obligations with respect to workers and that all lawful obligations towards Subcontractors and Suppliers in respect of the Work under the Contract have been fully discharged.
3. A payment by Canada pursuant to this section shall not be construed as evidence that the Work is satisfactory or in accordance with the Contract.
4. Delay in making payment by Canada under the Contract shall not constitute a breach of Contract.
5. Without limiting any right of setoff or deduction given or implied by law or elsewhere in the Contract, Canada may retain from amounts payable to the Contractor under the Contract, any amount payable to Canada by the Contractor under the Contract or any other current contract.
6. No additional payment shall be made for delays where the cause of the delay was under the control of the Contractor.
7. Except as provided for in these General Conditions, the amount payable to the Contractor under the Contract shall not be increased or decreased by reason of any increase or decrease in cost of the Work brought about by any increase in the cost of Labour, Plant or Material.
8. In the event of a change, including a new imposition or repeal of any tax, customs or other duty, charge, or any similar imposition that is imposed under sales 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 after the date of submission by the Contractor of the Contractor's bid, the contract amount shall be adjusted by an amount equal to the increased or decreased cost to the Contractor, which amount shall be determined through a detailed examination of the Contractor's records.
9. It is a term of every contract providing for the payment of any money by Her Majesty that payment under that contract is subject to there being an appropriation for the particular service for the fiscal year in which any commitment under that contract would come in course of payment. Section 40, *Financial Administration Act*, R.S., 1985, c. F-11, s. 40.

### **GC 5.3 Progress Payments**

1. Where the duration of the Work is greater than thirty (30) days, the Contractor shall be entitled to receive monthly progress payments upon submitting a progress claim in a form approved by the Departmental Representative. Where the duration of the Work is less than thirty (30) days, the Contractor shall submit a progress claim after the Work is complete.
2. On the expiration of a Payment Period, the Contractor shall deliver to the Departmental Representative:
  - (a) a written progress claim that fully describes any part of the Work that has been satisfactorily completed and any Material that was delivered to the site of the Work but not incorporated into the Work during the Payment Period for which the progress claim relates;
  - (b) a completed and signed statutory declaration as described in GC 5.2.2; and

## GENERAL CONDITIONS FOR MINOR WORKS (Continued)

- (c) in the case of the initial progress claim and the request for final payment, satisfactory evidence of compliance with workers compensation legislation that is applicable to the place of the Work.
- 3. Not later than ten (10) days after receipt of a progress claim properly submitted in accordance with GC 5.3.2, the Departmental Representative shall issue a progress report, a copy of which shall be given to the Contractor.
- 4. A progress report shall indicate the value of the part of the Work and 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 related to the Contract.
- 5. Not later than thirty (30) days after the receipt by the Departmental Representative of a properly submitted progress claim and supporting documentation, Canada shall make a progress payment to the Contractor in an amount that is equal to one of the following:
  - (a) 90 percent of the value that is indicated in the progress report; or
  - (b) If the Departmental Representative is satisfied that the Work is substantially complete and is acceptable for use by Canada, 100 percent of the value of the Work and Material that is in accordance with the Contract, less amounts previously paid for under the Contract, less the amount equal to the estimated cost of completing the Work and the estimated cost of rectifying defects and faults in the Work as determined by the Departmental Representative; or
  - (c) If the Departmental Representative is satisfied that the Work is complete, 100 percent of the value of the Work that is in accordance with the Contract less amounts previously paid for under the Contract;plus Applicable Taxes and less the aggregate of any amounts payable to or costs and damages claimed by Canada or by a Claimant against the Contractor.
- 6. The Departmental Representative reserves the right to increase or decrease the quantities submitted by the Contractor if there is a disagreement between the Contractor's invoiced quantities and the quantities shown in the records maintained at the site of the Work.
- 7. Subject to GC 5.3.8, GC 5.3.9 and GC 5.3.10, the Departmental Representative and the Contractor may, by an agreement in writing, amend a Price Per Unit as set out in the Price Table for any Class of Labour, Plant or Material provided the Certificate of Measurement shows that the Authorized Quantity of the Class of Labour, Plant or Material actually performed, used or supplied by the Contractor in performing the Work is:
  - (a) less than 85 percent of the Estimated Total Quantity; or
  - (b) in excess of 115 percent of the Estimated Total Quantity.
- 8. In no event shall the total amount of an Item set out in the Price Table that has been amended pursuant to GC 5.3.7 (a) exceed the amount that would have been Payable to the Contractor had the Estimated Total Quantity actually been performed, used, or supplied.
- 9. An amendment that is made necessary by GC 5.3.7 (b) shall apply only to the quantities that are in excess of 115 percent.
- 10. Where the Departmental Representative and the Contractor fail to agree on the amount of any adjustment to a Price Per Unit as contemplated by GC 5.3.7, the amended Price Per Unit shall be determined in accordance with GC 5.7.

## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

### **GC 5.4 Interest on Overdue Accounts**

1. Canada shall be liable to pay, to the Contractor, simple interest at the Average Bank Rate plus 3 percent per annum on any amount that is Overdue. The interest shall apply from the date such amount becomes Overdue until the day prior to the Date of Payment inclusively.
2. Interest shall be paid to the Contractor without demand on Overdue payments, except, in respect to amounts which are less than fifteen (15) days Overdue, in which case, no interest shall be paid unless the Contractor so demands.
3. Canada shall not be liable to pay interest where Canada is not responsible for the delay in paying the Contractor.

### **GC 5.5 Payment in the Event of Termination**

1. If the Contract is terminated pursuant to GC 7.4, Canada shall pay the Contractor:
  - (a) an amount, as agreed upon by the Contractor and the Departmental Representative, for all Labour, Plant and Material performed, used or supplied by the Contractor as at the date of termination plus
    - (i) any fully supported termination costs incurred by the Contractor, less
    - (ii) any amounts payable to or costs and damages claimed by Canada or by a Claimant, against the Contractor; or
  - (b) failing such an agreement, an amount calculated in accordance with GC 5.7.2.

### **GC 5.6 Final Completion**

1. A Certificate of Completion shall be issued to the Contractor on the date on which the Work has been completed and the Contractor has complied with the Contract and all orders and directions made pursuant thereto, all to the satisfaction of the Departmental Representative.
2. Where the Contract is, in whole or in part, a Unit Price Arrangement, the Departmental Representative shall, at the same time as the issuance of the Certificate of Completion, issue a Certificate of Measurement setting out the Authorized Quantities used or employed in respect of the classes and units set out in the Price Table under the BID AND ACCEPTANCE FORM and any subsequent amendments thereto, such certificate to be binding upon the Contractor and Canada.

### **GC 5.7 Determination of Price**

1. By mutual agreement:
  - (a) where 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, and include an allowance for overhead, margin and the risk of undertaking the work within the stipulated amount;
  - (b) where 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 Total Quantities and Price Per Units to the Price Table;
  - (c) a Price Per Unit referred to in GC 5.7.1 (b) 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, and include an allowance for overhead, margin and the risk of undertaking the work;

## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

- (d) to facilitate approval of the price of the additional Item, 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 appropriate percentage allowance;
- (e) if no agreement can be reached as contemplated in GC5.7.1 (a), the price shall be determined in accordance with GC 5.7.2; and
- (f) if no agreement can be reached as contemplated in GC 5.7.1 (b) and GC 5.7.1 (c), the Departmental Representative 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 GC 5.7.2.

### **2. Following Completion of the Additional Work**

- (a) Where it is not possible to predetermine, or where 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:
  - (i) 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 GC 5.7.2(b), that are directly attributable to the performance of the Contract; plus
  - (ii) an allowance for profit and all other expenditures or costs equal to 10 percent of the sum of the amounts referred to in GC 5.7.2 (a)(i); plus
  - (iii) interest, if any, paid by the Contractor on the amounts determined under GC 5.7.2 (a)(i) and (ii), calculated in accordance with GC 5.4.
- (b) The cost of Labour, Plant and Material referred to in GC 5.7.2 (a) shall be limited to the following categories of expenditure:
  - (i) payments to Subcontractors and suppliers;
  - (ii) wages, salaries and traveling expenses of employees of the Contractor located at the site of the Work and that portion of wages, salaries, bonuses, living and traveling 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;
  - (iii) 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 GST/HST collection costs;
  - (iv) 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 had been approved by the Departmental Representative;
  - (v) 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 the Departmental Representative, 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;
  - (vi) 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;
  - (vii) 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
  - (viii) any other payments made by the Contractor with the approval of the Departmental Representative that are necessary for the performance of the Contract in accordance with the Contract Documents.

## **GC 5.8 Claims Against and Obligations of the Contractor or Subcontractor**

## GENERAL CONDITIONS FOR MINOR WORKS (Continued)

1. The Contractor shall ensure that all its lawful obligations arising out of the performance of the Work are discharged and satisfied at least as often as the Contract requires Canada to pay the Contractor. The Contractor shall provide the Departmental Representative with a Statutory Declaration, as referred to in GC 5.2.2. If any third party claims and outstanding obligations exist under the Contract, a Statutory Declaration shall also be accompanied by letter documentation that clearly identifies the existence and condition of any third party disputed claims and outstanding obligations.
2. In order to discharge lawful obligations of and satisfy lawful claims against the Contractor or a Subcontractor arising out of the performance of the Work, Canada may:
  - (a) pay an amount from money that is due and payable to the Contractor pursuant to the Contract directly to the claimant against the Contractor or the Subcontractor; or
  - (b) 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. Monies withheld for this purpose shall not be subject to any interest payment in the event such claims are rejected.
3. The amount referred to in GC 5.8.2 (a) shall be that amount which the Contractor would have been obliged to pay to such claimant had the provisions of the Provincial or Territorial lien legislation, or in the province of Quebec, the law relating to mortgage, been applicable to the Work. Any such 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 mortgage which the claimant might have had.
4. For the purposes of GC 5.8, a claim shall be considered lawful when it is so determined:
  - (a) by a court of competent jurisdiction;
  - (b) by an arbitrator duly appointed to arbitrate the said claim; or
  - (c) by written notice delivered to the Departmental Representative and signed by the Contractor authorizing payment of the said claim(s).
5. A payment made pursuant to GC 5.8.2 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.
6. GC 5.8.2 shall only apply to claims and obligations where:
  - (a) the notification of which has set forth the amount claimed to be owing and the person who by Contract is primarily liable;
  - (b) the notification or a copy of the notification was received by the Departmental Representative in writing before final payment is made to the Contractor and within one hundred and twenty (120) days of the date on which the claimant:
    - (i) should have been paid in full under the claimant's Contract with the Contractor or Subcontractor where the claim is for money that was lawfully required to be held back from the claimant; or
    - (ii) performed the last of the labour or furnished the last of the Plant or Material pursuant to the claimant's Contract with the Contractor or Subcontractor where the claim is not for money referred to in GC 5.8.6 (b)(i); and
  - (c) the proceedings to determine the right to payment for the claim shall have commenced within one year from the date that the notice referred to in GC 5.8.6 (b) was received by the Department Representative.
7. The Departmental Representative shall inform the Contractor in writing of receipt of any notification of claim and of the intention of Canada to withhold funds pursuant to GC 5.8.2. The Contractor may, at any time thereafter and until payment is made to the claimant, post with Canada, security in the form of a Claimant's Payment Bond acceptable to Canada and in an

## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

amount equal to the value of the said claim. Upon receipt of such security Canada shall release to the Contractor any funds which would be otherwise payable to the Contractor, that were withheld pursuant to the provisions of GC 5.8.2.

### **GC 6 CHANGES IN THE WORK**

#### **GC 6.1 Changes in the Work**

1. Canada shall have the right to order additional Work, dispense with, or change the whole or any part of the Work described in the Drawings and Specifications or Scope of the Work.
2. The Departmental Representative shall decide whether anything done or not done as a result of directions given under GC 6.1.1 has increased or decreased the cost of the Work to the Contractor and where the cost of the Work has increased or decreased, the amount payable under the Contract shall be increased or decreased by an amount calculated in accordance with GC5.7.
3. Any change in the terms of the Contract, other than changes that may be ordered by Canada or the Departmental Representative pursuant to GC 6.1.1, may be made only by agreement in writing between Canada and the Contractor.

#### **GC 6.2 Changes in Subsurface Conditions and Delays by Canada**

1. No extra payment shall be made to the Contractor for any extra expense, loss or damage for any reason unless Canada shall certify that such extra expense, loss or damage is directly attributable to:
  - (a) a substantial difference between the subsurface conditions as indicated in the Drawings and Specifications or Scope of Work and the actual conditions found at the site of the Work; or
  - (b) the neglect or delay by Canada, occurring after the date of award of the Contract:
    - (i) in providing any information or the doing of any act which Canada is required expressly by the Contract to do or as required by a known custom of the trade; or
    - (ii) in suspending the Work pursuant to GC 7.3.
2. The Contractor shall, within ten (10) days immediately after encountering such subsurface conditions or such neglect or delay, give written notice to the Departmental Representative of a claim for such extra expense, loss or damage. Failure to provide such written notice shall render the claim null and void.
3. The amount of any extra payment made under this section shall be calculated in accordance with GC 5.7.
4. If, in the opinion of the Departmental Representative, any difference in subsurface conditions referred to in GC 6.2.1 results in a savings to the Contractor, the amount of said savings shall be deducted from the Contract Amount owing to the Contractor.

#### **GC 6.3 Extension of Time**

1. Upon written application by the Contractor made before the date fixed for the completion of the Work, Canada may extend the time for completion of the Work if, in the opinion of Canada causes beyond the control of the Contractor have delayed its completion.
2. If the Contractor does not complete the Work by the day fixed for its completion, but completes it thereafter, the Contractor shall:



## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

- (a) pay all Canada's inspection costs relating to the Work incurred after the stipulated completion date; and
- (b) compensate Canada for any loss or damage resulting from the failure by the Contractor to complete the Work by the completion date fixed by the Contract.

Unless, in the opinion of Canada, such delay was due to causes beyond the control of the Contractor or it is in the public interest to waive the whole or any part of the payment.

### **GC 7 DEFAULT, SUSPENSION OR TERMINATION OF CONTRACT**

#### **GC 7.1 Taking the Work Out of the Contractor's Hands**

1. By giving notice in writing to the Contractor, Canada 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 execution of the Work to the satisfaction of the Departmental Representative within six (6) days of Canada giving written notice to the Contractor to do so;
  - (b) defaults in the completion of any part of the Work within the time fixed by the Contract for its completion;
  - (c) becomes insolvent or commits 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 contrary to GC 1.3; and 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 extinguished.
3. The Contractor shall be liable to pay Canada, upon demand, an amount that is equal to the sum of all losses and damages incurred or sustained by Canada in respect of the Contractor's failure to complete the Work.
4. If the whole or any part of the Work that is taken out of the Contractor's hands pursuant to GC 7.1.1 is completed by Canada, the Departmental Representative shall calculate the amount, if any, of the holdback or progress claims that had accrued and was due prior to the date on which the Work was taken out of the Contractor's hands.
5. If it is determined that there is an amount 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, Canada may then pay the Contractor the amount determined not to be required pursuant to GC 7.1.4.

#### **GC 7.2 Effect of Taking the Work Out of the Contractor's Hands**

1. The taking of the Work or part thereof out of the Contractor's hands pursuant to GC 7.1.1 does not operate so as to relieve or discharge the Contractor from any obligations under the Contract or imposed upon the Contractor by law except the obligation to complete the performance of that part of the Work that was taken out of the Contractor's hands.
2. All Plant and Material and the interest of the Contractor in all real property, licenses, powers and privileges acquired, used, provided or consumed by the Contractor under the Contract shall continue to be the property of Canada without compensation to the Contractor.

## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

3. When the Departmental Representative certifies that any Plant, Material or any interest of the Contractor referred to in GC 7.2, is no longer required for the purpose 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.

### **GC 7.3 Suspension of the Contract**

1. Canada may, upon giving notice in writing to the Contractor, suspend the performance of the Work at any time. The Contractor shall comply with such notice immediately, subject to any conditions that may be stipulated in the notice.
2. If Canada suspends the Work for thirty (30) days or less the Contractor shall, subject to its remedy under GC 5.7, complete the Work when called upon to do so. If Canada suspends the Work for a period in excess of thirty (30) days, the Contractor may request that Canada terminate the Contract pursuant to GC 7.4.
3. It is the responsibility of the Contractor to mitigate all costs during the suspension period.

### **GC 7.4 Termination of the Contract**

1. Canada may terminate the Contract at any time by giving notice of termination in writing to the Contractor and upon receipt of such notice the Contractor shall cease all operations in performance of the Contract, subject to any conditions that may be stipulated in the notice.
2. Termination under GC 7.4.1 shall not relieve the Contractor of any legal or contractual obligations other than that portion of Work that remains to be completed at the time of the termination.
3. Payment, in event of termination under this subsection, shall be made pursuant to the provision of GC 5.5.

## **GC 8 DISPUTE RESOLUTION**

1. The Contractor may, within 10 days after the communication to the Contractor of any decision or direction referred to in GC2.1(b) and GC6.1, protest that decision or direction.
2. A protest referred to in GC8.1 shall be in writing, contain full reasons for the protest, be signed by the Contractor and be given to Canada.
3. If the Contractor gives a protest pursuant to GC8.2, any compliance by the Contractor with the decision or direction that was protested shall not be construed as an admission by the Contractor of the correctness of that decision or direction, or prevent the Contractor from taking whatever action the Contractor considers appropriate in the circumstances.
4. The giving of a protest by the Contractor pursuant to GC8.2 shall not relieve the Contractor from complying with the decision or direction that is the subject of the protest.
5. Subject to GC8.6, the Contractor shall take any action referred to in GC8.3 within 3 months after the date of the Certificate of Completion referred to in GC5.6 and not afterwards, except where it is otherwise provided by law.
6. The Contractor shall take any action referred to in GC8.3 resulting from a direction under GC3.4, within 3 months after the expiry of a warranty or guarantee period and not afterwards, except where it is otherwise provided by law.

## **GENERAL CONDITIONS FOR MINOR WORKS (Continued)**

7. Subject to GC8.8, if Canada determines that the Contractor's protest is justified, Canada shall pay the Contractor the cost of the additional labour, Plant and Material necessarily incurred by the Contractor in carrying out the protested decision or direction.
8. Costs referred to in GC8.7 shall be calculated in accordance with GC5.7.

### **GC 9 INDEMNIFICATION AND INSURANCE**

#### **GC 9.1 Indemnification**

1. The Contractor shall indemnify and save harmless Canada, its servants, agents and all those for whom Canada may be, in law, responsible, from and against all claims, demands, losses, damages, costs and legal proceedings by whomever made, sustained, brought or prosecuted, and in any manner based upon, occasioned by or attributed to the activities of the Contractor, the Contractor's employees, agents or persons for whom the Contractor is, in law, responsible for the performance or purported performance of the Contract, including an infringement or alleged infringement of a patent of invention or any other kind of intellectual property.
2. For the purpose of GC 9.1.1, activities include any act improperly carried out and any omission or delay in carrying out an act.
3. The Contractor's liability to indemnify or reimburse Canada under the Contract shall not affect or prejudice Canada from exercising any rights available to Canada at law or in equity.

#### **GC 9.2 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 GC 9.2.1 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 GC 9.3.

#### **GC 9.3 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 GC 9.2, 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 GC 9.2, the proceeds of the claim shall be paid by the insurer directly to the claimant.
3. If an election is made pursuant to GC 9.3.1, 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

## GENERAL CONDITIONS FOR MINOR WORKS (Continued)

- site and any other amount that is payable by the Contractor to Canada under the Contract, minus any monies retained pursuant to GC 9.3.1 (b); 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 GC 9.3.3 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 GC 9.3.4, 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 GC 9.3.3, be deemed to have been expended and discharged.
  6. If an election is not made pursuant to GC 9.3.1 (b), the Contractor shall, subject to GC 9.3.7, 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 GC 9.3.6, Canada shall pay the Contractor out of the monies referred to in GC 9.3.1 so far as they will thereon to extend.
  8. Subject to GC 9.3.7, payment by Canada pursuant to GC 9.3.7 shall be made in accordance with the Contract but the amount of each payment shall be 100 percent of the amount claimed notwithstanding GC 5.3 a) and b).



## 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 Contractor shall deposit with Canada a CERTIFICATE OF INSURANCE (form AAFC / AAC5314) available upon request.
- 2) In the event that the Contractor already possesses an insurance certificate clearly demonstrating that their insurance coverage meets IN2.1 Scope of Policy provisions, then the Contractor may deposit an original copy of this insurance certificate.
- 3) 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 \$1,000,000.00 ;
  - (b) a Products/Completed Operations Aggregate Limit of not less than \$1,000,000.00 ; and
  - (c) a General Aggregate Limit of not less than \$2,000,000.00 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 COMPLETION.

