



Cowichan Valley Regional District

**TENDER NO. ES-014-16
Island Savings Centre (ISC) – Cladding and Roof**

SUMMARY

Closing Date: Tuesday, September 13, 2016
Time: 2:00 pm at CVRD Ingram Street Office

Location: Cowichan Valley Regional District
175 Ingram Street
DUNCAN BC V9L 1N8

Attention: Joe Barry, Corporate Secretary

Bidder:

Name of Firm

Contact Name

Address

Postal Code

Telephone Number

Email

A. Upper Level Cladding (excluding GST): \$ _____

B. Lower Level Cladding (excluding GST): \$ _____

C. Ice Melt Pit Roof (excluding GST): \$ _____

TOTAL STIPULATED PRICE TENDER (excluding GST) = (A + B + C):

\$ _____

ADDENDA

ADDENDUM NO. _____ DATED _____

ADDENDUM NO. _____ DATED _____

ADDENDUM NO. _____ DATED _____

It is herewith acknowledged that the foregoing Addenda have been received and form part of the Tender.

Signature of Authorizing Officer

Dated



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TENDER NO. ES-014-16

TENDER CHECKLIST

This checklist is provided for the bidder's convenience to assist in ensuring that you are submitting a complete tender.

CLOSING DATE: **Tuesday, September 13, 2016**
2:00 p.m. local time
175 Ingram Street, Duncan BC V9L 1N8

TENDER:

TENDER SUMMARY:	Name of Tenderer	<input type="checkbox"/>
	Address and telephone number	<input type="checkbox"/>
	TOTAL TENDER PRICE	<input type="checkbox"/>
	Addenda acknowledged	<input type="checkbox"/>
FORM OF TENDER:	Signed	<input type="checkbox"/>
APPENDIX A	List of Tender Documents	<input type="checkbox"/>
APPENDIX B	List of Unit Prices and Optional Items	<input type="checkbox"/>



TENDER NO. ES-014-16
Island Savings Centre – Cladding and Roof

INVITATION TO TENDER

TENDER

The Owner, the Cowichan Valley Regional District (CVRD), offers to receive Tenders for the **Island Savings Centre – Cladding and Roof**. Tenders must be sealed and signed and clearly marked **ES-014-16 Island Savings Centre – Cladding and Roof** and will be received by Joe Barry, Corporate Secretary, Cowichan Valley Regional District, 175 Ingram Street, Duncan, BC, V9L 1N8, until **2:00 p.m., Tuesday, September 13, 2016**, by hand, mail or delivery, up to the time and date stated on the summary sheet. Tenders shall be opened at a public tender opening, held at 175 Ingram Street, immediately following the stated closing time.

Tenders or amendments submitted by facsimile or email will not be accepted. The lowest or any tender may not necessarily be accepted. Incomplete tenders will be considered noncompliant and returned to the tenderer. Tenders submitted after the stated close date and time will be returned unopened to the tenderer. Amendments to the submitted tender will be permitted, if received in writing prior to tender closing, and if endorsed by the same party or parties who signed and sealed the original tender submission.

SCOPE

The intent of this tender is to obtain an offer to complete all the work for a Stipulated Price Contract, in accordance with the Contract Documents. The works will include:

- A) Upper Level Cladding: Supply and installation of approximately 320 m² (3,444 sq ft) of 24-gauge cladding,
- B) Lower Level Cladding: Supply and installation of approximately 134 m² (1,442 sq ft) of 24-gauge cladding,
- C) Ice Melt Pit Roof: Supply and installation of new modified bituminous roofing membranes for the new Ice Melt Pit building approximately 35 m² (377 sq ft) in size

Note: The total stipulated price (brought forward to page 1) will be the sum of items A, B and C above.
eg. **Total Stipulated Price = A+B+C**

The project is located at the Island Savings Centre (ISC), 2687 James Street, Duncan.

The work must be completed by **November 15, 2016**.

INQUIRIES

Tender inquiries may be directed to Jeralyn Jackson, Project Manager, Capital Projects, via email to jjackson@cvrd.bc.ca

CONTRACT DOCUMENTS

Contract Documents may be obtained from the CVRD's website at www.cvrd.bc.ca. The successful bidder will be expected to enter into a Stipulated Price Contract.

SITE VISIT

A non-mandatory site visit will be held at **9 am, August 31, 2016**, at the Island Saving Centre, 2687 James Street, Duncan, at the entrance to the hockey arena (east side entrance).

INSTRUCTIONS TO TENDERERS

OWNER: Cowichan Valley Regional District
CONTRACT TITLE: Island Savings Centre – Cladding and Roof
CONTRACT NO.: TENDER ES-014-16

1.0 Introduction

The intent of this tender is to obtain an offer to complete all the work for a Stipulated Price Contract, in accordance with the Contract Documents. The works will include:

- A) Upper Level Cladding: Supply and installation of approximately 320 m² (3,444 sq ft) of 24-gauge cladding,
- B) Lower Level Cladding: Supply and installation of approximately 134 m² (1,442 sq ft) of 24-gauge cladding,
- C) Ice Melt Pit Roof: Supply and installation of new modified bituminous roofing membranes for the new Ice Melt Pit building approximately 35 m² (377 sq ft) in size

Note: The total stipulated price (brought forward to page 1) will be the sum of items A, B and C above.
eg. **Total Stipulated Price = A+B+C**

The project is located at the Island Savings Centre, 2687 James Street, Duncan.

The work must be completed by **November 15, 2016**.

2.0 Inquiries

Direct all inquiries regarding the *Contract* to:
Cowichan Valley Regional District
175 Ingram Street
Duncan BC V9L 1N8

Attention: Jeralyn Jackson
Phone: 250-746-2530
Email: jjackson@cvrd.bc.ca

3.0 Tender Documents

3.1 The tender documents, which a tenderer should review to prepare a tender, consist of all of the *Contract Documents* listed in the Form of Tender - Appendix A, entitled "List of Tender Documents".

3.2 Portions of the *Contract Documents* are included by reference. Copies of these documents have not been included with the tender package. These documents are the:

CCDC-2: Stipulated Price Contract:

- .1 Definitions
- .2 General Conditions

They are those contained in the publication entitled "Standard Construction Document CCDC-(2008) – Stipulated Price Contract", and

3.3 Any additional information made available to tenderers prior to the Tender.

4.0 Addenda

4.1 Questions arising during the bidding period shall be in writing and directed to:
Cowichan Valley Regional District
Attention: Jeralyn Jackson, PMP, ASCT

Email: jjackson@cvrd.bc.ca
Phone: 250 746-2530

A summary of the questions and any changes in the *Work*, will be included in an ADDENDUM, a written communication issued by the Owner. All ADDENDA shall be acknowledged by the Tenderer in the Tender Summary and the Tender Checklist.

- 4.2 ADDENDA will not be issued later than three (3) calendar days before the Tender closing date.
- 4.3 Tenderers shall not be entitled to make any claim for compensation for any costs or damages for the execution of this tender.

5.0 Submission of Tenders

- 5.1 Tenders must be submitted in a sealed envelope, marked on the outside with the above *Contract* Title and No., and must be received by the office of:

Joe Barry, Corporate Secretary

on or before:

Tender Closing Time: **2:00 pm** local time
Tender Closing Date: **Tuesday, September 13, 2016**

at:

*Cowichan Valley Regional District
175 Ingram Street
Duncan BC V9L 1N8*

- 5.2 Late tenders will not be accepted or considered, and will be returned unopened within 15 Days of receipt of the written Notice of Award delivered to the Owner:

6.0 Bonds

A Performance Bond and a Labour and Material Payment Bond will be required, each in the amount of 50% of the *Contract Price*, covering the performance of the *Work* including the *Contractor's* obligations during the Maintenance Period, issued by a surety licensed to carry on the business of suretyship in the province of British Columbia, and in a form acceptable to the Owner.

7.0 Award

- 7.1 After acceptance by the CVRD, a written acceptance will be issued to the successful Bidder;
- 7.2 Tenders received after the tender close date and time will be rejected and returned unopened;
- 7.3 The successful tenderer and the Owner will enter into a Stipulated Price Contract by the execution of the Form of Agreement in the forms included in the tender documents.
- 7.4 In the event that available funding is insufficient, the prices for each of the three components of this Tender (ie. A, B and C) and/or the Optional Items as quoted in Appendix B will form the basis for negotiation with the low bidder. After acceptance by the CVRD, a written acceptance will be issued to the successful Bidder.

7.6 The Owner has the right to accept the tender which it deems most advantageous to the CVRD and the right to reject any or all tenders. The owner's liability, in the aggregate, for any breach or breaches of any Contract formed upon by the submission of the tender will be limited to Five Thousand Dollars (\$5,000) or a reasonable cost of preparation of the Tender.

8.0 Sales Tax and Other

Any contract awarded as a result of the Tender will be subject to GST. GST is therefore to be shown separately on all invoices and will not be shown in the Tender Submission. All other taxes are to be included in the Stipulated Price.

9.0 WORKSAFEBC, Declaration and Liability Insurance

9.1 The tenderer must be registered with WorkSafeBC. Execution of this tender form shall constitute a warranty that the tenderer's assessment is not in arrears.

9.2 The Contractor will be considered by the Owner as the Prime Contractor on this project and shall be required to submit all Work Safe BC assurance and approvals for the duration of the work. The Contractor is to submit a "Notice of Project" to WorkSafeBC.

9.3 After acceptance by the CVRD, the successful contractor will submit copies of current liability insurance "with the CVRD as additional named insured" and standing with WorkSafeBC. Contractor will carry General Liability Insurance in the amount of \$5,000,000.

9.4 Prior to release of final payment, the Contractor shall provide a Statutory Declaration that all employees, subcontractors, and suppliers used in conjunction with the work have been fully paid and satisfied by the contractor, and witnessed by a Notary Public or a Commissioner for taking Affidavits and submitted to the CVRD.

FORM OF TENDER

(TO BE USED ONLY WITH THE DEFINITIONS AND GENERAL CONDITIONS OF THE "STANDARD CONSTRUCTION DOCUMENT CCDC-2 (2008) – STIPULATED PRICE CONTRACT".)

OWNER: Cowichan Valley Regional District
CONTRACT TITLE: Island Savings Centre – Cladding and Roof
CONTRACT NO.: TENDER ES-014-16

1.0 WE, THE UNDERSIGNED:

1.1 have received and carefully reviewed all of the Contract Documents, including the Instructions to Tenderers, the specified edition and sections of the "Standard Construction Document CCDC-2 (2008) – Stipulated Price Contract", and the following Addenda:

(ADDENDA, IF ANY)

1.2 have full knowledge of the Place of the *Work*, and the *Work* required; and

1.3 have complied with the Instructions to Tenderers; and

2.0 ACCORDINGLY WE HEREBY OFFER:

2.1 to perform and complete all of the *Work* and to provide all the labour, equipment and material all as set out in the Contract Documents, in strict compliance with the Contract Documents; and

2.2 to achieve Substantial Performance of the *Work* on or before **November 15, 2016**; and
(WORK DURATION OR DATE)

2.3 to do the *Work* for the stipulated price of _____ Dollars (\$ _____) in Canadian funds, and excludes GST.

