

**SPECIFICATION**

**FOR**

**Partial Roof Replacement**

**Access PEI - Summerside**

120 Harbour Drive, Summerside PE

Project 2060-15036

Prepared by:

Department of Transportation, Infrastructure and Energy

June 2015

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### Drawings

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1. INVITATION

- .1 Tenders will be received at the office of:

Attn. Clayton Warren  
c/o Prince County Courthouse  
108 Central St., Summerside, PEI

before 2:00 pm local time as designated by the time signal on CBC radio on  
**Tuesday, 23 June, 2015.**

- .2 Tenders received after closing time will not be opened, and will be returned to the bidder. **FAXES WILL NOT BE ACCEPTED.**
- .3 Tenders are to be clearly marked to indicate the project being tendered on. Tenders will be opened publicly immediately after the closing time. Lowest or any tender will not necessarily be accepted.

2. GENERAL SCOPE OF WORK

- .1 This project includes the supply of all labour, material, equipment necessary for the partial roof replacement of the Access PEI - Summerside Building. Roof replacement includes both a two-ply modified roof system and an asphalt shingle roof system.
- .2 The Contractor is responsible for supervising and coordinating all aspects of the work.
- .3 Each bidder shall examine the tender documents and should any errors or omissions be discovered, he or she shall notify the Department as soon as possible so that further instructions and/or drawings may be issued to all bidders before the date set for receiving tenders.

3. SCHEDULE

- .1 All work is to be started immediately upon award.
- .2 Work is to be completed by September 31, 2015.
- .3 Contractor to provide a construction schedule, safety policy and proof of insurance prior to starting work.

4. HOURS OF WORK

- .1 Work is to be completed during normal working hours. Coordinate with Clayton Warren at TIE Maintenance and Accommodations (o) 902-888-8265 or (c)902-315-0172. Work is to be coordinated to ensure minimum disruption to daily operations.

5. SITE VISIT

- .1 A site visit will be held at 10:00 A.M. on **Tuesday, June 16, 2015**. It is the responsibility of each Contractor to make themselves aware of existing conditions that affect the work.
- .2 Verbal instructions or answers are only binding when confirmed in writing from the Consultant.

6. TENDER SUBMISSIONS

- .1 Tenders shall be submitted on the tender form provided "**SECTION E**". All parts of the tender form must be properly completed.
- .2 Tenders submissions must be accompanied by a Bid Bond of Certified Check equal to 10% of bid price. This is to be made out to the **Minister of Transportation, Infrastructure and Energy**.
- .3 The Owner reserves the right to reject any and all tenders.

7. ADDENDA

- .1 Addenda may be issued during the tender period. All addenda become part of the tender documents.
- .2 Bidders are to acknowledge the receipt of addenda on the tender form.

8. INQUIRIES

- .1 Direct all questions to:  
Clayton Warren  
Transportation, Infrastructure and Energy  
Phone 902-888-8265  
Cell 902-315-0172  
Fax 902-432-2803

- END-

1. DEFINITIONS

.1 The Owner, the Contractor and the Consultant are those named as such.

(a) Owner

Department of Transportation, Infrastructure and Energy

(b) Consultant

Department of Transportation, Infrastructure and Energy

(c) Contractor

Any person or firm or corporation employed by or having a contract directly or indirectly with the Owner to carry out the work under the tender documents.

(d) Subcontractor

Includes only a person, firm or corporation having a contract for the execution of a part or parts of the work included in the Contract, and a person, firm and corporation furnishing material called for in the Contract and worked to a special design according to the tender documents, but does not include one who merely furnishes material not so worked.

2. EXISTING CONDITIONS

.1 If in the performance of the contract, subsurface or latent conditions at the site are found to be materially different from those indicated by the drawings and specifications, or unknown conditions not usually inherent in work of the character shown and specified, the attention of the Consultant shall be called immediately in writing to such conditions before they are disturbed. Upon such notice, or upon his own observation of such conditions, the Consultant shall promptly make such changes in the drawings and specifications as he finds necessary to conform to the different conditions and any increase or decrease in the cost shall be adjusted as provided under "Changes in the Work."

3. GUARANTEES

.1 The Contractor shall be required to guarantee the work of this Contract for period of twelve months after the Owner's acceptance of the work, against improper or defective materials and workmanship, and shall repair and make good at his own expense any damage to the building and contents though any of the above causes during this period. Any contract omissions and/or deficiencies reported to the Contractor within twelve months after acceptance of the work shall be made good by the Contractor at his own expense.

4. CONSULTANT AND CONTRACTOR

The Consultant is in the first instance the interpreter of the Contract and the judge of its performance; he shall use his powers under the Contract to enforce its faithful

performance by both parties hereto. The Contractor shall, however, have complete control, of his organization.

5. THE CONSULTANT'S DECISION

The Consultant shall decide on questions arising under the contract documents, whether as to the performance of the work or the interpretation of the Specifications and drawings, but should the Contractor hold such decisions to be at variance with the contract documents or to involve changes in work already built, fixed, ordered or in hand in excess of the Contract, or to be given in error, he shall notify the Consultant before proceeding to carry them out.

- .1 The order of priority of Documents from highest to lowest shall be:
- The formal agreement
  - Specification
    - General Conditions
    - Section of Specification
  - Drawings of largest scale

6. SITE INSPECTOR

- .1 There will be an Inspector representing the Department of Transportation, Infrastructure and Energy, Province of PEI. No work is to be covered without having received approval from the Inspector. The Inspector will have the authority to cause any part of the work to cease, should, in his opinion, there be cause to do so.
- .2 The fact that the Inspector does not reject any work shall not remove the responsibility for completing all work as specified from the Contractor.

7. SUPERINTENDENCE

The Contractor shall keep on the work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Consultant. The superintendent shall not be changed except with the consent of the Consultant, unless the superintendent proves to be unsatisfactory to the Contractor or ceases to be in his employ. The superintendent shall represent the Contractor in his absence and directions on minor matters given to him shall be held to be given to the Contractor. Important directions shall be given in writing to the Contractor. The Contractor shall give efficient supervision to the work using his best skill and attention.

8. PROTECTION OF WORK AND USE OF PROPERTY

1. The Contractor shall maintain continuously adequate protection of all his work from damage and shall take reasonable precautions to protect the Owner's property from all injury arising in connection with this Contract. He shall make good any damage or injury to his work and shall make good any damage or injury to the property of the Owner resulting from the lack of reasonable protective precautions. He shall not be responsible, however, for any damage or injury to his work and to the property of the Owner which may be directly due to errors in the contract documents or caused by the Owner, his agents, or employees, or from any work or risk which the Owner has agreed to insure, provided the Contractor has taken reasonable protective precautions. He shall adequately protect adjacent property as required by law and the contract documents.

- .2 The Contractor shall confine his apparatus, the storage of materials and the operations of his workmen to limits indicated by laws, ordinances, permits or by direction of the Consultant and shall not unreasonably encumber the premises with his materials. The Contractor shall not load or permit to be loaded any part of the work with a weight that will endanger its safety. The Contractor shall enforce the Consultant's instructions regarding signs, advertisements, fires and smoking.

## 9. CONTRACTORS' INSURANCE

### INDEMNITY/HOLD HARMLESS

- .1 The Contractor shall be liable for all injuries to persons and for damage to property caused by his operations, and those of his sub-contractors, and his and their employees, engaged on all operations in connection with the contract both on and off the site, and he shall indemnify and save harmless the Owner from all suits, claims, expenses, costs, demands, losses, and damages to which the Owner may be put by reason of injury, including death, to persons, and damage to property of the Owner and others, resulting from; negligence, carelessness and any other cause whatsoever in the performance of the work.
- .2 The Contractor shall, until the date of issue of the final Certificate of Approval of the work by the Consultant, Indemnify and Save Harmless the Owner, and protect his own interests against:
  - (a) Theft, burglary or robbery of, and loss or damage to, all materials and equipment brought to the site for use in the work, whether or not such materials and equipment are incorporated in the work at the time that any such theft, burglary, robbery, loss or damage occurs.
  - (b) Theft or burglary of, and loss or damage to, any of his own plant and equipment being used on the Project and/or stored on the site.