## **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 COMPLETION.

#### **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 9.3 Insurance Proceeds.
- 2) The Contractor shall, without delay, do such things and execute such documents as are necessary to effect payment of the proceeds.

**BID AND ACCEPTANCE FORM**  
CONSTRUCTION CONTRACT - MINOR WORKS

Solicitation / File Number: 20-1147
Project: CEF20 008
Contract: 20-1147

**MAIL OR DELIVER BID TO:**  
Agriculture and Agri-Food Canada (AAFC)  
Central Experimental Farm (CEF)  
K.W. Neatby Building #20 (Main Entrance)  
960 Carling Avenue, Ottawa, ON K1A 0C6  
Attn: Daniel Lafreniere  
Solicitation #20-1147

**BID CLOSING TIME:**  
Monday, December 07, 2020  
Day of week, Month, Day, Year  
at 02:00  AM  PM local time.

**DESCRIPTION OF WORKS:**  
Roof replacement - Building 12, CEF, Ottawa

**INSTRUCTIONS TO BIDDERS:**  
Bidders shall be governed by the following instructions:  
- SPECIAL INSTRUCTIONS TO BIDDERS - Form AAFC / AAC5318-E  
- INSTRUCTIONS TO BIDDERS - Form AAFC / AAC5319-E

The following additional documents form an attachment to this BID AND ACCEPTANCE FORM:  
 No additional document attachments

**OFFER AND AGREEMENT**

1. The undersigned bidder (hereinafter called the "Contractor") hereby offers to Her Majesty the Queen in right of Canada, as represented by the Minister of Agriculture and Agri-Food (hereinafter called "Canada"), to furnish all necessary labour, plant and material and to execute and complete in a satisfactory and workmanlike manner all the work required under this contract for the consideration of the unit or lump sum price or prices set forth in the Price Table below. The Contractor agrees that these prices include all applicable provincial sales taxes, ancillary taxes and any commodity tax. Note: Do not include Applicable Taxes (GST/HST/QST) as defined in the General Conditions in price(s).

PRICE TABLE					
Item	Class of Labour, Plant, or Material	Unit of Measurement	Estimated Total Quantity	Price Per Unit	Estimated Total Price
NOTE: Both price per unit and estimated total price must be filled in for each item in the Price Table. All estimated total prices will be subject to verification by Canada. In case of variation between the price per unit and the estimated total price, the price per unit will be considered to be the price bid.				<b>Total Bid</b>	

2. The Contractor shall perform and complete the Work on or before 2020-12-24.
3. The Contractor hereby acknowledges receipt of the following addenda to the bid documents (give number and date of each):  
Addenda numbers: \_\_\_\_\_ Dates: \_\_\_\_\_
4. The Contractor agrees that this offer: supersedes and cancels all communications, negotiations, and agreements relating to the work other than contained in this completed bid or any amendment incorporated by mutual agreement between the Contractor and Canada before acceptance of this Offer and Agreement; is irrevocable for 30 days after the Bid Closing Time shown hereon.
5. The Contractor agrees, that the complete bid together with and subject to all the provisions contained herein shall, when accepted and executed on behalf of Canada, constitute a binding contract between the Contractor and Canada.
6. The following additional documents form an attachment to a binding contract:  
6.1 GENERAL CONDITIONS FOR MINOR WORKS - Form AAFC / AAC5316-E



**BID AND ACCEPTANCE FORM (Continued)**

6.2 Specifications

6.3 Insurance Terms

**CONTRACTOR'S FULL BUSINESS NAME (Please print or type)**

\_\_\_\_\_

**CONTRACTOR'S BUSINESS ADDRESS (for all purposes of or incidental to the contract)**

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

Telephone number	Ext.	Facsimile number	E-mail (optional)	GST/HST number
------------------	------	------------------	-------------------	----------------

Attested to and Delivered on Behalf of the Contractor this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_  
Month Year

CONTRACTOR'S or, where applicable, SIGNING OFFICER'S SIGNATURE(S)	TITLE(S)	In the presence of: WITNESS SIGNATURE(S)
_____	_____	_____
_____	_____	_____

NOTE: Corporate Firms shall affix their Corporate Seal if applicable.

(FOR DEPARTMENTAL USE ONLY)

Accepted and Executed on Behalf of Canada this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_  
Month Year

SIGNATURE	TITLE	In the presence of: WITNESS SIGNATURE
_____	_____	_____

Bid opened in \_\_\_\_\_ on \_\_\_\_\_, \_\_\_\_\_ at \_\_\_\_\_  AM  PM local time.  
Location Day of week Month Day Year

in the presence of \_\_\_\_\_

**BID AND ACCEPTANCE FORM (Continued)**

**INTEGRITY PROVISIONS - LIST OF NAMES**  
**(complete if your bid exceeds \$10,000.00)**

If the required list of names has not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to provide the names within the time frame specified will render the bid non-responsive. Providing the required names is a mandatory requirement for contract award.

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.




# **SPECIFICATIONS and DRAWINGS**

**#20-1147**

**FOR**

**ROOF REPLACEMENT - BUILDING 12**

**CENTRAL EXPERIMENTAL FARM (CEF)  
Agriculture and Agri-Food Canada (AAFC)  
960 Carling Ave.  
Ottawa, ON  
K1A 0C6**

<b>Division</b>	<b>Section</b>	<b>Title</b>	<b>Pages</b>
<b>Division 01</b>	<b>General Requirements</b>		
	01 00 11	General Requirements.....	5
	01 35 29.06	Health and Safety Requirements .....	4
<b>Division 06</b>	<b>Wood, Plastics and Composites</b>		
	06 10 53	Miscellaneous Rough Carpentry .....	4
<b>Division 07</b>	<b>Thermal and Moisture Protection</b>		
	07 31 13	Asphalt Shingles .....	7
	07 62 00	Sheet Metal Flashing and Trim .....	6
	07 92 00	Joint Sealants .....	4

**Drawings**

- A1 – Roof Plan
- A2 – Details
- A3 – Details
- A4 – Details
- A5 – Details

**END OF SECTION**

**Part 1      General**

**1.1            GENERAL DESCRIPTION OF THE WORK**

- .1      Work to be carried out under this Contract, Roof Replacement, Building 12, at the Central Experimental Farm, Ottawa, Ontario.
- .2      Provide the necessary labour and materials to complete the removal of the existing roofing systems, existing curbs, sheet metal flashings and membrane down to the existing structural deck and install new roofing system as specified herein.
- .3      The new roof systems and roof related accessories shall be as specified and indicated on the drawings.
- .4      Supply and installation of related rough carpentry at parapets and curbs.
- .5      Supply and install all sheet metal caps, counter flashings, scuppers, torch stops, fascia and all other roof related metal flashings required to complete roof installation.
- .6      Supply and installation of all sealants required to seal the transition of membrane and related metal detailing and the termination of sheet metal and non-membrane surfaces.
- .7      Supply and installation of new snow guards as specified and indicated on the drawings. New snow guards to match existing colour.
- .8      Supply and installation of new lightning protection system as specified and detailed. New system to be certified upon completion.
- .9      Supply and installation of required access scaffolding, hording, fencing and overhead protection as required to comply with the Ministry of Labour Health and Safety requirements.

**1.2            DEFINITIONS**

- .1      “CONSTRUCTOR” and “CONTRACTOR” are synonymous.

**1.3            OTHER CONTRACTORS**

- .1      Other Contractors, Sub-Contractors and the Departmental Representative’s own forces, may be performing work on the site at the same time as the Work is being done under this Contract. The successful bidder shall provide all reasonable co-operation and collaboration with these other forces to ensure a timely completion of the work, taking into consideration and without undermining its own role as the “Constructor”.

**1.4            USE OF THE SITE**

- .1      Carry out the Work so as to have the least possible interference and disturbance to the normal use of the premises. The successful bidder is expected to include in the bid an allowance for the performance of off-hours work should it be required to conform with the above.
- .2      Maintain services to existing building and provide for personnel and vehicle access.

- .3 Restrict construction access to and from site to approved location. Do not allow construction traffic to block entrances or exits for any reason.
- .4 Co-ordinate any interference with Departmental Representative 's operation in this area and abide by Departmental Representative 's direction in this regard. In cases of conflicting requirements, Departmental Representative 's operation takes precedence but all reasonable effort to accommodate Contractor's needs will be made.

### **1.5 EXISTING SERVICES**

- .1 Before commencing work, establish location and extent of service lines in area of Work and notify Departmental Representative of findings.
- .2 Remove abandoned service lines within 2.4 m of structures. Cap or otherwise seal lines at cut-off points as directed by Departmental Representative.
- .3 Services are to be left operational unless otherwise authorized by Departmental Representative.
- .4 Unless otherwise specified, the Contractor will be responsible for disconnection, relocation, re-installation and extending all services required to facilitate work under this Contract. Co-ordinate work with the Departmental Representative and provide minimum 48 hours notification if services are to be interrupted.

### **1.6 CUTTING AND PATCHING**

- .1 Generally patch and "make good" any and all surfaces cut, damaged, exposed, or disturbed to comply with any appropriate statutory requirements and to the Departmental Representative 's acceptance.

### **1.7 PROTECTION OF PROPERTY**

- .1 Protect surrounding private and public property from damage during the performance of the Work.
- .2 Be responsible for damage incurred.

### **1.8 PRECONSTRUCTION CONDITIONS**

- .1 Prior to commencing mobilization, the Contractor shall record preconstruction conditions by photographing all items that could potentially be claimed by the Departmental Representative as damaged during the course of the work.
- .2 These items should include adjacent wall areas, landscaping, pavement, windows, paint finishes and any roof top equipment on or adjacent to the subject roof.
- .3 In the event that the Contractor is permitted to store materials or equipment on adjacent roofs or use adjacent roofs to access the subject roofs, these areas shall also be reviewed for preconstruction damage and photographed.
- .4 Provide Departmental Representative with photographic record of preconstruction photographs a minimum of 24 hours prior to commencing mobilization.
- .5 All such damages observed during final or post construction review that cannot be verified as pre-existing, are potentially considered the Contractor's responsibility to rectify.

### **1.9 FIRE PROTECTION**

- .1 Provide and maintain temporary fire protection equipment during the performance of the Work as required by insurance companies and governing codes, regulations and by-laws having jurisdiction.
- .2 Work requiring the generation of open flames (welding, soldering, etc...) cannot be performed until an Departmental Representative's Permit has been issued. It is the responsibility of the successful bidder to apply for here said permit.
- .3 Open fires and burning of rubbish are not permitted on site.

### **1.10 OCCUPATIONAL HEALTH AND SAFETY**

- .1 Follow the Ontario Provincial Occupational Health and Safety Act and Regulations for Construction Projects. For the purposes of the act, the person or company contracted to carry out the work shall be deemed the "**Constructor**".
- .2 Hazardous materials, not identified by the Departmental Representative, may be encountered at the worksite. Use all necessary precautions when handling such material. It is possible that asbestos may exist in some form and if encountered the Contractor is responsible to notify the Departmental Representative and to follow Ontario Ministry of Labour regulations governing the handling of asbestos in the workplace.
- .3 The Departmental Representative may cause those who do not comply with the O.H.S.A. and Regulations to be escorted from the site.
- .4 Temporary overhead protection will be required at ground street level sidewalks, where pedestrians are walking. All entrances shall have overhead protection. Additional protection will also be required to prevent material from falling to the street from overhead scaffold platforms.

### **1.11 PROTECTION OF BUILDING FINISHES AND EQUIPMENT**

- .1 Prevent movement, settlement, or other damage to other adjacent structures, utilities, and parts of building to remain in place. Provide bracing and shoring if required.
- .2 Keep noise, dust, and inconvenience to occupants to a minimum.
- .3 Protect building systems, services and equipment. Protect all furnishings within work area with (6 mil) polyethylene film during construction. Remove film during non-construction hours and leave premises in clean, unencumbered and safe manner for normal daytime function.
- .4 Provide temporary dust tight screens, partitions, covers, railings, barricades, supports and/or other protection as required. Protect workers, finished areas of work and public.

### **1.12 PARKING**

- .1 Parking is available on site.
- .2 All vehicles must be parked in designated parking areas (except for reasonable loading and unloading of equipment and/or materials to a local entrance).

**1.13 SIGNS AND ADVERTISEMENTS**

- .1 No signs or advertisements of any description other than notices regarding safety shall be displayed at the Work Site without permission of the Departmental Representative.
- .2 Upon completion of the Work, all signs shall be removed except those specifically directed by the Departmental Representative to remain.

**1.14 CLEAN-UP**

- .1 Maintain the work area in tidy condition, free from the accumulation of waste products and debris.
- .2 Remove waste and materials regularly so as to maintain a tidy work site. Do not dispose of any waste in the Departmental Representative's facilities unless specifically directed to do so by authorised personnel.
- .3 Store materials in areas specially designated by the Departmental Representative. Dispose of this debris in a legal manner so as to avoid causing a hazard to occupants and visitors on site.

**1.15 MATCHING**

- .1 Where new work occurs in or adjacent to existing work, it is the intent that colours and textures of visible finishes within these areas shall be matched to the satisfaction of the Departmental Representative.

**1.16 PERMITS, FEES, CERTIFICATES**

- .1 Obtain and pay for all required permits.
- .2 Arrange and pay for all inspection certificates required by Authorities having jurisdiction, (i.e., Electrical Safety Authority Certificate). Provide the Departmental Representative with copies of these certificates upon completion.

**1.17 DISRUPTION OF SERVICES**

- .1 The Contractor is responsible to provide adequate written notice to the Departmental Representative of any interruption of services (i.e., mechanical, electrical etc.) for the connection of new services or the alteration of existing.
- .2 The Contractor is expected to co-operate reasonably with the Departmental Representative in the scheduling of service interruptions.

**1.18 SANITARY FACILITIES**

- .1 Temporary sanitary facilities will be provided by the Constructor in compliance with the Occupational Health and Safety Act and Regulations for Construction Projects.

**1.19 POWER**

- .1 Contractor to supply their own power.



**1.20 WATER SUPPLY**

- .1 Water supply is available at no cost. Connection and disconnection will be at Contractor's expense and liability.

**1.21 TEMPORARY FACILITIES**

- .1 Any temporary facilities provided at the site by the Contractor must be removed upon completion of the work and the area used must be returned to the original condition.

**1.22 DOCUMENTS REQUIRED**

- .1 Maintain at the job site, one copy each of the following:
  - .1 Original Plans and Specifications and completed Form of Tender.
  - .2 Building Department stamped drawings if required.
  - .3 Any changes to Drawings or Details.
  - .4 Shop Drawings and any changes.
  - .5 Addenda.
  - .6 Change Orders.
  - .7 Site Instructions.
  - .8 Contractor's Safety Policy.
  - .9 Safety Data Sheets.

**Part 2 Products**

**2.1 NOT USED**

- .1 Not used.

**Part 3 Execution**

**3.1 NOT USED**

- .1 Not used.

**END OF SECTION**

**Part 1      General**

**1.1          REFERENCES**

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
- .2 Province of Ontario
  - .1 Occupational Health and Safety Act Projects, R.S.O. 1990, c.0.1, as amended and Regulations for Construction O. Reg. 213/91 as amended.

**1.2          ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
  - .1 Results of site specific safety hazard assessment.
  - .2 Results of safety and health risk or hazard analysis for site tasks and operation found in work plan.
- .2 Submit 2 copies of Contractor's authorized representative's work site health and safety inspection reports to authority having jurisdiction, daily / weekly, Departmental Representative.
- .3 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .4 Submit copies of incident and accident reports.
- .5 Submit WHMIS 2015 SDS - Safety Data Sheets.
- .6 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 21 days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within 2 days after receipt of comments from Departmental Representative.
- .7 Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .8 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.

**1.3          FILING OF NOTICE**

- .1 File Notice of Project with Provincial authorities prior to beginning of Work.
- .2 Contractor shall be responsible and assume the Principal Contractor role for each work zone location and not the entire complex. Contractor shall provide a written

acknowledgement of this responsibility with 3 weeks of contract award.  
Contractor to submit written acknowledgement to WSIB along with Notice of Project.

- .3 Contractor shall agree to install proper site separation and identification in order to maintain time and space at all times throughout life of project.

#### **1.4 SAFETY ASSESSMENT**

- .1 Perform site specific safety hazard assessment related to project.

#### **1.5 MEETINGS**

- .1 Schedule and administer Health and Safety meeting with Departmental Representative prior to commencement of Work.

#### **1.6 GENERAL REQUIREMENTS**

- .1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.
- .2 Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

#### **1.7 RESPONSIBILITY**

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2 Contractor will be responsible and assume the role Constructor as described in the Ontario Occupational Health and Safety Act and Regulations for Construction Projects.
- .3 Contractor shall be the Principal Contractor as described in the Ontario Health and Safety Act for the Construction for only their scope and areas of work as defined and described in this project specification.
- .4 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

#### **1.8 COMPLIANCE REQUIREMENTS**

- .1 Comply with Ontario Occupational Health and Safety Act, R.S.O. 1990, c. 0.1 and Ontario Regulations for Construction Projects, O. Reg. 213/91.
- .2 Comply with Canada Labour Code, Canada Occupational Safety and Health Regulations.

### **1.9 UNFORSEEN HAZARDS**

- .1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.
- .2 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, advise Health and Safety co-ordinator / Safety Officer and follow procedures in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.

### **1.10 HEALTH AND SAFETY CO-ORDINATOR**

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Co-ordinator. Health and Safety Co-ordinator must:
  - .1 Have site-related working experience specific to activities associated with roofing operations.
  - .2 Have working knowledge of occupational safety and health regulations.
  - .3 Be responsible for completing Contractor's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter site to perform Work.
  - .4 Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.
  - .5 Be on site during execution of Work and report directly to and be under direction of Registered Occupational Hygienist / Certified Industrial Hygienist / site supervisor.

### **1.11 POSTING OF DOCUMENTS**

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province having jurisdiction, and in consultation with Departmental Representative.

### **1.12 CORRECTION OF NON-COMPLIANCE**

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

### **1.13 POWDER ACTUATED DEVICES**

- .1 Use powder actuated devices only after receipt of written permission from Departmental Representative.

**1.14 WORK STOPPAGE**

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

**Part 2 Products**

**2.1 NOT USED**

- .1 Not used.

**Part 3 Execution**

**3.1 NOT USED**

- .1 Not used.

**END OF SECTION**

**Part 1      General**

**1.1            RELATED SECTIONS**

- .1      Section 07 31 13 - Asphalt Shingles.
- .2      Section 07 62 00 – Sheet Metal Flashing and Trim.
- .3      Section 07 92 00 – Joint Sealants.

**1.2            REFERENCES**

- .1      ASTM International
  - .1      ASTM A653/A653M-19, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- .2      CSA International
  - .1      CSA A123.22-08 (R2018) - Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
  - .2      CSA O141-05 (R2019), Softwood Lumber.
  - .3      CSA O151-17, Canadian Softwood Plywood.
- .3      National Lumber Grades Authority (NLGA)
  - .1      Standard Grading Rules for Canadian Lumber 2017.

**1.3            QUALITY ASSURANCE**

- .1      Lumber identification: by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- .2      Plywood identification: by grade mark in accordance with applicable CSA Standards.

**1.4            PRECAUTIONS**

- .1      Provide temporary protection, to the satisfaction of the Departmental Representative, to render all wood blocking watertight, if for any reason permanent membrane protection cannot be provided within the same day. Ensure the base of any curbs are temporarily sealed to prevent water from entering below the curb assembly, or behind sheathing, should the roof assembly not be completed on the same day as the carpentry work.

**1.5            DELIVERY, STORAGE, AND HANDLING**

- .1      Deliver, store and handle materials in accordance with Section with manufacturer's written instructions.
- .2      Delivery and acceptance requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.

- .3 Storage and handling requirements:
  - .1 Store materials off ground, indoors, in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
  - .2 Store materials off ground with moisture barrier at both ground level and as a cover forming a well-ventilated enclosure, with drainage to prevent standing water.
  - .3 Replace defective or damaged materials with new.

## **Part 2 Products**

### **2.1 LUMBER MATERIAL**

- .1 Lumber: Unless specified otherwise, softwood, S4S, moisture content 19% or less in accordance with following standards:
  - .1 CSA O141.
  - .2 NLGA Standard Grading Rules for Canadian Lumber.
- .2 Furring, blocking, nailing strips, grounds, rough bucks, curbs, fascia backing and sleepers:
  - .1 S2S is acceptable for all surfaces.
  - .2 Board sizes: "Standard" or better grade.
  - .3 Dimension sizes: "Standard" light framing or better grade.
  - .4 Post and timbers sizes: "Standard" or better grade.

### **2.2 PANEL MATERIALS**

- .1 Canadian softwood plywood (CSP): to CSA O151.
  - .1 Urea-formaldehyde free.