3.0 WE CONFIRM:

That the following appendices are attached to and form a part of this tender:

- Appendix A – List of Tender Documents
- Appendix B – List of Unit Prices & Optional Items

4.0 WE AGREE:

That this tender will be irrevocable and open for acceptance by the Owner for a period of 60 calendar days from the day following the Tender Closing Date and Time, even if the tender of another tenderer is accepted by the Owner. If within this period the Owner delivers a written notice ("Notice of Award") by which the Owner accepts our tender we will: Within 15 Days of receipt of the written Notice of Award, deliver to the Owner:

4.1 a Performance Bond and a Labour and Material Payment Bond, each in the amount of 50% of the Contract Price, covering the performance of the *Work* including the Contractor's obligations during the Maintenance Period, issued by a surety licensed to carry on the business of suretyship in the province of British Columbia, and in a form acceptable to the *Owner*; and

4.2 a detailed Construction Schedule in MS Project format; and

- 4.3 commence the *Work* within 1 Month of receipt of written "Notice to Proceed", or such longer time as may be otherwise specified in the Notice to Proceed; and
- 4.4 a "clearance letter" indicating that the tenderer is in WCB compliance; and
- 4.5 a copy of the insurance policies as specified in GC 11.1 indicating that all such insurance coverage is in place and;
- 4.6 sign the *Contract Documents*.

5.0 WE AGREE:

That, if we receive written Notice of Award of this *Contract* and, contrary to paragraph 4 of this Form of Tender, we:

- 5.1 fail or refuse to deliver the documents as specified by paragraph 4.1.1 of this Form of Tender; or
 - 5.2 fail or refuse to commence the *Work* as required by the Notice to Proceed,
- then such failure or refusal will be deemed to be a refusal by us to enter into the *Contract* and the *Owner* may, on written notice to us, award the *Contract* to another party.

6.0 OUR ADDRESS IS AS FOLLOWS:

Phone: _____

Attention: _____

This Tender is executed this _____ day of _____, 20____.

Contractor:

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

(AUTHORIZED SIGNATORY)

(AUTHORIZED SIGNATORY)

APPENDIX A – LIST OF TENDER DOCUMENTS

OWNER: Cowichan Valley Regional District
CONTRACT TITLE: Island Savings Centre – Cladding and Roof
CONTRACT NO.: TENDER ES-014-16

The following is the list or description of the Tender Documents referred to in the Tender for the above named *Project*:

NOTE: The documents noted with “***” are included with the tender documents by reference and are contained in the “Standard Construction Document CCDC-2 (2008) – Stipulated Price Contract

- 1 Instructions To Tenderers;
- 2 Form of Tender, including Appendix A & B
- 3 Form of Agreement, including all Schedules;
- 4 Definitions**;
- 5 Supplementary General Conditions;
- 6 General Conditions **;
- 7 Specifications
- 8 Design Drawings/Documents listed in Schedule 2 to the Agreement;
- 9 Addenda.



APPENDIX B – LIST OF UNIT PRICES & OPTIONAL ITEMS

TENDER NO: ES-014-16 Island Savings Centre – Cladding and Roof

The following are our Unit Prices for the units of work listed hereunder. The Unit Prices listed apply to performing units of work only during the time scheduled for such work in the project schedule. These prices do NOT include GST. Additional items are described following table.

Unit of Work	Unit Price (\$)
Foreman (\$/hr. inclusive of payroll burden).	\$ _____ /hr
Journeyman (\$/hr. inclusive of payroll burden)	\$ _____ /hr
Labourer (\$/hr. inclusive of payroll burden)	\$ _____ /hr

DESCRIPTION OF OPTIONAL ITEM PRICES

Submit pricing for the Optional items listed below that the Owner may or may not agree to substitute into the cladding portion of this project. In addition to the supply items listed under each Option, prices shall include all respective overhead, profit, taxes (excluding GST), disbursements and related charges, and, if the Owner chooses to substitute in one or both of the Optional items to the project, shall represent the actual addition or deletion to the Contract Price. **THESE PRICES ARE NOT TO BE INCLUDED IN THE TOTAL STIPULATED PRICE TENDER - INCLUDE ONLY IN APPENDIX B.**

Optional Item #1 – Supply only the cladding on the upper walls on the North elevation

- 30 Min Building paper
- 24 Gauge pre-painted cladding to match existing \$ _____
- 24 Gauge Cladding related flashings
- Materials delivered to site and loaded onto upper and lower roofs with crane

Optional Item #2 – Supply only the cladding on the lower walls on the North elevation.

- 30 Min Building paper
- 24 Gauge pre-painted cladding to match existing \$ _____
- 24 Gauge Cladding related flashings
- Materials delivered to site and loaded onto lower roof with crane

FORM OF AGREEMENT

(TO BE USED ONLY WITH THE DEFINITIONS AND GENERAL CONDITIONS OF THE "STANDARD CONSTRUCTION DOCUMENT CCDC-2 (2008) – STIPULATED PRICE CONTRACT".)

THIS AGREEMENT made in duplicate this _____ day of _____, 2016.

OWNER: Cowichan Valley Regional District
CONTRACT TITLE: Island Savings Centre – Cladding and Roof
CONTRACT NO.: TENDER ES-014-16

BETWEEN:
COWICHAN VALLEY REGIONAL DISTRICT
175 Ingram Street, Duncan, in the
Province of British Columbia

(the "Owner")

AND:

(NAME AND OFFICE ADDRESS OF CONTRACTOR)

(the "Contractor")

The Owner and the Contractor agree as follows:

ARTICLE A-1 THE WORK - START/COMPLETION DATES

- 1.1** The Contractor will perform all Work and provide all labour, equipment and material and do all things strictly as required by the Contract Documents. The works contained under this contract include construction, per the Contract drawings.
- 1.2** The Contractor will commence the Work in accordance with the Notice to Proceed. The Contractor will proceed with the Work diligently, will perform the Work generally in accordance with the construction schedules as required by the Contract Documents and will achieve Substantial Performance of the Work on or before **November 15, 2016** subject to the provisions of the Contract Documents for adjustments to the Contract Time.
- 1.3** Time shall be of the essence of the Contract. See SUPPLEMENTARY GENERAL CONDITIONS and SPECIFICATIONS for additional conditions.

ARTICLE A-2 AGREEMENTS AND AMENDMENTS

The Contract supersedes all prior negotiations, representations or agreements, whether written or oral, and the Contract may be amended only in strict accordance with the provisions of the Contract Documents.

ARTICLE A-3 CONTRACT DOCUMENTS

The "Contract Documents" consist of the documents listed or referred to in Schedule 1, entitled "Schedule of Contract Documents", which is attached and forms a part of this Agreement, and includes any and all

additional and amending documents issued in accordance with the provisions of the Contract Documents. All of the Contract Documents shall constitute the entire Contract between the Owner and the Contractor.

ARTICLE A-4 CONTRACT PRICE

4.1 The price for the Work ("Contract Price") in Canadian dollars, excluding GST is:

_____ and _____ cents \$ _____

4.2 The Contract price is subject to any adjustments, including any payments owing on account of Changes and agreed to Extra Work, approved in accordance with the provisions of the Contract Documents.

4.3 The Contract Price shall be the entire compensation owing to the Contractor for the Work and this compensation shall cover and include all profit and all costs of supervision, labour, material, equipment, overhead, financing, and all other costs and expenses whatsoever incurred in performing the Work.

ARTICLE A-5 PAYMENT

5.1 Subject to applicable legislation and the provisions of the Contract Documents, the Owner shall make payments to the Contractor.

5.2 If the Owner fails to make payments to the Contractor as they become due in accordance with the terms of the Contract Documents then interest calculated at 2% per annum over the prime commercial lending rate of the Bank of Canada on such unpaid amounts shall also become due and payable until payment. Such interest shall be calculated and added to any unpaid amounts monthly.

5.3 Subject to the provisions of the Contract Documents, and in accordance with legislation and statutory regulations respecting holdback percentages, the Owner shall in Canadian funds:

5.3.1 make progress payments to the Contractor on account of the Contract Price when due in the amount certified by the Consultant together with GST,

5.3.2 upon Substantial Performance of the Work, pay to the Contractor the unpaid balance of the holdback amount when due together with GST, and

5.3.3 upon the issuance of the final certificate for payment, pay to the Contractor the unpaid balance of the Contract Price when due together with GST.

ARTICLE A-6 RECEIPT OF AND ADDRESSES FOR NOTICES

Communications among the Owner, the Contract Administrator, and the Contractor, including all written notices required by the Contract Documents, may be delivered by hand, by email, or by pre-paid registered mail to the addresses as set out below:

The Owner:

*Cowichan Valley Regional District
175 Ingram Street
Duncan BC V9L 1N8*

Represented by: Jeralyn Jackson

Email: jjackson@cvrld.bc.ca

Attention: Jeralyn Jackson, ASCT, PMP
Project Manager, Capital Projects

The Contractor:

Email: _____
Attention: _____

The Consultant (Contract Administrator):
Cowichan Valley Regional District
175 Ingram Street
Duncan BC V9L 1N8

Email: jackson@cvrd.bc.ca
Attention: Jeralyn Jackson, ASCT, PMP
Project Manager, Capital Projects

- 6.1** A communication or notice that is addressed as above shall be considered to have been received:
- 6.1.1** immediately upon delivery, if delivered by hand; or
 - 6.1.2** immediately upon transmission if sent and received by email; or
 - 6.1.3** after 5 days from date of posting if sent by registered mail.
- 6.2** The Owner or the Contractor may, at any time, change its address for notice by giving written notice to the other at the address then applicable. Similarly if the Contract Administrator changes its address for notice then the Owner will give or cause to be given written notice to the Contractor.
- 6.3** The sender of a notice by email assumes all risk that the email will be received properly.

ARTICLE A-7 RIGHTS AND REMEDIES

- 7.1** The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights, and remedies otherwise imposed or available by law.
- 7.2** Except as specifically set out in the Contract Documents, no action or failure to act by the Owner, Contract Administrator, or Contractor shall constitute a waiver of any of the parties' rights or duties afforded under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach under the Contract.

ARTICLE A-8 GENERAL

- 8.1** The Contract Documents are to be read into and form part of this Agreement and the whole shall constitute the Contract between the parties, and subject to the law and the provisions of the Contract Documents shall enure to the benefit of and be binding upon the parties hereto, their respective heirs, legal representatives, successors, and assigns.

- 8.2 This Contract shall be construed according to the laws of British Columbia.
- 8.3 The Contractor shall not, without the express written consent of the Owner, assign this Contract, or any portion of this Contract.
- 8.4 The headings included in the Contract Documents are for convenience only and do not form part of this Contract and will not be used to interpret, define, or limit the scope or intent of this Contract or any of the provisions of the Contract Documents.
- 8.5 A word in the Contract Documents in the singular includes the plural and, in each case, vice versa.
- 8.6 This agreement shall ensure to the benefit of and be binding upon the parties and their successors, executors, administrators, and assigns.

IN WITNESS WHEREOF the parties hereto have executed this Agreement the day and year first written above.

