REQUEST FOR PROPOSAL 19-37

SPORTSPLEX RENOVATIONS CONSULTING SERVICES

April 23rd, 2019

The City of Campbell River is seeking the services of a qualified Architectural Consulting firm to assist with major renovations to the Campbell River Sportsplex.

This RFP is available by downloading it from BC Bid or the City's website at:
http://www.campbellriver.ca/business-economy/do-business-with-the-city/bidopportunities

This is not a tender. This is a non-binding Request For Proposals. The City reserves the absolute right to negotiate with one or more Proponents as it sees fit. Nothing in this RFP shall obligate the City to enter into a contract with any person.

This RFP is scheduled to close at:

RFP Closing Time: **3:00 p.m. local time**

RFP Closing Date: **Thursday May 16th, 2019**

Delivered to: City of Campbell River City Hall
301 St. Ann's Road
1st Floor Reception Desk
Campbell River, BC V9W 4C7
ATTN: Daniel Xu

RFP Enquiries: Daniel Xu, CPPB, CSCP
Senior Buyer
Telephone: 250.286.5788
purchasing@campbellriver.ca

REQUEST FOR PROPOSAL 19-37

SPORTSPLEX RENOVATIONS CONSULTING SERVICES

RECEIPT CONFIRMATION FORM

As receipt of this document, and to directly receive any further information, addendums, etc. regarding this competition, please return this form to:

Email: purchasing@campbellriver.ca
Fax: 250.286.5763

Company Name: _____

Address: _____

City: _____

Province/State: _____ Postal/Zip Code: _____

Telephone No: _____ Fax No: _____

Contact Person: _____

Title: _____

Email: _____

CITY OF CAMPBELL RIVER
REQUEST FOR PROPOSAL 19-37
SPORTSPLEX RENOVATIONS CONSULTING SERVICES
INSTRUCTIONS TO PROPONENTS

1.0 Submission Requirements

1.1 Proposals may be submitted via email or in a sealed envelope and addressed to:

City of Campbell River
301 St. Ann's Road
1st Floor Reception Desk
Campbell River, BC
V9W 4C7
ATTN: Daniel Xu – Senior Buyer

Ensure that the RFP name, number, company name, and return address is labelled on the outside envelope.

1.2 Proposals should be received by **3:00 p.m., Thursday May 16th, 2019.** Proposals will NOT be opened in public.

1.3 Proposals received and not conforming to Item 1.2, above, may at the City's discretion, be returned (unopened) to the *Proponent*(s) without consideration.

1.4 Proposals submitted via email are to be sent to purchasing@campbellriver.ca **Ensure to state the RFP name, number, and "Submission" in the Subject Line.** Email submissions should be consolidated into **one (1) Adobe .PDF virus free file and no larger than 10MB's.**

1.5 Proposals submitted to City Hall should include one (1) copy preferably in a bound 8½-inch x 11-inch format along with one (1) identical copy on a virus free data storage device (i.e. USB flash drive) in Adobe PDF format. No three-ring binders.

1.6 *Proponents* assume the entire risk when submitting a Proposal via email. The *City* will not be liable for any delay or rejection for any reason, including but not limited to, technological delays or issues caused by any network or email program, rejected as suspected spam, virus, malware, or email not identified in the Subject Line as a submission and being missed. The *City* will not be liable for any damages associated with Proposals not being received or being missed.

1.7 *Proponents* may choose to provide a completed Receipt Confirmation Form to the Senior Buyer, if they wish to receive any further information, addendums, etc. regarding this Request For Proposal.

1.8 *Proponents* are solely responsible for any costs or expenses related to the preparation, submission, and presentation of proposals.

1.9 After the closing time and date, all documents received by the *City* become the property of the *City.* The successful *Proponent* will be required to assign any copyright to the *City*. The *City* will have the exclusive rights to copy, edit and publish the material.

1.10 This proposal is subject to the terms and conditions of the Canadian Free Trade Agreement (CFTA), Mash Annex 502.4 and the New West Partnership Trade Agreement (NWPTA) between the provinces of B.C, Alberta, Saskatchewan, and Manitoba.

1.11 The awarding of a contract as a result of this Request for Proposal will not permit the successful *Proponent* to advertise the relationship with the *City* without the *City's* prior authorization.

1.12 Under no circumstances may the *Work* or any part thereof be subcontracted, transferred, or assigned to another firm, person, or company without the prior written authorization of the *City*.

1.13 If any director, officer or employee agent or other representative of a *Proponent* makes any representation or solicitation to any Councillor, officer or employee of the *City* of Campbell River with respect to the Proposal, whether before or after the submission of the Proposal, the *City* shall be entitled to reject or not accept the Proposal.

2.0 Definitions

2.1 "*City" means* The *City* of Campbell River.

2.2 *"Consultant"* means the successful *"Proponent".*

2.3 "*Proponent"* means the entity submitting a proposal.

2.4 *"Work"* means and includes anything and everything required to be done for the fulfilment and completion of this agreement.

3.0 Proposal Format

Proposals, rather than tenders, have been requested in order to afford *Proponents* a more flexible opportunity to employ their expertise and innovation, and thereby satisfy the *City's* needs in a more cost-effective manner. Proposals should be based on these Instructions and any Appendices issued.

Cross-references should be included as appropriate to make reference to related relevant information. Appendices can be added for supplementary materials that include brochures, sub-consultant proposals, detailed spreadsheets, resumes and supporting information.

Submission of Proposals should be arranged using the following format style with details relevant to the project:

Letter of Introduction
A brief cover letter introducing the *Proponent's* Proposal.

Appendix 1

Include a completed Appendix 1, as attached, to clearly show the company name, address, telephone number, e-mail address, and name of the primary contact person(s).

Table of Contents

Provide a table of contents for the Proposal.

Project Understanding

The *Proponent* should provide a detailed summary of their understanding of the proposed Scope of Work in their own words. Demonstrate the understanding of the key issues specific to this assignment and the Proponent's approach to addressing them.

Provide a table which expands the Scope of Work into a series of potential tasks or work activities for the tasks described.

Provide a list of personnel with their hourly rates and an approximate number of hours utilization that the *Proponent* anticipates their involvement to provide the services to address the potential tasks and work activities. The *Proponent* is expected to provide an appropriate balance and allocation of resources/hours and seniority/experience assigned for the services.

Provide a list of potential deliverables that would be provided by the *Proponen*t for the Scope of Work described in the Terms of Reference.

Approach and Methodology

Proponents should provide clear and concise information on their approach and methodology on how they will work with the City to deliver the required services and arrive solutions that best meets the City's requirements.

Provide a written narrative that clearly describes the services that will be provided. Provide a written summary describing how the *Proponent's* work plan will address the potential services.

Project Delivery

The *Proponent* should provide a clear and concise description of how they intend to deliver the services in sufficient detail that reasonably demonstrates that the *Proponent* understands the Scope of Work and how they intend to implement and execute it efficiently, cost-effectively, and to the highest quality.

Proponent Team

Firm profile: Name, address, telephone number, email address of the primary contact person, number of years in business, experience in similar projects, and geographic location of lead firm.

Capability: Size of workforce, equipment and facilities available where the work will be completed and where the *Consultant'*s Project Manager will be located.

Personnel: Identify the Project Manager and other key personnel. Provide an organization chart and resumes with relevant information for each team member, indicate their professional qualifications/designations, role and responsibility, summary of education/qualifications and experience in relation to the project.

Describe the availability and capacity of the Project Manager and other key personnel to undertake the Project.

Provide resumes for sub-consultants indicating their knowledge, qualifications and experience and if the Proponent will be using specialty sub-consultants.

Knowledge: Demonstrate knowledge of providing the services for local governments, in particular working with municipalities.

Experience: Provide a description of completed projects and past work history and demonstrate relevance to the Scope of Work described in the Terms of Reference. Describe how the Project Manager and other key personnel have been involved with similar projects.

References

Identify other projects for which your company has provided similar services. Provide references stating organization name, contact name, e-mail, phone number, and fax number to support this.

Proposed Budget

Proponents should also provide a high level budget and implementation plan detailing hourly utilization, plan tactics based on the Terms of Reference including any production costs or other expenses for the first year of the contract.

This budget should include hourly rates of all team members and an estimated allocation of hours between team members.

All prices proposed should be in Canadian (CAD) dollars and include all duties and taxes, including provincial sales taxes, with the exception of GST, which shall be shown separately.

4.0 Confidentiality and Freedom of Information

4.1 Your proposal should clearly identify any information that is considered to be of a confidential or proprietary nature (the “Confidential Information”). However, the

City is subject to the provisions of the *Freedom of Information and Protection of Privacy Act.* As a result, while Section 21 of the Act does offer some protection for third party business interests, the *City* cannot guarantee that any Confidential Information provided to the *City* will remain confidential if a request for access in respect of your proposal is made under the *Freedom of Information and Protection of Privacy Act.*

5.0 Pricing

5.1 The items listed in the Terms of Reference are minimum features to be provided. *Proponents* may also provide separate pricing on additional elements they feel would benefit the *City* in meeting its goal.

5.2 All invoices paid as a result of this Request for Proposal will be paid as per the *City's* standard payment terms "current month's invoices will be paid net 30 days".

6.0 Cancellation

6.1 The *City* reserves the right to cancel this Request for Proposal at any time and for any reason, and will not be responsible for any loss, damage, cost or expense incurred or suffered by any *Proponent* as a result of that cancellation.

6.2 The *City* reserves the right to terminate the Contract, at its sole and absolute discretion, on giving 30 days written notice to the *Consultant* of such termination and the *Consultant* will have no rights or claims against the *City* with respect to such termination. Cancellation would not, in any manner whatsoever, limit the *City's* right to bring action against the *Consultant* for damages for breach of contract.

7.0 Accuracy of Information

7.1 The *City* makes no representation or warranty; either expressed or implied, with respect to the accuracy or completeness of any information contained or referred to in this RFP.

8.0 Responsibility of Proponent

8.1 Each *Proponent* is responsible for informing themselves as to the contents and requirements of this RFP. Each *Proponent* is solely responsible to ensure that they have obtained and considered all information necessary to understand the requirements of the RFP and to prepare and submit their proposal. The *City* will not be responsible for any loss, damage or expense incurred by a *Proponent* as a result of any inaccuracy or incompleteness in this RFP, or as a result of any misunderstanding or misinterpretation of the terms of this RFP on the part of any *Proponent*.

8.2 The *City* of Campbell River may at any time prior to the closing date and time issue additional information, clarifications, or modifications to the RFP by written

addenda via the *City* of Campbell River website. Information provided in the addenda shall supersede all previous information provided.

8.3 The *City* of Campbell River will endeavour to notify all *Proponents* of any such addenda as may be issued but it is the *Proponent*'s sole responsibility to ensure they have reviewed the *City's* website for any addenda issued. By submitting a

Proposal the *Proponent* is deemed to have accepted and to abide by all addenda issued.

8.4 If a *Proponent* is in doubt as to the true meaning of any part of this Request for Proposal, or finds omissions, discrepancies or ambiguities, a request for interpretation or correction should be submitted to the Senior Buyer, in writing.

8.5 Only the written Request for Proposal and any addenda issued by the Senior Buyer should be relied upon by *Proponents* when preparing and submitting their proposals.

8.6 By submitting a proposal, the *Proponent* represents that it has the expertise, qualifications, resources, and relevant experience to perform the *Work.*

8.7 *Proponent*s should not rely on any dimensions or scales shown on any attached drawings. *Proponents* are responsible for all measurements and to examine the place of work prior to submission. By submitting a Proposal the *Proponent* represent that they have examined the place of work, or specifically elected not to.