### **2.3 FASTENERS**

- .1 Wood to wood fasteners: Wood screw #12 or as indicated, galvanized flat head, of sufficient length to completely penetrate through base minimum 25 mm.
- .2 Plywood to concrete, brick or hollow masonry fasteners: 6 mm diameter screws. Length to provide minimum 32 mm and maximum 40 mm embedment into substrate as required. Type to be approved subject to results of pull tests.
- .3 Exposed fasteners for metal to wood or masonry: Use #10 cadmium plated hex screws with neoprene and steel washers. Minimum length 38 mm. Use lead shields, as required for anchoring. Colour of screw head to meet approval of Departmental Representative.
- .4 Nails, spikes and staples: To CSA B111.

### **2.4 ACCESSORIES**

- .1 Metal closure: 0.56 mm (26 ga.) galvanized steel unless otherwise shown or specified.

- .2 Self-adhered membrane: To CSA A123.22, self-adhering membrane consisting of SBS rubberized asphalt compound laminated to a polyethelene film. Minimum thickness 1 mm.
- .3 Semi-rigid insulation: semi-rigid mineral wool, rockwool, or slagwool boards, to CAN/ULC S702.2.

## **2.5 FINISHES**

- .1 Galvanizing: To ASTM A653/A653M, use galvanized fasteners for all work.

## **Part 3 Execution**

### **3.1 GENERAL INSTALLATION**

- .1 Extend air/vapour barrier seals up vertical surfaces and curbs and onto the deck as shown on the Drawings, to provide continuity.
- .2 Slope the top of all wood blocking at the roof perimeter in towards the roof at a minimum of 5%, unless otherwise shown on the Drawings.
- .3 Comply with requirements of NBC, supplemented by the following paragraphs.
- .4 Install furring and blocking as required to space-out and support wall and ceiling finishes, facings, fascia, soffit, siding and other work as required.
- .5 Align and plumb faces of furring and blocking to tolerance of 1:600.
- .6 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
- .7 Install wood, fascia backing, nailers, curbs and other wood supports as required and secure using galvanized steel fasteners.

### **3.2 SECUREMENT OF WOOD BLOCKING**

- .1 Comply with more stringent requirements as required by drawings or Ontario Building Code requirements. Increase number and spacing of all fasteners by 50% for 2400 mm from all outside roof corners.
- .2 Install fasteners to the design intent to hold all wood blocking permanently in place to prevent warping, deflection and to resist all wind and weather conditions.
- .3 Secure wood to concrete in a staggered pattern with each row spaced at minimum 600 mm c/c with specified fasteners. Drill holes 13 mm deeper than depth of fastener penetration.
- .4 Install fasteners in two rows in the direction of the grain, offset one to another in a staggered fashion by approximately 50%. All fasteners shall be placed minimum 10 mm from any edge of framing.



- .5 Unless specified otherwise, the number of fasteners shall be doubled at all outside parapet corners, for a distance of 3 m from the corner.
- .6 For any exposed fastening, provide touch-up paint as required to coat all exposed surfaces of screws damaged during the driving process.

### **3.3 SHEATHING INSTALLATION**

- .1 Plywood:
  - .1 Not less than 2 mm gaps shall be provided between sheets, to allow for material expansion.
  - .2 Unless otherwise indicated, fasten plywood with a minimum of thirty-six fasteners per 1200 mm x 2400 mm sheet.

### **3.4 ERECTION**

- .1 Frame, anchor, fasten, tie and brace members to provide necessary strength and rigidity.
- .2 Countersink bolts where necessary to provide clearance for other work.
- .3 Bevel leading edge of wood panel products on vertical applications to facilitate membrane installation and as detailed on drawings.

**END OF SECTION**

**Part 1      General**

**1.1          RELATED SECTIONS**

- .1      Section 07 62 00 – Sheet Metal Flashing and Trim.
- .2      Section 07 92 00 – Joint Sealants.

**1.2          REFERENCES**

- .1      ASTM International
  - .1      ASTM A653/A653M-19, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- .2      Canadian General Standards Board (CGSB)
- .3      Canadian Roofing Contractors' Association (CRCA)
  - .1      CRCA Roofing Specifications Manual
- .4      CSA International
  - .1      CSA A123.5-16, Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules.
  - .2      CSA A123.22-08(R2018), Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
  - .3      CSA A123.51-14(R2018), Asphalt Shingle Application on Roof Slopes 1:6 and Steeper.
  - .4      CAN/CSA B72-M87 (R2013) Installation Code for Lightning Protection Systems.
- .5      Health Canada/Workplace Hazardous Materials Information System (WHMIS 2015)
  - .1      Safety Data Sheets (SDS).

**1.3          ACTION AND INFORMATIONAL SUBMITTALS**

- .1      Product data:
  - .1      Submit manufacturer's instructions, printed product literature and data sheets for asphalt shingles and include product characteristics, performance criteria, physical size, finish and limitations.
  - .2      Submit proof of manufacturer's CCMC listing and listing number.
  - .3      Manufacturer's Instructions: to indicate special handling criteria, installation sequence, cleaning procedures and storage.
  - .4      Submit 2 copies of WHMIS 2015 SDS.
- .2      Samples:
  - .1      Submit duplicate samples of full size specified shingles.

#### **1.4 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Delivery and acceptance requirements: Deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and handling requirements:
  - .1 Store materials off ground, in dry location, and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
  - .2 Remove only in quantities required for same day use.
  - .3 Store and protect asphalt shingles from nicks, scratches, and blemishes.
  - .4 Replace defective or damaged materials with new.

#### **1.5 EXTRA STOCK MATERIALS**

- .1 All unused shingles remain property of the Departmental Representative.

#### **1.6 WARRANTY**

- .1 Contractor's Warranty for Labour and Material:
  - .1 For Work of this Section 07 31 13 – Asphalt Shingles, 12 months warranty period is extended to 60 months.
  - .2 Make all necessary repairs and replacements within 48 hours of receipt of written notification.
  - .3 Nothing contained in this Article shall be construed as in any way restricting or limiting the liability in common law and statutory liability of the Contractor.
  - .4 Provide these written warranties, confirming above, issued on the corporate letterhead, signed and sealed by an authorized signing officer. The warranties will specifically reference the name of the Building, location and Departmental Representative.
- .2 Manufacturer's Warranty:
  - .1 Provide a 40-year shingle warranty.

### **Part 2 Products**

#### **2.1 MATERIALS**

- .1 Fibreglass asphalt shingles: To CSA A123.5 with a 40-year manufacturer's warranty.
  - .1 Type: self-sealing, glass fiber mat base, ceramically colored/UV resistant mineral surface granules across entire face of shingle; algae-resistant, two piece laminated architectural shingle.
  - .2 Colour: As selected from manufacturer's standard range by Client.
- .2 Starter Strip:

- .1 Starter strip shall consist of a 3-tab shingle placed upside down, with self-adhering strip placed along the leading edge and tabs removed.
- .3 Underlayment:
  - .1 Synthetic underlayment, made of spun-bonded polypropylene, vapour permeable.
- .4 Asphaltic cement:
  - .1 Plastic cement: To CAN/CGSB-37.5.
  - .2 Lap cement: To CAN/CGSB-37.4.
- .5 Nails: galvanized steel, sufficient length to penetrate 19 mm into deck.
- .6 Eave protection membrane: To CSA A123.22, modified bitumen based, self-adhering, minimum thickness 1 mm.
- .7 Plumbing vent flashing: Neoprene boot flashing, sized to suit vent stack, with 400 mm x 400 mm neoprene flange, sized to suit vent diameter.
- .8 Mineral wool insulation: To CAN/ULC S702.1, Type 1, preformed, unfaced.

## **2.2 FASTENERS**

- .1 Nails and staples to be long enough to penetrate decking a minimum of 19 mm.

## **2.3 ACCESSORIES**

- .1 Metal closure: 0.56 mm (26 gauge) galvanized steel unless otherwise shown or specified.
- .2 Spray-in-place polyurethane foam insulation: Thickness as shown or specified to CAN/ULC S705.1 Materials and CAN/ULC S705.2 Application.
- .3 Semi-rigid mineral wool insulation: Semi-rigid glass fibre, rockwool, or slagwool boards, to CAN/ULC 702.2.

## **2.4 STATIC VENTS**

- .1 Comprised of prepainted metal with a clear venting space of 61 square inches, with slant back profile for steep roofs crush and dent resistant.

## **2.5 LIGHTNING PROTECTION CONDUCTOR ATTACHMENT**

- .1 Components to lightning protection system shall comply with CAN/CSA B72-M87 Installation Code for Lightning Protection Systems.
- .2 Include for all copper/brass base plates, anchorage, straps, rods and connectors to reinstate the lightning protection system to comply with CAN/CSA B72-M87 and provide copy of certification prior to contract close-out.

## **2.6 SNOW GUARDS**

- .1 Powder coated, concealed fastening snow-guard system c/w 3-tier continuous tubing and intermediate clip, as recommended by the manufacturer. System to be supplied with all components required for installation including seam clamps, tubing, end caps, fasteners, etc.

## **Part 3 Execution**

### **3.1 REMOVAL OF EXISTING ROOFING**

- .1 Remove existing roofing, flashings and underlay, and expose roof sheathing.
- .2 Withdraw existing shingle and flashing nails. Set those which break off flush with wood deck. Leave surfaces free from dirt and loose material.
- .3 Remove portions of sheathing affected by fungal or insect attack as directed on site by Departmental Representative.
- .4 Remove all metal flashing, step flashing and plumbing vents flashing as per specification. Retain for re-use only where indicated.
- .5 Remove all existing static vents as per specification.
- .6 Remove all exhaust vents, carefully detaching interior ducts and ensure ducts are adequately anchored to substrate.

### **3.2 EXAMINATION**

- .1 Verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for asphalt shingles installation in accordance with manufacturer's written instructions.
  - .1 Visually review substrate in presence of Departmental Representative.
  - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.

- .3 Proceed with installation only after unacceptable conditions have been remedied.

### **3.3 EAVES PROTECTION AND UNDERLAYMENT APPLICATION**

- .1 Install 1 ply self-adhering waterproof membrane to all eaves extending 1.8m up slope and all valleys 1.8m wide and at the transition of all sloped and vertical surfaces as indicated on detail drawings.
- .2 Membrane shall be laid flat following removal of release paper and be free of wrinkles, buckles and fishmouths. Ensure membrane laps are all sealed with the upper ply lapped over the lower roll width by 75mm and with 150mm end laps.
- .3 Install membrane at all changes in plane to extend 300mm up vertical and 600mm onto sheathing.
- .4 Install two roll widths of membrane at all valleys, centred on middle of valley.
- .5 Install underlayment sheeting to all other sheathing surfaces, ensuring all laps are in direction of drainage plane. Nail in place until shingle application commences. Do not allow underlayment to provide overnight waterproof protection without receiving permission from Departmental Representative.

### **3.4 SHINGLE APPLICATION**

- .1 Do asphalt shingle work to CSA A123.51 and CRCA Specification except where specified otherwise.
- .2 Nailing and staples: All fasteners shall be driven straight to the achieve a flush finish. Where fasteners are under driven, the contractor shall return and correct by hand nailing. Where fasteners are over driven or installed crookedly, the contractor shall be requested to return and replace the affected shingles.
- .3 Install drip edge metal flashing along eaves, overhanging 12 mm, with minimum 100 mm flange extending onto roof decking. Nail to deck at 300 mm on centre.
- .4 Install step flashing interleaved between shingles at vertical junctions. Install metal step flashing, extending 100 mm up vertical face and 100mm out onto deck. Provide a minimum headlap of 75 mm for each step flashing. Install shingles over flange of the step flashings. Terminate shingles flush with vertical face.
- .5 Install asphalt shingles on roof slopes 1:6 and steeper in accordance with CSA A123.51.
- .6 Install a starter strip at the eave, rakes and valleys and extend 13mm beyond eave and rake edges. Nails should be installed in a parallel line to base of roof. Nails should be arranged so as not to be left exposed by the cut outs or spaces between shingles tabs. Install starter strip so that self-adhering strip is located at the extreme edge of the roof and faces upward.
- .7 Install the first course of shingles starting with a full shingle overhanging the eave and rake edges by 19 mm.

- .8 Install a minimum of 4 nails per shingle, located as indicated on the shingle packaging. For high wind areas or in cool temperatures, or on slopes of 21:12 (60°) or more, use 6 nails per shingle placed as shown below. Ensure that no nail is within 50 mm of a joint/cutout of the underlying shingle. Seal down each shingle at time of application with three 25 mm diameter spots of roofing cement placed under the shingle 50 mm above the bottom edge and equally spaced along the shingle. Use roofing cement sparingly, as excessive amounts may cause blistering.
- .9 Install the second course of shingles by cutting half the tab off the first shingle. Then alternate this with a full shingle for succeeding course.
- .10 For Architectural Laminated Shingles: Follow manufacturer's specific application requirements for the selected shingle. Generally, this will include trimming off 250 mm, 500 mm and 750 mm respectively, from the left end of the starting shingle and apply to overhang rake edge by 7 mm to 19 mm. Continue each course across the roof with full shingles butting ends loosely. Align the bottom edge of the shingles with the tops of the saw teeth of the shingles in the underlying course. Note: Other offsets between 150 mm – 250 mm may be used. Repeat the sequence of the first four courses up the roof.
- .11 Apply shingles so as to avoid colour blending problems.
- .12 Hip and Ridge Shingles: The contractor shall install precut shingles unless the manufacturer does not fabricate this product. Pre-cut Hip and Ridge products bend each piece over the hip or ridge, and nail per instructions on the wrapper. The final shingle should be set in roofing cement and the exposed nail heads of this shingle should be covered with roofing cement. Prior to application in cold weather, store hip and ridge shingles in a heated area to allow for easier bending.
- .13 In high wind areas: Starter strip shingles must be used at all eaves and rakes. The shingles must be installed with additional nails as specified and they must have an opportunity to seal or be manually sealed as described. Manual sealing in addition to 6 nails is required.

### **3.5 PLUMBING VENT FLASHING**

- .1 Install new neoprene sleeves over existing vents.
- .2 Ensure flange is laid flat and conical portion is stress free and not distorted.

### **3.6 STATIC VENTS**

- .1 Install vents in strict accordance with manufacturers printed instructions. Ensure vents are located in the same areas as the existing and increase opening size to accommodate the larger vent.
- .2 At vent locations, ensure vent opening is cut to match size of vent and does not restrict airflow. Brace openings as required to ensure a suitable substrate for vent unit.

- .3 Install vent flange to sit on shingles below openings and nail to substrate on top and sides. Shingles shall terminate at sides of vent, leaving approximately 25mm clearance around upstand.

### **3.7 SNOW GUARD INSTALLATION**

- .1 Install new system in accordance with manufacturer's written instructions.

### **3.8 CLEANING**

- .1 Leave Work area clean at end of each day.
- .2 Use tarps at ground level to collect debris and remove by end of each day.
- .3 Sweep ground areas with a drag magnet at regular intervals to ensure all nails are removed.
- .4 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment.

### **3.9 PROTECTION**

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by asphalt shingles installation.

**END OF SECTION**



**Part 1      General**

**1.1          RELATED SECTIONS**

- .1      Section 06 10 53 – Miscellaneous Rough Carpentry.
- .2      Section 07 92 00 – Joint Sealants.

**1.2          REFERENCE STANDARDS**

- .1      American Society for Testing and Materials International (ASTM)
  - .1      ASTM A653/A653M-19, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- .2      Canadian General Standards Board (CGSB)
  - .1      CSA A123.3-05(R2015), Asphalt Saturated Organic Roofing Felt.
  - .2      CSA A123.22-08(R2018), Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
  - .3      CAN2-51.32-M77, Sheathing, Membrane, Breather Type.
- .3      Canadian Roofing Contractors Association (CRCA)
  - .1      Roofing Specifications Manual 2012.
- .4      Health Canada/Workplace Hazardous Materials Information System (WHMIS 2015)
  - .1      Safety Data Sheets (SDS).
- .5      Sheet Metal and Air Conditioning Contractors Association of North America (SMACNA)
  - .1      Architectural Sheet Metal Manual

**1.3          ACTION AND INFORMATIONAL SUBMITTALS**

- .1      Submit to the Departmental Representative a list of materials intended for use before they are ordered.
- .2      Product Data:
  - .1      Submit manufacturer's printed product literature including product specifications and technical data sheets for sheet metal flashing fasteners and accessory materials. Include product characteristics, performance criteria, physical size, finish and limitation.
  - .2      Submit copies of WHMIS 2015 SDS - Safety Data Sheets
- .3      Samples:
  - .1      Submit duplicate 50 x 50 mm samples of each type of sheet metal material, finishes and colours.

#### **1.4 COORDINATION**

- .1 Coordinate work of this Section with Related Work specified in other Sections to ensure construction schedule is maintained and watertightness and protection of the building and finished work is maintained at all times.

#### **1.5 EXAMINATION**

- .1 Do not commence work until surface to be covered has been inspected.
- .2 Inspect work and advise the Departmental Representative of conditions that would adversely affect the work of this trade.
- .3 Commencement of work is proof that the Contractor has accepted surfaces as satisfactory for intended operations and accepts responsibility for appearances and performance of completed work.
- .4 Repair damaged and inferior work caused by work of this Contract with materials and finish to match original to the Departmental Representative's approval.

#### **1.6 DELIVERY, STORAGE AND HANDLING**

- .1 Deliver, store and handle materials in accordance with manufacturer's written instructions.
- .2 Safety: Comply with requirements of Workplace Hazardous Materials Information System (WHMIS 2015) regarding use, handling, storage, and disposal of materials.
- .3 Manufacturer's recommendations for handling and storing products are to be considered a minimum requirement.
- .4 Materials shall be delivered to the site, undamaged and in their original packages, with manufacturer's labels visible, attesting to their conformity to specific standards.

### **Part 2 Products**

#### **2.1 GENERAL**

- .1 All standards, regulations and specifications listed herein are considered to be the latest available edition.
- .2 Compatibility between materials is essential. Use only materials that are known to be compatible when incorporated in a completed assembly.

#### **2.2 PREFINISHED SHEET METAL FLASHING**

- .1 Pre-finished metal flashings: As shown on drawings, fabricate from 0.65 mm (24 ga.) steel to ASTM A653 Grade 230 with G90 zinc coating. Surface with Perspectra Series baked enamel finish. Colour to match existing from manufacturer's standard colour range.

### **2.3 PREFINISHED SHEET METAL CLADDING**

- .1 Pre-finished steel cladding: Same material as metal flashings, profile to match existing.
- .2 Pre-finished steel cladding: As shown on drawings, fabricate from 0.65 mm (24 ga.) or 0.51 mm (26 ga.) steel to ASTM A653 Grade 230 with G90 zinc coating. Surface with Perspectra Series baked enamel finish. Colour to match existing adjacent construction from manufacturer's standard colour range.
- .3 Cladding sections shall be provided in the maximum length to minimize the number of field laps.

### **2.4 ACCESSORIES**

- .1 Metal cleat: Same material as metal flashings, 50 mm wide @ 600 mm c/c.
- .2 Continuous metal starter strip: 0.71 mm (24 ga.) galvanized steel, secured at 400 mm c/c.
- .3 Use galvanized, copper, aluminum or stainless steel nails or screws as most compatible with materials and preservatives being utilized.
- .4 Nails: Annular threaded nails of length to penetrate into bases minimum 25 mm. No. 8 screws to penetrate wood 19 mm at 600 mm c/c.
- .5 Masonry fasteners: Spike sized to penetrate concrete 38 mm minimum as specified or shown.
- .6 Exposed fasteners: Where exposed fasteners are specified or as shown, use #10 screws with metal and neoprene washers pre-finished to match colour of flashing. Alternatively, use screws with colour match nylon caps where shown or approved by the Departmental Representative.
- .7 Screws for starter strips and fascia: #8 @ 400 mm c/c.
- .8 Wedges: Rolled plumber sheet lead.
- .9 Sealant: Refer to Drawings and Section 07 92 00 – Joint Sealants.
- .10 Weather barrier membrane: Dry sheathing to CAN/CGSB-51.32, No. 15 perforated asphalt felt to CSA A123.3.
- .11 Self-adhered membrane: To CSA A123.22, self-adhering membrane consisting of SBS rubberized asphalt compound laminated to a polyethelene film. Minimum thickness 1 mm.
- .12 Touch-up paint: As recommended by prefinished material manufacturer.