Contractor: _____)
 _____)
 _____)
 (FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL) _____)
 _____)
 (AUTHORIZED SIGNATORY) _____) Seal
 _____)
 (AUTHORIZED SIGNATORY) _____)
 _____)
 Witness to above signature: _____)
 _____)
 _____)
 Name: _____)
 _____)
 Occupation: _____)
 _____)
 Address: _____)
 _____)
 _____)
 Owner: _____)
 _____)
 The Corporate Seal of the _____)
 COWICHAN VALLEY REGIONAL DISTRICT _____)
 was hereunto affixed in the presence of: _____)
 _____)
 _____)
 Jon LeFebure, Chair _____)
 _____) Seal
 _____)
 _____)
 Joe Barry, Corporate Secretary

SCHEDULE 1 - CONTRACT DOCUMENTS

OWNER: Cowichan Valley Regional District
CONTRACT TITLE: Island Savings Centre – Cladding and Roof
CONTRACT NO.: TENDER ES-014-16

The following is the list or description of the Contract Documents referred to in the Contract for the above named *Project*:

NOTE: The documents noted with “***” are included with the contract documents by reference and are contained in the “Standard Construction Document CCD-2 (2008) – Stipulated Price Contract”

- 10 Instructions To Tenderers;
- 11 Form of Tender, including Appendix A & B
- 12 Form of Agreement, including all Schedules;
- 13 Definitions**;
- 14 Supplementary General Conditions;
- 15 General Conditions **;
- 16 Specifications
- 17 Design Drawings/Documents listed in Schedule 2 to the Agreement;
- 18 The following Addenda:

Addendum No.	Date

SCHEDULE 2 - LIST OF CONTRACT DRAWINGS/DOCUMENTS

OWNER: Cowichan Valley Regional District
CONTRACT TITLE: Island Savings Centre – Cladding and Roof
CONTRACT NO.: TENDER ES-014-16

List of Contract Drawings and Figures

TITLE	DRAWING NO.	DATE	REV NO.
AAE Structural Ltd. – Ice Melt Pit Facility	S1	April 21, 2016	-
AAE Structural Ltd. – Ice Melt Pit Facility	S2	April 21, 2016	-
Photo of site cladding and roof	Figure 1	Aug 10, 2016	-
Photo of extent of cladding	Figure 2	Aug 10, 2016	-
			-
			-
			-

SUPPLEMENTARY GENERAL CONDITIONS

The provisions of the Definitions and General Conditions sections of the "Standard Construction Document CCDC 2 – 2008 Stipulated Price Contract", are modified and supplemented as follows:

DEFINITIONS:

Clarification: Definition 9 – **Consultant**: The *Consultant* will also include an employee of the CVRD.

GENERAL CONDITIONS OF THE STIPULATED PRICE CONTRACT

SGC 1.1.7 Amend GC 1.1.7 OF SECTION GC 1.1 Contract Documents

Amend GC 1.1.7 by adding the underlined words and deleting the ~~struck-out~~ words:

1.1.7 If there is a conflict within the Contract Documents:

- .1 the order of priority of documents, from highest to lowest, shall be
 - Agreement between the Owner and the Contractor,
 - Addenda,
 - Definitions,
 - Supplementary General Conditions,
 - ~~the~~ General Conditions,
 - ~~Division 1 of the~~ Specifications,
 - ~~technical~~ Specifications,
 - ~~material and finishing~~ schedules,
 - ~~the~~ Drawings and Figures
 - Tender ES-014-16
- .2 Drawings of larger scale shall govern over those of smaller scale of the same date.
- .3 dimensions shown on Drawings shall govern over dimensions scaled from Drawings.
- .4 later dated documents shall govern over earlier documents of the same type.

SGC 9.1 Add to Section GC 9.1 – Protection of Work and Property:

9.1.5 Before commencing any Work at the Place of the Work, the Contractor shall be responsible to locate in three dimensions all underground utilities and structures indicated on the Contract Documents as being at the Place of the Work. The Contractor shall also be responsible to consult with all utility corporations that provide electricity, communication, gas or other utility services in the area of the Place of the Work, to locate in three dimensions all underground utilities for which they have records. The Contractor shall also locate in three dimensions any other utilities or underground structures that are reasonably apparent in an inspection of the Place of the Work."

SGC 9.4 Add to Section GC 9.4 – Construction Safety:

- 9.4.2 The Contractor shall be responsible for safety management for all persons who are present within the boundaries of the Work Site Plan including but not limited to the Contractor's worker, the Subcontractor's workers, the Owner, the Contract Administrator, or any other inspector or agent appointed by either of them, and other Contractor's workers and anyone else.
- 9.4.3 The Contractor shall investigate thoroughly the nature and conditions of the project as well as the requirements of the job procedures and should be prepared to, if warranted, implement a more comprehensive safety program than is required by the regulations specified under GC 3.4.1.

- 9.4.4 The Contractor shall develop and be responsible to maintain a project-specific work site safety program, tailored specifically to the work of the contract, and shall be acceptable in all respects to the regulations specified under GC 3.4.1.
- 9.4.5 The Contractor shall be solely and completely responsible for the overall safety program on the work site during the performance of the work, to ensure the safety of all persons at the work site, and to safely coordinate all activities on the work site. This requirement shall apply continuously, and not be limited to normal working hours.
- 9.4.6 The Contractor shall make itself, its employees, Subcontractors, suppliers, the Owner, the Contract Administrator, and all others that the contractor brings to the work site, aware of the safety and security rules, regulations, and requirements in effect at the work site.
- 9.4.7 The Contractor shall provide site safety orientation for all Contractor and Subcontractor employees and visitors to the site. This presentation must be made before their work commences, or an appropriately trained worker must escort them.
- 9.4.8 The Contractor shall be proactive in its approach towards safety and shall anticipate problems, correcting situations before they occur. The Contractor shall have a means of inspecting the work site to ensure all personnel meet or exceed the minimum safety requirements, all unsafe conditions are corrected immediately, and proper discipline is enforced. A lax attitude towards safety will not be tolerated on the work site.

SGC 11.1.1.1 Amend GC 11.1.1.1 OF SECTION GC 11.1 Insurance

Amend GC 11.1.1.1 by adding the underlined words and deleting the ~~struck~~ words:

- .1 General liability insurance in the name of the Contractor and include, or in the case of a single, blanket policy, be endorsed to ~~name-include~~, the Owner ~~and the Consultant~~ as additional insureds but only with respect to liability, other than legal liability arising out of their sole negligence, arising out of the operations of the Contractor with regard to the Work. General liability insurance shall be maintained from the date of commencement of the Work until one year from the date of Substantial Performance of the Work. Liability coverage shall be provided for completed operations hazards from the date of Substantial Performance of the Work, as set out in the certificate of Substantial Performance of the Work, on an ongoing basis for a period of ~~6-one~~ years following Substantial Performance of the Work.

SECTIONS GC 11.1.1.3, GC 11.1.1.4, GC 11.1.1.5, GC 11.1.1.6 and GC 11.1.1.7 are not applicable.

SPECIFICATIONS

1.0 Description of Work

The contractor will be responsible for supply and installation of approximately 321.4 m² (3,460 sq ft) of 24-gauge cladding, supply only of approximately 133.8 m² (1,440 sq ft) of 24-gauge cladding and supply and installation of new modified bituminous roofing membranes for the new Ice Melt Pit building approximately 35 m² (376.6 sq ft) in size.

The work must be scheduled around ongoing programs at the Island Savings Centre and must be completed by **November 15, 2016**, to accommodate regularly scheduled programming.

Safety and communication with Island Savings Centre staff will be key issues.

- 1.1 All work on site shall be co-ordinated with the Island Savings Centre Building Manager, Brad Coleman (250-746-0430), so as to minimize disruptions. Execute work with least possible interference or disturbance to building operations, occupants and normal use of premises. Arrange with Building Manager to facilitate execution of work.
- 1.2 In June, 2014, the CVRD completed a Hazardous Materials survey for the Island Savings Centre and a Hazardous Materials Management Inventory Survey that is available upon request.

2.0 Cladding

In 2014 the Island Savings Centre Commission approved the completion of the north wall siding at the Island Savings Centre. The existing cedar cladding is beginning to show signs of failing including rot, cracking and buckling. The Contractor will be required to work with the CVRD to match the color and profile of the new steel cladding as close as possible to the existing. The areas proposed for the new cladding are:

- **Upper level:** surface area of 43.9 m x 7.3m or approximately 320 m².
- **Lower level:** surface area of 27.4 m x 4.9 m (deduct 21 m² for the Ice Melt Pit) or approximately 113 m².

2.1 Work Included:

- 2.1.1 All labour, materials and equipment necessary to fabricate and erect the metal wall panels.
- 2.1.2 The supply and installation of accessories as required to make a waterproof and complete installation.
- 2.1.3 Cutting and flashing around penetrations of existing building.

2.2 Quality Assurance:

- 2.2.1 Qualification of workers: Employ skilled applicators certified by the Provincial Apprenticeship Board as being 'enrolled in' or 'having completed' appropriate training in the fabrication and installation of metal cladding, or experience as approved otherwise.
- 2.2.2 Attend site to measure, gain information of existing substrates and design to determine product design, color and required methods to fasten to old cedar substrate.

2.3 Products:

- 2.3.1 Cladding shall be cold rolled sheet steel product with an aluminium-zinc alloy coating and a factory-applied paint coating system. The panels are to be a minimum of 24 gauge. The aluminium-zinc sheet steel (or better) coating shall conform to ASTM A-792M, AZ150 or better. The manufacturer is to specify the type and brand of paint coating system used.
- 2.3.2 Acceptable Products:

- .1 Vicwest CL 938, 24- gauge prefinished sheet metal.
 - .2 Westform WF 636 Wall Panel, 24-gauge.
 - .3 Westman Steel Elite Rib, 24-gauge.
- 2.3.3 All cladding color to be Antique Linen to match existing.

2.4 Execution:

- 2.4.1 All installation work shall be carried out by trained crews and in accordance with the manufacturer's and these specifications.
- 2.4.2 Metal cladding systems shall be adjusted to final position before being permanently fastened to structural supports. If such supports are improperly aligned, levelled, or plumbed, the problem shall be reported to the general contractor in order that the necessary corrections be made before proceeding with the work.
- 2.4.3 End laps shall be located over supports. Minimum end laps shall be as per manufacturer's specifications.
- 2.4.4 Contractor to provide all flashing as required for openings or as required.
- 2.4.5 When cutting or drilling prefinished material, care shall be exercised to ensure that cuttings do not remain to rust on exposed prefinished surfaces. Where practicable, cutting and drilling shall be conducted so that cuttings do not strike or accumulate on exposed cladding surfaces. Edges cut with an abrasive blade must be hand trimmed.
- 2.4.6 Attend site to measure, gain information of existing substrates and design to determine product design, color and required methods to fasten to old cedar substrate.
- 2.4.7 Proposal to include any finish cap, trim mouldings or barrier backing as recommended by manufacturer and/or building codes (ie. 30 min paper backing).
- 2.4.8 Island Savings Centre staff will be responsible for any substructure of pony wall that may need replacing due to weather/age failure.
- 2.4.9 Contractor will be responsible for any crane work and lifts that may be required to complete supply and installation of cladding.
- 2.4.10 Contractor will include in quote all provisions required to install cladding on two levels of the Island Savings Centre Centre north face (upper and lower).
- 2.4.11 Contractor must schedule around ongoing Island Savings Centre programs and user groups at the Island Savings Centre.
- 2.4.12 Island Savings Centre staff will be responsible for disconnection, removal and reinstallation of light fixtures on the north wall of the Island Savings Centre.