9.0 Enquiries

9.1 All questions and enquiries should be submitted in writing no later than three (3) working days prior to the closing date of the RFP.

9.2 Any questions regarding this competition and the submission of proposals should be directed to *Daniel Xu, CPPB, CSCP, Senior Buyer* at 250.286.5788 or purchasing@campbellriver.ca

10.0 References

10.1 The *City* shall have the right, but not the obligation, to contact any references.

11.0 Indemnification

11.1 The *Consultant* hereby releases and shall indemnify and save harmless the *City*, its officers, employees, officials, agents, advisors and representatives from and against any and all claims, costs, damages, actions, causes of action, losses, demands, payments, suits and expenses, legal fees or liability arising from:

a. errors, omissions or negligent acts of the *Consultant*, its officers, agents, members, employees, advisors or subcontractors, or any other person for whom the *Consultant* is in law responsible in the performances of the Services;

b. the breach, violation or non-performance of this Agreement by the *Consultant*, its officers, agents, members, employees, advisors or subcontractors, or any other person for whom the *Consultant* is in law

responsible in the performance of the Services;

c. personal injury including death, property damage and loss arising out of, suffered or experienced by any person in connection with or during the provision of the Services under this Agreement, including without limitation WorkSafeBC claims and assessments.

11.2 The release and indemnity contained in section 11.1 shall apply except to the extent that the claims, costs, damages, actions, causes of action, losses, demands, payments, suits, expenses or legal fees or liability arise from the negligence of the *City*, its officers, employees, officials, agents, advisors, or representatives.

11.3 The *Consultant* is solely responsible for and shall promptly pay all WorkSafeBC premiums and assessments relating to the performance of the Services under this Agreement, whether by the *Consultant*, its officers, agents, members, employees, advisors or subcontractors, or any other person for whom the *Consultant* is in law responsible.

11.4 The release and indemnity contained in section 11.1 shall survive the termination of this Agreement.

12.0 Insurance, Licenses, and Permits

12.1 The *Consultant* must submit to the *City*, upon acceptance of its proposal, the following:

a. Comprehensive General Liability Insurance in an amount not less than $2,000,000 with a provision naming the *City* as an additional insured and a Cross Liability clause;
b. A provision requiring the Insurer to give the *City* a minimum of 30 days' notice of cancellation or lapsing or any material change in the insurance policy;
c. Professional Liability Errors and Omissions Insurance in the amount of not less than $500,000 per occurrence and a minimum of $2,000,000 aggregate for all claims;
d. A copy of your current Certificate of Clearance from WorkSafe BC;
e. A signed City of Campbell River Safety Covenant.

12.2 The *Consultant* shall provide and pay for all necessary insurances, licenses, permits, and approvals from authorities having jurisdiction required for the performance of the *Work* and is responsible for any deductible amounts under the policies.

12.3 All insurances, licenses, and permits must remain valid for the term of the *Work.*

13.0 Declarations

13.1 In submitting a proposal the *Proponent* declares that:

- I (we) do not (or any related company) have any family, ownership, and operating relationships with the *City*, or any elected official, staff or other officials holding public office in the *City* and agree that the *City* reserves the right to reject any proposal that may be perceived to be in a conflict of inter
- I (we) am (are) not or have not:

a. an individual who has; or
b. an individual who was a shareholder or officer of a company that has; or
c. a company that has; or
d. a company with a shareholder or officer who has; or
e. a company that is, or was a shareholder of a company that is, or was a shareholder of a company that has; or
f. a company that has a shareholder or officer who is also a shareholder or officer of another company that has;
g. had a bid bond retained, or
h. had all or part of a performance bond retained, or breached a contract with the *City*, or failed to complete its obligations under any prior contract with the *City* (or any other publicly funded jurisdiction or organization in British Columbia), or has been charged or convicted of an offence in respect of a *City* (or any other publicly funded jurisdiction or organization in British Columbia) contract.

14.0 Timing

14.1 Time is of the essence in carrying out the *Work*. The *Consultant* must commence the Services in a timely manner and carry out the Services in accordance with the completion dates set out in the work plan, or as mutually amended in writing by the *Consultant* and the *City* from time to time.

15.0 Regulations of Authorities Having Jurisdiction

15.1 All *Work* provided must be in accordance with all laws and regulations pertaining to the *Work*. The laws of the Province of B.C. shall govern this proposal and any subsequent Agreement resulting from this proposal.

15.2 The *Consultant* will be required to enter into an Agreement with the *City*, refer to the attached Draft Agreement.

16.0 Acceptance

16.1 The *City* will be entitled to conduct such acceptance tests as it considers necessary to verify that the product and service (the *Work*) meets the Specifications. If the product and service meets the Specifications after acceptance testing, the City will accept it in writing. If the product and service does not meet the Specifications the *City* may: reject the *Work*; or accept the *Work*. The *City* will not reject the product and service without first notifying the *Consultant* and giving the *Consultant* a reasonable opportunity to correct any failure of the equipment to meet the Specifications. If the product and service

meets the Specifications except that some items of product and service have not yet been delivered, the *City* may accept the product and service but withhold that portion of the purchase price attributable to the product and service not yet delivered.

17.0 Resolution of Disputes

17.1 If requested in writing by either the *City* or the *Consultant*, the *City* and the *Consultant* shall attempt to resolve any dispute between them arising out of or in connection with this agreement by first entering into structured non-binding negotiations with the assistance of a mediator on a without prejudice basis. The mediator shall be appointed by agreement of the parties. If a dispute cannot be settled within a period of thirty (30) calendar days with the mediator, if mutually agreed, the dispute shall be referred to the arbitration of a single arbitrator, or to three arbitrators failing such an agreement, in which case each party shall appoint one arbitrator, and the first two named shall choose the third arbitrator. Any arbitration shall be conducted in accordance with the Commercial Arbitration Act (British Columbia). The award and determination shall be binding upon the parties hereto and their successors and assigns.

17.2 The cost of arbitration will be borne equally by the parties.

18.0 Evaluation Criteria & Process

18.1 An evaluation committee made up of *City* staff and its advisors will be reviewing proposal submissions. The evaluation criteria will be applied to all submissions fairly and without bias to any *Proponent* or proposal and the same criteria and weightings will be applied to all submissions.

18.2 No assumptions should be made that information regarding the *Proponent* or its participants, their experience, expertise and performance on other projects is known, other than the documentation and responses submitted by the *Proponent*.

18.3 The *City* reserves the right to conduct pre-selection meetings with *Proponents*. *Proponents* may be requested, as part of the evaluation process, to provide a presentation, which may include a demonstration of their products.

18.4 The *City* reserves the right to conduct pre-selection meetings in order to correct, change or adapt the selected proposal to the wishes of the selection committee.

18.5 Award of any contract resulting from this RFP may be subject to available funding, City of Campbell River Council approval, and other budget considerations.

18.6 The *City* is entitled to accept for consideration any or none of the proposals submitted and will evaluate proposals based on the “best value” and not necessarily the lowest cost. The following are some of the key considerations that the *City* expects to take into account to determine best value:

	Description	Weight
1	**Experience –** Demonstrated previous related experience, project planning, company & personnel qualifications, references, etc.	20%
2	**Methodology –** Design, approach, timing and schedule, initiative and innovation, demonstrated understanding of project requirements, assignment of resources, reporting, controls, response times, etc.	50%
3	**Proposal –** Completeness, overall quality and level of details submitted, concise, etc.	10%
4	**Budget –** Rate structure, estimated total costs, etc.	20%

19.0 Negotiation of Contract and Award

19.1 If the *City* selects a preferred *Proponent*, then the *City* will enter into discussions with that preferred *Proponent* to clarify any outstanding issues and attempt to finalize the terms of the contract, including financial terms. If discussions are successful the *City* and the preferred *Proponent* will finalize a contract.

19.2 If at any time the *City* reasonably forms the opinion that a mutually acceptable agreement is not likely to be reached within a reasonable time frame the *City* may terminate discussions in which event the *City* may either open discussions with another *Proponent* or terminate this RFP and retain or obtain the services in some other manner.

19.3 The *City* further reserves the right to conduct post-award meetings in order to correct, change, or adapt the selected submission to the wishes of the *City*.

CITY OF CAMPBELL RIVER
REQUEST FOR PROPOSAL 19-37
SPORTSPLEX RENOVATIONS CONSULTING SERVICES
INSTRUCTIONS TO PROPONENTS

A. BACKGROUND

The City of Campbell River is seeking the services of a qualified Architectural Consulting firm to assist with major renovations to the Campbell River Sportsplex. These works are generally described as the requirement to address existing building envelope issues, refreshing the majority of existing rooftop HVAC equipment and completion of an eleven hundred square foot building addition.

The Campbell River Sportsplex is a pre-engineered, multi use facility located in the Willow Point area of Campbell River which includes racquetball and squash courts, a weight room, two gymnasiums, activity rooms, kitchen, office space and related change and washroom facilities. The building also supports all of the outdoor sports fields and other activity spaces at the Willow Point Park. The building was constructed in 1993 and has now reached the end of service life for several key building envelope systems and the majority of the existing rooftop mechanical equipment and due to the increased demand on all of the programmable spaces, is in significant need of additional storage space.

The City has completed a number of conditions assessments on the building and is now in the position to proceed with the most urgent items that have been identified. These improvements will include:

1. Complete replacement of the existing metal roof with a new roofing system
2. Inspection, assessment and rehabilitation of the exterior wall assembly where required
3. Assessment of building mechanical load and confirmation of appropriate equipment sizing
4. Inspection and rehabilitation and/or replacement of up to nine (9) rooftop HVAC units and twelve (12) rooftop exhaust fans
5. Addition of 1,100 sf of storage space

The community demand for access to the facilities at the Sportsplex requires that the facility remain open 7 days a week which will need to be considered when assessing the impacts of any required works.

B. SCOPE

Acting as the lead consultant it is expected that the successful proponent will as a minimum:

1. Meet with City project team to confirm scope, approach, deliverables and all related timing
2. Review existing reports, drawings, specifications and related materials
3. Review Facility Operational Schedule with Facility Operators and identify requirements, impacts and potential limitations on construction activities.
4. Review the recommendations made in the attached RDH Building Science Building Enclosure Condition Assessment (BECA) Report, April 4, 2019.
5. Review the site and confirm existing conditions against BECA recommendations
6. Complete a mechanical system evaluation to confirm system loads and equipment sizing are correct based on current occupancy and usage.

7. Based on the above, prepare and submit for review a Preliminary Design Report, complete with cost estimate as per City Policy, detailing necessary work effort to:
    a. Address all identified Building Enclosure issues
    b. Refurbish and/or Replace existing rooftop HVAC units (9) and EFs (12)
    c. Complete 1,100 sf addition identified as Gym Storage Expansion in the attached VDA Architecture Gym Storage Expansion conceptual design.
8. Upon receipt of the City's review of the Preliminary Design Report, prepare detailed drawings, specifications, construction cost estimate and a proposed methodology for completing the works which fully considers the facilities operational requirements and minimizes any potential disruptions.
9. Submit detailed design package for review
10. Develop Class A estimate as per City Policy and submit with detailed design package.
11. Based on the City's comments, prepare a construction tender package based on stipulated price contract form (CCDC-2)
12. Acting as the coordinating registered professional, prepare and submit building permit application complete with any necessary Schedules.
13. Assist the City during the tender process by provision of technical support
14. Review tender submissions and submit recommendations based on outcomes
15. Upon award of the construction contract, provide all necessary construction services including contract administration, site inspection and regulatory compliance
16. Upon completion of the works, prepare and submit all necessary record information including as-constructed drawings, O&M manuals, schedules, etc.
17. Provide project completion report at project close out.