## **2.5 FABRICATION**

- .1 Fabricate metal flashings and other sheet metal work in accordance with applicable details, as indicated. Where not indicated, follow applicable CRCA 'FL' series details and SMACNA architectural details.
- .2 Metal shall be formed on a bending brake, shaping trimmed and hard seaming shall be done on bench, as far as practicable, with proper sheet metal working tools. Angles of bends and folds for interlocking metal shall be made with full regard to expansion and contraction to avoid buckling and to avoid damaging metal surfaces.
- .3 Fabricate all possible work in shop in maximum 2400 mm lengths by brake forming, bench cutting, drilling and shaping. Match existing profiles where metal flashing is to be repaired.
- .4 Hem exposed edges on underside 13 mm. Mitre and seal corners with sealant.
- .5 Form sections square, true and accurate to size, free from distortion and other defects detrimental to appearance or performance.
- .6 Dry joints are to be tight but not dented so as to permit slight adjustments of sheets and yet remain watertight.
- .7 Lock seams at all corners.
- .8 Apply isolation coating to metal surfaces to be embedded in concrete or mortar.
- .9 Supply all accessories required for installation of sheet metal work of this Section. Fabricate accessories of same material to which they will be used.

## **Part 3 Execution**

### **3.1 MANUFACTURER'S INSTRUCTIONS**

- .1 Compliance: Comply with manufacturer's written recommendations, including product technical bulletins, handling, storage and installation instructions, and datasheets.

### **3.2 SHEET METAL FLASHING INSTALLATION**

- .1 Install sheet metal flashings at copings, walls, expansion joints, roof openings and other components required to protect the membrane flashings as shown on the drawings or otherwise required. Where not indicated, follow applicable CRCA 'FL' series details.
- .2 Install continuous concealed starter strips at all exterior faces. Install cleats between lock joints and as indicated to permanently hold flashing in place. Install hook strip fasteners with 2 fasteners per cleat.

- .3 Sheet metal work shall be installed to cover the entire area it protects and shall be watertight under all service and weather conditions. Install in a uniform manner, true to line, free of dents, warping and distortion.
- .4 Back-paint sheet metal that comes into contact with another kind of metal, masonry or concrete with bituminous paint at the rate of 0.15 L/m<sup>2</sup>.
- .5 Install sheet metal with concealed fasteners at lock joints. Exposed fastening will only be permitted with the approval of the Departmental Representative. When exposed fasteners are shown, space all fasteners evenly in an approved manner. Use lead plugs and screws with neoprene washers where fasteners are exposed, otherwise use concrete drive fasteners where metal flashings are installed over concrete masonry.
- .6 Install weather barrier membrane under sheet metal where indicated.
- .7 Join sheet metal by "S" lock seams, to permit thermal movement. Seal all fasteners and completely fill all joints with Type 'B' sealant as flashing is being installed. Clean off all excessive visible material subsequent to installation.
- .8 When flashing is being installed in more than one piece, offset joints in adjacent flashings by approximately 50%.
- .9 Form inside and outside corners by means of locked seams. Do not use pop rivets unless accepted by Departmental Representative.
- .10 Slope all metal to interior of roof area to maintain slope, unless otherwise indicated. Do not form open joints or pockets that fail to drain water.
- .11 Where existing reglets are to be re-used, remove existing sealant and re-cut to conform to the size requirements specified herein.

### **3.3 SHEET METAL CLADDING INSTALLATION**

- .1 Provide all required accessories to complete the installation at all corners, terminations and projections. Ribs shall be installed horizontally and metal sections shall overlap by a minimum of 150 mm. Use the longest lengths possible to minimize the number of joints.
- .2 Secure Z-girts to existing substrate vertically. Install one Z-girt at the wall head and one at the wall base and at a maximum spacing of 900 mm between bars to provide suitable substrate for cladding and flashing anchorage. Anchor Z-girt to substrate at 300 mm maximum c/c.
- .3 Siding to be secured to Z-girts with self-taping screws complete with neoprene washers. Colour to match siding. Fasteners shall be installed between each rib and at a consistent elevation.
- .4 Install siding in accordance with design intent and as indicated on shop drawings.

- .5 All perimeters shall be covered with specified sheet metal flashing and caulked at termination. Include for all J-trim, U-trim and closures at penetrations and drip edges at base.

### **3.4 CLEANING**

- .1 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment. Remove and replace all sheet metal sections that received surface damage or scratches during fabrication, delivery or installation.
- .2 For scratches and scuffs to be retained in the new installation, use touch up paint recommended by the metal material supplier.
- .3 Leave work areas clean, free from grease, finger marks and stains.

**END OF SECTION**

**Part 1      General**

**1.1            RELATED SECTIONS**

- .1      Section 06 10 53 – Miscellaneous Rough Carpentry.
- .2      Section 07 52 00 - Modified Bituminous Membrane Roofing.
- .3      Section 07 62 00 – Sheet Metal Flashing and Trim.
- .4      Section 22 05 11 – Plumbing and Drainage.

**1.2            REFERENCES**

- .1      American Society for Testing and Materials International, (ASTM)
  - .1      ASTM C920-18, Standard Specification for Elastomeric Joint Sealants.
- .2      Health Canada/Workplace Hazardous Materials Information System (WHMIS 2015)
  - .1      Safety Data Sheets (SDS).

**1.3            COORDINATION**

- .1      Coordinate work of this Section with Related Work specified in other Sections to ensure construction schedule is maintained and watertightness and protection of the building and finished work is maintained at all times.

**1.4            EXAMINATION**

- .1      Do not commence work until surface to be covered has been inspected.
- .2      Inspect work and advise the Departmental Representative of conditions that would adversely affect the work of this trade.
- .3      Commencement of work is proof that the Contractor has accepted surfaces as satisfactory for intended operations and accepts responsibility for appearances and performance of completed work.

**1.5            DELIVERY, STORAGE AND HANDLING**

- .1      Deliver and store materials in original wrappings and containers with manufacturer's seals and labels, intact. Protect from freezing, moisture, water and contact with ground or floor.

**1.6            ENVIRONMENTAL AND SAFETY REQUIREMENTS**

- .1      Comply with requirements of Workplace Hazardous Materials Information System (WHMIS 2015) regarding use, handling, storage and disposal of hazardous materials; and regarding labeling and provision of safety data sheets acceptable to Labour Canada.

- .2 Conform to manufacturer's recommended temperatures, relative humidity and substrate moisture content for application and curing of sealants including special conditions governing use.
- .3 In confined spaces provide portable supply of outside air and exhaust fans to ensure fumes will not impact workmen or building occupants.
- .4 Compatibility is essential in use of any materials that will be compatible when incorporated in finished assembly.

**Part 2 Products**

**2.1 MATERIALS**

- .1 Sealants acceptable for use on this project must be listed on CGSB Qualified Products List issued by CGSB Qualification Board for Joint Sealants. Where sealants are qualified with primers use only these primers.
- .2 Modified bitumen sealant (Sealant Type 'A'):
  - .1 For penetration and terminations of bituminous and modified bituminous membrane: As recommended by membrane manufacturer.
- .3 Urethanes one part (Sealant Type 'B'):
  - .1 Non-sag: To ASTM C920, Type S, Class 25 or higher, use NT.

Type		Use	Movement Capability Class		
S	Single Component	T	Traffic	Class 100/50	100% expansion
M	Multi-Component	NT	Non-traffic		50% compression
Grade		I	Immersed	Class 50	50%
P	Pourable	M	Mortar	Class 35	35%
NS	Non-sag	G	Glass	Class 25	25%
		O	Other	Class 12.5	12.5%

**2.2 JOINT CLEANER**

- .1 Non-corrosive and non-staining type, compatible with joint forming materials and sealant recommended by sealant manufacturer.

**2.3 PRIMER**

- .1 As recommended by sealant manufacturer for specific substrate adhesion.

**Part 3 Execution**

**3.1 PROTECTION**

- .1 Protect installed work of other trades from staining or contamination.



### 3.2 PREPARATION OF JOINT SURFACES

- .1 Examine joint sizes and conditions to establish correct depth to width relationship for installation of backup materials and sealants.
- .2 Clean bonding joint surfaces of harmful substances including dust, rust, oil, grease and other matter, which may impair work.
- .3 Do not apply sealants to joint surfaces treated with sealer, curing compound, water repellent, or other coatings unless tests have been performed to ensure compatibility of materials. Remove coatings as required.
- .4 Ensure joint surfaces are dry and frost free.
- .5 Prepare surfaces in accordance with manufacturer's directions.

### 3.3 APPLICATION

- .1 Sealant - General:
  - .1 Apply sealant when air and substrate temperatures are not forecast to be less than minimum recommended by manufacturer. Do not work during inclement weather. Perform all work in accordance with manufacturer's written instructions.
  - .2 Mask edges of joint where irregular surface or sensitive joint border exists to provide neat joint.
  - .3 Apply sealant in continuous beads.
  - .4 Apply sealant using gun with proper size nozzle.
  - .5 Use sufficient pressure to fill voids and joints solid.
  - .6 Form surface of sealant with full bead, smooth, free from ridges, wrinkles, sags, air pockets and embedded impurities.
  - .7 Tool exposed surfaces before skinning begins to give slightly concave shape.
  - .8 Remove excess compound promptly as work progresses and upon completion.
  - .9 The use of liquid tooling aids, such as soapy water or alcohols, are prohibited as they may impact effective sealant cure, adhesion and potentially cause aesthetic issues.
- .2 Sealant Type 'A':
  - .1 Install sealant Type 'A' to the top of membrane flashings where required or as shown on drawings. Modified sealant to be installed around finished flashings at all protrusions including soil stacks, sleeves, pitch boxes and fasteners securing membrane to walls.
  - .2 Apply sealant Type 'A' with hand trowel to achieve a 25 mm width and minimum 3 mm thickness.
  - .3 Apply sealant Type 'A' immediately after flashings have been installed and are still warm. No membrane flashings shall be left uncovered at the end of any work period. *(Non-compliance with this mandate may result in*

*rejection, removal and replacement of the membrane flashings to the affected area).*

- .4 Trowel sealant Type 'A' in two directions to ensure proper adhesion to substrate and that all surface irregularities are filled. Tool surface of modified sealant to smooth finish.
- .5 Install sealant Type 'A' at the underside of drains, metal sleeves and other location where specified on drawings.
- .3 Curing:
  - .1 Cure sealants in accordance with sealant manufacturer's instructions.
  - .2 Do not cover up sealants until proper curing has taken place.
- .4 Install sealant Type 'B' at sheet metal terminations.

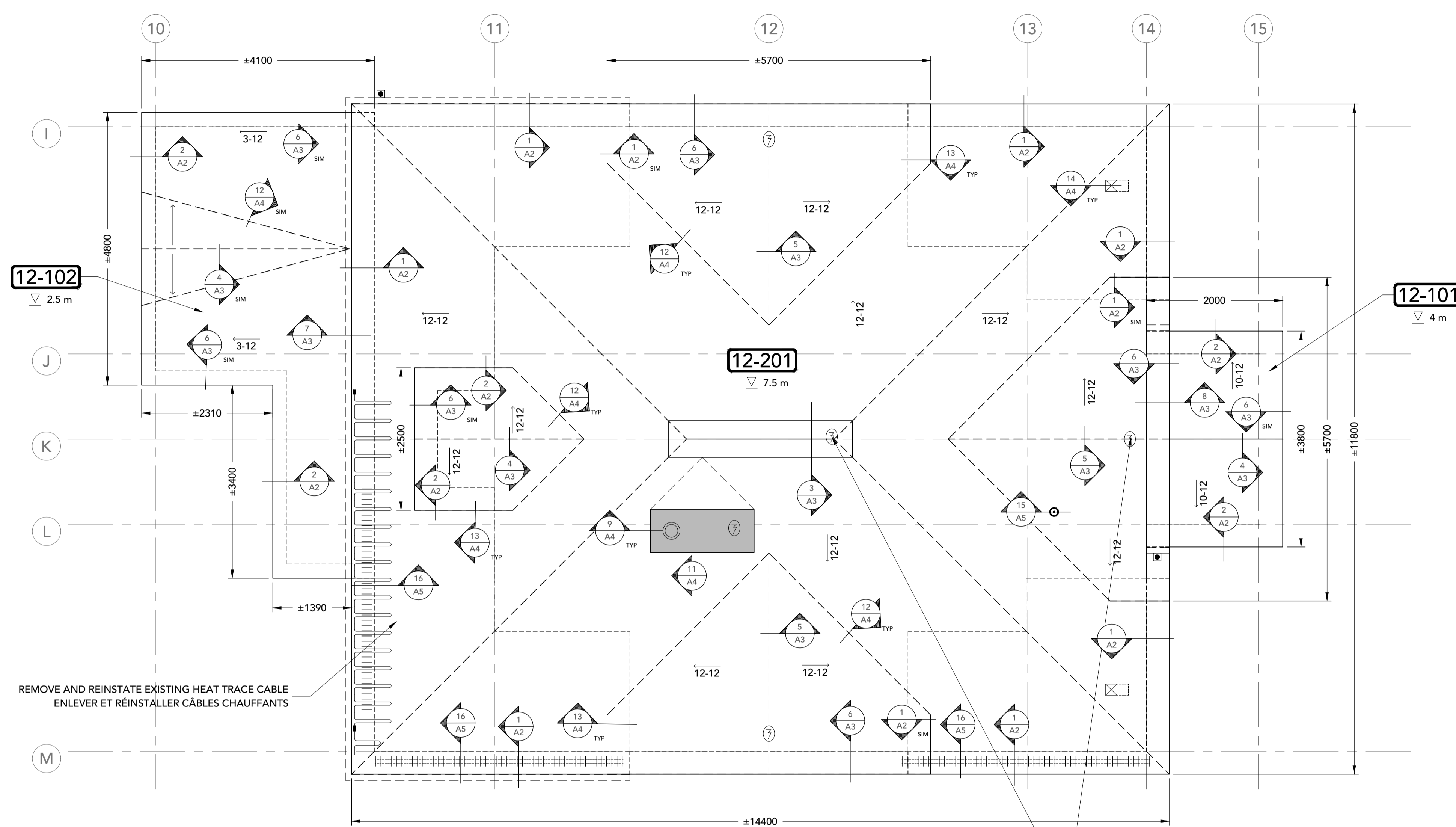
### **3.4 CLEANING**

- .1 Clean adjacent surfaces immediately and leave work neat and clean.
- .2 Remove excess droppings using recommended cleaners as work progresses.
- .3 Remove masking tape after initial set of sealant.
- .4 Clean all contaminated surfaces to Owner's acceptance.
- .5 Remove all rubbish and surplus materials from the job site on a daily basis.

### **3.5 PROTECTION**

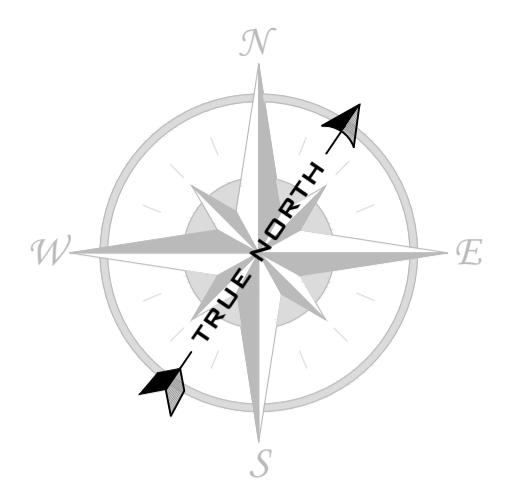
- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by joint sealants installation.

**END OF SECTION**

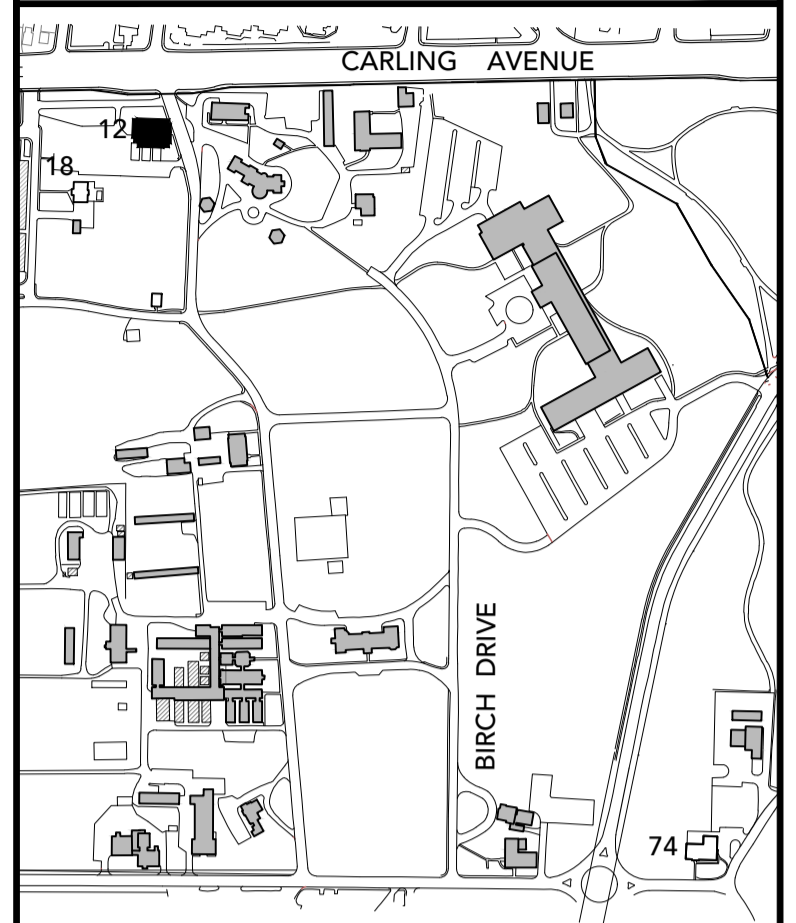


ROOF PLAN - BUILDING 12 / PLAN DU TOIT - BÂTIMENT 12  
1:50

LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	CHIMNEY CHEMINÉE		HEAT TRACE CABLE (RE & RE) CÂBLES CHAUFFANTS (RE & RE)
	CRICKET CRICKET		ICE GUARD GARDE DE GLACE
	EAVESTROUGH / DOWNSPOUT GOUTTIÈRE / DESCENTE		LIGHTNING PROTECTION TO BE REPLACE PARATONNERRE À ÊTRE REMPLACER
	GOOSENECK EXHAUST COL-DE-CYGNE		PLUMBING VENT ÉVENT DE PLOMBERIE
	ROOF SLOPE PENTE DE TOIT		ROOF NUMBER AND ELEVATION NUMÉRO ET HAUTEUR DU TOIT



Public Works and  
Government Services Canada  
Architectural and Engineering Services  
Ontario Region  
Travaux publics et  
Services gouvernementaux Canada  
Services d'architecture et de génie  
Région de l'Ontario



revision	description	date
03	FOR TENDER/ POUR APPEL D'OFFRE	2020-10-22
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01	FOR 66% REVIEW/ POUR RÉVISION DE 66%	2020-08-21