3.0 Ice Melt Pit Bldg. Roof

Ice Melt Pit Facility Roofing 2016 Specifications as follows:

DIVISION NO. & TITLE	SECTION No. & TITLE	PAGES
DIVISION 0 - BIDDING & CONTRACT REQUIREMENTS	00020 Specification Index	1-1
	00030 Index to Drawings	1-1
DIVISION 1 - GENERAL REQUIREMENTS	01011 Summary of Work	1-4
	01041 Project Coordination	1-2
	01200 Project Meetings	1-1
	01220 General Instructions	1-2
	01300 Submittals	1-1
	01310 Construction Schedule	1-1
	01400 Quality Control	1-1
	01500 Temporary Facilities and Controls/Site Security	1-3
	01600 Material and Equipment	1-2
01700 Contract Closeout	1-1	
DIVISION 2 – SITE WORK	02052 Deconstruction, Demolition Waste Management and Disposal	1-2
DIVISION 3, 4 & 5 – NOT USED		
DIVISION 6 - WOOD AND PLASTICS– NOT USED		
DIVISION 7 - THERMAL AND MOISTURE PROTECTION	07213 Overlay Board	1-2
	07535 Modified Bituminous Membranes	1-8
	07620 Metal Flashing	1-3
	07900 Sealants	1-1

MODIFIED BITUMINOUS MEMBRANE

DIVISION 1 - GENERAL REQUIREMENTS

SUMMARY OF WORK

Section 01011

Page 1 of 2

1.0 GENERAL

1.1 DOCUMENTS

This section of the specifications forms part of the contract documents and is to be read, interpreted, and coordinated with all other parts.

1.2 SUMMARY OF WORK

This section of Work includes furnishing of all labor, materials, services and equipment necessary to provide a new membrane roofing assembly and metal flashing on the low sloped roof for the new Ice Pit Melt Pit Facility at the Island Savings Centre located in Duncan, British Columbia. The work included is as shown on the Roof Plan, on the attached drawings, and as specified **herein**.

.1 General scope of work includes, but is not limited to, the following:

- .1 Supply and installation of new modified bituminous roofing membranes consisting of two ply of SBS modified bituminous membrane and membrane flashing torch applied to one layer of 4.5 mm thick asphalt core board. Asphalt core boards to be mechanically attached to RGC Standards on the new wood deck **and**;
- .3 Supply and installation of new drains, roof penetration / protrusion flashing hardware, new metal cap flashings, at all roof perimeters, up stands and roof transitions, **and**;
- .4 Supply and installation of 75mm (3") PVC down pipe with elbow and straps for exterior drainage, **all as detailed and specified herein,**

1.3 ENVIRONMENTAL REQUIREMENTS

- .1 Requirements of RCABC - RGC Standards and Manufacturer shall be followed for acceptable weather conditions during application of the roofing system.
- .2 Do not carry out roofing operations during wet weather. Do not apply roofing to wet surfaces

MODIFIED BITUMINOUS MEMBRANE

1.3 ENVIRONMENTAL REQUIREMENTS (Continued) Section 01011

Page 2 of 2

- .3 Coordinate metal flashing and trim work with the installation of roofing, drains, curbs, etc.
- .4 Interior Protection: The interior of the building and its contents shall be at all times from damage consequential to the execution of this contract and any repairs or claims for damage will be the sole responsibility of the Contractor.
- .5 Protect adjacent work and surfaces from spills and, splashes. Keep grounds and work areas around project clean on a daily basis.
- .6 Under no circumstances shall any portion of the roof be left open to the weather overnight. Ensure all portions are sealed watertight before leaving the roof. The roofing assembly; base sheet, base stripping, and acceptable night seal must be installed and completed each day.
- .7 Do not store tools, materials, etc. on top of roof-top mechanical equipment. Keep roof-top equipment clean of all roofing debris.
- .8 Smoking on roof or anywhere other than owner designated areas is not permitted.

1.4 REFERENCE DOCUMENTS

- .1 The Contractor shall provide, at the site, one copy of each of the following documents for general reference.
 - Worker's Compensation Board of British Columbia (Work Safe) Accident Prevention Regulations.
 - Latest addition of RGC Roofing Practices Manual and or continuous access to manual on Roofing Contractors Association of BC web site: www.rcabc.org

MODIFIED BITUMINOUS MEMBRANE

DIVISION 1 - GENERAL REQUIREMENTS

PROJECT COORDINATION

Section 01041

PROJECT MEETINGS

Section 01041

Page 1 of 2

- .1 As required by the Consultant or Owner Representative, the Contractor shall call site meetings at regular intervals to which all invited sub trades (if any) must attend. The owner representative will provide physical space and make arrangements for the meeting. The Owner's representative (Project Officer) will chair the meetings and shall prepare and distribute the minutes of such meetings. Minutes shall be distributed within seventy-two (72) hours of the meeting date.
- .2 Special project meetings may be called at the request of the Owner's Representative, Consultant, or the Contractor.

1.5 SECURITY

- .1 No security will be provided or compensation paid by the Owner for material, equipment, or work stolen, lost, damaged or destroyed. The Contractor shall be responsible for watching the work & equipment at all times and for making good all deficiencies at no extra cost to the contract sum.
- .2 Subcontractors shall make their own arrangements to ensure the security of their own equipment, materials and work in cooperation with the Contractor.
- .3 The Contractor shall designate areas of the site as, indicated on the site plan, to be used as temporary lock fast stores and subcontractors shall comply with the Contractor's instructions in this regard.

1.6 CONSTRUCTION SAFETY

- .1 The Contractor shall comply with all applicable laws and regulations of Federal, Provincial and municipal authorities concerning construction safety.
- .2 The Contractor shall comply with Worker's Compensation Act of British Columbia Accident Prevention Regulations (Work Safe latest editions) and shall provide all necessary safety requirements as prescribed by the Act for his work.
- .3 Precautions shall be taken to prevent the overloading of any part of the existing structure, during the progress of the work and damage resulting from such overloading shall be made good at the expense of the Contractor. Existing gravel will not be stocked piled on roof surface.

MODIFIED BITUMINOUS MEMBRANE

PROJECT MEETINGS (Continued)

Section 01041

Page 2 of 2

1.7 CREW SIZE & CONTINUITY OF WORK

- .1 During roofing removal and installation of new roofing the Contractor shall maintain a minimum crew of 2 workers with qualifications as specified in section 1.6.3. Exceptions for crew size will only be made during sheet metal installation. Safety monitors, if utilized, do not constitute 'workers with qualifications'. Sheet metal installation shall follow completion of other work by no more than seven (7) working days.
- .2 With due allowance for inclement weather, the Contractor shall diligently pursue total completion of the project in the best possible time.
- .3 The cap sheet installation will follow base sheet installation within one two (2) weeks.
- .4 Work start time on project is restricted to **7:00 a.m. during week days** and any changes to start time will require agreement from owner's representative and consultant.

1.8 ENVIRONMENTAL CONDITIONS

- .1 Weather conditions permissible for roofing are subject to the discretion of the roofing contractor and the Consultant, except that in no case shall roofing work be carried out under the following conditions:
 - When temperature of substrates or air is lower than or is forecast to drop below 2 degrees during the course of the work.
 - When imminent wet weather has been forecast imminent wet weather.
 - Whenever site conditions have been adversely affected by recent wet weather events.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 1 - GENERAL REQUIREMENTS

GENERAL INSTRUCTIONS

Section 01220

Page 1 of 2

1.9 RELATED SECTIONS

- .1 Mechanical Division 15 – Section 15700 Heating Ventilating, and Air Conditioning Equipment.
- .2 Electrical Division 16 – Section 16100 Wiring Methods.

1.10 REFERENCES

- .1 Roofing Contractors Association of British Columbia (RCABC), Roofing Practices Manual (RPM), latest edition.
- .2 CGSB 37-GP-56M, Membrane, Modified Bituminous, Prefabricated and Reinforced for Roofing.
- .3 Membrane Manufacturers, Technical Manual, latest edition.

1.11 CONTINGENCY ALLOWANCES

- .1 The Owner has a reserve contingency allowance in place to cover unforeseen circumstances. All extra cost items to be approved by owner or owner representative and must be supported by invoices and or approved change orders.

1.12 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver and store materials in original sealed containers with all Manufacturers' labels intact. Store and keep dry all materials, accessories. Elevated roofing materials and accessories to prevent contact with ground, roof or deck from moisture / weather with purpose-made tarps. Polyethylene and other non-breathable plastic coverings are not acceptable. Ensure materials and tarps are secure from severe winds. Do not rely on Manufacturer's packaging for weather protection. **Do Not leave or store materials tools or ladders or any other means of access to roof at site or on grounds over night or at any break in the work schedule.**

MODIFIED BITUMINOUS MEMBRANE

GENERAL INSTRUCTIONS (Continued)

Section 01220

Page 2 of 2

1.13 DELIVERY STORAGE AND HANDLING (continued)

- .2 Store membrane rolls upright in strict accordance with the Membrane Manufacturer's published instructions. Do not stack pallets more than one high.
- .3 Store membrane rolls, etc. in heated enclosures prior to use where climatic conditions warrant and as recommended by the Manufacturer; bring only enough rolls for immediate use to the work area.
- .4 Store all combustible materials away from heat and open flame.
- .5 **Do not stockpile materials or equipment**, or operate equipment so as to overload the structure in any way. Any damage from overloading the deck or its supporting members shall be repaired or replaced at the Contractor's expense.

1.14 GUARANTEES

- .1 Provide a written Contractors Application (Labour) guarantee for a period of ten (10) years from the date of an completion. All costs for Guarantee fees are to be included in the tender submitted; **and** in addition provide a 10 year SBS membrane manufacturer's material warranty, at no cost to the owner.
- .2 Provide copies of all final project guarantees and warranties to the Cowichan Valley Regional District (CVRD).
Attention: Jeralyn Jackson, PMP, ASCT, as a condition of Final Acceptance of this project.
- .3 Inspections on this project are pre-assigned by the owner.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 1 - GENERAL REQUIREMENTS

SUBMITTALS

Section 01300

Page 1 of 1

Preferred format for all submittals is as PDF or doc electronic files whenever possible.

1.15 PRESTART MEETING SCHEDULES

- .1 Obtain and provide at the Prestart Meeting written verification from the Membrane Manufacturer certifying that the installer is approved by Manufacturer for installation of the specified system and supply of the required warranty documents.
- .2 Provide a list of all personnel who may be working on the site and copies of all trade qualifications of workers assigned to the project at the Prestart Meeting.
- .3 Product data: Submit 2 sets of Manufacturer's technical product data, published installation instructions and maintenance recommendations for each type of roofing product to be used at the Prestart Meeting.
- .4 Prepare and submit 2 copies of a written Strategic Material Application in Flame Sensitive Locations (SMAFSL) Plan, as outlined in Submittal documents, to the Owner's Representative and Consultant, detailing the methods of application and material to be used in identified flame sensitive areas at the Prestart Meeting. SMAFSL to include installation practices around building air intake locations.
- .5 Submit two sets of standard metal flashing colour samples for selection by the Owner at the Prestart Meeting.