### BUILDERS RISK, ALL RISK PROPERTY INSURANCE

- .3 The contractor shall, without limiting its obligations or liabilities herein and at its own expense, provide and maintain the following insurances with Insurers and in forms and amounts acceptable to Government:

Commercial General Liability Insurance in an amount not less than Two million dollars (\$2,000,000) inclusive per occurrence against bodily injury, including death, and property damages. The Owner is to be added as an insured under this policy. Such insurance shall include, but not be limited to:

Products and Completed Operations Liability;  
Owners and Contractors Protective Liability;  
Blanket written Contractual Liability;  
Contingent Employers Liability;  
Personal Injury Liability;  
Non-Owned automobile Liability;  
Cross Liability;  
Broad Form Property damage;

Employees as Additional Insureds;

- .4 The Contractor shall maintain Builders Risk, all Risk Property Insurance, acceptable to the Owner, in the joint names of the Owner and Contractor to a total no less than one hundred (100%) percent of the total value of the work done and material delivered to the site, payable to the Owner and Contractor as their respective interests may appear, and protecting each in such terms as will preclude subrogation of claims by the Insurer against anyone insured thereunder.
- .5 Prior to commencement of any work hereunder, the Contractor shall file with the Owner, copies of the insurance policy(s). All insurance is primary and will not require the sharing of any loss with any Owner Insurance program.
- .6 The Contractor shall not commence work under this contract until he has obtained all of the liability insurance specified and such insurance has been approved by the Owner, nor shall the Contractor allow any sub-contractor to commence work on his sub-contract until all similar insurance required of the sub-contractors has been obtained. Approval of the insurance by the Owner, shall not relieve or decrease the liability of the contractor hereunder, nor shall such approval imply the contractor has fulfilled all the terms and conditions of this contract. Upon expiration of any policies during the period of this Contract, new certificates of insurance showing renewal shall be forwarded. In the event, that the Contractor carried a blanket-type policy, an endorsement by the insurance company is required confirming coverage of this specific project and indicating the extent of coverage.

10. CHANGES IN THE WORK

The Owner or the Consultant, without invalidating the Contract, may make changes by altering, adding to, or deducting from the work, the contract sum being adjusted accordingly. All such work shall be executed under the conditions of the Contract except that any claim for extension or reduction of time caused thereby shall be adjusted at the time of ordering such change. No change shall be made unless ordered from the Consultant and no claim for an addition to or deduction from the contract sum shall be valid unless so ordered and at the same time valued or agreed to be valued. In accordance with paragraph 'Valuation of Changes'.

11. VALUATION OF CHANGES

Change Orders calling for normal changes or additions to the work will be priced in detail giving actual material trade prices (not list prices) and actual labour costs (including Unemployment Insurance, Worker's Compensation, holiday pay) and actual equipment rental. To these prices the Contractor will add:

- .1 For work less than \$2,500 involving the General Contractor only, the General Contractor adds 20% to his costs.
- .2 For work over \$2,500 involving the General Contractor only, the General Contractor adds 15% to his costs.
- .3 For work less than \$2,500 involving a Sub-Contractor only, the Sub-Contractor adds 20% to his costs, submits this price to the General Contractor who adds 10%.



- .4 For work over \$2,500 involving a Sub-Contractor only, the Sub-Contractor adds 15% to his cost, submits this price to the General Contractor who adds 5%.
- .5 .1 For work less than \$2,500 involving the General Contractor and Sub-Contractor, the Sub-Contractor adds 20% to his costs, submits his price to the General Contractor who adds 10%; to this amount the General Contractor adds the cost of his own work plus 20% of the cost of his own work only.
- .2 The General Contractor does not add a further 10% to the cost of his own work.
- .6 .1 For work over \$2,500 involving the General Contractor and a Sub-Contractor, the Sub-Contractor adds 15% to his cost, submits this price to the General Contractor who adds 5%; to this amount the General Contractor adds the cost of his own work plus 15% of the cost of his own work only.
- .2 The General Contractor does not add a further 5% to the cost of his own work.

## 12. CERTIFICATES AND PAYMENTS

- (a) Partial payments will be made monthly and within thirty (30) days after approval by the Owner, and on the basis of a duly certified and approved estimate of work performed during the preceding period. In preparing estimates, the material delivered on the site and preparatory work done shall be taken into consideration.
- (b) In making such partial payments, there shall be retained a hold back in the amount of 15% (fifteen percent) of the estimated amount on each partial payment estimate, less any hold back release which may have been made specific sub-contractors under any progressive release of hold back provisions in Provincial legislation.
- ©.) Final Payment: Within 60 days after the filing of such document of completion and minimum one day after the lien period and upon receipt from the General Contractor of declarations signed by each of his sub-contractors that the sub-contractor has been paid up to and including the past previous, partial payment, the Owner will pay the Contractor the amount stated therein, less all deductions authorized by the terms of this contract, and previous payments and advances whatsoever to or for the account of the Contractor. All previous estimates and payments including those relating to extra work shall be subject to correction at the time of this payment, which is throughout this Contract called Final Payment. Final Payment shall be subject to inspection and acceptance by the Owner or duly authorized representatives of the Owner and by representatives of all agencies having direct interest in the project.

Submittals to include:

- Certificate or letter of clearance from the Provincial Worker's Compensation Board.
- Certificate or letter of clearance from the Provincial Treasury.

13. PERMITS, REGULATIONS AND TAXES

- .1 .1 As of April 01, 2013, Harmonized Sales Tax (HST) was implemented in Prince Edward Island. All permits and fees required for the proper completion and inspection of the work herein specified will be paid for by the contractor.
- .2 The Bid Price is to include all charges but excluding HST.
- .3 Invoices are to indicate the progress billing to date, plus a separate line item for HST for payment.
- .2 The Contractor shall give all necessary notices and pay all permits, licenses, or certificates, required by law and comply with all laws, ordinances, rules and regulations relating to the work and to the preservation of the public health. The Contractor shall be responsible for the safety of all workmen and equipment on the project in accordance with all applicable safety legislation passed by federal, provincial and local authorities governing construction safety at the time of tender. All applicable taxes shall be included in the tender price, excluding the Harmonized Sales Tax (HST).
  - .1 The Owner shall obtain and pay for the building permit, permanent easement, and rights of servitude.
- .3 The work shall be completed to the satisfaction of the Owner and local inspecting authorities.
- .4 In the absence of any provisions contained herein, the applicable Provincial Codes or the National Building Code shall govern in that order.
- .5 All equipment supplied or installed shall be CSA approved for the intended use.
- .6 All materials, components and equipment as well as construction methods shall comply with the latest edition of the National Building Code and all other applicable codes or regulations.
- .7 The latest edition of the PEI Occupational Health & Safety Act and Regulations shall govern safe construction practices.

14. OWNER'S RIGHT TO DO WORK

If the Contractor should neglect to carry out the work properly or fail to perform any provision of this Contract, the Owner, after five (5) days written notice to the Contractor, may without prejudice to any other right or remedy he may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor; provided however, that the Consultant shall approve both such action and the amount charged to the Contractor.

15. ASSIGNMENT

Neither party to the Contract shall assign the Contract without the written consent of the other.

16. SUBCONTRACTS

The Contractor agrees that the list of names of sub-contractors supplied prior to the

signing of the Contract is the list of Sub-Contractors proposed to be used to carry out those parts of the work noted thereon and he shall not employ any to whom the Consultant may reasonably object.

If the change of any name on such list is required by the Consultant, and the work has to be awarded to a higher bidder, the contract price shall be increased by the difference between the two bids.

The Consultant shall, on request, furnish to any Sub-Contractor wherever practicable, evidence of the amounts certified to on his account.

The Contractor shall be held as fully responsible to the Owner for the acts and omissions of his sub-contractors and of persons directly or indirectly employed by them, as for the acts and omissions of persons directly employed by him.