C. QUALIFICATION

Proponents must have as a minimum demonstrated experience in:

1. Acting as lead consultant in design and renovation of similar type of assembly facilities.
2. Fulfilling role of Registered Coordinating Professional as it relates to all BC Building Code requirements.
3. Acting as Contract Administrator for projects of similar scale and complexity.
4. Understanding and incorporating operational requirements in the development of a construction plan so as to minimize impacts to the facility operations.

D. ANTICIPATED TIMING:

Phase 1 – Assessment and Preliminary Design:

City Request For Proposal:	April - May 2019
City Council Approval:	May 27, 2019
Services Agreement Execution:	June 15, 2019
Kick-Off:	June 2019

Site Inspection/Condition Assessment:	July 2019
Preliminary Report Submitted:	September 6, 2019
Detailed Design/Budget Submitted:	October 30, 2019
City Budget deliberations:	November – December 2019
Phase 2 Approval:	December 2019

Phase 2 – Detailed Design and Construction:

Detailed Design:	January – March 2020
Regulatory Approvals:	January – May 2020
Construction Tender:	April 2020
Construction:	May – September 2020
Complete:	October 2020

E. INFORMATION

The following information is attached just for the purpose of information:

CCR: RDH Building Envelope Condition Assessment, April 4, 2019.

CCR: VDA Architecture/ LEC Group Gym Storage Expansion description, October 24, 2016

CCR: F-CAP-X Building Condition Assessment Report, December 15, 2017.

CCR: Capital Project Management Policy

CITY OF CAMPBELL RIVER
REQUEST FOR PROPOSAL 19-37
SPORTSPLEX RENOVATIONS CONSULTING SERVICES
AGREEMENT

THIS AGREEMENT made this _____ day of _____, 2019

Reference No.: **RFP 19-37**

Contract: **SPORTSPLEX RENOVATIONS CONSULTING SERVICES**

BETWEEN:

City of Campbell River
301 St. Ann's Road
Campbell River, B.C. V9W 4C7 (the "*City*")

AND:

TBD

(the "*Consultant*")

A. The *City* requires the professional services of the *Consultant* and desires to engage the *Consultant* to perform the services set out in this Agreement.

B. The *Consultant* has agreed to perform the Services in accordance with the terms and conditions of this Agreement.

In consideration of the terms, covenants and conditions of this Agreement, the *City* and the *Consultant* agree as follows:

1.0 CONSULTANT'S SERVICES TO THE CITY

1.1 The *Consultant* must provide and is responsible for the services outlined in the work plan submitted to the *City* by the *Consultant* in response to the Request for Proposal (the "Proposal") hereto as Schedule "A" and forming an integral part of this Agreement in the amount of $XXXXX, excluding GST.

1.2 If there is any inconsistency or conflict between the provisions of the contract documents then the contract documents shall govern and take precedence in the following order with the Agreement taking precedence over all other contract documents:

a. The Agreement between the City and Contractor;
b. The Contractor's submitted proposal and pricing;
c. The City's Request For Proposal and all addenda's;
d. All other contract documents.

1.3 The *Consultant* may engage professional sub-consultants for the performance of specific tasks forming part of the Services, as approved in writing by the *City*. The sub-*Consultant*s may not be replaced without the prior written consent of the *City*.

1.4 The *Consultant* must administer, coordinate, and manage all Services of sub-*Consultant*s, and is responsible for all work performed by the sub-consultants in relation to the Services and will pay all fees and disbursements of all sub-consultants.

1.5 The *Consultant* must perform the Services:

a) with that degree of care, skill and diligence normally applied in the performance of services of a similar nature;

b) in accordance with current professional practices; and

c) in conformance with the latest design standards and codes applicable at the time of design.

1.6 The *Consultant* must furnish all personnel required to perform the Services, and all personnel must be competent and qualified to perform the Services.

1.7 Where specific personnel have been proposed by the *Consultant* for the performance of the Services, and have been accepted by the *City*, the personnel may not be replaced without the prior written consent of the *City*.

1.8 The *Consultant* must commence the Services in a reasonably timely manner and carry out the Services in accordance with the completion dates set out in the work plan, or as mutually amended in writing by the *Consultant* and the *City* from time to time.

2.0 BASIS OF PAYMENT TO THE CONSULTANT

2.1 In consideration of the Services performed by the *Consultant* to the satisfaction of the *City*, the *City* will pay the *Consultant* the fees and reimbursable expenses as prescribed in this agreement.

2.2 Payment to the *Consultant* will be based on hours worked by the employees of the *Consultant* multiplied by their hourly rates as indicated in the proposal and shall not exceed the budget without prior written authorization from the *City*.

2.3 The limit on the fees to be paid by the *City* to the *Consultant* does not diminish the duties and obligations of the *Consultant* to provide the Services.

2.4 All other expenses not listed above are considered to be included in the *Consultant's* fees.

2.5 The *Consultant* shall submit invoices to the *City* representative or delegate on a monthly basis.

2.6 On each invoice the *Consultant* shall list the names, hours worked and pay rates of all employees of the *Consultant* or sub-consultants that have worked on the Services for the phase of the work plan. Each invoice should also record the total amount of all claims to date, the value of this claim and the remaining budget to completion.

2.7 Attached to each invoice shall be copies of invoices for all disbursements claimed; confirmation of payments made to sub-consultants and a brief report detailing work completed to date, work completed during the period covered by the invoice and work outstanding to complete the Services.

2.8 If the *City* does not approve of or wishes to further review, audit or otherwise seek clarification concerning the *Consultant's* invoices, the *City* is not liable for interest charges in respect of the invoice for the period from the date the invoice is submitted until the date that the invoice is paid.

2.9 If the *City* approves the amount of an invoice, the *City* will cause the invoice to be paid on or before the 15th day of the month following receipt and approval of the invoice.

2.10 The *Consultant* must keep proper accounts and records of all costs and expenditures forming the basis of any billing to the *City*, including but not limited to hours worked, details of all disbursements and percentage amounts of work completed.

2.11 The *City* is entitled to verify the accuracy and validity of all billing and payments made by auditing and taking extracts from the books and records of the *Consultant*. Notwithstanding the foregoing, the *City's* right to inspect, copy and audit shall not extend to the composition of the *Consultant's* rates and fees, percentage mark-ups or multipliers but shall apply only to their application to the applicable units.

3.0 CHANGES TO SCOPE OF SERVICES

3.1 The *City* may at any time vary the scope of work to be provided by the *Consultant*.

3.2 If the *Consultant* considers that any request or instruction from the *City* constitutes a change in the scope of the Services, the *Consultant* must advise the *City* within ten (10) days in writing.

3.3 Without written advice within the time period specified, the *City* is not obligated to make any payments for additional fees to the *Consultant*.

4.0 INDEMNIFICATION

4.1 The *Consultant* and any sub-consultants shall at all times indemnify and save harmless the *City* and/or any of its officers or employees from and against all claims and demands, loss, costs, damages, suits, fees or other proceedings brought or prosecuted, based upon, occasioned by or attributable to the negligent acts, errors or omissions of the performance of the Services by the *Consultant*, its officers, employees, contractors or subcontractor.

4.2 The release and indemnity contained in section 4.1 shall apply except to the extent that the claims, costs, damages, actions, causes of action, losses, demands, payments, suits, expenses or legal fees or liability arise from the negligence of the *City*, its officers, employees, officials, agents, contractors, or representatives.

4.3 The *Consultant* is solely responsible for and shall promptly pay all WorkSafeBC premiums and assessments relating to the performance of the Services under this Agreement, whether by the *Consultant*, its officers, agents, members, employees, contractors or subcontractors, or any other person for whom the *Consultant* is in law responsible.

4.4 The release and indemnity contained in section 4.1 shall survive the termination of this Agreement.

5.0 INSURANCE, LICENSES, AND PERMITS

5.1 The *Consultant* must submit to the *City*, upon acceptance of its proposal the following:

a. Comprehensive General Liability Insurance in an amount not less than $2,000,000 with a provision naming the City as an additional insured and a Cross Liability clause;
b. A provision requiring the Insurer to give the City a minimum of 30 days' notice of cancellation or lapsing or any material change in the insurance policy;
c. Professional Liability Errors and Omissions Insurance in the amount of not less than $500,000 per occurrence and a minimum $2,000,000 aggregate for all claims;
d. A copy of your current Certificate of Clearance from WorkSafe BC;
e. A signed City of Campbell River Safety Covenant.

5.2 The *Consultant* shall provide and pay for all necessary insurances, licenses, permits, and authorities having jurisdiction required for the performance of the *Work* and is responsible for any deductible amounts under the policies.

5.3 All insurances, licenses, and permits must remain valid for the term of the *Work.*

6.0 CITY APPROVALS

6.1 No reviews, approvals or inspections carried out or information supplied by the *City* or its employees derogate from the duties and obligations of the *Consultant*, with respect to the Services, and all responsibility for the Services is the *Consultant's*.

7.0 TERMINATION

7.1 At any time, in its sole judgment, the *City* may terminate the services of the *Consultant* in whole or part by giving 30 days written notice to the *Consultant*.

7.2 If termination is not for cause, the *Consultant* shall be paid at the rate prescribed for all services properly performed to the date of the delivery of the notice according to the terms of this Agreement, plus necessary and reasonable wind up costs incurred, if any, in closing out the Services or the part terminated.

7.3 At any time, in its sole judgment, the *City* may instruct the *Consultant* to terminate the services of any sub-consultant appointed a role under the Services Agreement, in whole or part by giving 30 days written notice to the *Consultant*. In this case, the *Consultant* will implement a suitable replacement, to the approval of the *City*, in the same 30 days.

8.0 CONFIDENTIALITY

8.1 The *Consultant* acknowledges that in performing the Services required under this Agreement, it will acquire information about certain matters which is confidential to the *City*, and the information is the exclusive property of the *City*.

8.2 The restrictions on use and disclosure of confidential information under this Agreement shall not apply to information which (a) was in the possession of the *Consultant* before the *Consultant* was retained by the *City* to provide the services (so long as such information has not previously been designated as confidential, whether pursuant to an agreement between the *City* and the *Consultant* or otherwise); or (b) becomes publicly known other than through the *Consultant*; or (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

9.0 OWNERSHIP OF DOCUMENTS

9.1 All drawings, plans, models, designs, specifications, reports and other documents ("Work Product") produced by the *Consultant* and any agent, member, employee, contractor or subcontractor of the *Consultant* in connection with the provision of the Services and provided to the *City* shall become the sole property of the *City*. The *City* shall have the right to utilize the Work Product for its benefit in connection with any future repair, modification or extension of the project for which the Services were provided. The *City* shall not use the Work Product for any other purpose without the advance written consent of the *Consultant*, not to be unreasonably withheld.

9.2 If required by the *City*, the *Consultant* will assign any copyright of the product of the *Consultant's* Services and will obtain similar assignments from the sub-contractors.

10.0 TIME

10.1 Time is of the essence in carrying out the Services. The *Consultant* must commence the Services in a reasonably timely manner and carry out the Services in accordance with the completion dates set out in the work plan, or as mutually amended in writing by the *Consultant* and the *City* from time to time.