1.16 OTHER SUBMITTALS

- .1 For changes to the specified work submit shop drawings detailing construction details, assembly, profiles, materials, and installation for conditions as requested by the Consultant.
- .2 Provide sheet metal flashings shop drawings to consultant for review prior to fabrication.
- .3 Submit written weekly and or daily work schedules, via e-mail or fax, as required by the Consultant or Owner's Representative, prior to the start of work in each area. Verbal communication or phone messages will not be acceptable.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 1 - GENERAL REQUIREMENTS

CONSTRUCTION SCHEDULE

Section 01310

Page 1 of 1

1.17 GENERAL SCHEDULES

- .1 Immediately following the award of the contract and **before** commencement of the Work on the work site, the Contractor shall convene a meeting at the site with the Owner's representative, Consultant, Sub trades (if any) in attendance. At this meeting, the roof replacement and deck repair work sequence as well as scheduling will be discussed and finalized in detail and will include priorities, timing of existing service interruptions and the like; special project procedures and any questions with respect to the roof replacement and deck repairs, scheduling or procedures will be brought forward and clarified.
- .2 In order to improve the roof replacement and outside wall restoration repairs, already in progress, schedule modifications to the construction schedule may be suggested by the Owner's representative, Consultant(s) or the contractor before and during the roof replacement and deck repairs. Such modifications may be implemented by mutual agreement.

1.18 COMPLETION SCHEDULE

- .1 It is the intention that this project be substantially completed by the **15th day of November, 2016**.

MODIFIED BITUMINOUS MEMBRANE

QUALITY CONTROL

Section 01400

Page 1 of 1

1.19 GENERAL

- .1 For the work, obtain primary materials from a single Manufacturer, which has produced products and systems successfully for not less than 10 years. Submit job references on request of the Consultant. All materials shall be only as recommended or accepted by the primary Membrane Manufacturer.
- .2 Contractor shall be experienced in the application of the materials and shall supply job references and client references upon request; to show modified bitumen installation experience of similar size and scope of this project for at least 5 years. Client references to be supplied on request.
- .3 Contractor's Field Supervision: Contractor must maintain the same full time supervisor foreman, unless prevented by illness, on the job site during all times when roofing work is in progress.
Supervisor must have roofing qualification and have a minimum 10 years' experience in roofing work similar in nature and scope of specified roofing. Roofing crew makeup shall be trade qualified journeyman roofers in the ratio of no more than 1 to 3 (at least one journeyman to three labours).
Qualifications may be reviewed prior to award of contract and will be reviewed on site.
- .4 Prior to commencement of the work, the Consultant, the Roofing Contractor, the Roofing Contractor's Foreman and the Owner's Representative shall meet on site (the Pre-Start Meeting) to review the materials, details, work schedule and the Owner's requirements. A Manufacturer's Representative shall visit the site during start-up to assist & ensure that the installers and the Consultant/Inspector are instructed in the most up-to-date and correct membrane installation procedures
- .5 A copy of the complete specifications, drawings, submittals and addenda shall be on site at all times.
 - .5.1 The project foreman must be familiar with all aspects of the specifications and all personnel must read and understand the contents of the specification prior to the start of work.
 - .5.2 Replacement of project designated foreman and key qualified roofing journey persons will not be permitted without prior written approval from the roofing consultant.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 1 - GENERAL REQUIREMENTS

**TEMPORARY FACILITIES and
CONTROLS / SITE SECURITY**

Section 01500

Page 1 of 2

- .1 Site Access: Site Access: From exterior by Contractor supplied, installed and maintained ladders. Electrical connection is available at site for power related tools and chargers.
- .2 Parking is restricted to essential company vehicles, cranes & bins only. Worker vehicles shall **only** be parked at owner designated locations.
- .3 Notify Owner's Representative, Consultant, of intent to start work at least three (3) days prior to commencing any work. Provide daily notification of any changes in work schedule.
- .4 The building occupants **will be** sensitive to noise, vibration, dust or any logistical activity that prevents ready access to the building. The Contractor is to cooperate and communicate with the Owner's Representatives and onsite personnel regarding the location of equipment, materials or personnel, so as to minimize the impact to occupants and the operation of the facility as much as possible.

1.20 FIRE PREVENTATIVE MEASURES

- .1 The Contractor is to use this section of the specifications as a guide for the development assessment evaluation and a Strategic Material Application in Fire Sensitive of a risk Location Plan (SMAFSL). The Contractor is not to rely solely on these specifications for fire hazard assessment and appropriate work procedures.
- .2 The Contractor shall make himself familiar with the construction of the building prior to and during the scope of work, as well as with the actual use and occupancy of the in determining appropriate Fire Safety Plans. Consultation with the Owner's building Representative, their designate and Tenants shall form an integral part of the Fire Safety Plan. The SMAFSL shall include installation practices around building air intake locations.
- .3 Proposals for the use of alternate materials and or installation practices, prior to work, or as encountered, are to be submitted to the Consultant prior to implementation.
- .4 Proposals to modify the materials or installation practices are designed to specifically address installation fire concerns and not to be considered an opportunity to change the specified membrane system or generate extra costs.
- .5 A SMAFSL Plan based on the Contractor's installation knowledge, familiarity with the building and the building use, and documented consultation with the Owner's Representative shall form part of a plan to be supplied by the successful bidder at the Prestart Meeting. A copy of this plan is to be submitted to the Owner's Representative and Consultant and be available upon request for review by any other regulatory agency.

MODIFIED BITUMINOUS MEMBRANE

**TEMPORARY FACILITIES and
CONTROLS / SITE SECURITY (Continued)**

Section 01500

Page 2 of 2

- .6 Comply with Owner's instructions for obtaining Hot Works Permits where required.
- .7 Comply with or exceed RCABC Safety Precautions - Torching for Modified Bituminous Systems as described in the RCABC Roofing Practices Manual, Tab 5.0.1.
- .8 Where torches are used for drying or application, a minimum of one 10 lb. ABC fire extinguisher with current charge tags intact is required for each torch on the roof, the extinguisher at all times will be within 20' (6m) of the worker using the torch. Workers will be able to demonstrate verbal competence in the use of the extinguisher upon request of the Consultant.
- .9 In addition to fire extinguisher requirements set out in paragraph 1.10.8, of regulations there shall be a fully charged water hose extended to the roof level for use while hot work is underway. In the event that water service is not readily available at least one "2A Rated Hand Operated Pressurized Water Extinguisher" shall be at roof level.
- .10 All work involving propane torch application of roofing materials shall conform to the British Columbia Fire Code, Section 5.2 "Hot Works", 2006 or latest version. Take particular note of the mandatory Fire Watch Requirements of this section. Fire watch personnel shall have at their disposal a hand held infra-red non-contact thermometer to aid in identifying hotspots and must be used as part of the fire watches duties
 - .1 Make fire watch records available for review on request to the Owner's Representative, Consultant / Inspector or any other regulatory agency.
 - .2 Fire watch shall be 1 hour minimum from time of torch extinguishment or as directed by the Owner.
- .11 Leaving materials and equipment stored at a reroofing site can result in a potentially dangerous situation, subsequently, the following additional procedures are to be followed:
 - .1 Secure roofing materials or equipment on the building when the roofing crew is not on site.
 - .2 Optimally, no materials are to be left on the ground overnight. Where materials must be stored on the ground overnight a security guard must be posted to patrol the site.
 - .3 Propane tanks are to be secured or removed on a daily basis. Torches are to be removed from propane bottles and secured at the end of each workday.
 - .4 All ladders accessing the site must be removed and secured each night. All ladder type hoists must be secured or removed to prevent others from accessing the roof site.
 - .5 Garbage bins to be removed on a regular basis. Consult and cooperate with the Owner's Representative so that bins do not interfere with building operations or deliveries.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 1 - GENERAL REQUIREMENTS

MATERIAL AND EQUIPMENT

Section 01600

Page 1 of 1

1.21 REFERENCES

- .1 Roofing Contractors Association of British Columbia (RCABC), Roofing Practices Manual (RPM), latest edition.
- .2 CGSB 37-GP-56M, Membrane, Modified Bituminous, Prefabricated and Reinforced for Roofing.
- .3 Soprema Inc., Siplast & IKO Industries Ltd. Technical Manuals, latest editions.

1.22 DESIGN STANDARD

- .1 CGSB 37-GP-56M, high performance Modified Bituminous Membranes , listed as accepted for use in the RGC Roof Star Guarantee Program have been selected for this project. The specifications are based on products that comply with this standard.
- .2 Other Manufacturers of similar products with similar performance characteristics are invited to submit proposals through the Roofing Contractor at the time of tender.
- .3 All accessory materials must be supplied and approved in writing by the project designated coordinator. Proposals must include product technical data sheets or site- specific descriptions and printed manufacturer's installation instructions and must comply fully with the experience and job reference requirements of Section 1.6 Quality Assurance of these specifications.

1.23 ROOFING MATERIALS

- .1 **Standards:** conform to RCABC Guarantee Standards and appropriate CSA, CGSB, and ASTM standards for materials used in specified roofing system; use only materials listed in RCABC Accepted Material Listing in the RCABC.s Roofing Practices Manual
- .2 Use winter-grade or summer grade materials correctly in accordance with the manufacturer's specified temperature parameters for such applications.
- .3 **Membrane Accessories:** Use only primers, adhesives, sealants and mastics supplied and or approved by the membrane manufacturer.
- .4 **Alternative Membranes Materials:** Membrane Manufacturers and suppliers are invited to submit and apply for membrane approvals for use on this project. Applications are to be presented in a format that facilitates comparison to defined requirements.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 1 - GENERAL REQUIREMENTS

CONTRACT CLOSEOUT

Section 01700

Page 1 of 1

1.24 PROTECTION AND FINAL CLEAN UP

- .1 Protect finished roof areas from damage and ensure that only authorized traffic and persons are allowed on roof until after final inspection.
- .2 During roofing protect buildings and grounds from debris and equipment. Site is to be kept in a neat, tidy, safe and workmanlike condition at all times.
- .3 Upon completion, site is to be left in a clean condition to the complete satisfaction of the Owner's Representative. Clean all spills, splatters etc. caused during the Roof Replacement. Remove and dispose of all debris, wrappers etc. and verify that all drains are functioning properly.

1.25 DOCUMENT SUBMITTALS

- .1 Maintenance manuals, administrative documentation, as built drawings, etc. shall be delivered to the owner representative in accordance with Administrative Documentation.
- .2 Submit all required material prior to Final Application for Payment.
- .3 Provide a copy of all final project guarantees & warranties to, Cowichan Valley Regional District., as a condition of Final Acceptance of this project.
- .4 Submit a final statement of accounting providing the total adjusted Contract Price, all previous payments, and any monies remaining due. Consultant shall issue a final change order that reflects any approved adjustments to the Contract Price not previously made.