In view of this responsibility the contractor shall not be obliged to employ as a sub-contractor or supplier any person or firm to whom he may reasonably object.

Nothing contained in the contract documents shall create any contractual relation between any sub-contractor and the Owner.

17. CLEANING UP

The Contractor shall at all times keep the premises free from accumulations of waste material or rubbish caused by his employee or work, and at the completion of the work he shall remove all his rubbish and all tools, equipment and surplus materials from and about the work and shall leave the work "broom clean" or its equivalent, unless more exactly specified. In case of dispute the Owner may remove the rubbish and charge the cost as the Consultant shall determine to be just.

18. CONFIDENTIALITY AND FREEDOM OF INFORMATION (Effective November 1, 2002)

- .1 By submitting your bid, you agree to disclosure of the information supplied, subject to the provisions of the Freedom of Information and Protection of Privacy (FOIPP) Act.
- .2 Anything submitted in your bid that you consider to be personal information because of its proprietary nature should be marked as "**confidential**", and will be subject to appropriate consideration under the FOIPP Act.
- .3 During the delivery and installation of goods and/or services, you may have access to confidential or personal information. Should this occur, you must ensure that such information is not released to any third parties or unauthorized individuals.
- .4 Any information provided on this contract may be subject to release under the *Freedom of Information and Protection of Privacy Act*. You will be consulted prior to the release of any information.

1. GENERAL

The undersigned tenderer (hereinafter called the "Contractor") hereby offers to the Minister of Transportation, Infrastructure and Energy (hereinafter called the "Owner") to furnish all necessary tools, plant, services, materials and labour to execute and complete in a careful and workmanlike manner the work set out under the "Project **200-15037** herein, which is more particularly described in the Plans and Specifications titled **Partial Roof Replacement- Access PEI Summerside** and dated **June 2015** for the lump sum as set out in Clause 3.

The Contractor agrees:

- .1 To complete the work by the date indicated in the Invitation to Bidders.
- .2 That this Form of Agreement supersedes and cancels all communication, negotiations and agreements relating to the work other than contained in the completed tender.
- .3 To use all suppliers and sub-contractors indicated on his tender unless prior approval is received from the Consultant to make a change.

2. ADDENDA

The following addenda are included in this contract:

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3. CONTRACT PRICE

3.1 The Contract Price, *(the lump sum referred to in Clause 1:)* which excludes value added taxes is:

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3.2 Harmonized Sales Tax (HST) (of \_\_\_\_\_ %) payable by the Owner to the Contractor are:

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3.3 Total amount payable by the Owner to the Contractor for the construction of the work is:

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4. CORRESPONDENCE

The Owner, Consultant, and Contractor may be contacted in writing at the addresses below:

Owner & Consultant

PEI Department of Transportation, Infrastructure and Energy  
P.O. Box 2000  
Charlottetown, P.E.I.  
C1A 7N8

Contractor

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. CONTRACTOR'S ACCEPTANCE

Accepted and executed on behalf of the Contractor this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_,

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

\_\_\_\_\_

Witness

\_\_\_\_\_

Signature & Corporate Seal

6. OWNER'S ACCEPTANCE

Accepted and executed on behalf of the Owner this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_,

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

\_\_\_\_\_

Witness

\_\_\_\_\_

Signature & Seal

TENDER

Submitted by: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Date: \_\_\_\_\_

For: Partial Roof Replacement- Access PEI Summerside  
120 Harbour Drive,  
Summerside, PE

To: Minister of Transportation, Infrastructure and Energy  
11 Kent Street  
P.O. Box 2000  
Charlottetown, PE  
C1A 7N8

HAVING examined the drawings and specifications for this project as well as any addenda issued, we hereby offer to furnish all materials, plant and labour necessary for the full and proper completion of:

**“Partial Roof Replacement- Access PEI Summerside”**

INCLUDING all prime cost allowances, and Government sales or other taxes in force at this date and **EXCLUDING Harmonized Sales Tax (HST, which has come into force April 01, 2013) and EXCLUDING any additional or deductible allowances or taxes which may be applicable subsequent to this date,** and which shall be payable by or to the Owner, in accordance with the above mentioned documents, for the sum of:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

in lawful money of Canada.

In submitting this tender we recognize the necessity to complete the information requested on any appendices, as well as the right of the Owner to accept any tender at the price submitted on the condition that revised tenders will not be called for if minor changes are made.

In the event of this tender being accepted within 30 days of the time stated for the closing of tenders, and our failing or declining to enter into a contract, then our bid deposit shall be forfeited to the Owner in lieu of any damages which he may suffer by reason of our failure or refusal to enter into such contract.

In the event of our tender not being accepted within 30 days of the time stated for the closing of tenders, the bid deposit will be returned to us forthwith unless a satisfactory

arrangement is made with us covering its retention for a further stated period.

This tender includes the following addenda:

<u>Addendum #</u>	<u>Date</u>	<u>Initial</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

If we are notified of the acceptance of this tender within the above specified time we will:

Enter into a formal contract agreement with the Owners.

Furnish a general analysis of the contract sum, the total aggregating the amount of our tender.

Provide a Construction Schedule and complete the entire work on or before the dates stated.

Our tender includes the following sub-contractors and suppliers (own forces may be used).

Modified Roof System \_\_\_\_\_

Asphalt Roof System \_\_\_\_\_

Submitted by (Name of Bidder)

Authorized Signature and Seal

- END -

1. References

- .1 CSA S269.1 - [1975] Falsework for Construction Purposes.
- .2 CAN/CSA-S269.2-[M87] Access Scaffolding for Construction Purposes.

2. Construction Safety Measures

- .1 Observe construction safety measures of:
  - .1 National Building Code 1995, Part 8
  - .2 National Fire Code of Canada
  - .3 Provincial Government, including but not limited to the:
    - .1 Provincial Building Code Act
    - .2 Occupational Health & Safety Act revised Statutes of Prince Edward Island 1988 (including any amendments to December 20, 2000) and regulations.
    - .3 Workers' Compensation Act
    - .4 Fire Prevention Act
    - .5 Dangerous Goods Transportation Act
    - .6 Industrial Best Practices for Equipment Isolation and Lockout Policy
- .2 In case of conflict or discrepancy the more stringent requirement shall apply.
- .3 Maintain clear emergency exit paths.
- .4 Ensure that employees working on this specific project have met training requirements as legislated by the Prince Edward Island Occupational Health and Safety Act and its regulations.
- .5 Where reference is made to jurisdictional authorities, it shall mean all authorities who have within their constituted powers the right to enforce the laws of the place of the building or workplace.

3. Overloading

- .1 Ensure no part of Work is subjected to loading that will endanger its safety or will cause permanent deformation.

4. Falsework

- .1 Design and construct falsework in accordance with CSA S269.2.



5. Hoists & Cranes

- .1 Operate such equipment only by qualified hoist or crane operators, and maintain current inspection certificate.

6. Scaffolding & Fall Arrest

- .1 Design and Construct Scaffolding in accordance with CSA S269.2.
- .2 Each user of scaffolding shall examine scaffolding for sufficiency before using it. He shall make it secure, or shall notify the Contractor in Writing that he will not commence work until it is made secure.
- .3 Comply with the requirements of the Fall Protection & scaffolding Regulations, Province of Prince Edward Island 1988.

7. Equipment & Tools

- .1 Each user of equipment or tools shall be appropriately trained and be responsible to examine for sufficiency before use. Make equipment and tools safe if necessary, or notify the Contractor in writing that user will not commence work with such tools until it is made safe.

8. WHMIS

- .1 Comply with the requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials; and comply regarding labelling and provision of material safety data sheets.
- .2 Have a copy of WHMIS data sheets available at the workplace on delivery of materials.