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RÉFECTION DE TOITURE  
ROOF REPLACEMENT, CEF  
BUILDING 12  
BÂTIMENT 12

drawing title  
titre du dessin  
ROOF PLAN  
PLAN DU TOIT  
BUILDING 12 / BÂTIMENT 12

drawn by  
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ROEL PARKER

designed by  
conçu par  
MICHEL PAULIN

approved by  
approuvé par  
MICHAEL BARRINGTON

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soumission  
FOR 99% REVIEW  
POUR RÉVISION DE 99%

project manager  
administrateur  
de projets

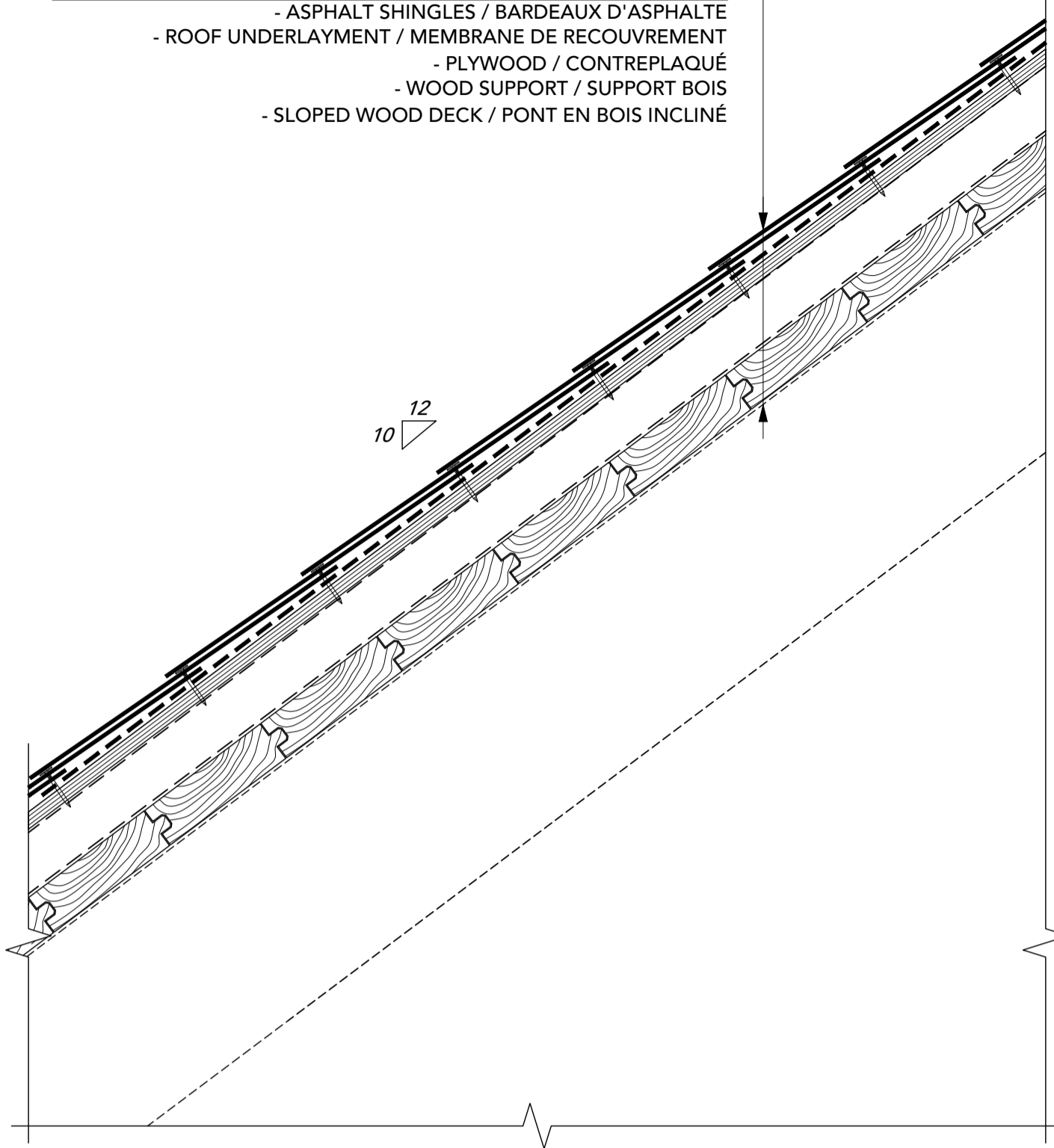
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2020-08-28

project no.  
no. du projet  
CEF20 0008

drawing no.  
dessiné no.  
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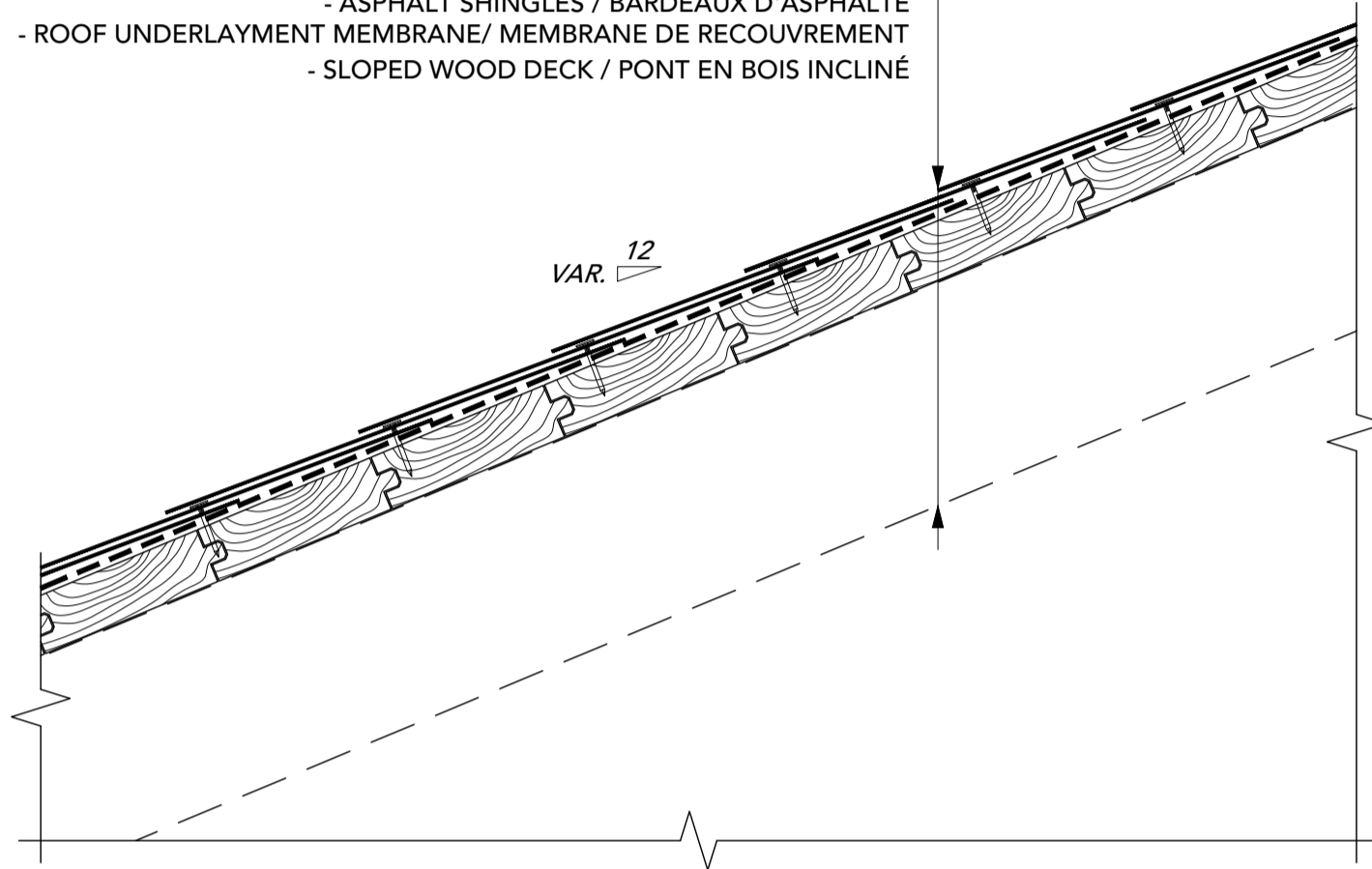


**EXISTING ROOFING SYSTEM E1 / SYSTÈME DE TOITURE EXISTANTE E1:**  
 - ASPHALT SHINGLES / BARDEAUX D'ASPHALTE  
 - ROOF UNDERLAYMENT / MEMBRANE DE RECOUVREMENT  
 - PLYWOOD / CONTREPLAQUÉ  
 - WOOD SUPPORT / SUPPORT BOIS  
 - SLOPED WOOD DECK / PONT EN BOIS INCLINÉ



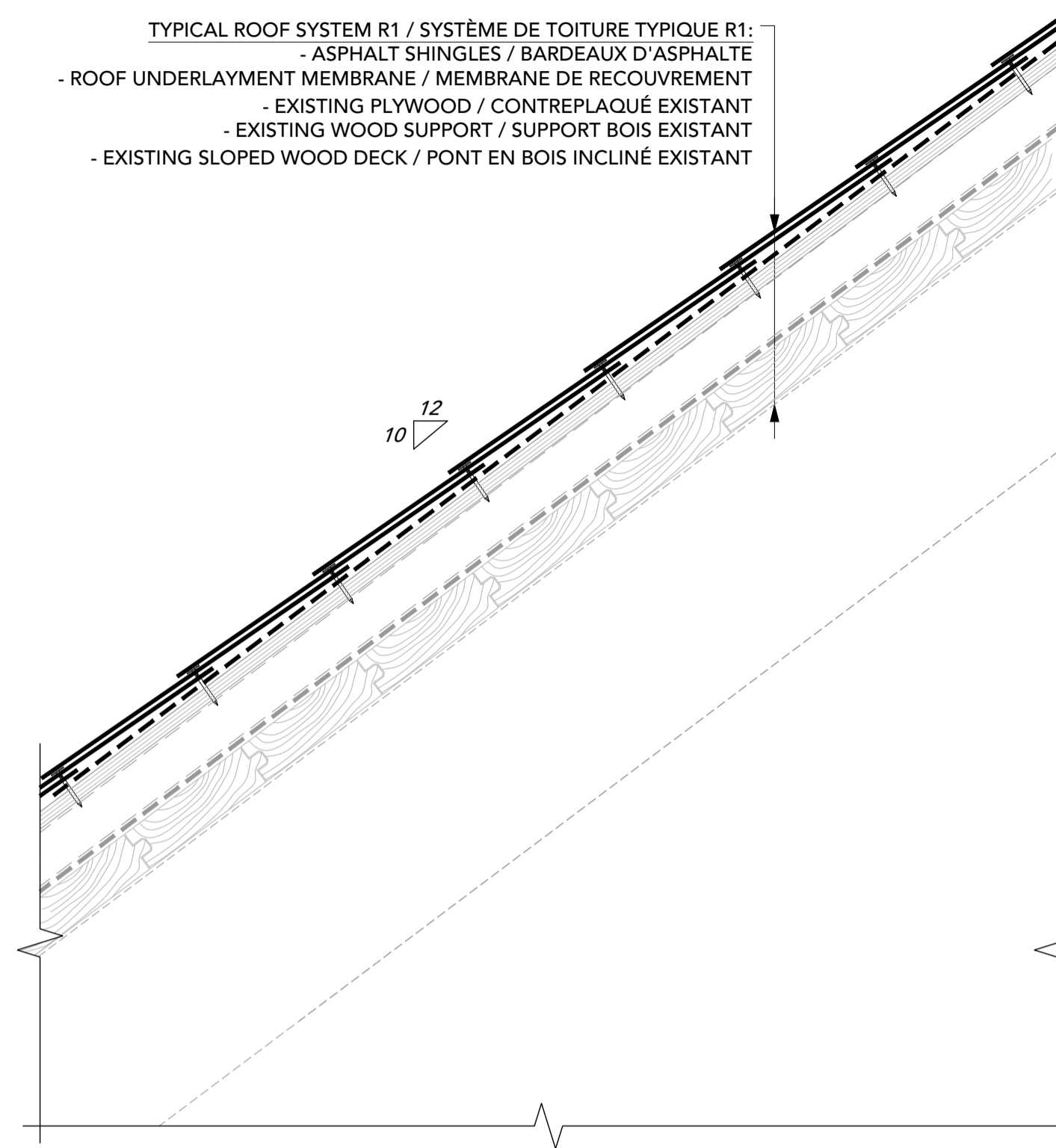
**E1** EXISTING ROOFING SYSTEM E1 / SYSTÈME DE TOITURE EXISTANTE E1  
**A2** 1:5 ROOF AREA 12-201 / BASSINS 12-201

**EXISTING ROOFING SYSTEM E2 / SYSTÈME DE TOITURE EXISTANTE E2:**  
 - ASPHALT SHINGLES / BARDEAUX D'ASPHALTE  
 - ROOF UNDERLAYMENT MEMBRANE / MEMBRANE DE RECOUVREMENT  
 - SLOPED WOOD DECK / PONT EN BOIS INCLINÉ



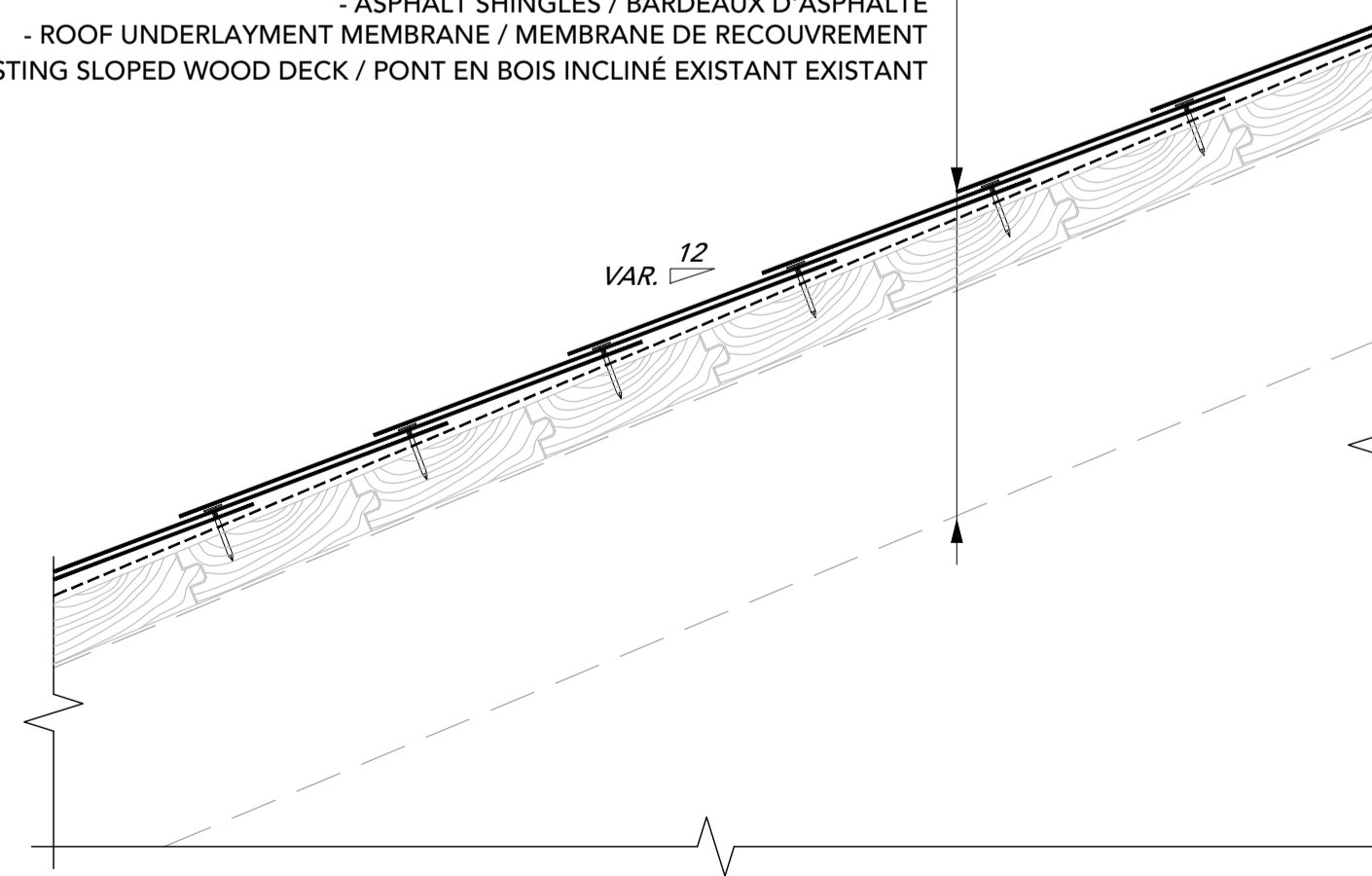
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**A2** 1:5 ROOF AREA 12-101 & 12-102 / BASSINS 12-10 ET 12-102

**TYPICAL ROOF SYSTEM R1 / SYSTÈME DE TOITURE TYPIQUE R1:**  
 - ASPHALT SHINGLES / BARDEAUX D'ASPHALTE  
 - ROOF UNDERLAYMENT MEMBRANE / MEMBRANE DE RECOUVREMENT  
 - EXISTING PLYWOOD / CONTREPLAQUÉ EXISTANT  
 - EXISTING WOOD SUPPORT / SUPPORT BOIS EXISTANT  
 - EXISTING SLOPED WOOD DECK / PONT EN BOIS INCLINÉ EXISTANT

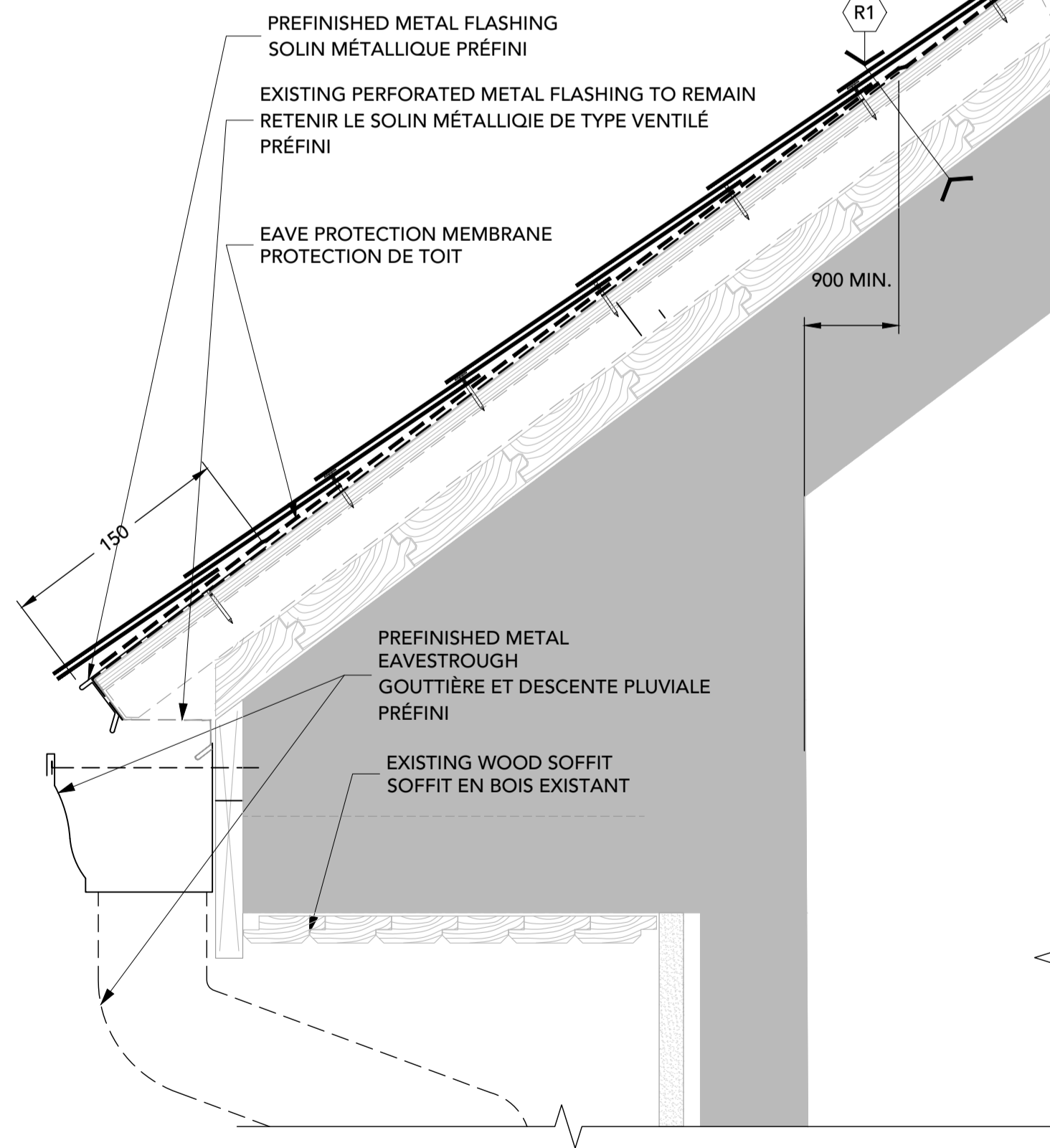


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**A2** 1:5 ROOF AREA 12-201 / BASSIN 12-201