1.26 INSPECTION

- .1 Refer to Supplementary General Conditions.
- .2 In preparation for application for Certificate of Substantial Performance, carefully inspect the Work and ensure that it is complete, that all major and minor roofing as well as sheet metal deficiencies are remedied, defects are corrected, building is clean and in condition for occupancy.
- .3 Notify the Owners Representative in writing, of the satisfactory completion of the Work and request a final inspection.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

DECK OVERLAY BOARDS

Ssection 07200

Page 1 of 2

1.1 SECTION INCLUDES

- .1 Materials and installation procedures for ridge board manufactured for roofing and Asphalt Core Boards as listed in RCABC material acceptance section Tab 2.2 of the Roofing Practices Manual.

1.2 RELATED SECTIONS

- .1 Section 07535 Modified Bituminous Sheet Roofing.

1.3 REFERENCES

- .1 CSA A123.21-04 Standard Test Method for the Dynamic Wind Uplift Resistance.
- .2 Underwriters Laboratories of Canada (ULC) listed as to external fire exposure only (ULC S107).
- .3 Roofing Contractors Association of BC (RCABC): listed in the RGC Accepted Materials List of the RGC Roofing Practices Manual.

PART 2 PRODUCTS

2.1 ASPHALT CORE OVERLAY BOARD

- .1 Overlay board for separation layer over the wood deck, shall be one layer of 4.5mm (3/16") thickness. Asphalt core overlay board shall be listed as an Accepted Material in Tab 2.2 of the RCABC RGC Roofing Practices Manual.

PART 3 EXECUTION

3.2 ROOF OVERLAY BOARD INSTALLATION

- .1 Install one (1) layer of 4.5 mm thick by 1.22 m x 2.44 m, asphalt core board acceptable to membrane manufacturer staggered a minimum 100mm (12") from adjacent board layer and rows. Mechanically attached asphalt core boards with screws and plates to existing to RCABC standards with board joints staggered from a minimum of 300mm (12").
- .2 Upon conclusion of each working period, exposed surfaces and edges of the insulation shall be sealed and rendered watertight by temporary seal. This seal shall be removed and disposed of on resumption of work. Ensure the transition is smooth and does not impede drainage.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

**MODIFIED BITUMINOUS MEMBRANES
AND ACCESSORIES**

Section 07535

Page 1 of 8

1.1 SECTION INCLUDES

- .1 Materials and installation procedures for Modified Bituminous Membranes.

1.2 RELATED SECTIONS

- .1 Section 07200 Asphalt Core Overlay Boards.
- .2 Section 07900 Sealants.

1.3 REFERENCES

- .1 Canadian General Standards Board: 37-GP-56M.
- .2 CSA A123.21-04 Standard Test Method for the Dynamic Wind Uplift Resistance
- .3 Roofing Contractors Association of BC (RCABC): listed in the RGC Accepted Materials List of the RGC Roofing Practices Manual.
- .4 Health Canada / Workplace Hazardous Materials Information System (WHMIS).
 - .1 Material Safety Data Sheets (MSDS).

1.4 SUBMITTALS

- .1 Submit product samples & data sheets in accordance with Section 01300 – Submittal Procedures. Include:
 - 1. Product characteristics
 - 2. Performance criteria
 - 3. Limitations
- .2 Submit proof of manufacturer's CCMC Listing, Listing number and material acceptance listing with Roofing Contractors Association of BC (RCABC).

MODIFIED BITUMINOUS MEMBRANE

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

**MODIFIED BITUMINOUS MEMBRANES Section 07535
AND ACCESSORIES (Continued)**

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PART 2 PRODUCTS

2.1 MEMBRANES

- .1 Bituminous solvent-based primer for torch applied membranes: ELASTOCOL 500 as manufactured by Soprema Inc.; or IKO Modified Bitumen Primer by IKO Industries Ltd.
- .2 Polymer non-bituminous solvent-based primers for self-adhesive membranes, ELASTOCOL STICK as manufactured by Soprema Inc.; or SAM Adhesive by IKO Industries Ltd.
- .3 Roof Membrane Base Sheet: SBS modified bitumen sheet, 3 mm thick, mass 3.8 kg/M², conforming to CAN/CGSB 37-GP-56M (9~ Draft), thermofusible film top and bottom surface, ELASTOPHENE FLAM GF 3.0 mm thick as manufactured by Soprema Inc. or 3.0 mm thick, mass 3.8 kg/M², conforming to CAN/CGSB 37-GP-56M (9~ Draft), Torchflex TF-95-FF Base thermofusible film top and bottom, as manufactured by IKO Industries Ltd.
- .4 Base Sheet Flashing (Stripping): SBS modified bitumen sheet, 3.0 mm thick, conforming to CGSB 37-GP-56M, with thermofusible film top and bottom, SOPRALENE FLAM 180 as manufactured Soprema Inc.: or 3.0 mm thick, mass 3.17 kg/M², conforming to CAN/CGSB 37-GP-56M (9~ Draft), film top and bottom as manufactured by IKO Industries Ltd.
- .5 Base Sheet "SELF ADHERING" Flashing (Stripping) for use in flame sensitive areas only: SBS modified bitumen sheet, 3.0 mm thick, mass 2.8 kg/M², conforming to CGSB 37-GP-56M, with thermofusible film on top and self-adhesive surface, on the bottom, Sopralene FLAM STICK, as manufactured Soprema Inc. or Armourbond 180, 3.0 mm thick, mass 3.45, as manufactured by IKO Industries Ltd.
- .6 Roof Membrane Cap Sheet: SBS modified bitumen sheet 4.0mm thick (nominal) thermofusible bottom surface, granulated top surface, conforming to CGSB37-GP-56M, Sopralene 180 GR manufactured by Soprema Inc. Color to be Brown; or 4.0mm thick (nominal), mass 4.82 Torchflex TP – 180 Cap Sheet, as manufactured by IKO Industries Ltd. Color to be brown.
- .7 Exposed Membrane Cap Flashings: SBS modified bitumen sheet 4.0mm thick, mass 4.82 kg/M², conforming to CGSB 37-GP-56M, SOPRALENE 180 GR as manufactured by Soprema Inc. Color to be brown or 4.0mm thick (nominal), mass 4.82 Torchflex TP-180 Cap Sheet as manufactured by IKO Industries Ltd. Color to be brown.
- .8 Fire Protection: For additional protection in flame sensitive locations, as determined by the contractor, a 165 mm (6 %") wide tape consisting of a glass fleece reinforcement and SBS modified bitumen shall be installed. Tape as recommended by the membrane manufacturer.

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**MODIFIED BITUMINOUS MEMBRANES Section 07535
AND ACCESSORIES (Continued)**

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2.2 MEMBRANE ACCESSORIES

- .1 Bituminous solvent-based primer for torch applied membranes acceptable for use by primary membrane manufacturer.
- .2 Polymer non-bituminous solvent-based primers for self-adhesive membranes:
- .3 Membrane Underlay Board for use over asphalt contaminated surfaces: semi-rigid waterproof sheet with a rubber filled asphalt core, sandwiched with 2 layers of fiberglass reinforcement, with a thermofusible poly film finish. Sheet shall be 0.8 mm thick by 1.22 m x 2.44 m.
- .4 Roof Mastic for installation beneath hardware flanges and for use when installing mastic and granules at the base of flanged flashings: Mastic type as required by the Membrane manufacturer's "system" criteria.
- .5 General-purpose caulking: **FLEXIBLE SEAL** as distributed by Pro-Line Construction Materials Ltd. or All Weather Products.
- .6 Liquid Membrane Detailing: For immersed service: Liquid-applied two-component PMMA coating c/w woven polyester reinforcement Manufacturers Accepted Proprietary Flashing System.
 - .1 The use of the specialty flashing system shall be specifically approved in advance by the membrane manufacturer for each application.
- .7 Roofing Assembly Attachment: To be adhesive applied asphalt core board with adhesive patterns 150mm (6") 150mm (6") spaced continuous ribbons and quantities as per RCABC pattern for board size and membrane manufacturer's application specifications. With the exception of areas with bare wood Membranes are to be torch applied.

2.3 VENTS, PIPES, ALUMINUM ROOF PENETRATION FLASHINGS

- .1 Use only "Hot Weld" products as manufactured by Menzies Metals or pre-approved alternate by Consultant.
- .2 Where required plumbing jacks, to be Aluminum roof penetration hardware. Penetration hardware to be a minimum of 8" above finished roof.
 - .1 Plumbing stacks shall have Aluminum caps of appropriate size and fit.

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MODIFIED BITUMINOUS MEMBRANES Section 07535
AND ACCESSORIES (Continued)

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VENTS, PIPES, ALUMINUM ROOF PENETRATION FLASHINGS (Continued)

- .1 Were required plumbing pipes hardware to be minimum 8” above finished roof. Extend plumbing piping or cut back as necessary.
- .2 Prime top surfaces of all metal flanges, including sheet leads and allow to dry for 24 hours prior to installation.
- .3 Set flanges of drains and metal penetration flashings in a full bed of mastic and secure in Place.
- .4 Over flanges, etc. apply a 30” square piece of base sheet target flashing centered over the protrusion turned 45° to membrane direction and fully torch in place.

2.4 SCUPPERS OR SPUN COPPER OR ALUMINUM DRAINS

- .1 Install fully adhered base membrane sheet in roof drain or scupper well.
- .2 Thoroughly wire brush both sides of copper flanges, prime and allow to dry a minimum 24 hours.
- .3 Apply full bed of mastic to underside of copper drain & scupper flange, set drain and or scupper in place and mechanically attach with minimum 6 fasteners.
- .4 Install base sheet stripping “target flashing” centered over the drain / scupper and cut out to 1” outside of drain bowl flange to full bottom of sump and fully torch membrane flashing in place.

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DIVISION 7 – THERMAL AND MOISTURE PROTECTION

**MODIFIED BITUMINOUS MEMBRANES
AND ACCESSORIES** (Continued)

Section 07535

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PART 3 EXECUTION

3.1 INSTALLATION

.1 FLAME PROTECTION UNDERLAYMENT INSTALLATIONS

- .1 Apply only membranes approved for specific use by the membrane manufacturer and in compliance with RCABC Fire Safety Recommendations.
- .2 Ensure continuous coverage on exposed wood decks of all combustible materials and seal with manufacturers recommended **fire guard tape at all roof perimeters deck protrusions and openings.**
- .3 Self-adhesive modified bituminous membranes flashings shall only be installed when ambient temperature meets or exceeds the manufacturers printed product installation temperatures. Install membrane as per RGC Guarantee Standards in the RGC Roofing Practices Manual.

.2 BASE SHEET INSTALLATION

- .1 Install base sheet in strict accordance with the Membrane Manufacturer's instructions, The Membrane Manufacturer's printed instructions form an integral part of the installation portion of the specifications.
- .2 Unroll membranes before use and allow sheets to relax for minimum 20 minutes or longer in colder weather conditions as recommended by the Membrane Manufacturer.
- .3 Install Self-Adhesive base sheet membrane around the perimeter of roof, at curbs, and up stands, etc. as flame protection always pre-strip before installing field of roof when wood surfaces are present.
- .5 Self-Adhesive base sheet side laps shall be 75mm (3") and end laps 150mm (6").
- .6 Provide a smooth application, free of voids, wrinkles, fish mouths or tears. If minor repair patches are required, ensure patches extend minimum 6" beyond defect, and are neat, square to membrane direction and fully bonded to the base sheet.