9. Hazardous Material

- .1 Should material resembling hazardous materials, other than those identified with the Contract Documents, including but not limited to spray or trowel applied asbestos, be encountered in course of work; stop work immediately. Do not proceed until written instructions have been received from Consultant.
- .2 Any material which contains asbestos that is disturbed or removed during construction work, shall be removed in accordance with the regulations set out by the Occupational Health & Safety Act.
- .3 Where work entails use, storage, or disposal of toxic or hazardous materials, chemicals and or explosives, or otherwise creates a hazard to life, safety, health, or the environment; work shall be in accordance with the Jurisdictional Authority.

10. Site Cleaning

- .1 Except where special permission is obtained, maintain clear access on public sidewalks and access points.

11. Fire Safety Requirements

- .1 Enforce fire protection methods, good housekeeping and adherence to local and underwriter's fire regulations including, but not limited to, Fire Protection Act and the Provincial Building Code Act. Provide UL approved fire extinguishers, and other fire fighting services and equipment, except where more explicit requirements are specified as the responsibility of individual Sections.
- .2 Hot Work will not be permitted on or within the building structure, tanks, or confined spaces, except as outlined herein. Prior to conducting hot work, a hot work permit shall be prepared and submitted. An example format for a hot work permit shall be included in the Safety document submission. The permit shall describe compliance with the following procedures. After tank or confined space interiors or building areas have been decontaminated, hot work may be conducted only when the tank or confined space is inverted. Hot work shall not be performed unless monitoring indicates atmospheres within and immediately surrounding are less than 8% oxygen inside less than 10% of the LFL outside; continuous monitoring shall continue until the hot work is completed. The hot work prohibition includes welding, cutting, grinding, sawing, or other similar operations which could be expected to potentially generate combustion-producing temperatures or sparks, or which could produce potentially hazardous fumes or vapours. An individual at each hot work site shall be designated as a fire watch. This person's sole responsibility shall be to monitor the hot work and have immediate access to at least two (2) twenty pound fire extinguishers located at each hot work site. All extinguishers shall be currently inspection tagged, approved safety pin and tamper resistant seal. A new permit shall be obtained at the start of each work shift during which hot work will be conducted.
- .3 Smoking permitted in designated areas only. Exercise care in the use of smoking materials.
- .4 Advise Fire Chief in the area of Work of any work that would impede fire apparatus response, including but not limited to violation of minimum overhead clearance prescribed by the fire chief, erecting of barricades and digging of trenches.
- .5 Fire Separations:
  - .1 Ensure that fire separations are installed to maintain total integrity and that they are not breached by Work following their installation.
  - .2 Replace fire separations which have suffered a lessening of their required rating during construction.
- .6 Ensure nothing subverts the integrity of fire protection provided for the building structure.
- .7 Coordinate work of all sections so that they do not encroach on space required for fire protection and it's installation. Ensure that fire protection damaged during construction is totally replaced.

12. Reporting Fires

- .1 Know the location of the nearest fire alarm box and telephone, including the emergency phone number.
- .2 Report immediately all fire incident to the fire department as follows:
  - .1 Activate nearest fire alarm box, or
  - .2 Telephone 911
  - .3 Where fire alarm box is exterior to building, the person activating the fire alarm box shall remain at the box to direct Fire Department to scene of the fire.
  - .4 When reporting a fire by telephone, give location of fire, name or number of building and be prepared to verify the location.

13. Environmental Protection

- .1 Ensure that pollution and environmental control of construction activities are exercised during the Work to requirements of the federal and provincial environmental acts; including, but not limited to, the Prince Edward Island Environmental Protection Act.

14. Safety Document Submission

- .1 Ensure Safety Document Submission applies to Work of this specific project and site.
- .2 Submit two copies of Safety Document at the Pre-Construction Meeting. Do not commence Work nor deliver material on-site prior to submission.
- .3 Include in Safety Document submission specific information detailing the methods and procedures to be implemented ensuring adherence to the acts, regulations, codes and policies specified in this section and to:
  - .1 Ensure the health and safety of persons at or near the Work; including, but not limited to, the Public.
  - .2 Ensure the measures and procedures of the regulatory agencies specified are carried out.
  - .3 Ensure every employee, self-employed person and employer performing Work under this contract complies with the regulatory agencies specified.
  - .4 Where changes to the methods and procedures in the execution of work change submitted safety methods and procedures, modify submitted Safety Documentation and submit modifications, in writing to the Consultant and Minister prior to implementation.

15. Safety Document Organization

- .1 Organize information in the form of an instructional manual as follows:
  - .1 Place in binders of commercial quality, 8-1/2"x 11"x3" maximum ring size.
  - .2 Cover: Identify binder with typed or printed title "Project Safety Document" and list the title of project.
  - .3 Provide tabbed fly leaf for each separate heading, with typed heading on tab.
  - .4 Where drawings are within the safety document, provide with reinforced punched binder tab. Bind in with text; fold in larger drawings to size text pages.
  - .5 Arrange content under Safety Document headings specified herein.

16. Safety Document Headings

- .1 Employee Safety Training
  - .1 Place, under this heading, a statement indicating employees working on this specific project have met specified training requirements.
  - .2 Company Safety Policy
    - .1 Place, under this heading, information pertaining to the company's policy and commitment to Occupational Health and Safety, including the responsibilities of management, supervisors and workers.
  - .3 Company Safety Rules in General Terms
    - .1 Place, under this heading, information of a general, global nature, applying to every work environment where the company has staff and pertaining to rules directing compliance to policy. For example state company safety rules with respect to use of hard hats, safety glasses, safety foot ware, CSA approval on such items, use of alcohol or non-prescription drugs.
  - .4 Hazard Assessment
    - .1 Place, under this heading, information identifying possible hazards specific to this project and identify safe methods and procedures for the execution of work to ensure safety in the work place.
    - .2 Arrange contents of this heading by technical section number on the project manual.

- .5 Emergency Action Plan
  - .1 Place, under this heading, information detailing action to be taken in the event of various emergencies.
  - .2 Arrange content under the following sub-headings:
    - .1 First Aid
      - .1 Include information concerning establishment of a First Aid Station, related supplies, staff awareness of location and staff training in First Aid Care of Casualties.
      - .2 Contact of Emergency Support Groups:
        - .1 Include relative information including phone location for emergency use, the emergency telephone numbers (and their location) for the various organizations which must be contacted in case of an emergency, and staff training in procedures.
      - .3 Cessation of Work:
        - .1 Include relative information how work cessation during emergencies is handled and communicated to persons present on site.
      - .6 Joint Occupational Health & Safety Committee Representative:
        - .1 Place under this heading information detailing membership and terms of reference.

17. Safety Officer

- .1 Provide a Safety Officer at the work site to perform safety management, surveillance, inspections, and safety enforcement for the Contractor. The Safety Specialist shall be the safety "competent person." The Safety Officer shall be at the work site at all times whenever work or testing is being performed, shall conduct daily safety inspections.
  - .1 Qualifications
    - .a Qualifications of Safety Officer:
      - .1 Ability to manage the on-site contractor safety program through appropriate management controls.
      - .2 Ability to identify hazards and have the capability to expend resources necessary to abate the hazards.
      - .3 Must have worked on similar types of projects that are equal to or exceed the scope of the project assigned with the same responsibilities.

- .4 Shall, as a minimum, have attended a recognized training qualification program including at least 40 hours of classroom instruction.
  - b. Qualifications of Qualified Person, Confined Space Entry. The qualified person shall be capable (by education and specialized training) of anticipating, recognizing, and evaluating employee exposure to hazardous substances or other unsafe conditions in a confined space. This person shall be capable of specifying necessary control and protective action to ensure worker safety.
  - c. Qualification of Crane Operators must be submitted to the consultant for approval and must be authorized to operate the crane.
- .2 Meetings
- a. Preconstruction Conference  
The safety officer shall attend the preconstruction conference. (see outline attached).
  - b. Meeting on Work Procedures  
Meet with Contracting Officer to discuss work procedures and safety precautions required by the APP. Ensure the participation of the contractor's superintendent, the quality control, and representatives of each subcontractor or trade performing work at the site.
  - c. Weekly Safety Meetings  
Hold weekly at the project site. Attach minutes showing contract title, signatures of attendees and a list of topics discussed.
  - d. Work Phase Meetings  
The appropriate activity hazard analysis shall be reviewed and attendance documented by the Contractor at the preparatory, initial, and follow-up phases of quality control inspection.
  - e. New Employee indoctrination  
New employees will be informed of specific site hazards before they begin work. Documentation of this orientation shall be kept on file at the project site.