11.0 RESOLUTION OF DISPUTES

11.1 This Agreement shall be governed by the laws of the Province of British Columbia.

11.2 If requested in writing by either the *City* or the *Consultant*, the *City* and the *Consultant* shall attempt to resolve any dispute between them arising out of or in connection with this Agreement by first entering into structured non-binding negotiations with the assistance of a mediator on a without prejudice basis. The mediator shall be appointed by agreement of the parties. If a dispute cannot be settled within a period of thirty (30) calendar days with the mediator, if mutually agreed, the dispute shall be referred to the arbitration of a single arbitrator, or to three arbitrators failing such an agreement, in which case each party shall appoint one arbitrator, and the first two named shall choose the third arbitrator. Any arbitration shall be conducted in accordance with the

Commercial Arbitration Act (British Columbia). The award and determination shall be binding upon the parties hereto and their successors and assigns.

11.3 The cost of arbitration will be borne equally by the parties.

12.0 NOTICES

12.1 Communications among the *City* and the *Consultant*, including all written notices required by the agreement, may be delivered by hand, e-mail, fax, or by pre-paid registered mail to the addresses as set out below:

The *City:*
City of Campbell River
301 St. Ann's Road
Campbell River, BC
V9W 4C7
Attention: Jason Hartley, Capital Works Manager
Email: Jason.hartley@campbellriver.ca

The *Consultant:* **TBD**

Attention:
Email:

The City of Campbell River

_____ _____
AUTHORIZED SIGNATORY WITNESS

TBD

_____ _____
AUTHORIZED SIGNATORY WITNESS

CITY OF CAMPBELL RIVER

SAFETY COVENANT

BETWEEN:

_____
(Company Name (Print legibly)

_____
(Address)

_____
(City) (Postal Code)

_____
(Phone no.) (Email)

Hereinafter referred to as the "Contractor"

AND:

CITY OF CAMPBELL RIVER

hereinafter called the "Owner"

WHEREAS:

The Contractor covenants and agrees that when performing any work for the Owner in British Columbia, whether directly as a contractor or indirectly as a sub-contractor, it will adhere to all of the requirements of the Occupational Health and Safety (OHS) Regulation, B.C. Reg. 296/97, as may be amended from time to time, that are applicable to the work being performed, and as well will comply with the provisions of the *Workers Compensation Act, R.S.B.C, 1996, c.492*, as amended (the 'Act').

The Contractor covenants and agrees that when performing any work for the Owner in which Federal occupational health and safety regulations may apply that the contractor or indirectly as a subcontractor will adhere to such regulations as administered by the Government of Canada.

Without limiting the generality of the foregoing, the Contractor agrees, with respect to any and all work performed by the Contractor in British Columbia:

1) Before commencing any work for the Owner, the Contractor will consult the OHS Regulation and will determine which provisions of the OHS Regulation is applicable to the work that the Contractor is to perform. The Contractor will strictly comply with all applicable OHS Regulations when performing the work.

2) Before commencing any work for the Owner, the Contractor will review and familiarize itself with any existing policies or procedures developed by the Owner in relation to the work. If in the opinion of the Contractor, by following a policy or procedure that the Owner has established in relation to the work, the Contractor, or an employee of the Contractor or of the Owner, or any other worker, is put at increased risk, the Contractor must request a written change of policy or procedure from the Owner, applicable only to the work the Contractor is to perform, before proceeding with the work.

3) The Owner reserves the right to refuse to amend its policies or procedures in response to any such request where the Owner, after such consultation with WorkSafeBC as the Owner considers necessary, determines that the Owner's policy or procedure does not increase the risk to any worker at the location of the work to be performed, and determines that the Contractor's request is unreasonable, or is unnecessary for the protection of workers at the location of the work.

4) To have read every section of the OHS Regulation that pertains to the job(s) at hand, to ensure that it understands the pertinent OHS Regulation and its application to the supervisor(s) and to all of the workers at the location of the work, and to ensure that each worker under the Contractor's supervision follows the applicable OHS Regulation. To assist Contractors with this task, the City of Campbell River directs them to consult with WorkSafeBC directly, to access the WorkSafeBC Regulations and Policies available on the WorkSafeBC website.

5) To understand, comply with and, to the full extent of the Contractor's lawful authority, to enforce all of the following provisions of the WorkSafeBC OHS Regulations as they pertains to the job at hand and to the workers employed by the Contractor, and to provide to the owner, at any time upon request, evidence of compliance with the following:

a) Rights & Responsibilities – Occupational Health & Safety Program (Part 3, including;
   i) Joint Health and Safety Committees
   ii) Occupational First Aid
   iii) Investigations
   iv) Inspections
   v) Written Instructions
   vi) Records and Statistics
   vii) Supervision
   viii) Refusal of unsafe work
b) General Conditions (Regulation – Part 4)
c) Chemical and Biological Substances (Regulation – Part 5)
d) Substance Specific Requirements (Regulation – Part 6)
   i) Asbestos handling protocols (Regulation – Part 6, s. 6.1 – 6.32)
e) Noise, Vibration, Radiation and Temperature (Regulation – Part 7)
f) Personal Protective Clothing and Equipment (Regulation - Part 8)
g) Confined Spaces (Regulation – Part 9)
h) De-energization and Lock-out (Regulation – Part 10)
i) Fall Protection (Regulation – Part 11)
j) Tools, Machinery and Equipment (Regulation – Part 12)
k) Ladders, Scaffolds and Temporary Work Platforms (Regulation – Part 13)
l) Cranes and Hoists (Regulation – Part 14)
m) Rigging (Regulation – Part 15)
n) Mobile Equipment (Regulation – Part 16)
o) Traffic Control (Regulation – Part 18)
p) Electrical Safety (Regulation – Part 19)
q) Construction, Excavation & Demolition (Regulation – Part 20)
   i) Coordination of Multiple Employer Workplaces (Regulation – Part 20, s. 20.3)
r) Blasting operations (Regulation – Part 21)
s) Underground Workings (Regulation – Part 22)
t) Diving, Fishing and Other Marine Operations (Regulation – Part 24)
u) Forestry Operations (Regulation – Part 26)
v) Aircraft Operations (Regulation – Part 29)
w) Firefighting (Regulation – Part 31)
x) Evacuation and Rescue (Regulation – Part 32)

PROVISIONS OF THE *WORKERS COMPENSATION ACT* – PART 3 SPECIFIC TO CONTRACTORS ON A WORKSITE:

i. Division 3 – General duties of Employers, Workers and Others (Sections 115, 116, 117, 118, 119, 120, 121, 122, 123, 124);
ii. Division 4;
iii. Division 10.

6) The *Workers Compensation Act* stipulates that the Owner (the City of Campbell River) is required to enforce any observed infraction of the Act or Regulation. The Contractor accepts that the City of Campbell River will be conducting periodic checks of the Contractor during the Contractor's work for the City of Campbell River and will be asking the Contractor to comply with the Act/Regulation in the event that any contravention is observed. If a contravention is observed and not corrected, the Contractor may be asked to leave the worksite and may result in termination of the contract for the work.

7) For the purposes of streamlining large construction projects and multiple employer worksites, the Owner reserves the right to designate a "prime contractor" amongst contractors who are working on a job-site together. A designated person employed by the "prime contractor" – appointed by the Owner - will act as the coordinator of the other contractors on that job-site and will ensure that each of the contractors on the job site are following all of the Act and WorkSafeBC Regulations as well as site-specific policies and procedures. This includes having in place an approved WorkSafeBC Health and Safety Program and a list of the qualified persons amongst the other contractors who have been designated to be responsible for each of the other contractor's site health and safety activities.

8) In the event that a prime contractor has been designated, it is the responsibility of the Contractor to inquire who the "prime contractor" is for the worksite and to comply with the requirements for a multiple employer worksite where a prime contractor has been designated, as set out in the preceding section.

NOTE:

a) Payment of WorkSafeBC Assessments by any Contractor does not obviate the responsibility of the contractor to any of the foregoing.

b) The foregoing constitutes requirements of the Prevention Division of WorkSafeBC BC for any workplace in the Province of British Columbia and constitutes the Owner's expectations of contractors.

The Contractor covenants and agrees that when performing any work for the Owner, whether directly as a contractor or indirectly as a sub-contractor, it will adhere to all of the requirements of the B.C. Employment Standards Act (RSBC 1996), as may be amended from time to time, that are applicable to the work being performed, including but not limited to:

1) Section 36 (2); an employer must ensure that each employee has at least 8 consecutive hours free from work between each shift worked.

2) Section 39; despite any provision of this Part, an employer must not require or directly or indirectly allow an employee to work excessive hours or hours detrimental to the employee's health or safety.

THIS Covenant made the _____ day of _____, 2019, in the City of Campbell River, in the Province of British Columbia.

CONTRACTOR:

_____
Company Name

_____
Authorized Signatory

_____
(Printed Name & Title)

APPENDIX 1

Date: _____

Company Name: _____

Address: _____

City: _____

Province/State: _____ Postal/Zip Code: _____

Telephone No.: _____ Fax No: _____

Primary Contact: _____

Title: _____

Email: _____

Signature: _____

City of Campbell River

BUILDING CONDITION ASSESSMENT REPORT

Building Name	**Sportsplex**
Address	**1800 South Alder Street, Campbell River, BC.**
Asset ID Number	**B025**
Building Size (sq. ft.)	**33035**
Number of Storeys	**1**
Date of Construction	**1985**

Prepared by
Facility Condition Assessment Portfolio eXperts Canada Ltd.
December 15, 2017

Project No. C16004

F·CAP·X

1 ASSET EXECUTIVE SUMMARY

1.1 Facility Condition Index

Based on the findings of the BCA, the 5-Year Facility Condition Assessment is 31.88%

1.2 Asset Summary

The Sportsplex was constructed as a design-build project for the City of Campbell River in 1985 (1993) and is a pre-engineered steel framed building with total floor area of approximately 33,035 ft.^{2}. Architectural & structural drawings were not made available for a review, as such our comments are based on a limited visual review as well as experience with similar developments. It is assumed the building was designed and constructed using best practices and the Building Code at time of construction. The Kevin Klippenstein Architect Assessment Report was provided for review.

The main floor provides staff office spaces, four glass fronted racket courts, of which two are adjustable for squash and racquetball, a large gymnasium with a movable partition, and two large activity rooms, one with a movable partition. The activity rooms have access to a commercial kitchen. Currently Squash Court No. 04 is being used for exercise activities. The facility also has four large male and female changerooms with showers. Two changerooms are accessible from the exterior. There are also five regular washrooms of which two are accessible from the exterior. A dedicated handicap accessible washroom and a first aid room are provided near the staff and reception area. Gymnasium equipment, which is available for the public, is stored in a large storage room. There are four aluminum fabricated multi-level bleachers for viewing the racket courts.

1.3 A – Substructure

The building floor slab is concrete slab-on-grade. Footings and foundations could not be confirmed, however assume that the pre-engineered building tapered columns are supported on concrete drilled piers/caisson which bear on native soil.

1.4 B – Shell

The pre-engineered steel framed building system, especially when reviewed in the gymnasium, consists of tapered steel columns connected to the roof steel beams, where purlins connect the metal roof deck to the building structure. The exterior metal insulated sandwiched wall is connected to the mainframe by metal girts. At locations ribbed masonry veneer to approximately 8’ above grade forms the exterior wall system.

Interior walls are framed and finished to approximately 8.0 ft. above floor and complete with a vapour barrier wall fabric over insulation for exposed walls.

Exterior fenestrations, at the building entrances are aluminum storefront systems with aluminum framed glass doors and vinyl framed windows. The roof is a low slope prefinished metal panels connected by fasteners to the steel roof purlins. Access to the facility roof is through a roof hatch in activity room.