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**MODIFIED BITUMINOUS MEMBRANES
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Section 07535

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.3 BASE SHEET FLASHING INSTALLATION

- .1 Upon completion of the first ply of membrane and before application of the second ply, provide membrane flashing at all up-stands, curbs, penetrations, etc. that have **not been** previously pre-stripped with self-adhered membranes.
- .2 Prime all appropriate substrates and allow to dry.
 - .1 All surfaces that are contaminated by asphalt will be overlaid with a Cover board suitable to the manufacturer. Cover boards can be designed to receive either torch applied or self-adhering base sheet stripping plies.
- .3 Cut membrane in 1 meter (roll width) pieces by the length to suit the detail. Install one ply of membrane flashing to vertical surfaces and carefully seal to the base sheet. All base sheet stripping shall be applied from 4” onto the flat surface of the roof ‘up and over parapets and extended to the outside face of the exterior edge.
- .4 In areas that have been determined to be flame sensitive install “SELF ADHERING” or “ADHERED WITH MASTIC” base sheet flashing stripping as applicable with appropriate primer or adhesive as per Manufacturer’s instructions.
- .5 Flame sensitive locations ensure, through careful planning that the poly facer on the field base sheet is defeated away from the actual point of installation. Do not defeat the poly facer in flame sensitive locations.
- .6 All self-adhering base sheets are to be installed using procedures and techniques (Hand rolling) as per Manufacturer’s printed installation.
- .7 Install membrane gussets at all locations as required by Membrane Manufacturer’s written membrane manual installation instructions.
- .8 Base sheet stripping plies shall be nailed at the top edge or the outside supports as applicable.
- .9 Install base sheet stripping in one piece over equipment sleepers and terminate 100mm (4”) onto roof field membrane.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

**MODIFIED BITUMINOUS MEMBRANES
AND ACCESSORIES** (Continued)

Section 07535

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.4 CAP SHEET INSTALLATION

- .1 Cap sheet installations will follow base sheet installation by a maximum of two (2) weeks. "Phased" construction will not be acceptable under any circumstances.
- .2 Drain Sumps: Torch install cap membrane in drain sumps to edge of copper drain bowl or cast bowl flange, butter off and install mastic and granules to finish.
- .3 Start at the low point and in the same direction as the base sheet.
- .4 Unroll and allow sheets to relax, align sheets, staggering from the base sheet below by a minimum of 300mm (12") from side as well as end laps and clip and bevel corners.
- .5 Re-roll Cap Sheet Membranes from both ends, prior to torching and after alignment.
- .6 Ensuring that membrane is aligned properly, fully torch weld the cap sheet to the base sheet. During this application, both surfaces shall be simultaneously melted, forming a bead of molten asphalt that is pushed in front of the roll being applied. Immediately after torching cap sheet while it is still hot, use a clean trowel or hard rubber roller to seal end laps and T-joints (Do not use roofer's torching pull stick).
- .7 Granulated Cap Sheet will have side laps of 75mm (3") and end laps of 150mm (6"). Surface granules on end laps must be embedded prior to installation of the following sheet.
- .8 After installation of the cap sheet check all laps with a trowel. Avoid excessive asphalt bleed out in side and end laps.
- .9 Provide a smooth application free from wrinkles, fish-mouths and tears. If minor repair patches are required, ensure patches are full roll width, neat, square with rounded corners and fully bonded to the cap sheet.
- .10 For surface repairs to membrane granules (if or when required) and to seal low or unusual roof detail configurations embed matching granules in PMMA Liquid Applied Membrane such as Alsan RS as Manufactured by Soprema Inc. or Parapro PMMA 123 Flashing Resin Liquid Applied Membrane as Manufactured by Siplast, OR other pre-approved alternate.

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DIVISION 7 – THERMAL AND MOISTURE PROTECTION

**MODIFIED BITUMINOUS MEMBRANES
AND ACCESSORIES** (Continued)

Section 07535

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.5 CAP SHEET FLASHING INSTALLATION

- .1 Cut cap sheet membrane in 1 meter (roll width) pieces by the length to suit the detail. Extend onto the horizontal surface a minimum of 150mm (6"). Side laps shall be 75mm (3") and staggered a minimum of 300mm (12") with side laps of the base sheet.
- .2 Using a chalk line lay out a straight line on the cap sheet surface, parallel to the roof edge 150mm (6") inside the roof from the base of the cant or plane change.
- .3 Using a torch and a round nosed trowel or a purpose made de-granulating tool, embed the cap sheet granules into the heated bitumen, from the chalk line to the edge of the sheet.
- .4 SBS Membrane Flam granulated cap sheet flashing will be torch welded directly on to the base sheet proceeding from bottom to top. Ensure a neat and uniform bond.
- .5 Cap sheet stripping will be applied to extend down the interior vertical face from the top outside edge of the curb onto the flat portion of the roof a minimum of 150mm (6").

MODIFIED BITUMINOUS MEMBRANE

DIVISION 7 – THERMAL AND MOISTURE PROTECTION

METAL FLASHING AND TRIM

Section 07620

Page 1 of 2

1.1 RELATED WORK

- .1 Section 07535 Modified Bituminous Sheet Roofing & Accessories
- .2 Section 07900 Sealants

1.2 REFERENCES

- .1 ASTM A653/A653M-06 SS Grade 33, Z275 (G90) coating. 0.64 mm (0.0252", 24 (gauge) galvanized steel sheet. Thickness tolerance as per ASTM A924/A924M-06 \pm 0.08mm (0.003") for sheet widths not exceeding 1500mm (60").
- .2 RGC Roofing Practices Manual - Roofing Contractors Association of British Columbia (RCABC).

1.3 SAMPLES

- .1 Submit manufacturer's standard product samples of sheet metal and metal cladding material, colours and finishes.

2 PRODUCTS

2.1 SHEET METAL FLASHING

- .1 24 ga. sheet steel galvanized steel to ASTM A525, ZF275 coating, pre-finished with Silicone Modified Polyester (SMP) 2-Coat system, Finish minimum of 5 micron (0.2mil) primer plus a 20 micron (0.8) mil top coat. Top side dry film thickness to be a minimum 20 microns (0.8mil) or pre-approved alternative, standard color as chosen by owner. **Or**
- .2 24 ga. sheet steel galvanized steel to ASTM A525, ZF275 coating, and pre-finished with 70% Polyvinylidene Fluoride resin (PVFD) 2-coat system. Finish minimum of 5 micron (0.2mil) primer plus a 20 micron (0.8) mil top coat. Top side dry film thickness to be a minimum 20 microns (0.8 mil). Colour to be chosen from standard manufacturer's range by owner.

MODIFIED BITUMINOUS MEMBRANE

2.2 METAL FLASHING FABRICATION & INSTALLATION

- .1 All metal flashings shall be installed to RCABC Guarantee Corp. standards and RCABC flashing details shall be 24 ga. sheet steel galvanized steel to ASTM A525, ZF275 and use standing seams and S-Locks where standing seams are impractical. All metal will be sloped to the interior of the roof.
- .2 Form metal cap & base flashings to RCABC details, square, true, and accurate to size, free from distortion and other defects detrimental to appearance or performance.
- .3 Provide for thermal movement of flashings and materials with materials it comes in contact. Remove cladding screws from existing metal wall cladding to facilitate installation of new roofing membrane to a height of 200mm (8") above the finished roof surface. Refasten cladding and a skirt counter flashing with minimum No. 8 cladding screws with rubber grommets.
- .4 Metal flashing outside perimeter clips (minimum 30" in length per 10 ft. length) fastened at 300mm (12") o/c and 75 mm (3") maximum from hook of the clip with non-corrosive cladding screws with neoprene washers suitable for the purpose. Refer to RCABC Minimum Standard A6.10 latest revision. All anchoring shall meet or exceed RCABC standards. Use concealed fastening on outside faces unless otherwise approved by Consultant.
- .5 All exposed edges of flashing shall be hemmed as per existing dimensions for rigidity. Metal flashings are to be securely anchored to continuous blocking or nailers using continuous clips for attachment fastened at 300mm (12") o/c and 75mm (3") maximum from hook of the clip with exterior screw fasteners suitable for the purpose. Apply sealant to all exposed cut edges on metal flashing standing seams.
- .6 Install pipe settlement caps and or other RCABC accepted stack flashing termination methods for similar round penetrations. Flash existing fume curb vents with stainless steel storm collars.

MODIFIED BITUMINOUS MEMBRANE

DIVISION 7 – THERMAL AND MOISTURE PROTECTION
CAULKING & SEALANTS

Section 07900

Page 1 of 1

1.1 RELATED WORK

- .1 Section 07535 Modified Bituminous Sheet Roofing.
- .2 Section 07620 Metal Flashing and Trim.

1.3 MATERIALS

- .1 Sealants for other than membrane work shall be one part, moisture cure, polyurethane, Tremco DYMONIC or Schnee-Morehead 5M7100 PERMATHANE. Silicone based sealants will not be used on this project.
- .2 FLEXIBLE SEAL General-purpose caulking: as distributed by Slegg Construction Materials Ltd. or All Weather Products.
- .3 ALSAN RS Flashing System as manufactured by Soprema Inc. Liquid-applied two-component PMMA coating complete with woven polyester reinforcement.