- END -

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## **PRE-CONSTRUCTION CONTRACTOR SAFETY CHECKLIST**

Use this text as a guideline for completing the attached checklist. This checklist is a general, *pre-construction* review of the contractor safety program, as well as an information session to identify what the PEI Department of Transportation, Infrastructure and Energy (TIE) requires of our Contractors. Where the item requires a submission, ensure that it is received. If the item does not apply, enter N/A for not applicable.

The following information will assist you in establishing what will be reviewed in each section.

1. **Safety Policy:** Each employer is required by law (in Prince Edward Island) to have a safety policy and program and to implement that policy. TIE will ask for and receive a copy of that program.
2. **Safety Representative:** Each contractor is required to advise TIE who their safety representative is. That representative has duties as described in the Occupational Health and Safety Act.
3. **Emergency Procedure:** Each contractor must have a site specific layout and emergency plan complete with emergency phone numbers.
4. **Employee Orientation:** Each and every person working for a contractor, including sub-contractors, will be given an orientation to familiarize them with the site safety program. Unless otherwise specified, each sub-contractor is responsible for the orientation of their workers.
5. **Safe Work Plan:** Most contractors are involved in tasks that subject workers to hazards. In order to ensure that these workers are secured from hazard, the contractor will supply TIE with a written safe work plan which affords protection against the hazards. This plan must be signed by a company representative and communicated to the workers involved in the task.
6. **Personal Protective Equipment Review:** Advise that all workers require CSA Class "B" hard-hat, CSA "Green patch" (eight inch) footwear, eye, ear, and respiratory protection as required (boots and hat at all times).
7. **Fall Protection:** Fall restraint or fall arrest protection required where a fall of 2.4 meters ( 8 feet ) or more is possible. **NO EXCEPTIONS.**
8. **Housekeeping:** Advise of daily, or as needed, clean-up requirements.
9. **Tool Box Talks:** Each contractor is required to conduct weekly safety meetings with their forces and advise TIR they have been done.
10. **Material Handling/Storage:** Advise contractor about storage areas and handling of material so as not to endanger their worker or another worker. Stacked material to be banded, chained, blocked, or otherwise secured.
11. **Landing Platforms:** Advise contractor about movement of material on or off platforms. All material to be secured. Platform gates or chains to be kept closed at all times workers are on platform. If not possible, worker to be tied off with fall restraint system independent of platform.
12. **WHMIS Training:** Receive verification that all contractor workers are trained and that the contractor submits their MSDS.

13. **GFCI:** Advise contractor that all tools are required to have ground fault circuit interrupters (where electricity is supplied by contractor).
14. **Accident Investigations:** Any injury to any of their workers must be investigated and reported to TIE.
15. **Verbal, Written, Gone:** Explain Zero Tolerance Program.
16. **Joint/Worker Safety Committee:** Sites of over 20 workers must establish a safety committee; over 50, an additional worker committee. Workers required to attend committee meetings will do so and not be prevented by employers.
17. **Fire Protection:** All trades involved in performing hot work of any kind are required to provide fire protection at the work location.
18. **Guardrails:** Advise contractors that where temporary removal of guardrails is necessary, the area around them must be cordoned off with a barrier. Guardrails must be replaced as soon as possible.
19. **First Aider:** Each contractor is required to have a first aid kit and trained first aider. Employer must name their first aider.
20. **Visitors:** Advise contractor that any visitors to site must be suitably protected from hazard. They must wear hard hat, safety vest, and proper safety footwear while on site.
21. **Task Lighting:** Review responsibilities of task specific lighting (who provides it).
22. **Swamper/Riggers Competency:** Where cranes are used, the contractor must use a swamper/rigger. They shall provide TIR with a written statement identifying, by name(s), their rigger and that the named person is a competent worker as described in the construction regulations.
23. **Scaffolds:** Review scaffold building requirement:
  - ☞ Use all braces required by design.
  - ☞ Access ladder for platform over 1.5 meters.
  - ☞ Full width platform if height over 3 meters ( ten feet. )  
(PEI Regulations require double planks)
  - ☞ Full guardrails and toeboards.
  - ☞ Tied in three times base dimension or use of outriggers.
  - ☞ Engineered over 50 feet in height (standard frame type).
24. **Elevating Work Platforms:**
  - ☞ All boom and scissors lifts required to be CSA approved and have approval on machine.
  - ☞ Operators manual required on machine at all times.
  - ☞ Maintenance record on machine at all times.
  - ☞ Operator must receive training in operation of equipment.
  - ☞ Fall protection must be used at all times on a boom lift.
  - ☞ Fall protection required to be used on scissors lift when unit is being moved.
25. **Protruding Rebar:** Installer's of reinforcing steel must protect the protruding hazard or make arrangements to have it protected. Removal of protective coverings for task purposes only is allowed, however, protective covering must be replaced as soon as possible.
26. **WCB Clearance Certificates:** Advise contractor that TIE will not release any funds for payment until Workers Compensation Board Clearance Certificate has been received by TIR.



**PRE-CONSTRUCTION CONTRACTOR SAFETY CHECKLIST**

PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

WORK BEING PERFORMED: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Print name and title)

\_\_\_\_\_  
(Print name and title)

\_\_\_\_\_  
E-D Project Manager/Superintendent  
(Sign)

\_\_\_\_\_  
Contractor Representative  
(Sign)

✓ Means Yes

☒ Means No

- |   |                          |   |                          |
|---|--------------------------|---|--------------------------|
| 1. Safety Policy Submitted                      | <input type="checkbox"/> | 13. GFCI Requirements                             | <input type="checkbox"/> |
| 2. Safety Representative                        | <input type="checkbox"/> | 14. Accident/Incident Investigations Notification | <input type="checkbox"/> |
| 3. Emergency Procedure Review                   | <input type="checkbox"/> | 15. Verbal, Written, Gone                         | <input type="checkbox"/> |
| 4. Employee Orientation                         | <input type="checkbox"/> | 16. Joint/Worker Safety Committee                 | <input type="checkbox"/> |
| 5. Written Safe Work Plan Submitted             | <input type="checkbox"/> | 17. Fire Protection                               | <input type="checkbox"/> |
| 6. Personal Protective Equipment Review         | <input type="checkbox"/> | 18. Guardrails                                    | <input type="checkbox"/> |
| • Hard Hats & Footwear                          |                          | 19. First Aider on Staff - Name Supplied          | <input type="checkbox"/> |
| • Safety Glasses                                |                          | 20. Visitors & Safety Equip.                      | <input type="checkbox"/> |
| • Hearing                                       |                          | 21. Task Lighting                                 | <input type="checkbox"/> |
| • Dust & Fumes                                  |                          | 22. Swampers/Riggers Competency (in writing)      | <input type="checkbox"/> |
| 7. Fall Protection                              | <input type="checkbox"/> | 23. Scaffolds                                     | <input type="checkbox"/> |
| 8. Housekeeping                                 | <input type="checkbox"/> | 24. Elevating Work Platforms                      | <input type="checkbox"/> |
| 9. Tool Box Safety Talks (Weekly)               | <input type="checkbox"/> | 25. Protruding Rebar Protection                   | <input type="checkbox"/> |
| 10. Material Handling/Storage                   | <input type="checkbox"/> | 26. WCB Clearance Certificate                     | <input type="checkbox"/> |
| 11. Landing Platforms                           | <input type="checkbox"/> |   |                          |
| 12. WHMIS Training Verification - MSDS Received | <input type="checkbox"/> |   |                          |

1. GENERAL

- .1 This section shall install and maintain the items required to prevent environmental damage.
- .2 Ensure that pollution and environmental control of construction activities are exercised during the Work to requirements of the federal and provincial environmental acts; including, but not limited to, the Prince Edward Island Environmental Protection Act.