1.5 C – Interiors

The building interior construction and finishes are general well maintained and in good condition. The interior finishes consist of vinyl floor tiles in the main floor corridors, activity rooms & service rooms, carpet in office areas, ceramic floor and wall tiles in washrooms, change rooms and kitchen, and cushioned maple sports floor assembly in the gymnasium and racquet courts. The interior wall construction and finishes consist of painted CMU's, and gypsum wall boards. The upper portion on the wall and the ceiling is exposed to the structural frame and the installation wrapped in PVC blanket. Ceramic wall tiles are used in the shower areas. Movable partitions are provided in the main lobby, activity rooms and in the gymnasium.

1.6 D - Services – Conveying

The building is single-storey structure without a basement and does not have a vertical transportation system.

1.7 D – Services – Plumbing

The building plumbing system is in fair condition overall. Many of the fixtures are still original to the building and will require capital replacement or upgrade in the near future.

1.8 D - Services – HVAC

The building HVAC system is in fair to good condition overall. Heating and cooling is provided by approximately 13 rooftop HVAC units (RTU1 to RTU13). In the washrooms that are accessed from the exterior heating is provided by electric force flow heaters. There are two ceiling suspended natural gas fired heaters in the storage area. Washroom and change room exhaust is provided by approximately nine exhaust fans. A BMS system manufactured by Reliable controls the building heating, cooling and ventilation systems. As units are scheduled for replacement it is recommended that alternate energy efficient system should be considered.

1.9 D – Services – Fire Protection

The building fire suppression system consists of a wet sprinkler system and fire extinguishers. The kitchen has a chemical suppression system incorporated into the kitchen exhaust.

1.10 D – Services – Electrical

Building electrical system is in good condition overall. Much of the distribution system is original however some components have been added as needed.

1.11 G - Building Site Works

The facility domestic water supply, and the sanitary and storm sewer systems are connected to the City utilities. Concrete paved walkways connect the building main entrances to the parking areas and street.

2 INTRODUCTION

Facility Condition Assessment Portfolio Experts Canada Ltd. (FCAPX) was contracted by the City of Campbell River (Campbell River) to provide Building Condition Assessments (BCAs) for 41 municipally-owned buildings located throughout the City. Site assessments were carried out in January and February 2017.

3 BUILDING CONDITION ASSESSMENT SUMMARY

FCAPX conducted BCA's for the following assets/components observed within the subject buildings based on the Uniformat II building classification system:

- A- Substructure
- B- Shell
- C - Interiors
- D – Services
- G - Building Siteworks

The Opinion of Probable Cost Table is provided in Appendix A. The Photo Log is provided in Appendix B.

4 SCOPE

The scope of this assessment is consistent with the requirements of a BCA report prepared for capital planning purposes and is specifically formatted to support the inclusion of the building assets into Campbell River's Asset Management Plan. This BCA report was prepared in accordance with the scope of services outlined in our proposal dated September 6, 2016.

The BCA carried out by FCAPX is generally based on the ASTM E2018-15: Standard Guide for Property Condition Assessments and consisted of the following:

- Interviews with property management and maintenance staff;
- Review, where available, of drawings and previously completed assessment reports;
- Walk-through Site Assessment Visit;
- Preparation of tables with Opinions of Probable Costs to remedy physical deficiencies;

- Preparation of tables with Opinions of Probable Costs to replace components which will exceed their expected useful life (EUL) over a 25-year evaluation period; and
- Preparation of Building Condition Assessment Report, which includes a photo log of the components addressed.

ASTM defines a physical deficiency as a conspicuous defect or significant deferred maintenance of a site's material systems, components, or equipment as observed during the site assessor's walk-through site visit. Included within this definition are material systems, components, or equipment that are approaching, have reached, or have exceeded their typical expected useful life (EUL) or whose remaining useful life (RUL) should not be relied upon in view of actual or effective age, abuse, excessive wear and tear, exposure to the elements, lack of proper or routine maintenance, etc. This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous minor repairs, normal operating maintenance, etc., and excludes conditions that generally do not constitute a material physical deficiency of the site.

The review of the Site was based on a visual walk-through review of the visible and accessible components of the property, building and related structures. The roof surface, interior and exterior wall finishes, and floor and ceiling finishes of the on-site building and related structures were visually assessed to check their condition and to identify physical deficiencies where observed. The assessment did not include an intrusive investigation of wall assemblies, ceiling cavities, or any other enclosures/assemblies. No physical tests were conducted and no samples of building materials were collected to substantiate observations made, or for any other reason.

The review of the mechanical systems, electrical systems, and fire & life safety systems at the property included discussions with the site representative and review of pertinent maintenance records that were made available. A visual walk-through assessment of the mechanical systems, electrical systems, and fire & life safety systems was conducted to determine the type of systems present, age, and aesthetic condition. No physical or performance tests were conducted on these systems.

A detailed evaluation of the property development's compliance with applicable national and/or provincial Building Codes and/or Fire Codes is not part of the scope of this assessment. It is assumed that the existing buildings and related structures were reviewed and approved by local authorities at the time of construction. However, applicable codes were used by FCAPX during the assessment as a reference in determining appropriate recommendations.

Replacement and repair costs are based on unit rates published by Means Publishing and/or Marshall & Swift Valuation Service, combined with local experience gained by FCAPX. The quantities associated with each item have been estimated during a walk-through site assessment and do not represent exact measurements or quantities. At the time of replacement, specific "scope of work" statements and quotations should be determined and the budgetary items revised to reflect actual expenditures. Not included are items that would be addressed as routine maintenance. However, the capital costs may include items, which are currently managed under the Operations and Maintenance budget for the site.

In the report, a cost threshold based on property type was generally used to identify the deficiencies observed at the site: $1,500.

Opinions of probable costs for deficiencies that are individually less than the established threshold amount are generally not included in the BCA cost tables. The exception are deficiency costs relating to life, safety or accessibility; these may be included regardless of this cost threshold.

4.1 Urgency Ratings

FCAPX has applied an urgency rating to each component included in the report. The following table outlines the urgency rating system utilized for the Campbell River BCA's.

Table 1 – BCA Urgency Rating

Rating	Definition
Very Poor/Critical	Component has either failed, or is at risk of failing imminently. Repair/replacement should be undertaken within the current year.
Poor	Component exhibits significant deterioration/deficiencies and/or has significant issues reported by client/building staff. Repair or replacement is anticipated within 1 to 2 years.
Fair	Component exhibits minor deficiencies and/or has issues reported by client/building staff. Additionally, items that have exceeded or will exceed their useful life during the evaluation period. Repair or replacement is recommended within 3 to 5 years.
Good	Components that do not exhibit deficiencies and do not have significant issues reported by client/building staff. Repair or replacement is typically recommended in alignment with component lifecycle within 6 to 10 years.
Very Good	Components that do not have significant deficiencies and do not have any lifecycle replacement events recommended within 10 years.

4.2 Deviations from Guide

The major deviations from ASTM E2018-15 for this project were as follows: No reviews of municipal/public records for zoning, building, and/or fire & life safety code/regulatory comparison conducted. However, a site representative was asked to confirm whether there were any such compliance issues.

This assessment did not include:

- Verification of the property's compliance with barrier-free accessibility requirements.
- Investigation of whether or not the property resides in a flood plain.
- Verification of number of parking spaces.
- Verification of gross and net usable areas of the site building(s).
- Review of as-built construction drawings for the Site and its building.

A detailed evaluation of the property development's compliance with national and/or provincial Building Codes and Fire Codes (as well as local/municipal by-laws, etc.) was not part of the scope of this assessment. The existing building and related structures are assumed to have been reviewed and approved by local authorities at the time of construction and/or subsequent renovation(s).

5 General Fall Arrest Guidelines

The following is a guideline for an employer or owner in respect to workers who may need to carry out inspections/maintenance or equipment maintenance/repairs and the worker is subject to falling a vertical distance of 3.0 m (10 ft) or more, for example the roof.

Please note that the guidelines below are not intended to supersede or amend the Occupational Health and Safety Regulation (OHS Regulation) under the inspectional jurisdiction of WorkSafeBC. We recommend that the employer/owner read the OHS Regulations prior to delegating a task to the worker.

According to OHS Regulation 3.5 every employer must ensure that regular inspections are made of all workplaces, including buildings, structures, grounds, excavations, tools, equipment, machinery and work methods and practices, at intervals that will prevent the development of unsafe working conditions

5.1 Working at Heights Training

Before a worker is allowed to proceed with a task, where a risk of falling exists, the employer/owner must ensure that worker has successfully completed a working at heights training by an approved authority or agency and the certificate of training has not expired.

In addition, the employer must ensure that at the subject work site there is a written fall protection plan and the worker is aware and instructed in the fall protection systems and procedures for the subject work site.

5.2 Use of Ladders or Work Platforms

Employer/owner must ensure that ladders and work platforms selected and used by the worker are appropriate for the work activity, and meet and are used in accordance with the applicable CSA or ANSI standard, in effect when the ladder or work platform was manufactured.

5.3 Unguarded Edges

Where there is an unguarded edge or no guardrail provided, the employer/owner must instruct the worker of the control zone which is a safe distance 2.0 m (6.5 ft) from the unguarded edge. In addition, the employer/owner must appoint a safety monitor to ensure the worker stays within the control zone and work is carried out in a manner that minimizes the risk/potential to fall.

5.4 Fall Protection Methods

Where, due to the location of the equipment or activity, the worker may need to work outside of the control zone, the employer/owner must ensure that one or more of the fall protection methods/equipment are available to the worker:

- Guardrails engineered and constructed in conformance with OHS Regulations are provided. The provided guardrail should consist of a top rail, which is between 102 cm to 112 cm above the work surface and a mid rail, which located approximately midway between the underside if the top rail and the top of toe board, if provided, or the work surface; and/or
- A fall arrest system that stops the worker in mid-fall and prevent the worker from hitting the surface below. Examples include a safety nets and full body harnesses attached by lifelines to secured anchors.

5.5 Subject Site Proposed Fall Arrest Protection Plan/Requirement

The Sportsplex building is a single-storey structure with some raised roof sections. Caged wall mounted roof ladders are provided from the lower roof sections to the raised roof sections. However, the lower roof sections can only be accessed by an external temporary ladder installed on grade adjacent to the building. The roof cover is a preformed metal roof system, and the roof sections are either low pitched gable roofs or low sloped roofs.

At the roof edge curbs/parapets are not provided. Storm water runoff is directed to the gutters provided at the roof edge. Rooftop mechanical system include approximately 13 HVAC units and approximately nine exhaust fans. Most of the rooftop mechanical

equipment are located in the safe control zone. However, given that the roof sections are either low pitched gabled or low slope roof sections with no safe parapet or curb at the roof edge, there are no roof anchors or guardrails around the rooftop mechanical equipment. Hence, at the subject site, the fall arrest protection plan, at a minimum, must include:

- A worker, who has completed and has a valid (not expired) Fall Arrest Training Certificate;
- An appropriate ladder to access the one-storey building;
- A safety monitor to instruct, and ensure the worker stays in the safe control zone; and
- Either engineer approved guardrail or a fall arrest system, when the subject task requires the worker to review/assess/maintain the rooftop mechanical equipment.

Table 2 below provides an estimate of the capital costs associated with the installation of the recommended building improvements list above.

Table 2 – Fall Arrest Capital Cost Recommendations

Recommendation	Estimated Cost
Install an approximately 18-foot high wall mounted external roof access ladder with a safety compliant cage.	$3,500.00
Install an engineered fall arrest system or a guardrail at the roof edge, where a worker is required to step out of the safety control zone to under a task.	$1,500.00
Total	**$5,000.00**

6 LIMITING CONDITIONS

This report has been prepared for the exclusive and sole use of the City of Campbell River. The report may not be relied upon by any other person or entity without the express written consent of FCAPX and the City of Campbell River.