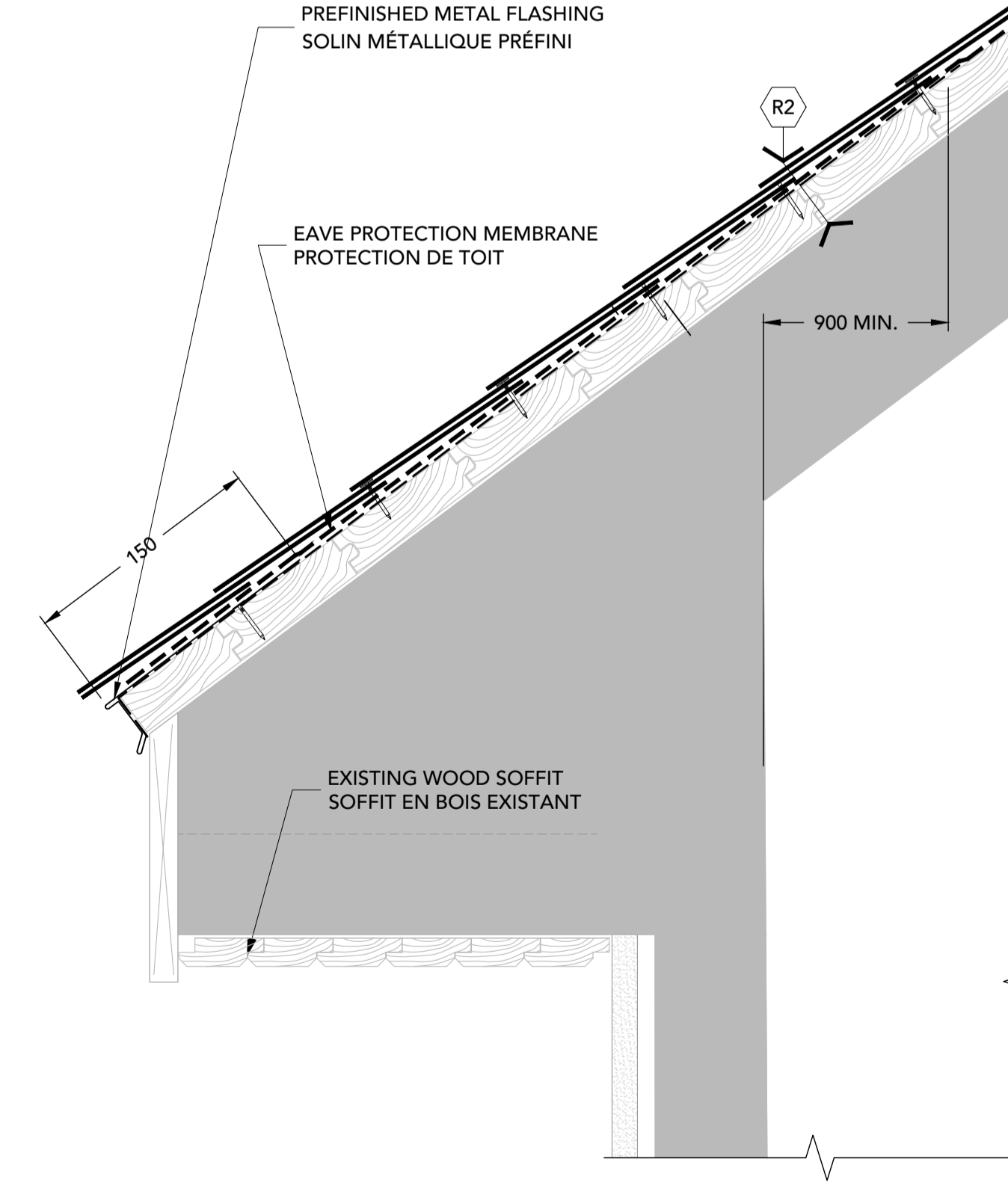
**TYPICAL ROOF SYSTEM R1 / SYSTÈME DE TOITURE TYPIQUE R2:**  
 - ASPHALT SHINGLES / BARDEAUX D'ASPHALTE  
 - ROOF UNDERLAYMENT MEMBRANE / MEMBRANE DE RECOUVREMENT  
 EXISTING SLOPED WOOD DECK / PONT EN BOIS INCLINÉ EXISTANT



**R2** TYPICAL ROOF SYSTEM R1 / SYSTÈME DE TOITURE TYPIQUE R2  
**A2** 1:5 ROOF AREAS 12-101 & 12-102 / BASSINS 12-101 ET 12-102



**1** ROOF EAVES / AVANT TOIT  
**A2** 1:5



**2** ROOF EAVES / AVANT TOIT  
**A2** 1:5

revision		date
03	FOR TENDER/ POUR APPEL D'OFFRE	2020-10-22
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**RÉFECTION DE TOITURE  
 ROOF REPLACEMENT, CEF  
 BUILDING 12  
 BÂTIMENT 12**

drawing title  
 titre du dessin  
**DETAILS  
 DÉTAILS**

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**ROEL PARKER**

designed by  
 conc par  
**MICHEL PAULIN**

approved by  
 approuvé par  
**MICHAEL BARRINGTON**

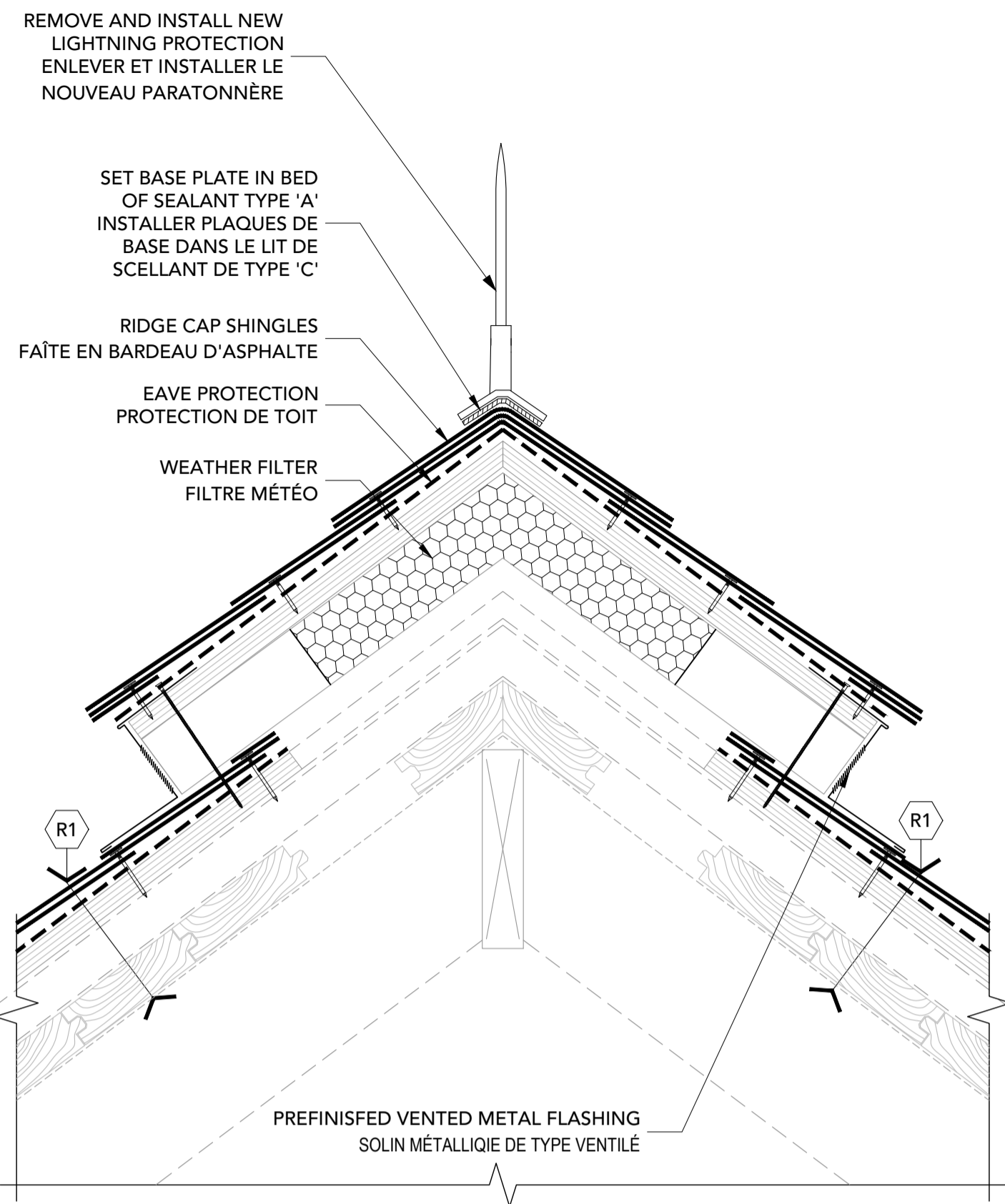
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**2020-08-28**

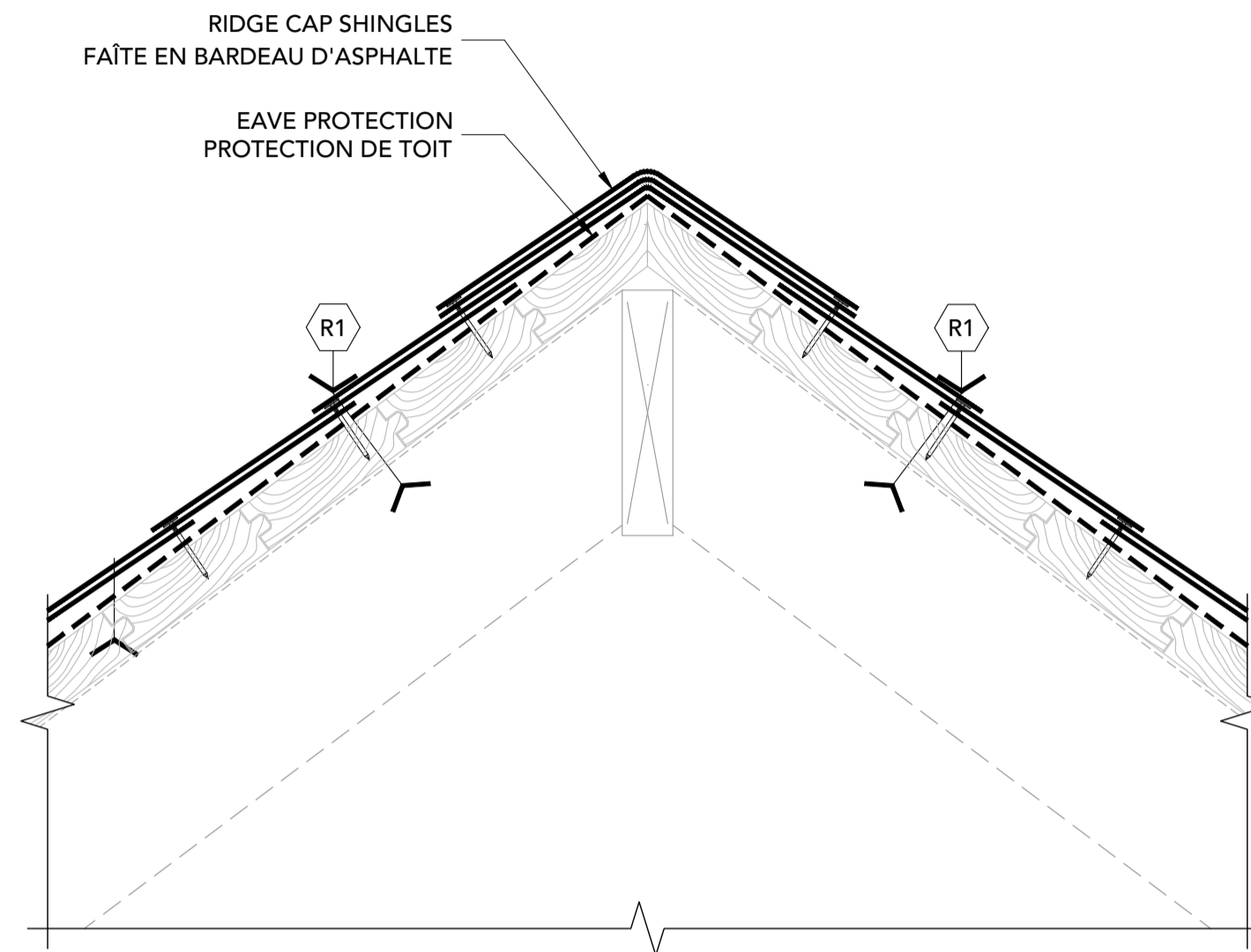
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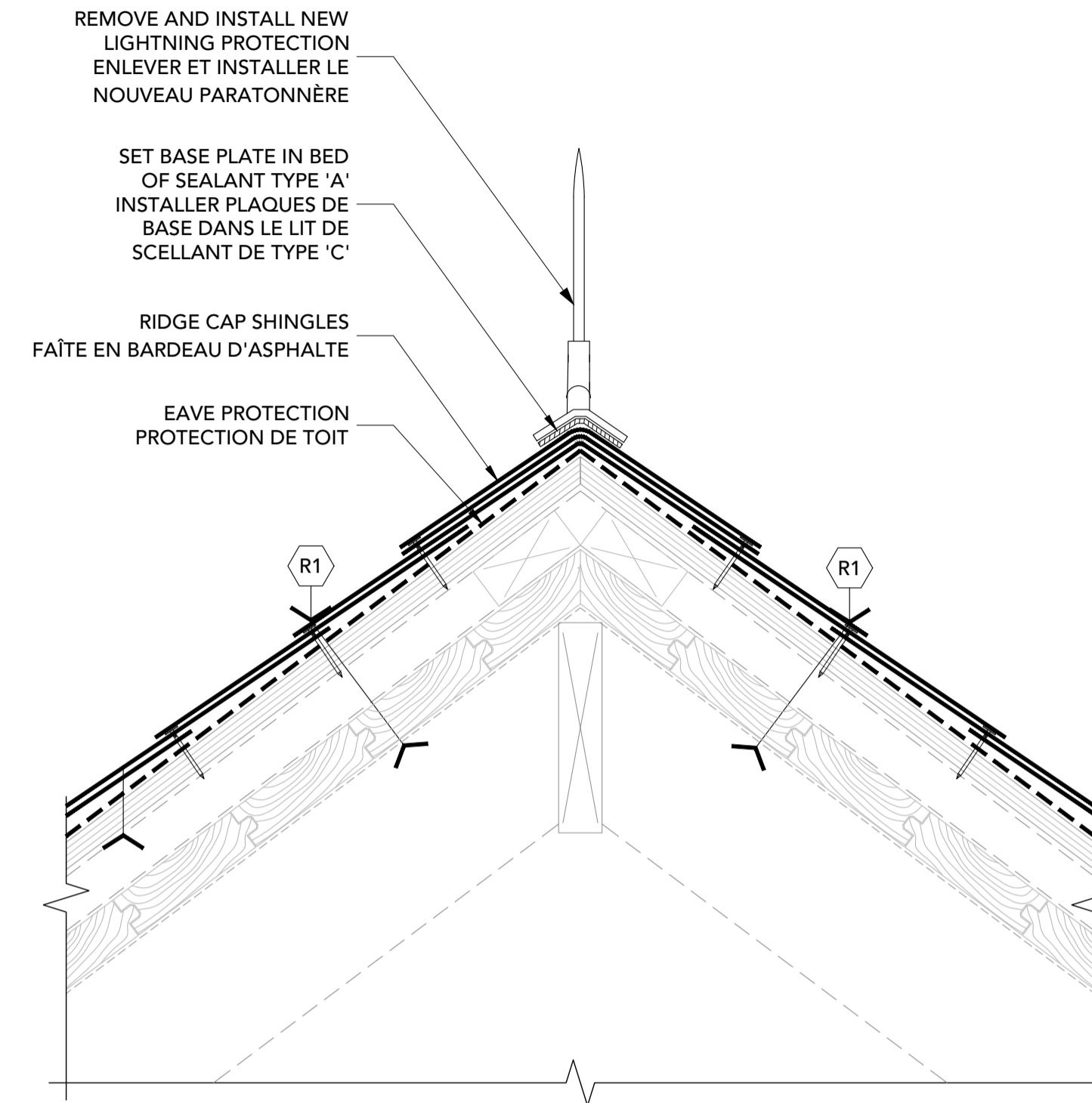