2. DISPOSAL OF WASTE

- .1 Do not bury rubbish or waste material on site.
- .2 Provide containers or otherwise prevent material from being wind-blown around the site and on to adjoining properties.
- .3 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.
- .4 All rubbish and construction debris must be removed from all the site on a regular basis, so that the site is maintained in a clean, safe condition. Materials removed are to be disposed of in a manner acceptable to the Provincial Department of Environment, Labour & Justice.

End

1. GENERAL

- .1 This section shall be responsible for the supply and installation of the following:
- Asphalt shingles and roofing underlay as specified herein.
  - Installation of new metal starter strip around roof perimeter as specified herein.

The work shall include all items normally required to complete a proper roofing job whether specified, noted or detailed.

.2 References:

- .1 CSA A123.1-latest edition Asphalt Shingles Surfaced with Mineral Granules.
- .2 CAN3-A123.52-latest edition Asphalt Shingle Application on Roof Slopes (1:6 to less than 1:3).
- .3 CSA B111-latest edition Wire Nail, Spikes and Staples.
- .4 National Building Code of Canada (NBC) 1995. (Refer to Sections 9.26.6, 9.26.7 and 9.26.8).

2. WARRANTY

- .1 Provide the owner with a five (5) year warranty issued by the Contractor. This warranty is to cover the cost of any repairs required to stop water leaks in the roof membrane or flashings for a period of five (5) years after installation. All costs associated with this requirement shall be paid by the contractor and included in his tender price.

3. MATERIALS

- .1 Asphalt shingles: to CSA A123.1.
- .1 Standard of Acceptance: Cambridge, Architectural design asphalt shingle supplied by IKO or approved equal.
  - .2 Warranty: 40 years limited.
  - .3 Colour to be selected by Owner from manufacturer's standard range.
  - .6 Underlayment: As recommended by asphalt shingle manufacturer.
- .2 Cement:
- .1 Plastic cement: to CGSB 37-GP-5Ma.
  - .2 Lap cement: to CGSB 37-GP-4Ma.
- .3 Nails: to CSA B111-latest edition, of galvanized steel, sufficient length to penetrate 19 mm into deck.
- .4 Staples: chisel point galvanized steel 25 mm crown 1.5 mm thick, sufficient length to penetrate 20 mm into deck.
- .5 Pre-finished metal starting strip.

- .6 Ice and Winter Shields: Self-adhesive glass reinforced Polymer Modified Bitumen.  
Acceptable Products: Armourgard by IKO or approved equal.

4. EXECUTION

- .1 Do asphalt shingle work in accordance with manufacturers written instructions and NBC 1995 except where specified otherwise. All modified roofing to be installed by experienced applicators as per Section 7C and the manufacturers written instructions. Contractor to note requirement 9.26.8.1 of the NBC 1995 Edition for asphalt roofing on slopes of less than 1 in 3. "Except for the first 2 courses, coverage shall not be less than 3 thicknesses of shingle over the entire roof, disregarding cutouts."
- .2 In accordance with referenced standards:
- .1 Install underlay modified bitumen base and cap sheet as per Section 7C and the Drawing.
  - .2 Install full width ice and water shield as noted on drawing. IKO water shield or approved equal.
  - .3 Apply eave protection, underlayment and asphalt shingles.
  - .4 Closed valleys to be finished with woven closed valley detailing. Stay 300 mm away from valley with nails. Open valleys are to be as indicated on drawings.
  - .5 Glue down each tab of asphalt shingles with roofing cement to ensure good adhesion.
  - .6 Install new metal starter strip around roof perimeter, (eaves and rakes), colour white.
  - .7 Existing sheathing to be nailed down as required. Identify any rotted sheathing to Owner before enclosing the work.

- End -

1. GENERAL

- .1 This section shall supply all necessary labour, materials, equipment and supervision required to remove portions of the existing roofing system and make good all areas to accept new roofing materials.

2. WORKMANSHIP

- .1 All material removed shall become the property of the contractor and removed from the site on a daily basis.
- .2 Utilize a chute to drop the material from the roof into a bin or onto a truck.
- .3 Take care not to overload the roof structure with piles of demolished material.
- .4 Do not travel across newly roofed areas with material from demolished roof areas.
- .5 Make roof watertight at completion of each days work.
- .6 Prevent material caused by demolition work from blowing around site.
- .7 Dispose of demolished material in a method approved by the Provincial Department of Technology and Environment.
- .8 Erect barricades as required to prevent people from entering the area where the demolished material is being loaded into trucks or bins.
- .9 Refer to drawings for extents of material to be removed.
- .10 Remove all existing metal gravel stops and flashings.

End

1. SCOPE OF WORK

1. This section shall supply all labour, material, equipment and supervision required to complete the required roof repairs with modified bitumen roof membrane as detailed and specified. The work shall include all items normally required to complete a proper roofing job, whether specifically noted or detailed.

2. QUALIFICATIONS OF CONTRACTOR

1. Any contractor carrying out this work must be a roofing contractor who is a current member of the CRCA. The Contractor must also be approved by the membrane manufacturer and have had experience in the installation of the roofing system.

3. WARRANTY

1. Provide the owner with a written two year labour warranty and ten year material warranty issued by the Contractor. This warranty is to cover the cost of any repairs required to stop water leaks in the roof membrane or flashings for a period of two years after installation. All costs associated with this requirement shall be paid by the contractor and included in his or her tender price.

4. MATERIALS

1. Asphalt - To CSA A123.4-M Type 3.
2. Vapour Barrier: Existing membrane to remain in place to act as vapour barrier for new assembly. Contractor is responsible for ensuring the existing membrane is in useable condition, and will repair any damage/wet spots as required at an additional cost to the contract. **This cost is priced as per the Unit Pricing on Section E Contract Tender.** Contractor is also responsible for ensuring the manufacturer will warranty all new materials that are placed above the existing membrane.
3. Insulation
  1. Rigid Cellular Poly-isocyanurate foam to CAN/CGSB-51.26-M86 and CAN/ULC-S770 to LTTR values. HCFC-free. Roof insulation to provide minimum RSI 4.23 (R-24), **total thickness of 100mm (4")**.

Acceptable Manufacturers: IKO  
Soprema  
GAF  
Johns Manville  
Dow  
Isox Maritime Ltd.

4. Fibreboard: Asphalt coated wax impregnated wood fibre board mating CSA-A247-M86, thickness to be 13 mm and sheet size of 1200 x 2400 mm.
5. Membranes: Shall consist of a two-ply modified asphalt membrane as specified herein, or approved equal.
  1. Base Sheet: to CGSB 37-GP-56M,

Styrene-Butadiene-Styrene (SBS) Elastomeric polymer prefabricated sheet, polyester reinforcement, weighing 180 g/m<sup>2</sup>, minimum thickness of 2.0 mm +/- 0.2 mm.

1. Type 1, fully adhered.
2. Grade heavy duty service.
3. Top and bottom surfaces: Polyethylene (top) / Sanded (bottom)
4. Acceptable Manufacturers:
  1. Soprema
  2. IKO
  3. Bakor
  4. Or approved equal

2. Base Sheet Flashing

1. Similar to Base Sheet above, except both surfaces are to have Polyethylene top and bottom, minimum thickness of 3.0 mm +/- 0.2 mm.

3. Cap Sheet & Cap Sheet Flashing: to CGSB 37-GP-56M

Styrene-Butadiene-Styrene (SBS) Elastomeric polymer prefabricated sheet, polyester reinforcement, weighing 250 g/m<sup>2</sup>, minimum thickness of 4.0 mm +/- 0.2 mm at selvage edge.

1. Type 1, fully adhered.
2. Class A-granule surfaced (top).
3. Grade heavy duty service.
4. Bottom surface: Polyethylene
5. Acceptable Manufacturers:
  1. Soprema
  2. IKO
  3. Bakor
  4. Or approved equal

6. Metal Counter Flashing

Sheet Steel: Preformed grade A, galvanized to ASTM A525 (G90) or ASTM 525M (Z275) coating. Factory pre-coated in coil form to a 5000 series paint finish on exposed surfaces.