Any reliance on this report by a third party, any decisions that a third party makes based on this report, or any use at all of this report by a third party is the responsibility of such third parties. FCAPX accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this report.

The assessment of the building/site components was performed using methods and procedures that are consistent with standard commercial and customary practice as outlined in ASTM Standard E 2018-15 for Property Condition Assessments. As per this ASTM Standard, the assessment of the building/site components was based on a visual walk-through site visit, which captured the overall condition of the site at that specific point in time only.

No legal surveys, soil tests, environmental assessments, geotechnical assessments, detailed barrier-free compliance assessments, seismic assessments, detailed engineering calculations, or quantity surveying compilations have been made. No responsibility, therefore, is assumed concerning these matters. FCAPX did not design or construct the building(s) or related structures and therefore will not be held responsible for the impact of any design or construction defects, whether or not described in this report. No guarantee or warranty, expressed or implied, with respect to the property, building components, building systems, property systems, or any other physical aspect of the property is made.

The recommendations and our opinion of probable costs associated with these recommendations, as presented in this report, are based on walk-through non-invasive observations of the parts of the building which were readily accessible during our visual review. Conditions may exist that are not as per the general condition of the system being observed and reported in this report. Opinions of probable costs presented in this report are also based on information received during interviews with operations and maintenance staff. In certain instances, FCAPX has been required to assume that the information provided is accurate and cannot be held responsible for incorrect information received during the interview process. Should additional information become available with respect to the condition of the building and/or site elements, FCAPX requests that this information be brought to our attention so that we may reassess the conclusions presented herein.

The opinions of probable costs are intended for global budgeting purposes only. The scope of work and the actual costs of the work recommended can only be determined after a detailed examination of the site element in question, understanding of the site restrictions, understanding of the effects on the ongoing operations of the site/building, definition of the construction schedule, and preparation of tender documents. We expressly waive any responsibilities for the effects of any action taken as a result of these endeavors unless we are specifically advised of prior to, and participate in the action, at which time, our responsibility will be negotiated.

Our opinions and recommendations presented in our reports will be rendered in accordance with generally accepted professional standards and are not to be construed as a warranty or guarantee regarding existing or future physical conditions at the Site or regarding compliance of Site systems/components and procedures/operations with the various regulating codes, standards, regulations, ordinances, etc.

Client Name	**City of Campbell River**
Building Name	**SPORTSPLEX**
Building Number	**B025**
Address	**1800 South Alder Street**
Building Size (sq.ft.)	**33035**
Number of Storeys	**1**
Date of Construction	**1985**
Date of Site Visit	**2017-02-22**
Current Year	**2017**
Current Replacement Value	**$8,329,367**
Facility Condition Index (FCI)	**31.88%**

Opinion of Probable Cost Table

Overall Asset Condition Summary

A - Substructure

Rec #	Uniformat Level 1	Uniformat Level 2	Uniformat Level 3	Uniformat Level 4	Component Type	Component Narrative	Condition Narrative	Urgency Rating	Deficiency Category	Recommendation Type	Quantity	Unit of Measure	Unit Cost	Total Cost	Installation Date	Expected Useful Life	Remaining Useful Life	Recommendation Timing	Photo No.	Event Year	Event Year 2017	2018	2019	2020	2021	2022 - 2026	2027 - 2031	2032 - 2036	2037 - 2041	Total
1	A - Substructure	A10 - Foundations	A1030 - Slabs On Grade	A1031 - Standard Slab on Grade	Concrete	Building has a cast-in-place concrete slab-on-grade floor, which is generally covered with a floor covering.	The concrete slab-on-grade floor appears to be in good condition overall. Where exposed, a crack, which runs east/west along gridline 8 (see architectural floor plan), was noted in the building . It is recommended that the crack be monitored, and should significant change be noted a structural engineer be retained.	2 - Good	Building Integrity	Lifecycle Replacement	33035	sq.ft.	$0	$0	1985	75	43	43		2060	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal - A - Substructure														**$0**							**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

B - Shell

Rec #	Uniformat Level 1	Uniformat Level 2	Uniformat Level 3	Uniformat Level 4	Component Type	Component Narrative	Condition Narrative	Urgency Rating	Deficiency Category	Recommendation Type	Quantity	Unit of Measure	Unit Cost	Total Cost	Installation Date	Expected Useful Life	Remaining Useful Life	Recommendation Timing	Photo No.	Event Year	Event Year 2017	2018	2019	2020	2021	2022 - 2026	2027 - 2031	2032 - 2036	2037 - 2041	Total
2	B - Shell	B10 - SuperStructure	B1030 - Structural Frame			The building is a pre-engineered steel framed structure. In the gymnasium the buildings structure consists of tapered steel columns connected to the roof steel beams, where the metal roof deck is fastened by metal purlins to the building structure.	No significant deficiencies on the exposed exterior wall to suggest movement or deterioration of the structure was observed. However, as indicated above, a crack, which runs east/west along gridline No.8 (see drawings), was observed on the floor slab. Although no significant elevation difference was noted, the crack appears to have travelled, and was noted on the concrete block walls and the ceramic floor tiles in change rooms 1 to 4. The completion of a seismic report could not be confirmed. As previously mentioned the crack should be monitored and should significant change be noted a structural engineer retained.	2 - Good	Building Integrity	Lifecycle Replacement	1	each	$0	$0	1975	76	34	34	2, 3, 4 & 5	2051	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	B - Shell	B10 - SuperStructure	B1020 - Roof Construction	B1022 - Pitched Roof Construction		Roof construction consists of a preformed metal roof systems connected to the roof steel beams by purlins.	The roof structural frame assembly appears in good condition. No deficiencies were observed or noted during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	33035	sq.ft.	$0	$0	1985	75	43	43		2060	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	B - Shell	B10 - SuperStructure	B1030 - Structural Frame	B1021 - Flat Roof Construction		At northeast and southeast facility corners low sloped metal framed canopy roof structures supported on a steel frame are provided.	No deficiencies were observed or noted during the assessment. The surface corrosion noted should be addressed by maintenance, as this will assist the structure achieve its EUL.	2 - Good	Building Integrity	Lifecycle Replacement	3	each	$0	$0	1985	75	43	43	1	2060	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	B - Shell	B20 - Exterior Enclosure	B2010 - Exterior Walls	B2011 - Exterior Wall Construction	B2011 - Exterior Walls - Concrete Block Wall System	Exterior wall assembly consists of painted concrete masonry, which extends approximately 8.0 ft. high from grade.	Our observations noted that, in general, the concrete masonry blocks are in poor condition. Deterioration included visible moisture on the interior face of the concrete masonry in many locations. The noted moisture infiltration may be attributed to the exterior grade (landscaping) at several isolated locations being above the grade beam. In addition delamination of the concrete masonry units, especially at north elevation corners was observed. In order to confirm the scope and methodology of the rehabilitation, a Building Envelope Condition Assessment (BECA) study is recommended.	4 - Poor	Building Integrity	Study	1	sq.ft.	$12,000	$12,000	1985	74	42	0	6, 7,8 & 8	2017	$12,000	$0	$0	$0	$0	$0	$0	$0	$0	$12,000
6	B - Shell	B20 - Exterior Enclosure	B2010 - Exterior Walls	B2011 - Exterior Wall Construction	B2011 - Exterior Walls - Concrete Block Wall System	Exterior wall assembly consists of painted concrete masonry, which extends approximately 8.0 ft. high from grade.	The scope and fee of the intervention to address the noted deterioration is subject to the study.	4 - Poor	Building Integrity	Condition-Based Replacement	6800	sq.ft.	$30	$204,000	1985	75	43	1	6, 7,8 & 9	2018	$0	$204,000	$0	$0	$0	$0	$0	$0	$0	$204,000
7	B - Shell	B20 - Exterior Enclosure	B2010 - Exterior Walls	B2011 - Exterior Wall Construction	B2011 - Exterior Walls - Prefinished metal panels non- insulated	Exterior wall assembly above the concrete masonry block consists of medium gauge metal channel cladding, installed vertically and fastened with exposed fasteners to the metal grits of the steel framed structure.	No significant deterioration was noted on the prefinished metal panels. However, it was noted that the flashing details, especially at the concrete masonry interface is poorly constructed, and several poorly sealed penetrations, potential allowing moisture infiltration. Recommend that the scope of the BECA include the above noted deficiencies.	3 - Fair	Building Integrity	Major Repair	7500	sq.ft.	$18	$135,000	1985	40	8	2		2019	$0	$0	$135,000	$0	$0	$0	$0	$0	$0	$135,000
8	B - Shell	B20 - Exterior Enclosure	B2020 - Exterior Windows	B2021 - Windows		Exterior windows consist of medium grade commercial aluminum windows constructed with insulated glass units (IGUs).	The condition of windows is fair. In general the windows do not appear to comply to the current Best Practice installation guidelines. Although not confirmed, water/moisture ingress is likely occurring in several areas. Prior to replacement, a study to determine details, manufacture and scope of work for windows is recommended.	3 - Fair	Building Integrity	Condition-Based Replacement	31	each	$1,500	$46,500	1985	40	8	4	10	2021	$0	$0	$0	$0	$46,500	$0	$0	$0	$0	$46,500
9	B - Shell	B20 - Exterior Enclosure	B2030 - Exterior Doors	B2023 - Storefronts		A storefront assembly (windows and doors) are used at the three building entrances: north, east & west elevations. In total there are 13 exterior entry doors. Three doors are constructed with automatic door open devices.	Doors are well-maintained and in good condition. No deficiencies were observed or noted during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	18	each	$3,500	$63,000	2008	25	16	16	11	2033	$0	$0	$0	$0	$0	$0	$0	$63,000	$0	$63,000
10	B - Shell	B20 - Exterior Enclosure	B2030 - Exterior Doors	B2032 - Solid Exterior Doors		Exterior doors are generally pressed steel doors and metal frames.	Several doors and door hardware have been replaced, and the exterior doors are in good condition. Due to the frequency of use, failure of the exterior door hardware is anticipated, and a provision for their replacement is tracked in the table. For the purpose of this report we have combined, excluding the storefront assembly door at main entrance, all doors together .	2 - Good	Building Integrity	Lifecycle Replacement	10	each	$3,500	$35,000	2008	25	16	8	12	2025	$0	$0	$0	$0	$0	$35,000	$0	$0	$0	$35,000
11	B - Shell	B30 - Roofing	B3010 - Roof Coverings	B3011 - Roof Finishes	B3011 - Roof Coverings - Preformed/ standing seam metal roof	The facility roof cover is a standing seam metal roof. Metal gutters and external rain water leaders, which are integrated with the roof assembly, provide the storm water surface runoff.	The roof assembly system is in poor condition. Consistent with the roof age, numerous patch repairs, especially at the gutters, and metal surface corrosion was evident. The facility manager confirmed the presence of roof leaks. It is recommended, that, in order to design the flashing details, the replacement be deferred to after the completion of the BECA.	4 - Poor	Building Integrity	Lifecycle Replacement	33100	sq.ft.	$25	$827,500	1985	35	3	1	13, 14, 15 & 16	2018	$0	$827,500	$0	$0	$0	$0	$0	$0	$0	$827,500
Subtotal - B - Shell														**$12,000**	**$1,031,500**	**$135,000**	**$0**	**$46,500**	**$35,000**	**$0**	**$63,000**	**$0**	**$1,323,000**