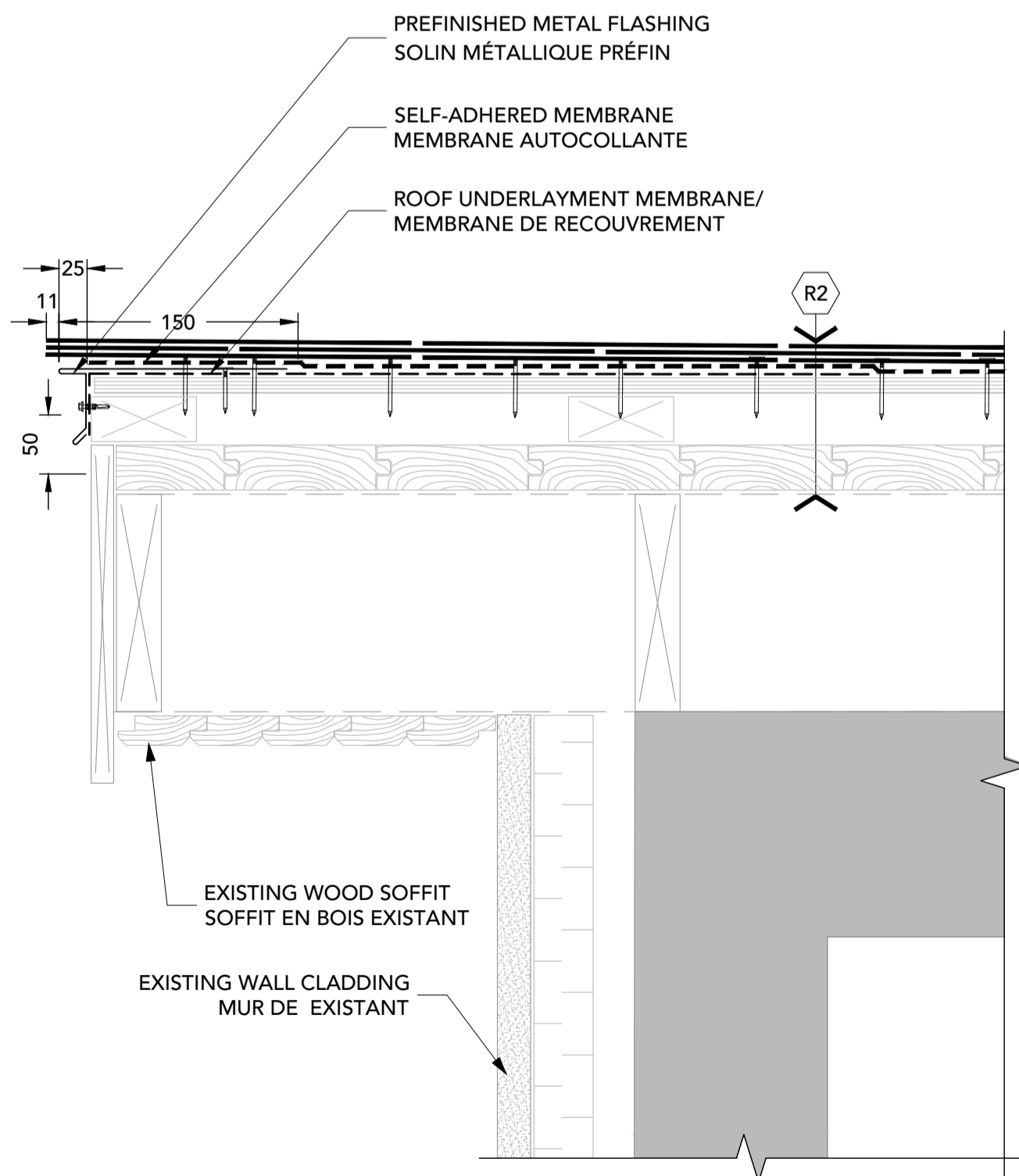
3 RIDGE VENT / D'ÉVENT FAÏTIER  
A3 1:5



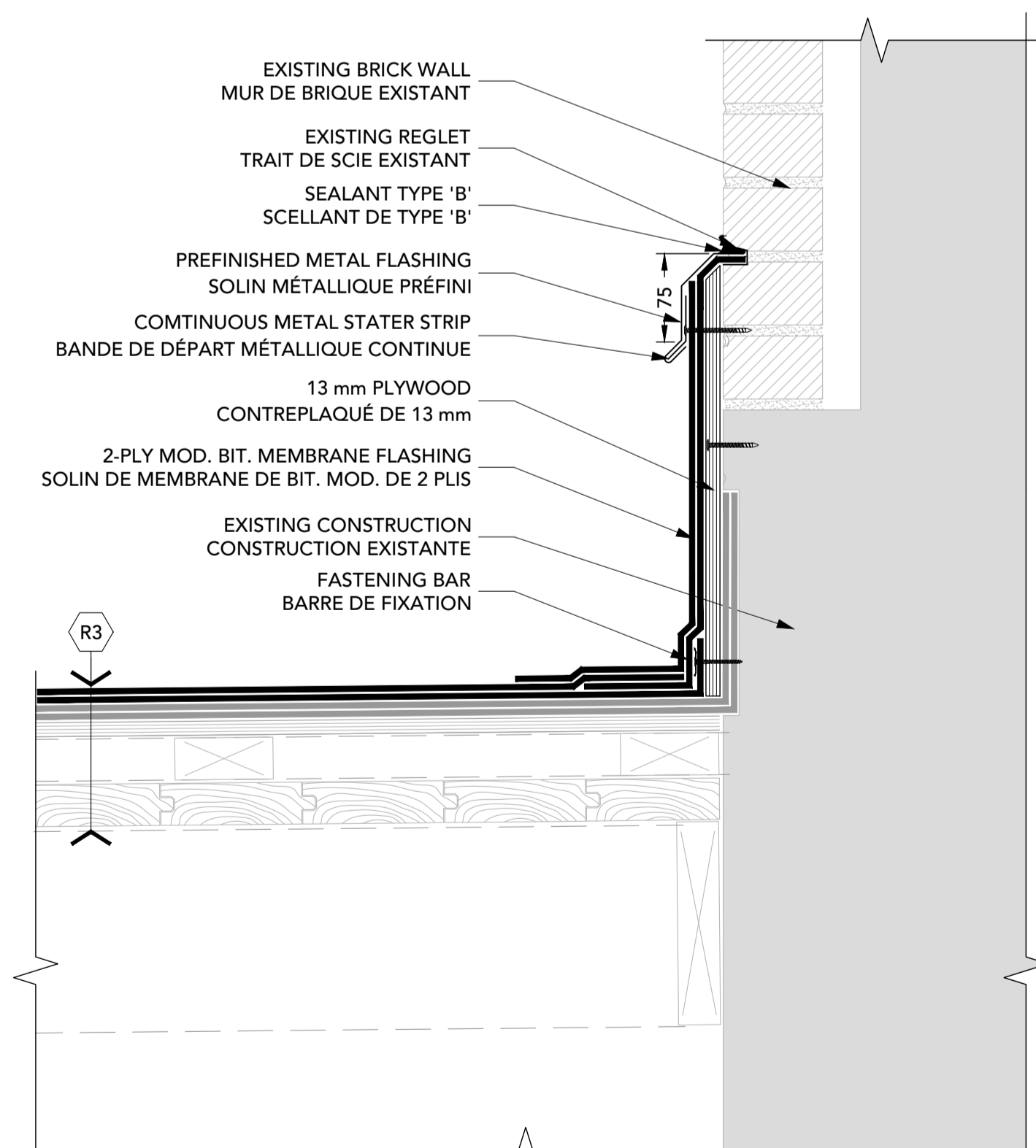
4 ROOF RIDGE / CRÊTE DE TOIT  
A3 1:5



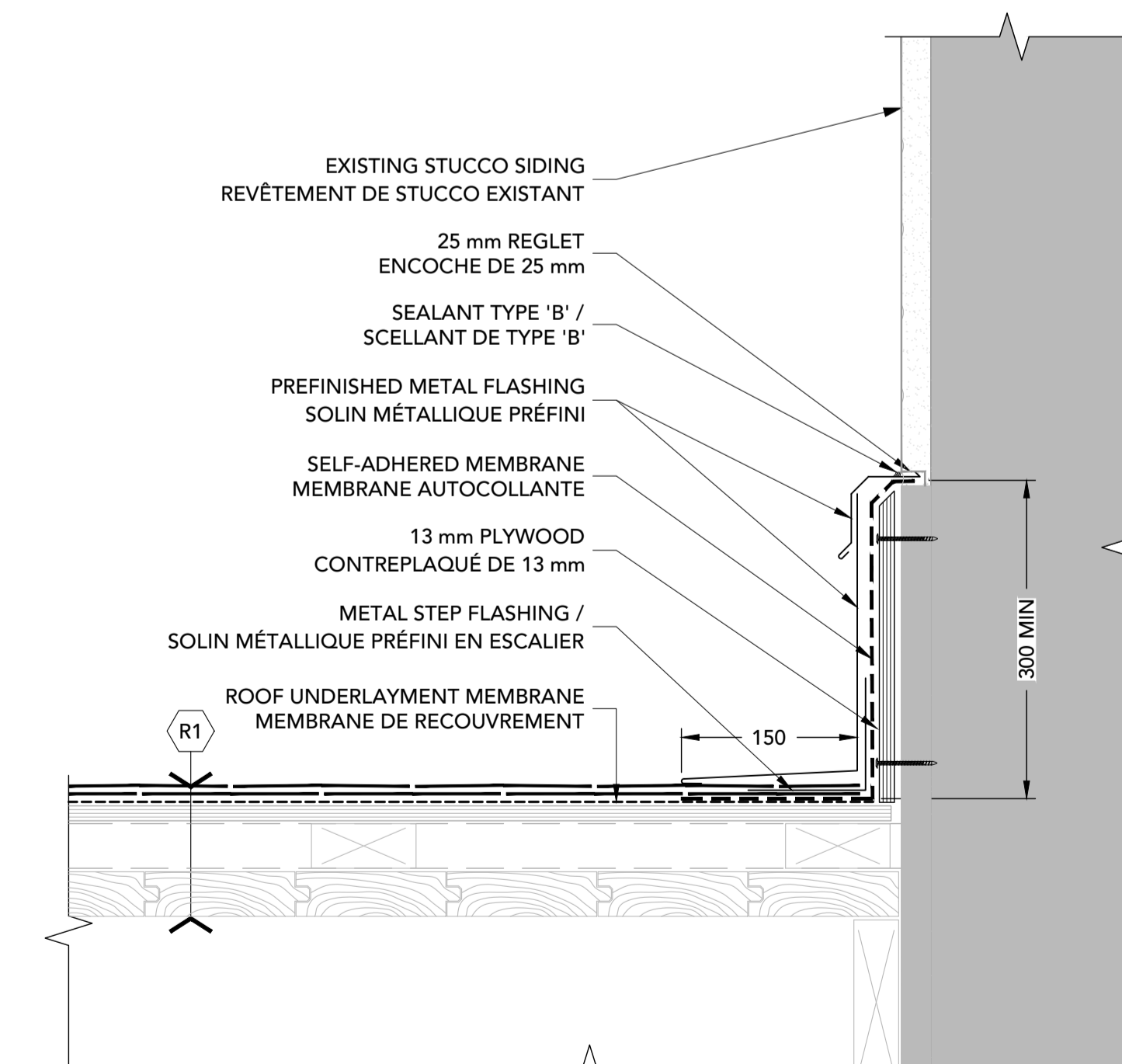
5 ROOF RIDGE / CRÊTE DE TOIT  
A3 1:5



6 ROOF EDGE / BORD DE TOIT  
A3 1:5



7 WALL FLASHING/SOLIN MURAL  
A3 1:5



8 WALL FLASHING / SOLIN MURAL  
A3 1:5

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BÂTIMENT 12**

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DÉTAILS**

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ROEL PARKER

designed by concé par  
MICHEL PAULIN

approved by approuvé par  
MICHAEL BARRINGTON

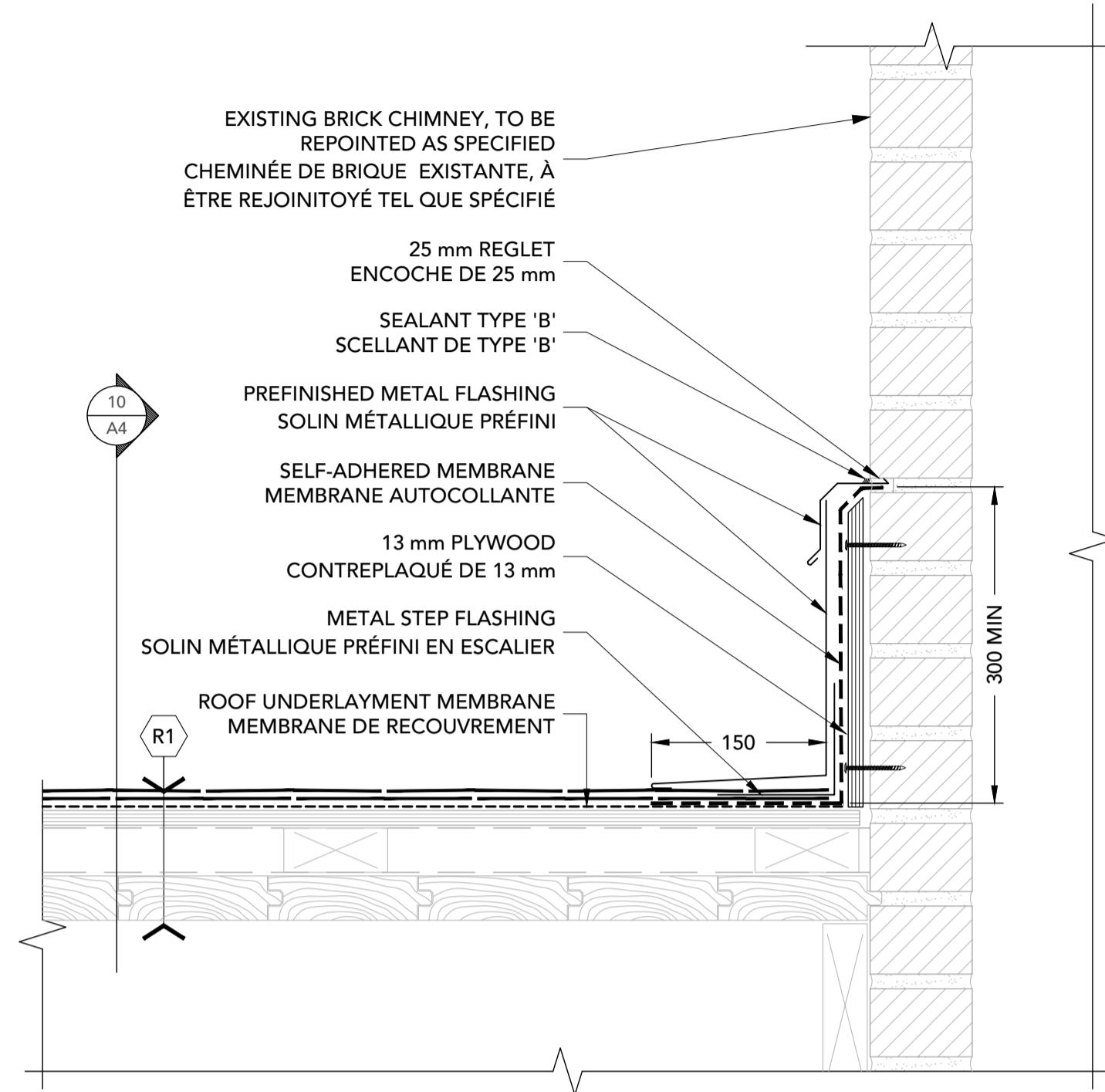
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project manager administrateur de projets

project date date du projet  
2020-08-28

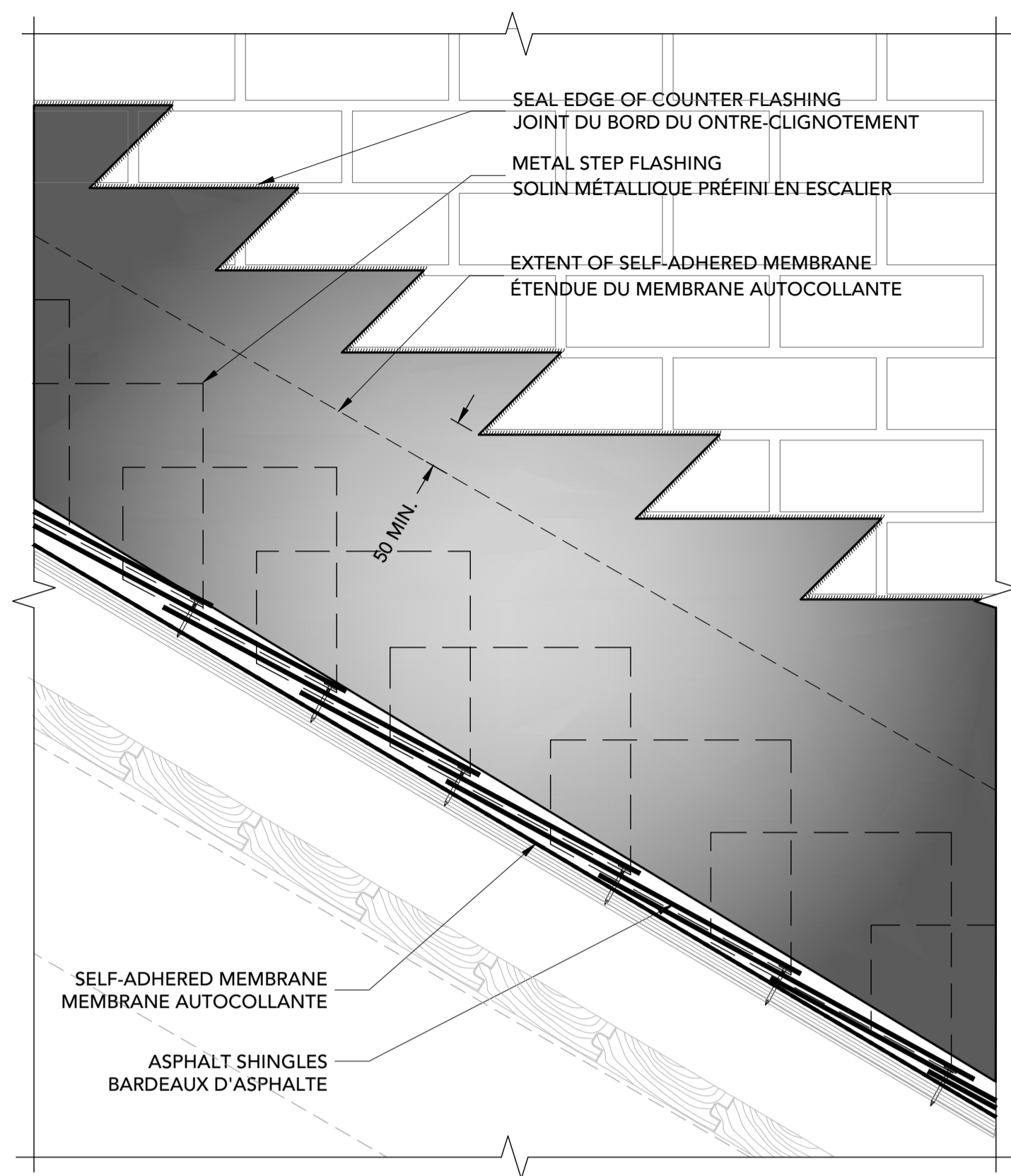
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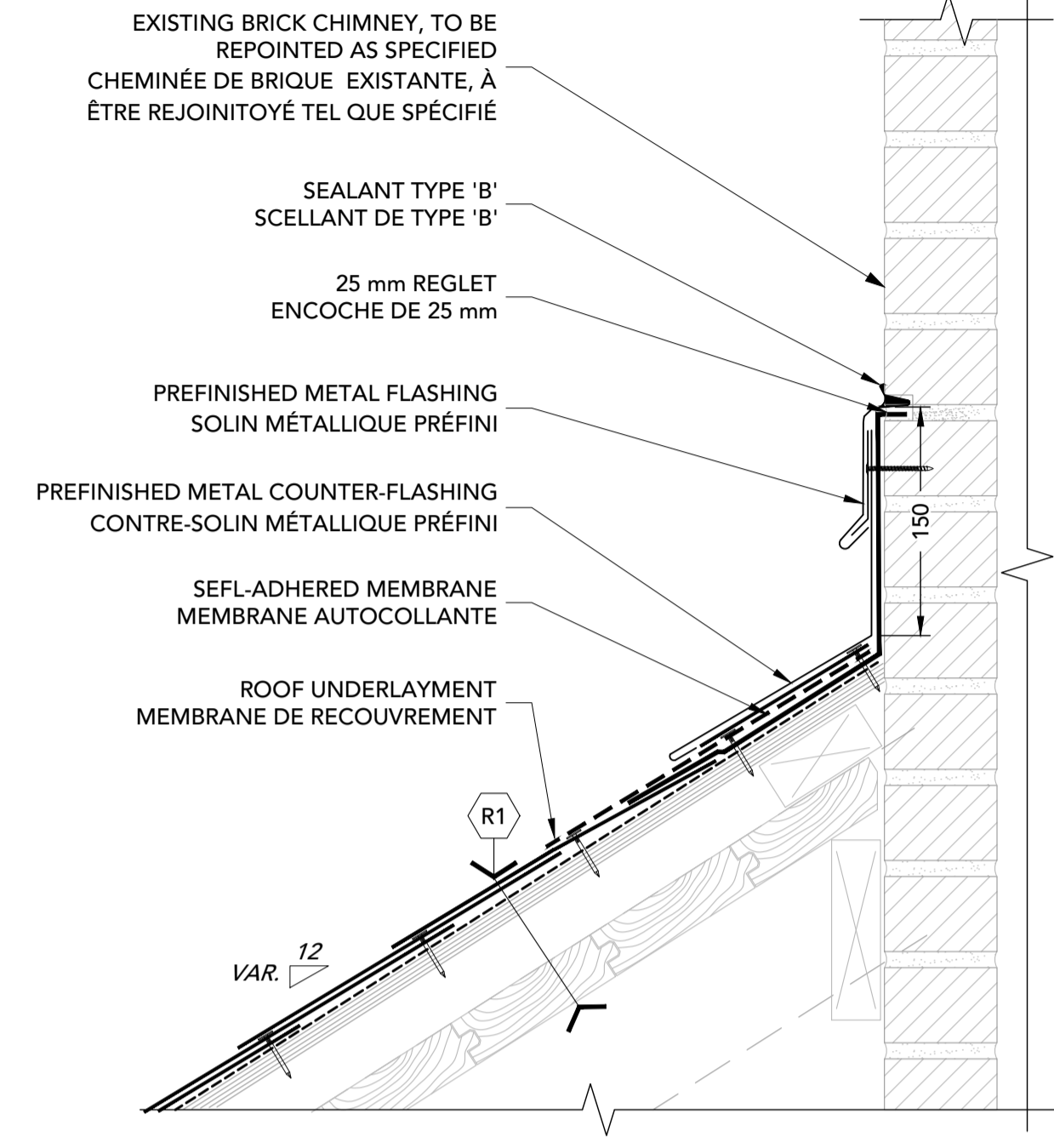