Thickness - 0.80 mm (22 Gauge)  
Colour - (to match existing)

All metal flashing shall be brake formed to the required profile and length to allow for expansion and contraction. Prior to torching any modified bitumen membrane to the flashing, a primer must be applied to the necessary areas.

7. Caulking: to CAN/CGSB-19.24-M80, or caulking that is recommended by membrane manufacturer.

8. Primers: As recommended by roofing membrane manufacturer.

9. Screw Fasteners: Self drilling steel screws with flat steel plates, length of screws to be such that the exposed ends do not project into the building more than 18 mm below the lower surface of the top flutes in the roof deck.
10. Vent Stack Covers: Telescoping cap and pre-insulated flange sleeve of aluminum, sized to suit vents.
  1. Acceptable Manufacturers: Lexsuco; Thaler; or approved equal.
  2. Install sleeve 3 mm below vent stack and install sealant to vent stack, place cap onto bead of sealant to seal cap to vent stack over flange. Do not seal cap to vent stack until bent stack installation has been inspected.
11. Roof Drains: Shall be new retrofit roof drains, compatible with modified bitumen membrane.
  1. Standard of Acceptance: Hercules RetroDrain, complete with cast aluminum strainer, or approved equal.
5. WORKMANSHIP
  1. All work shall be carried out in a workmanlike manner by qualified tradesmen following the highest expected standards for the work being performed and in compliance with all recommendations by the manufacturers of the various materials.
  2. Prior to beginning the work the contractor shall submit, to the Engineer for approval, technical literature which describes the modified bitumen membrane proposed for this project, also, supply fastening pattern to meet FM I-90 requirements. No material shall be ordered until approval for the proposed products is obtained in writing from the engineer.
  3. Remove existing roofing assembly to expose existing membrane. Verify that items scheduled to remain in place are not damaged during the course of the work. Repair vapour barrier at all locations where water infiltration may be evident to satisfaction of TIR representative. **Contractor to notify TIE at least 24 hours prior to exposure of existing membrane for examination. Note that thermal imaging may be required at the expense of the owner, however, the contractor is to provide adequate time for imaging to be completed at no additional cost to the contract.**
  4. Remove all dirt and debris from the substrate by sweeping and washing.
  5. Install all new blocking, curbs and woodwork as shown on drawings.
  6. Fasten new insulation to the steel deck with mechanical fasteners and plates to FM I-90 requirements including bulletin I-28 for fastening to roof perimeters and corners which requires more fasteners. Provide 50% more fasteners on perimeter and 75% more fasteners on corners. Assume a factor of 0.4 x ht. of outside wall, to top of parapet to determine distance in from roof edge. Screws are to be located so as to screw into the top flute of the roof deck and project a maximum amount of 18 mm below the top flute as recommended by roofing product manufacturer. Beginning at the bottom of the slope, lay down the protection boards on the

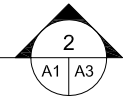
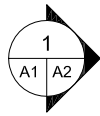


insulation in parallel rows, all joints between boards and insulation will be staggered. Install boards by butting edges snugly and without warping.

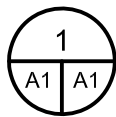
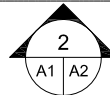
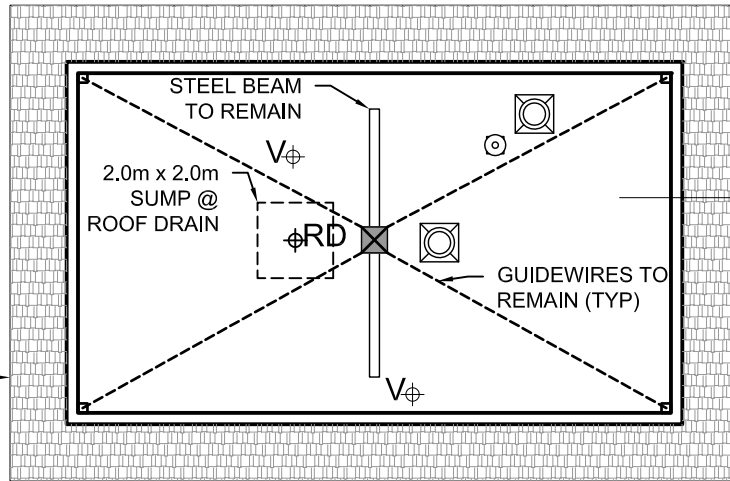
7. Apply 12.5mm asphalt impregnated fibre board in a full mopping of hot asphalt, applied at the rate of 1.2 kg per metre squared at 230 degrees Celsius.
8. Install new roof drains. Ensure that all pipe joints are water tight. Contractor to ensure all roof drains are free from obstruction - confirm in presence of TIR representative.
9. Apply base sheet in a full mopping of hot asphalt, applied at the rate of 1.2 kg per metre squared at 230 degrees Celsius.
10. Install metal flashings, gravel stops, vent stack covers, and roof drains. **Notify TIE representative at least 24 hours prior to covering thru-Wall flashings to allow inspection.**
11. Prime wood and flashing surfaces prior to torching base sheet flashing.
12. Torch the base sheet flashing in place.
13. Torch the cap sheet in place, position the rolls so that the side seams of the cap sheet do not coincide with the seams in the base sheet, minimum distance 300 mm. Overlap seams 75 mm on the sides and 150 mm on the ends. Application to be free of blisters, fishmouths, and wrinkles.
14. All torching is to be done by experienced workmen – over burning will not be tolerated. The torching of the side seams is to produce a continuous visible bleed out of melted bitumen approximately 3 mm along the side seam.

- End -

APPROX. AREA:  
 ASPHALT SHINGLES = 180sq.m (1940sq.ft)  
 MODIFIED ROOF: 150sq.m (1615sq.ft)



EXISTING WOOD SHINGLES TO BE REMOVED AND REPLACED WITH ASPHALT SHINGLE ROOF SYSTEM AS PER SPECIFICATIONS








### ROOF PLAN

NTS

#### GENERAL NOTES:

1. ALL DIMENSIONS & SITE CONDITIONS ARE TO BE CONFIRMED ON SITE BY THE CONTRACTOR. CONTRACTOR RESPONSIBLE TO VISIT THE SITE PRIOR TO SUBMITTING A TENDER AND MAKE THEMSELVES FAMILIAR WITH CONDITIONS THAT MAY AFFECT THE WORK.
2. ALL ROOF CURBS TO BE A MIN. 100mm ABOVE NEW ROOF. CONTRACTOR RESPONSIBLE FOR IDENTIFYING CURBS NEEDING TO BE RAISED. ALL MECHANICAL AND ELECTRICAL COMPONENTS INVOLVED WITH RAISING CURBS TO BE COMPLETED BY A LICENSED CONTRACTOR.
3. EXISTING ROOF DRAINS TO BE REPLACED AND RAISED UP TO HEIGHT OF NEW ROOF.