C - Interiors

Rec #	Uniformat Level 1	Uniformat Level 2	Uniformat Level 3	Uniformat Level 4	Component Type	Component Narrative	Condition Narrative	Urgency Rating	Deficiency Category	Recommendation Type	Quantity	Unit of Measure	Unit Cost	Total Cost	Installation Date	Expected Useful Life	Remaining Useful Life	Recommendation Timing	Photo No.	Event Year	Event Year 2017	2018	2019	2020	2021	2022 - 2026	2027 - 2031	2032 - 2036	2037 - 2041	Total
12	C - Interiors	C10 - Interior Construction	C1010 - Partitions	C1011 - Fixed Partitions		The fixed partitions consist primarily of painted concrete masonry units (CMUs) and steel stud walls. The four racquet courts are comprised of painted plywood walls.	Facility is kept very clean and maintained and walls are in good condition.	2 - Good	Appearance	Lifecycle Replacement	420	linear ft.	$85	$35,700	1985	50	18	18	17	2035	$0	$0	$0	$0	$0	$0	$0	$35,700	$0	$35,700
13	C - Interiors	C10 - Interior Construction	C1010 - Partitions		Raquet Court Glazed Walls	At the racquet court two fixed vision panel walls and two moveable vision panel walls are provided.	No deficiencies were observed or reported during the assessment. According to the site contact the vision panel walls are maintained by a service contractor on a regular basis.	2 - Good	Appearance	Lifecycle Replacement	4	each	$10,000	$40,000	1985	40	8	8	18 & 19	2025	$0	$0	$0	$0	$0	$40,000	$0	$0	$0	$40,000
14	C - Interiors	C10 - Interior Construction	C1020 - Interior Doors	C1021 - Interior Doors		The interior double-doors and single-doors are comprised of pressed steel metal doors & metal door frames.	The interior doors, door frames and door hardware are in good condition. As per information provided the interior doors are repaired and maintained on an as needed basis by a professional service contractor.	2 - Good	Appearance	Lifecycle Replacement	67	each	$3,500	$234,500	1985	40	8	10		2027	$0	$0	$0	$0	$0	$0	$234,500	$0	$0	$234,500
15	C - Interiors	C10 - Interior Construction	C1010 - Partitions	C1013 - Retractable Partitions		The lobby reception area has a retractable folding sliding security grill partition.	No deficiencies were observed or reported during the assessment. According to the site contact the movable partition is maintained by a service contractor on a regular basis.	2 - Good	Appearance	Lifecycle Replacement	1	each	$5,500	$5,500	1985	35	3	5	20	2022	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
16	C - Interiors	C10 - Interior Construction	C1010 - Partitions	C1013 - Retractable Partitions		An electric powered movable partition door in the gymnasium. The controls require a key access and only operated by the maintenance staff.	No deficiencies were observed or reported during the assessment. According to the site contact the movable partition is maintained by a service contractor on a regular basis.	2 - Good	Appearance	Lifecycle Replacement	1	each	$75,000	$75,000	1985	30	-2	5	21	2022	$0	$0	$0	$0	$0	$75,000	$0	$0	$0	$75,000
17	C - Interiors	C10 - Interior Construction	C1010 - Partitions	C1013 - Retractable Partitions		A manually operated movable partitions, which consist folding panels, separates the two activity rooms.	Door requires maintenance to close tightly and maintain the sound barrier between the activity rooms.	3 - Fair	Appearance	Lifecycle Replacement	1	each	$18,000	$18,000	1985	30	-2	3	22	2020	$0	$0	$0	$18,000	$0	$0	$0	$0	$0	$18,000
18	C - Interiors	C10 - Interior Construction	C1010 - Partitions	C1011 - Fixed Partitions		Pressed steel frames vision panels separate the corridors from rooms	The metal frames and vision panels are in good condition. No deficiencies were observed or noted during the assessment.	2 - Good	Appearance	Lifecycle Replacement	8	each	$2,000	$16,000	1985	40	8	8		2025	$0	$0	$0	$0	$0	$16,000	$0	$0	$0	$16,000
19	C - Interiors	C10 - Interior Construction	C1031 - Fabricated Toilet Partitions	C1031 - Fabricated Toilet Partitions		Baked enamel toilet partitions are provided in the men's & women's washrooms.	Toilet Partitions were replaced in approximately 2012 and in good condition.	2 - Good	Appearance	Lifecycle Replacement	21	each	$1,800	$37,800	2012	35	30	30	23	2047	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
20	C - Interiors	C10 - Interior Construction	C1031 - Fabricated Toilet Partitions	C1031 - Fabricated Toilet Partitions		Washroom accessories provided in the men's & women's washrooms include: mirrors paper towel and waste dispensers, soap dispensers, toilet paper dispensers, etc. Quantities are based on washroom count	Washroom accessories are in good condition. No deficiencies were observed or noted during the assessment.	2 - Good	Appearance	Lifecycle Replacement	6	each	$1,500	$9,000	1985	35	3	5		2022	$0	$0	$0	$0	$0	$9,000	$0	$0	$0	$9,000
21	C - Interiors	C10 - Interior Construction	C1030 - Fittings Specialties	C1032 - Fabricated Compartments & Cubicles		Millwork & counterstops are provided in washrooms, kitchen and wet bar in south Activity Room.	No deficiencies were observed or noted during the assessment.	2 - Good	Appearance	Lifecycle Replacement	65	linear ft.	$275	$17,875	2008	25	16	15	25	2032	$0	$0	$0	$0	$0	$0	$0	$17,875	$0	$17,875
22	C - Interiors	C10 - Interior Construction	C1030 - Fittings Specialties	C1037 - General Fittings & Misc. Metals		Custom wood benches are provided men's and women's change rooms	Benches are in good condition. No deficiencies were observed or noted during the assessment.	2 - Good	Appearance	Lifecycle Replacement	6	each	$800	$4,800	2008	25	16	16		2033	$0	$0	$0	$0	$0	$0	$0	$4,800	$0	$4,800
23	C - Interiors	C10 - Interior Construction	C1030 - Fittings Specialties	C1037 - General Fittings & Misc. Metals	C1037 - Lockers	Baked enamel lockers are provided in the change rooms.	Lockers were reportedly replaced in approximately 2012 and are good condition.	2 - Good	Appearance	Lifecycle Replacement	64	each	$200	$12,800	2012	25	20	20	25	2037	$0	$0	$0	$0	$0	$0	$0	$0	$12,800	$12,800
24	C - Interiors	C10 - Interior Construction	C1030 - Fittings Specialties	C1035 - Identifying Devices		Wayfinding include signs & plaques.	No deficiencies were observed or reported during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	1	each	$5,000	$5,000	1985	35	3	5		2022	$0	$0	$0	$0	$0	$5,000	$0	$0	$0	$5,000
25	C - Interiors	C10 - Interior Construction	C1030 - Fittings Specialties			Four manually operated and two electric operated basketball backstops are installed in the gymnasium.	No deficiencies were observed or reported during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	6	unit(s)	$5,000	$30,000	1985	35	3	5	26	2022	$0	$0	$0	$0	$0	$30,000	$0	$0	$0	$30,000
26	C - Interiors	C10 - Interior Construction	C1030 - Fittings Specialties			The specialty gymnasium equipment consists of tumbling mats, trampoline and miscellaneous equipment.	Equipment reportedly replaced in approximately 2015, and in good condition.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	1	unit(s)	$20,000	$20,000	2015	20	18	18	27	2035	$0	$0	$0	$0	$0	$0	$0	$20,000	$0	$20,000
27	C - Interiors	C10 - Interior Construction	C1030 - Fittings Specialties			Specialty gymnasium equipment consist of, electronic game board and control hardware.	Component appear to be in very good condition. An allowance has been provided for this equipment at $10,000. No deficiencies were observed during the assessment.	2 - Good	Functionality - Space Functionality	Lifecycle Replacement	1	unit(s)	$10,000	$10,000	2015	20	18	18		2035	$0	$0	$0	$0	$0	$0	$0	$10,000	$0	$10,000
28	C - Interiors	C10 - Interior Construction	C1030 - Fittings Specialties	C1013 - Retractable Partitions	C1037 - Bleachers	The retractable bleachers for the gymnasium are stored in the East Corridor to facilitate viewing of the racquet courts	Reportedly replaced in approximately 2005.	2 - Good	Functionality - Space Functionality	Lifecycle Replacement	4	each	$5,000	$20,000	2005	25	13	13		2030	$0	$0	$0	$0	$0	$0	$20,000	$0	$0	$20,000
29	C - Interiors	C30 - Interior Finishes	C3010 - Wall Finishes	C3012 - Wall Finishes to Interior Walls		Interior walls are provided with a painted finish.	The color and age of the paint finishes appear to vary throughout the building and are noted to be in good condition.	2 - Good	Appearance	Lifecycle Replacement	15000	sq.ft.	$2	$30,000	2012	10	5	5		2022	$0	$0	$0	$0	$0	$30,000	$0	$0	$0	$30,000
30	C - Interiors	C30 - Interior Finishes	C3010 - Wall Finishes	C3012 - Wall Finishes to Interior Walls	C3012 - Wood Paneled Wall Finish	Wood panelled wall finishes provided in the gymnasium walls and racquet courts.	Panelling is in good condition. No deficiencies were observed or reported during the assessment.	2 - Good	Appearance	Lifecycle Replacement	6000	sq.ft.	$4	$24,000	1985	35	3	5		2022	$0	$0	$0	$0	$0	$24,000	$0	$0	$0	$24,000
31	C - Interiors	C30 - Interior Finishes	C3010 - Wall Finishes	C3012 - Wall Finishes to Interior Walls		Mirrored wall finishes are provided in the weight/exercise room on the north, south and east walls.	Mirror panels are in good condition. No deficiencies were observed or noted during the assessment.	2 - Good	Appearance	Lifecycle Replacement	890	sq.ft.	$15	$13,350	1985	35	3	5	28	2022	$0	$0	$0	$0	$0	$13,350	$0	$0	$0	$13,350
32	C - Interiors	C30 - Interior Finishes	C30320 - Floor Finishes	C3024 - Flooring	C3024 - Vinyl Floor Tiles	Vinyl floor tiles are provided in the corridors.	The vinyl floor tiles are in good condition.	2 - Good	Building Integrity	Lifecycle Replacement	9748	sq.ft.	$13	$126,724	1985	25	-7	5		2022	$0	$0	$0	$0	$0	$126,724	$0	$0	$0	$126,724
33	C - Interiors	C30 - Interior Finishes	C30320 - Floor Finishes	C3024 - Flooring	C3024 - Ceramic Floor Tiles	Ceramic floor tiles are used in the change room shower areas.	The ceramic floor tiles are in good condition. No deficiencies were observed during noted during assessment.	2 - Good	Building Integrity	Lifecycle Replacement	7577	sq.ft.	$10	$75,770	1985	25	-7	5		2022	$0	$0	$0	$0	$0	$75,770	$0	$0	$0	$75,770
34	C - Interiors	C30 - Interior Finishes	C30320 - Floor Finishes	C3024 - Flooring	C3025 - Carpet/Carpet Tiles	Carpet tiles are provided in Lower Floor office areas were installed reportedly in approximately 2015.	The carpet tiles, which were recently installed, are in good condition.	2 - Good	Building Integrity	Lifecycle Replacement	1033	sq.ft.	$5	$5,165	2015	12	10	10		2027	$0	$0	$0	$0	$0	$0	$5,165	$0	$0	$5,165
35	C - Interiors	C30 - Interior Finishes	C30320 - Floor Finishes	C3024 - Flooring	C3024 - Composition Floor	A cushioned rubber mat is provided in the weight/exercise room.	The rubber flooring was reportedly installed in approximately 2015, and in good condition.	2 - Good	Building Integrity	Lifecycle Replacement	1300	sq.ft.	$15	$19,500	2015	20	18	18		2035	$0	$0	$0	$0	$0	$0	$0	$19,500	$0	$19,500
36	C - Interiors	C30 - Interior Finishes	C30320 - Floor Finishes	C3024 - Flooring	C3024 - Painted/Sealed Concrete Floor	Painted/Sealed concrete floor is provided for the main floor areas and the lower floor mechanical, artifact storage areas.	No deficiencies were observed or reported during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	400	sq.ft.	$2	$800	1985	30	-2	5		2022	$0	$0	$0	$0	$0	$800	$0	$0	$0	$800
37	C - Interiors	C30 - Interior Finishes	C30330 - Ceiling Finishes	C3031 - Ceiling Finishes	C2031 - Gypsum Board Ceilings	Painted gypsum wallboard ceilings are provided in washrooms.	No deficiencies were observed or noted during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	5500	sq.ft.	$9	$22,500	1985	43	11	11		2032	$0	$0	$0	$0	$0	$0	$0	$22,500	$0	$22,500
38	C - Interiors	C30 - Interior Finishes	C30330 - Ceiling Finishes	C3032 - Suspended Ceilings	C3031 - Suspended Acoustic Panel Ceiling	T-bar grid ceilings are provided in office areas.	No deficiencies were observed or noted during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	1033	sq.ft.	$5	$5,165	1985	44	12	12		2029	$0	$0	$0	$0	$0	$0	$5,165	$0	$0	$5,165
39	C - Interiors	C30 - Interior Finishes	C30330 - Ceiling Finishes	C3033 - Other Ceilings		Exposed metal, ductwork, sprinkler piping and conduit is exposed in all areas excluding administration area and is detail painted with individual components having separate colors.	The exposed painted ceiling is in good condition.	2 - Good	Building Integrity	Lifecycle Replacement	1	each	$40,000	$40,000	2012	20	15	15	29	2032	$0	$0	$0	$0	$0	$0	$0	$40,000	$0	$40,000
40	C - Interiors	C30 - Interior Finishes	C1030 - Fittings Specialties	C1017 - Interior Windows & Storefronts		Metal venetian blinds provide window covering main and upper floor office areas	The blinds are in good condition.	2 - Good	Functionality - Temperature Control	Lifecycle Replacement	13	each	$350	$4,550	2010	20	13	13		2030	$0	$0	$0	$0	$0	$0	$4,550	$0	$0	$4,550
Subtotal - C - Interiors														**$0**	**$0**	**$0**	**$18,000**	**$0**	**$445,644**	**$269,380**	**$170,375**	**$12,800**	**$916,199**