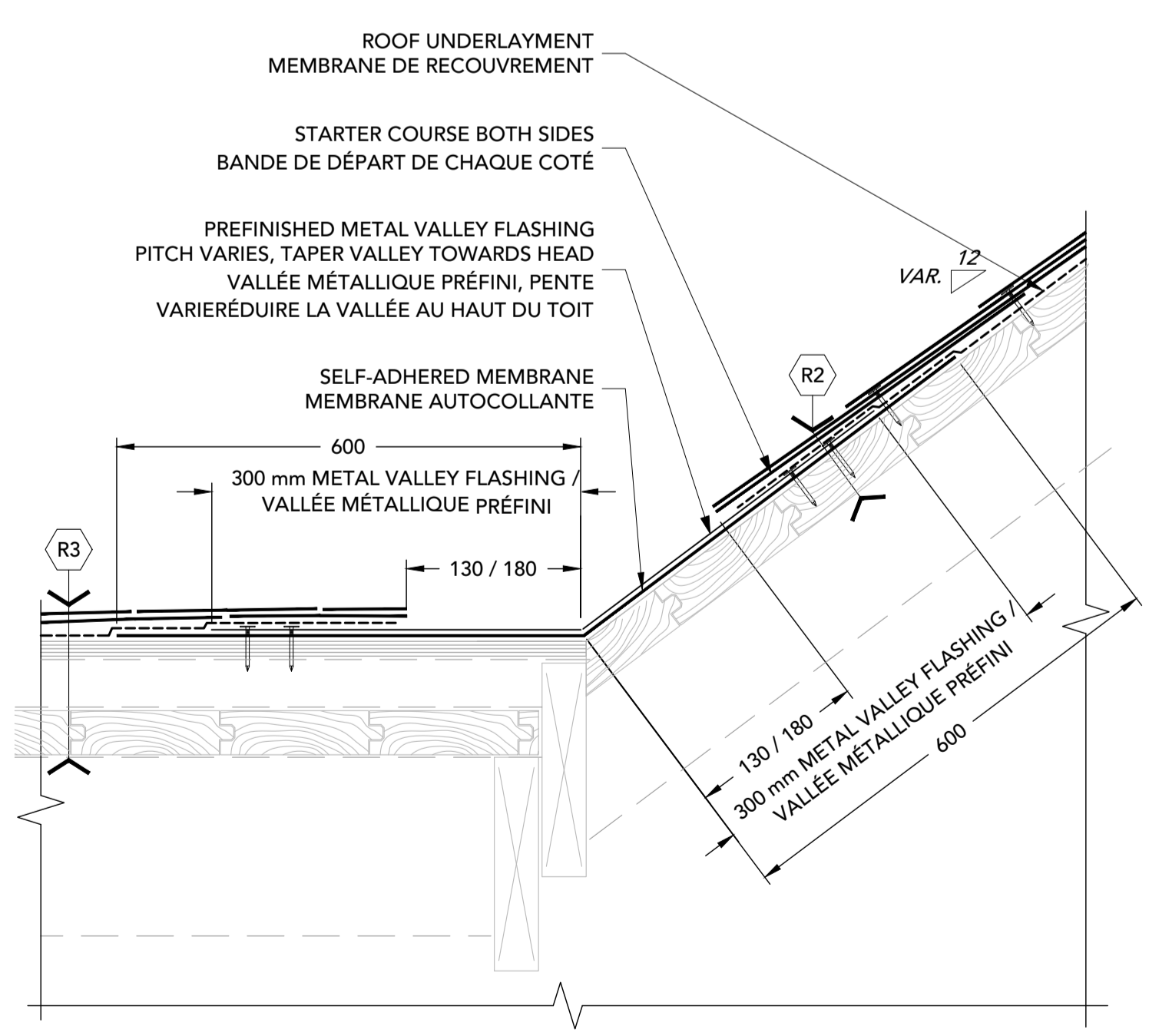
9 CHIMNEY / CHEMINÉE  
 A4 1:5



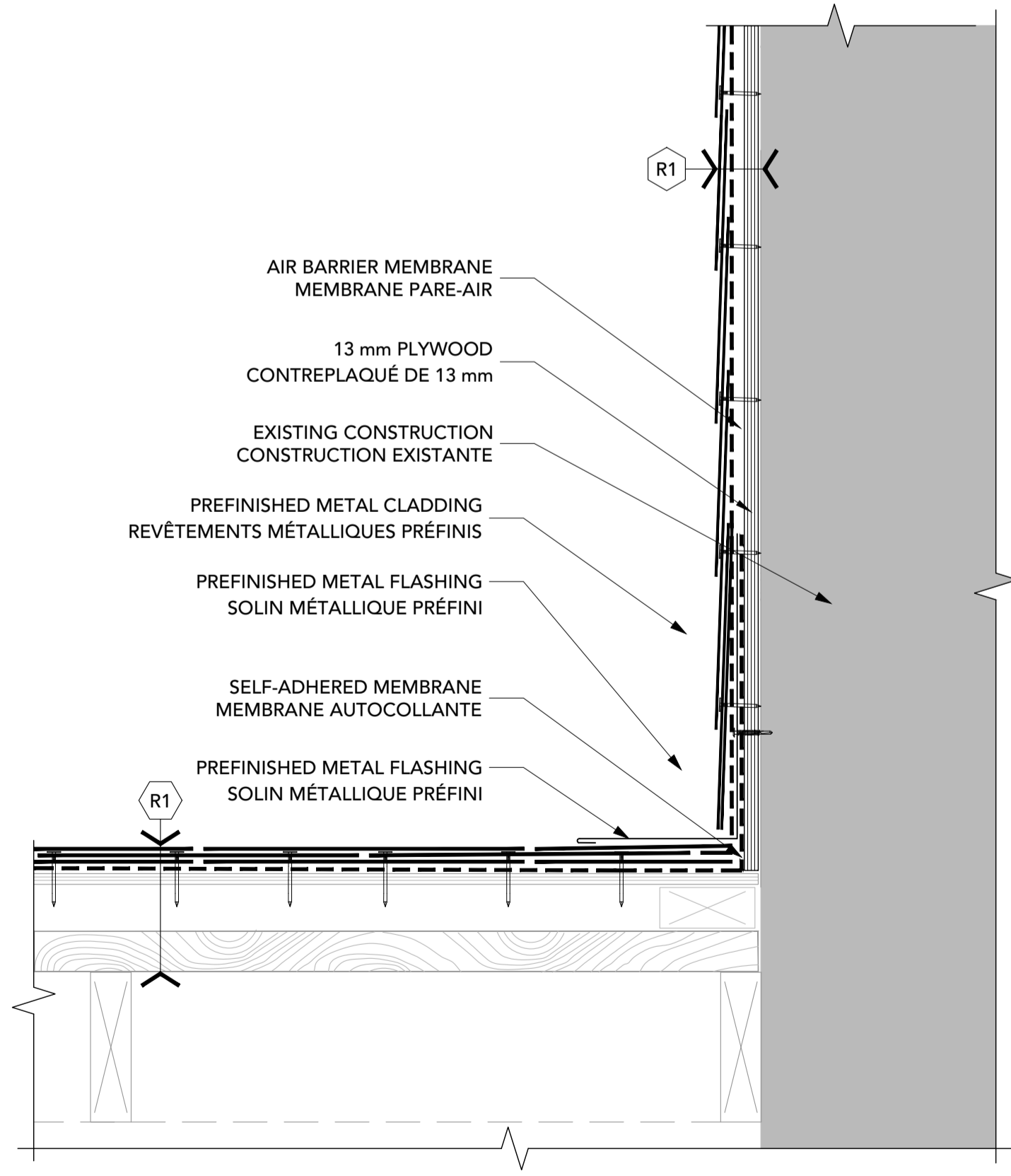
10 METAL STEP FLASHING / SOLIN MÉTALLIQUE PRÉFINI EN ESCALIER  
 A4 1:5



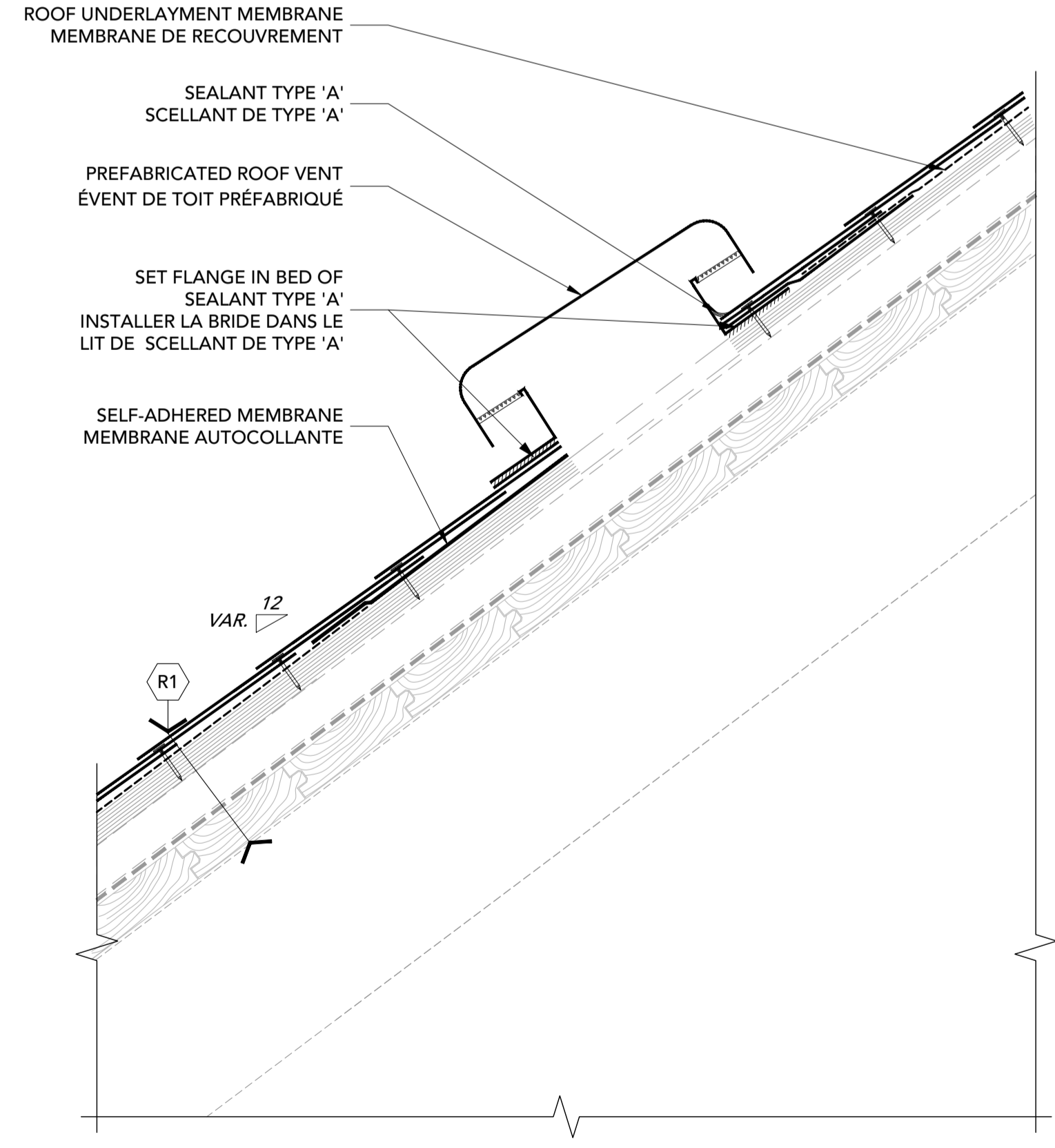
11 CHIMNEY / CHEMINÉE  
 A4 1:5



12 VALLEY / VALLÉE  
 A4 1:5



13 WALL FLASHING / SOLIN MURAL  
 A4 1:5



14 ROOF VENT / AÉRATEUR DE TOIT  
 A4 1:5

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 DÉTAILS**

drawn by  
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 ROEL PARKER

designed by  
 conçu par  
 MICHEL PAULIN

approved by  
 approuvé par  
 MICHAEL BARRINGTON

tender  
 soumission  
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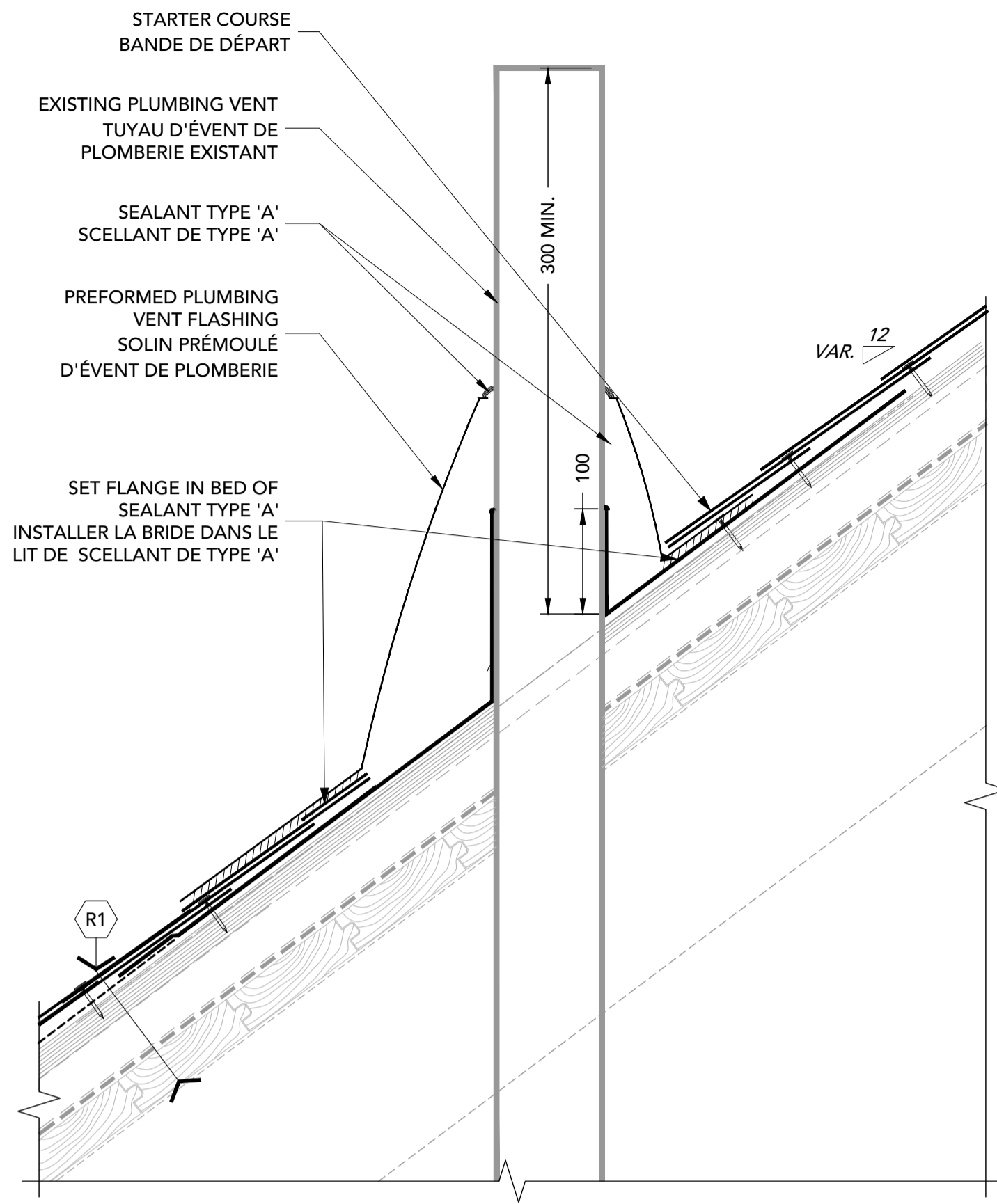
project manager  
 administrateur  
 de projets

project date  
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 2020-08-28

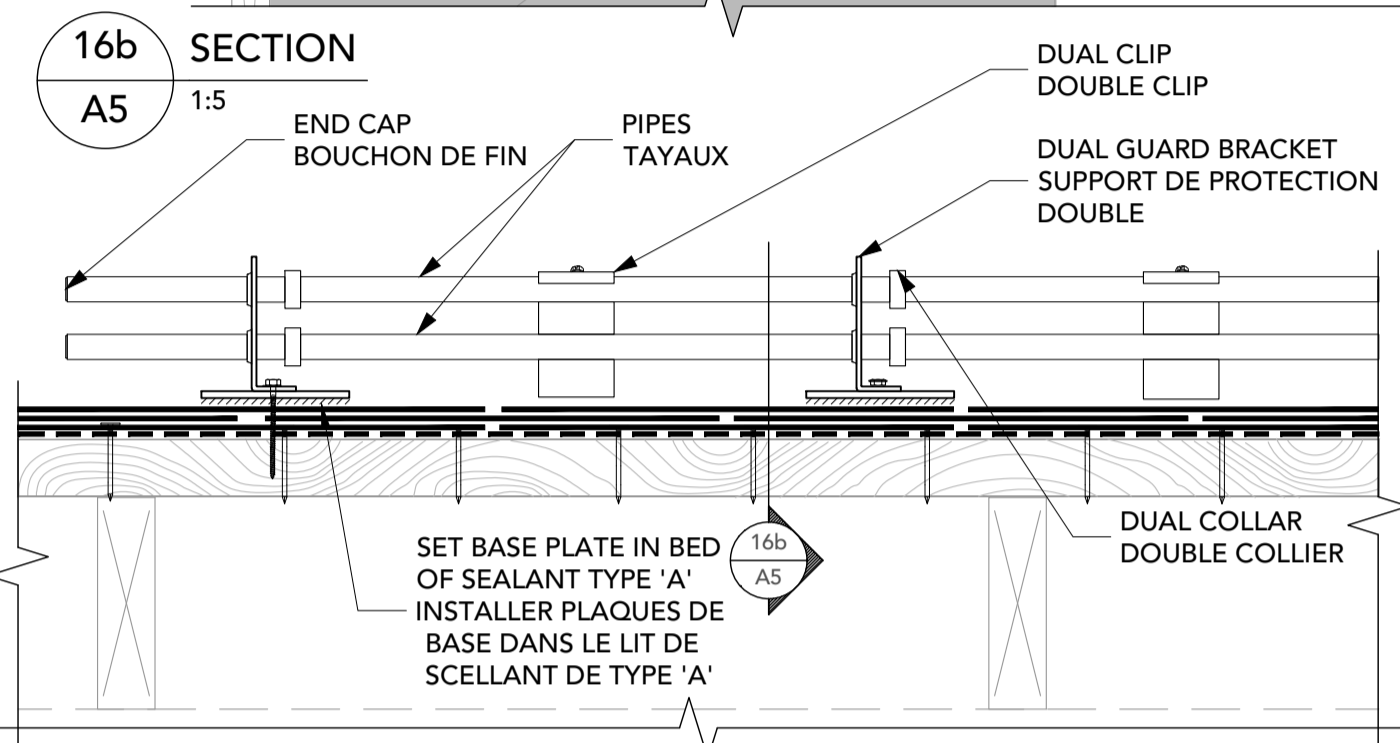
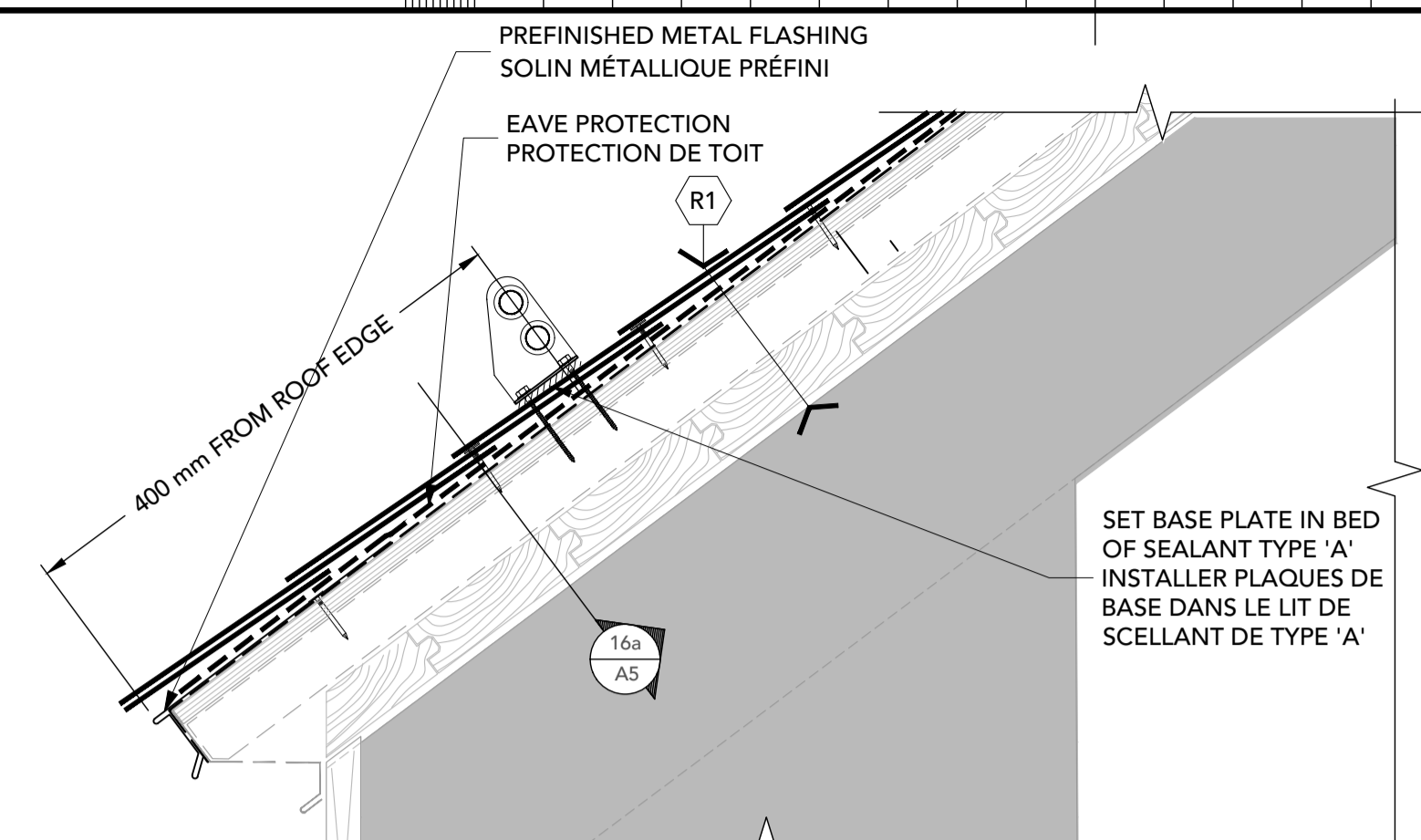
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 no. du projet  
 CEF20 0008

drawing no.  
 dessiné no.  
 A4





15 PLUMBING VENT / ÉVENT DE PLOMBERIE  
A5 1:5



16b SECTION 1:5  
A5  
16a ELEVATION / ÉLÉVATION 1:5  
A5  
16 ICE GUARD / GARDE DE GLACE 1:5  
A5

RESERVED  
RÉSERVÉ

03	FOR TENDER/ POUR APPEL D'OFFRE	2020-10-22
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dessiné par ROEL PARKER  
designed by  
conc par MICHEL PAULIN  
approved by  
approuvé par MICHAEL BARRINGTON

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POUR RÉVISION DE 99%  
project manager  
administrateur de projets

project date  
date du projet 2020-08-28

project no.  
no. du projet CEF20 0008

drawing no.  
dessiné no. A5

RESERVED  
RÉSERVÉ

RESERVED  
RÉSERVÉ

RESERVED  
RÉSERVÉ



# CENTRAL EXPERIMENTAL FARM FERME EXPÉRIMENTALE CENTRALE