#### LEGEND:

-  EXISTING ROOF DRAIN (RETROFIT)
-  EXISTING VENT STACK (RETROFIT)
-  EXISTING CHIMNEY (TO REMAIN)
-  EXISTING LARGE ANTENNA (TO REMAIN)
-  EXISTING SMALL ANTENNA (TO REMAIN)

**ISSUED FOR TENDER**

JUNE, 2015

Project Title:  
**Access PEI - Summerside**

Drawing Title:  
**Partial Roof Replacement**



Date:  
 June, 2015

Dsgn By:  
 DFM

Drn By:  
 DFM

Scale:  
 As Noted

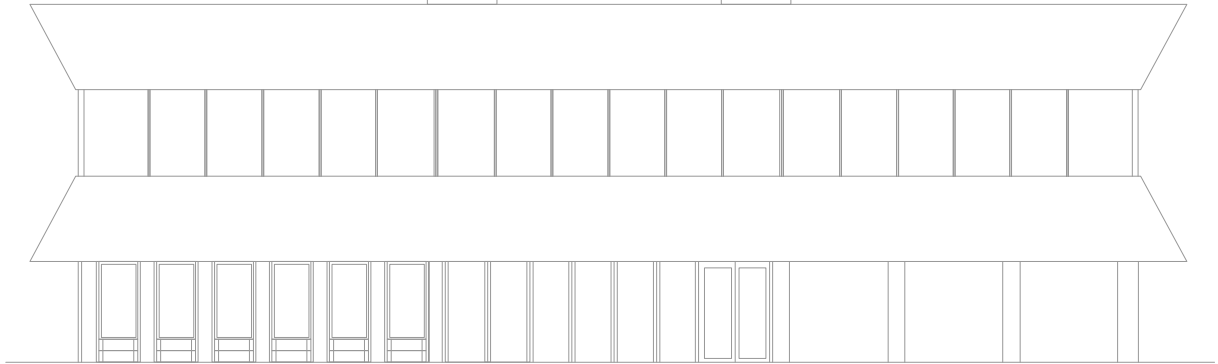
Proj No.:  
**2060-15037**

Dwg No.:  
**A1**

EXISTING WOOD SHINGLES TO BE REMOVED AND REPLACED WITH ASPHALT SHINGLE ROOF SYSTEM AS PER SPECIFICATIONS

EXISTING FLUES & ANTENNAS TO REMAIN (TYP)

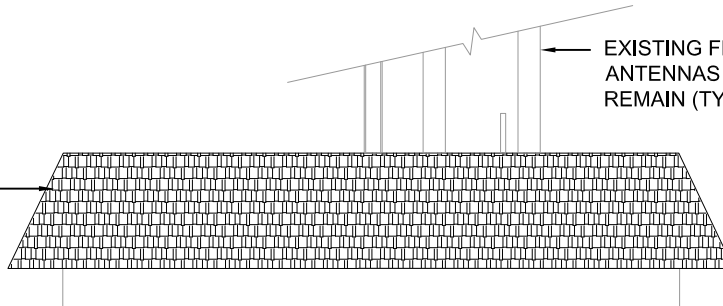
APPROX. AREA:  
 ASPHALT SHINGLES = 180sq.m (1940sq.ft)  
 MODIFIED ROOF: 150sq.m (1615sq.ft)



**1 EAST ELEVATION**  
 A1 A2 NTS

EXISTING WOOD SHINGLES TO BE REMOVED AND REPLACED WITH ASPHALT SHINGLE ROOF SYSTEM AS PER SPECIFICATIONS

EXISTING FLUES & ANTENNAS TO REMAIN (TYP)



**2 NORTH ELEVATION**  
 A1 A2 NTS

**ISSUED FOR TENDER**  
 JUNE, 2015

Project Title:  
*Access PEI - Summerside*

Drawing Title:  
*Partial Roof Replacement*



Date:  
 June, 2015

Dsgn By:  
 DFM

Drn By:  
 DFM

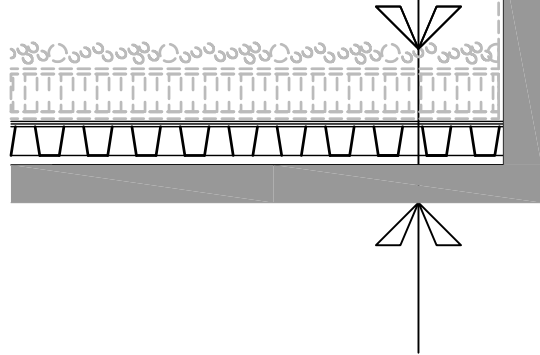
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Proj No.:  
**2060-15037**

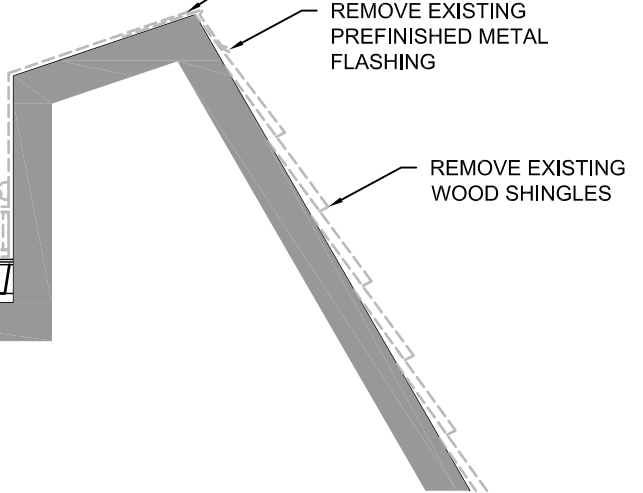
Dwg No.:  
**A2**

**EXISTING ROOF CONSTRUCTION**

- GRAVEL BALLAST (TO BE REMOVED)
- FILTER FABRIC (TO BE REMOVED)
- RIGID INSULATION (TO BE REMOVED)
- MULTI PLY MEMBRANE (TO REMAIN)
- GYPSUM BOARD (TO REMAIN)
- EXISTING ROOF STRUCTURE (TO REMAIN)



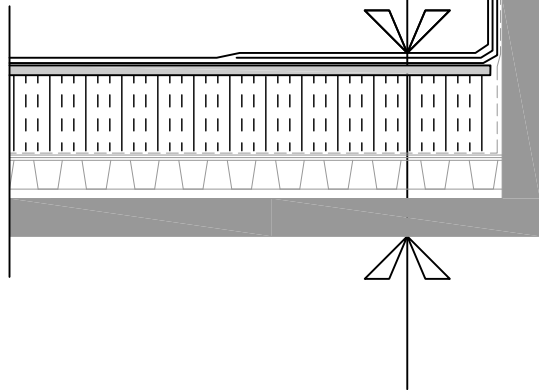
- REMOVE EXISTING BASE FLASHING
- REMOVE EXISTING PREFINISHED METAL FLASHING
- REMOVE EXISTING WOOD SHINGLES



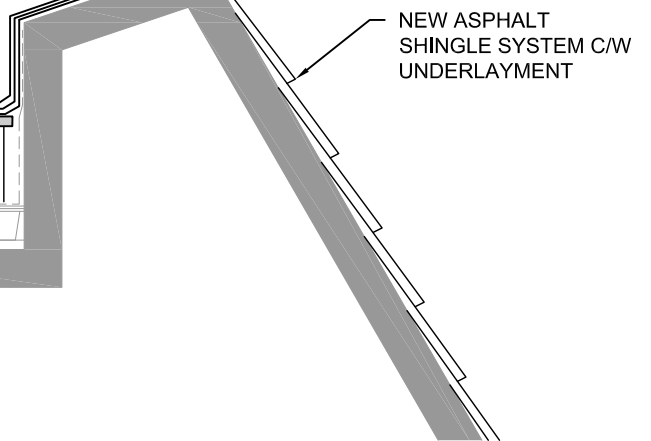
**1** EXISTING ROOF SECTION  
A1 | A3 NTS

**NEW ROOF CONSTRUCTION**

- NEW MODIFIED BITUMEN CAP SHEET
- NEW MODIFIED BITUMEN BASE SHEET
- NEW 12.5mm FIBRE BOARD
- NEW RIGID INSULATION
- EXISTING ROOF STRUCTURE



- NEW CAULKING
- NEW BASE FLASHING
- NEW PREFINISHED METAL FLASHING
- NEW ASPHALT SHINGLE SYSTEM C/W UNDERLAYMENT



**2** NEW ROOF SECTION  
A1 | A3 NTS

**ISSUED FOR TENDER**  
JUNE, 2015

Project Title:  
**Access PEI - Summerside**

Drawing Title:  
**Partial Roof Replacement**



Date:  
June, 2015

Dsgn By:  
DFM

Drn By:  
DFM

Scale:  
As Noted

Proj No.:  
**2060-15037**

Dwg No.:  
**A3**