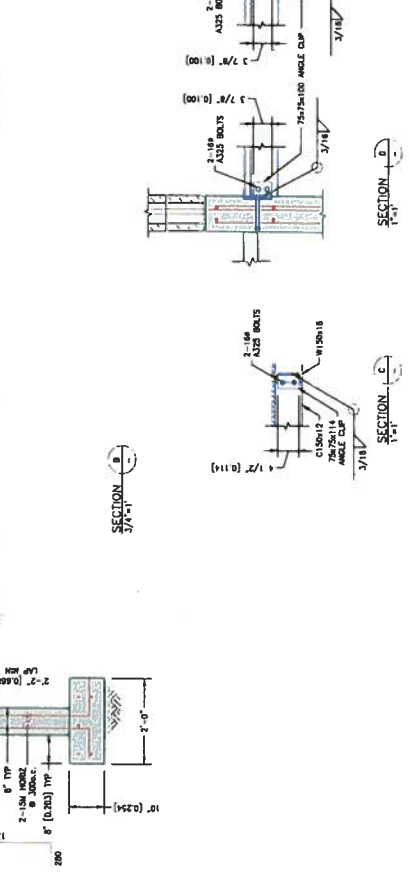
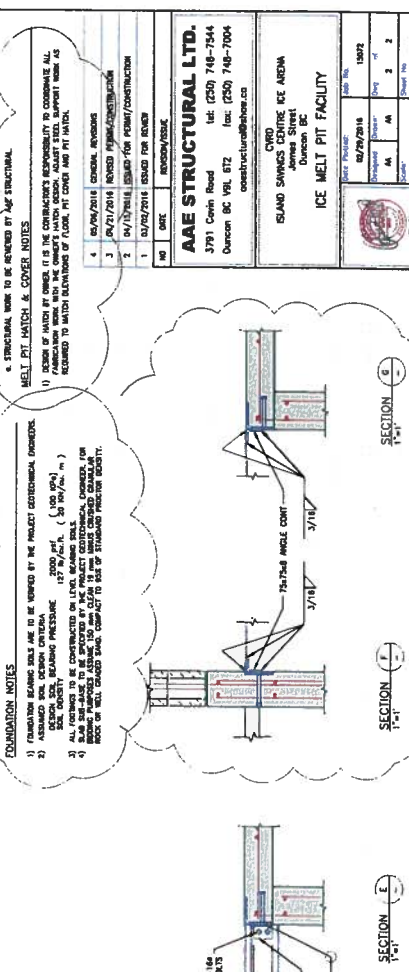
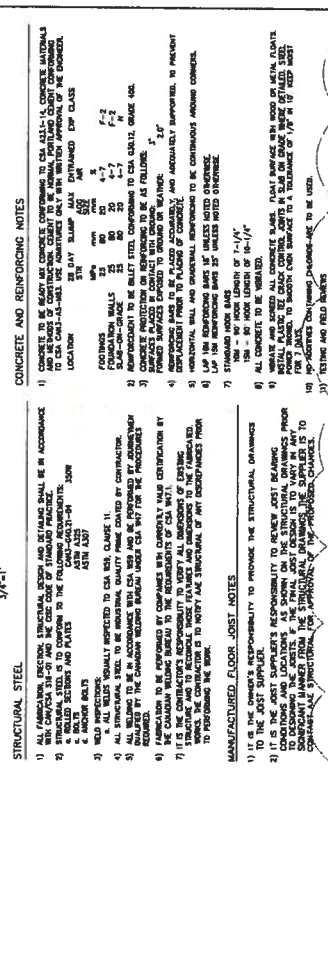
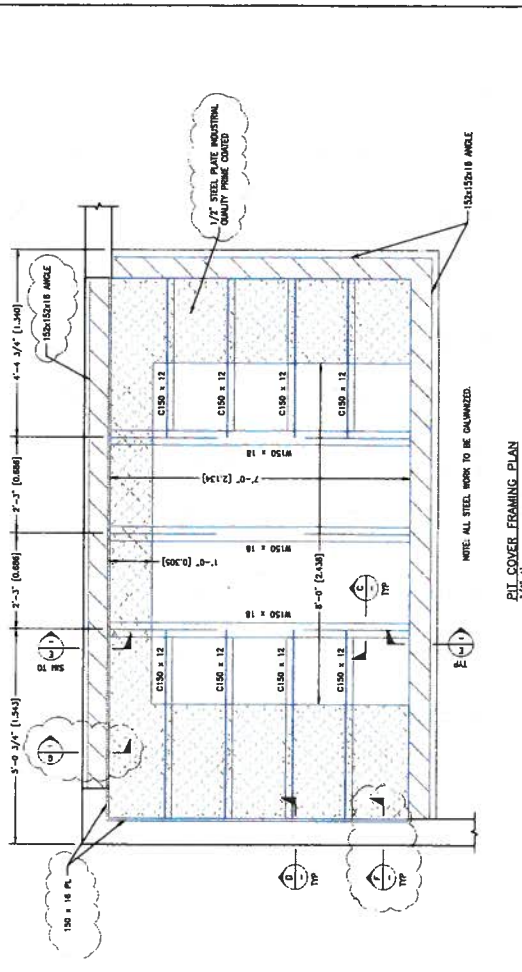
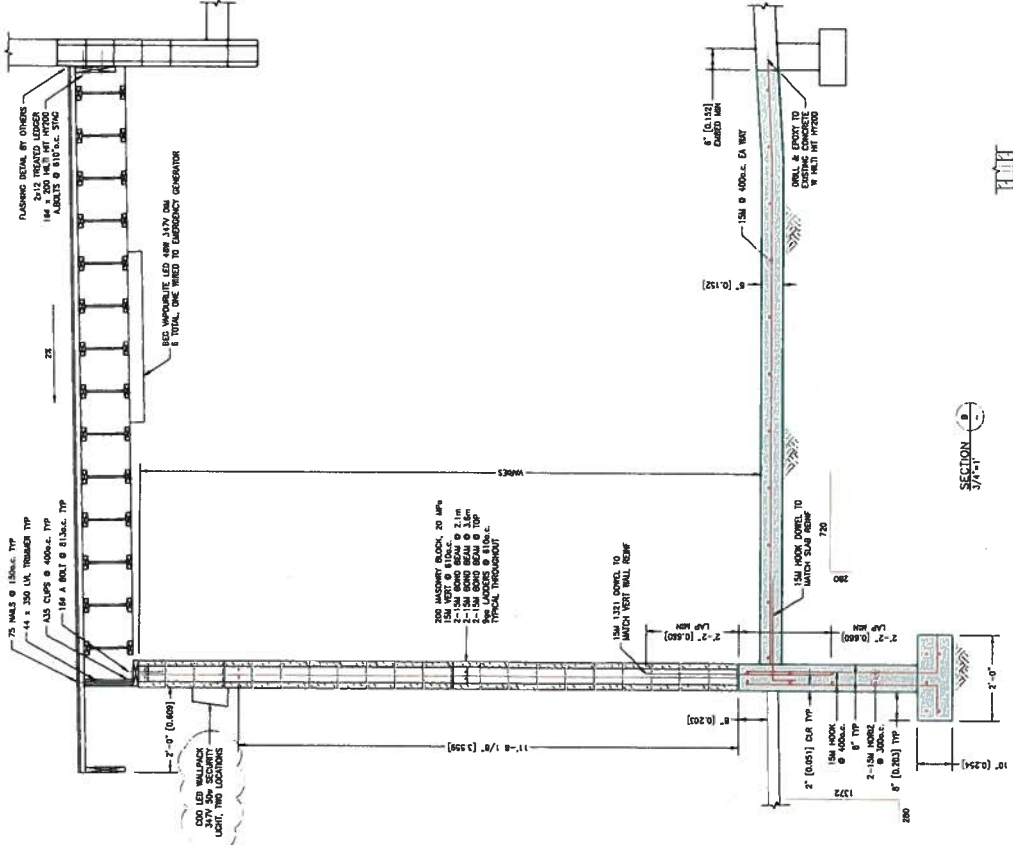
1.4 EXECUTION

- .1 All surfaces to receive sealant must be prepared according to the Sealant Manufacturer's printed instructions.
- .2 Apply sealant between flashings seams and dissimilar construction materials. Apply sealant neatly and hand tool all joints.
- .3 Do not use gum pan type flashings unless expressly instructed to do so in writing by the Consultant.

END OF SECTION

DRAWINGS:

Drawings S1 and S2 as follows:



AAE STRUCTURAL LTD.
 3791 Cowan Road
 Duncan BC V9L 6T2
 Tel: (250) 748-7544
 Fax: (250) 748-7004
 aaestructural@shaw.ca

ISLAND SERVICES CENTRE ICE ARENA
 James Street
 Duncan BC

ICE MELT PIT FACILITY

DATE: 02/29/2016
 DRAWING NO: 15072
 SHEET NO: 2
 OF: 2

FIGURES:

Figures 1 and 2 as follows:



A - UPPER LEVEL CLADDING

B - LOWER LEVEL CLADDING

**C - ICE MELT PIT
BLDG**

FIGURE 4

EXTENT OF CLADDING

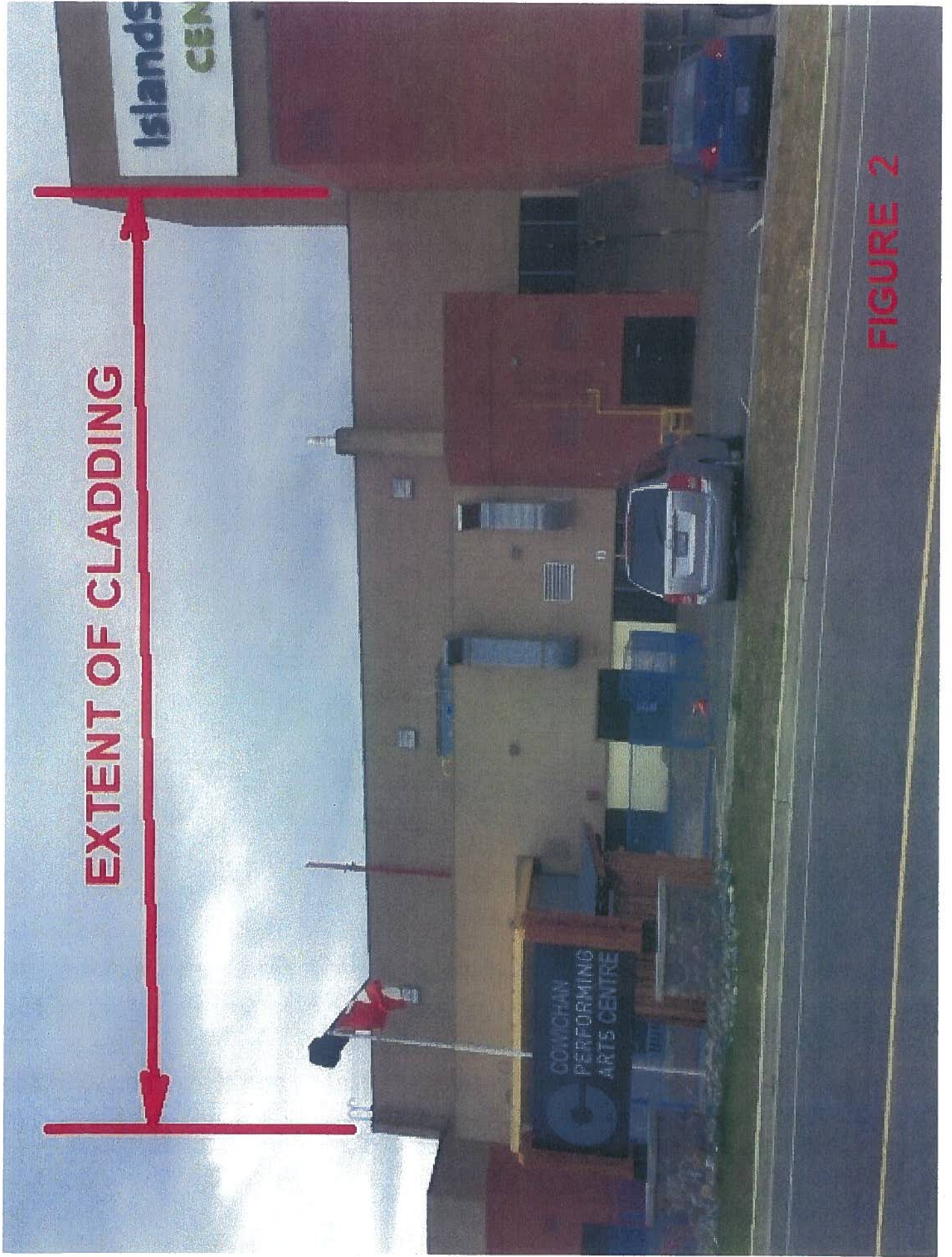


FIGURE 2