D - Services - Conveying

Rec #	Uniformat Level 1	Uniformat Level 2	Uniformat Level 3	Uniformat Level 4	Component Type	Component Narrative	Condition Narrative	Urgency Rating	Deficiency Category	Recommendation Type	Quantity	Unit of Measure	Unit Cost	Total Cost	Installation Date	Expected Useful Life	Remaining Useful Life	Recommendation Timing	Photo No.	Event Year	Event Year 2017	2018	2019	2020	2021	2022 - 2026	2027 - 2031	2032 - 2036	2037 - 2041	Total
41														$0							$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal - D - Services - Conveying														**$0**							**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**

D - Services - Plumbing

Rec #	Uniformat Level 1	Uniformat Level 2	Uniformat Level 3	Uniformat Level 4	Component Type	Component Narrative	Condition Narrative	Urgency Rating	Deficiency Category	Recommendation Type	Quantity	Unit of Measure	Unit Cost	Total Cost	Installation Date	Expected Useful Life	Remaining Useful Life	Recommendation Timing	Photo No.	Event Year	Event Year 2017	2018	2019	2020	2021	2022 - 2026	2027 - 2031	2032 - 2036	2037 - 2041	Total
42	D - Services	D20 - Plumbing	D2010 - Plumbing Fixtures	D2011 - Water Closets		Water closets are floor mounted flush valve type. Various makes and models are used in the facility.	Some units have failed over the years and have been replaced as required. The majority are still original to the building. No deficiencies were observed or noted during the assessment.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	14	unit(s)	$2,000	$28,000	1985	25	-7	2		2019	$0	$0	$28,000	$0	$0	$0	$0	$0	$0	$28,000
43	D - Services	D20 - Plumbing	D2010 - Plumbing Fixtures	D2012 - Urinals		Urinals are wall hung white china with hands free flush valves.	Some units have failed over the years and been replaced as required. The majority are still original to the building. No deficiencies were observed or noted during the assessment.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	6	unit(s)	$3,300	$19,800	1985	25	-7	2		2019	$0	$0	$19,800	$0	$0	$0	$0	$0	$0	$19,800

Opinion of Probable Cost Table

44	D - Services	D20 - Plumbing	D2010 - Plumbing Fixtures	D2013 - Lavatories		Lavatories are surface mounted white china with manual fixtures.	Some units have failed over the years and been replaced as required. The majority are still original to the building. No deficiencies were observed or noted during the assessment.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	16	unit(s)	$1,000	$16,000	1985	25	-7	2	31	2019	$0	$0	$16,000	$0	$0	$0	$0	$0	$0	$16,000
45	D - Services	D20 - Plumbing	D2010 - Plumbing Fixtures	D2014 - Sinks		Single basin stainless steel surface mount sinks are located in the event rooms and staff lunch area.	No deficiencies were observed or noted during the assessment.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	5	unit(s)	$1,000	$5,000	1985	25	-7	5	33	2022	$0	$0	$0	$0	$0	$5,000	$0	$0	$0	$5,000
46	D - Services	D20 - Plumbing	D2010 - Plumbing Fixtures	D2014 - Sinks		Floor mount plastic mop sinks with wall hung utility fixtures are located in the Janitors' Rooms.	Units are aged and stained but should provide years of additional service before replacement is necessary. No deficiencies were observed or noted during the assessment.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	3	unit(s)	$1,500	$4,500	1985	25	-7	5		2022	$0	$0	$0	$0	$0	$4,500	$0	$0	$0	$4,500
47	D - Services	D20 - Plumbing	D2010 - Plumbing Fixtures	D2014 - Sinks		Stainless steel commercial prep sinks are connected to a floor mounted grease interceptor.	No deficiencies were observed or noted during the assessment.	2 - Good	Functionality - Space Functionality	Lifecycle Replacement	1	unit(s)	$5,000	$5,000	2005	25	13	13	32	2030	$0	$0	$0	$0	$0	$0	$5,000	$0	$0	$5,000
48	D - Services	D20 - Plumbing	D2010 - Plumbing Fixtures	D2017 - Showers		Showers are tiled built in place units. Fixtures are normal flow heads with manual controls.	No deficiencies were observed or noted during the assessment.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	16	unit(s)	$1,500	$24,000	1985	25	-7	2		2019	$0	$0	$24,000	$0	$0	$0	$0	$0	$0	$24,000
49	D - Services	D20 - Plumbing	D2010 - Plumbing Fixtures	D2018 - Drinking Fountains and Coolers		Stainless steel wall hung public drinking fountains are located around the facility.	No deficiencies were observed or noted during the assessment.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	3	unit(s)	$1,000	$3,000	1985	25	-7	2		2019	$0	$0	$3,000	$0	$0	$0	$0	$0	$0	$3,000
50	D - Services	D20 - Plumbing	D2010 - Plumbing Fixtures	D2018 - Drinking Fountains and Coolers		Elkay EZH20 combination drinking / bottle fill fountain is installed in the main corridor.	No deficiencies were observed or noted during the assessment.	2 - Good	Functionality - Space Functionality	Lifecycle Replacement	1	each	$2,500	$2,500	2010	25	18	18	30	2035	$0	$0	$0	$0	$0	$0	$0	$2,500	$0	$2,500
51	D - Services	D20 - Plumbing	D2020 - Domestic Water Distribution	D2022 - Hot Water Service	D2022 - Domestic Water Heater	Enerworks solar water heating system includes a panel (installed on roof), buffer tank, and expansion tanks.	Buffer tank is not seismically braced.	2 - Good	Building Integrity	Lifecycle Replacement	1	each	$15,000	$15,000	2010	20	13	13		2030	$0	$0	$0	$0	$0	$0	$15,000	$0	$0	$15,000
52	D - Services	D20 - Plumbing	D2020 - Domestic Water Distribution	D2022 - Hot Water Service	D2022 - Domestic Water Heater	AO Smith Cyclone M modulating gas fired water heater is installed in the Mechanical room.	Items are stored directly in front of the tank should be relocated to a safe distance from the burner and flue connections.	3 - Fair	Building Integrity	Lifecycle Replacement	3	each	$2,500	$7,500	2011	10	4	4	34	2021	$0	$0	$0	$0	$7,500	$0	$0	$0	$0	$7,500
53	D - Services	D20 - Plumbing	D2020 - Domestic Water Distribution	D2022 - Hot Water Service	D2022 - Domestic Water Heater	John Wood electric hot water tanks are located in the janitors rooms. Units vary in model and capacity but are all approximately 180L volumes.	Tanks lack seismic bracing.	3 - Fair	Building Integrity	Lifecycle Replacement	3	each	$2,500	$7,500	2011	10	4	4		2021	$0	$0	$0	$0	$7,500	$0	$0	$0	$0	$7,500
54	D - Services	D20 - Plumbing	D2020 - Domestic Water Distribution	D2023.4 - Plumbing Piping Systems		Domestic water distribution is via copper piping.	Not all of the water system piping has been thermally insulated.	2 - Good	Building Integrity	Lifecycle Replacement	33000	sq.ft.	$2	$66,000	1985	37	5	5		2022	$0	$0	$0	$0	$0	$66,000	$0	$0	$0	$66,000
55	D - Services	D20 - Plumbing	D2030 - Sanitary Waste	D2031 - Waste Piping		Waste piping is a combination of ABS and Black Iron piping.	No deficiencies were observed or noted during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	33000	sq.ft.	$3	$99,000	1985	37	5	5		2022	$0	$0	$0	$0	$0	$99,000	$0	$0	$0	$99,000
56	D - Services	D20 - Plumbing	D2030 - Sanitary Waste	D2032 - Vent Piping		Vent piping is concealed in the walls and ceiling space. It is assumed to be ABS.	No deficiencies were observed or noted during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	33000	sq.ft.	$1	$16,500	1985	37	5	5		2022	$0	$0	$0	$0	$0	$16,500	$0	$0	$0	$16,500
Subtotal - D - Services - Plumbing																					**$0**	**$0**	**$90,000**	**$0**	**$15,000**	**$191,000**	**$20,000**	**$2,500**	**$0**	**$319,300**

D - Services - HVAC

Rec #	Discipline	Uniformat Level 1	Uniformat Level 2	Uniformat Level 3	Uniformat Level 4	Component Type	Component Narrative	Condition Narrative	Urgency Rating	Deficiency Category	Recommendation Type	Quantity	Unit of Measure	Unit Cost	Total Cost	Installation Date	Expected Useful Life	Remaining Useful Life	Recommendation Timing	Photo No.	Event Year	Event Year 2017	2018	2019	2020	2021	2022 - 2026	2027 - 2031	2032 - 2036	2037 - 2041	Total
57	D - Services	D30 - HVAC	D3010 - Fuel Energy Supply Systems	D3012 - Gas Supply System		A gas meter is located on the front face of the building. Steel piping distributes natural gas to the RTUs and kitchen equipment.	No deficiencies were observed or noted during the assessment. Meter is property of the gas utility.	2 - Good	Functionality - Temperature Control	Lifecycle Replacement	33000	sq.ft.	$1	$33,000	1985	37	5	6		2023	$0	$0	$0	$0	$0	$33,000	$0	$0	$0	$33,000
58	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-1 Daikin Model DCG036090BXXAAA. 208-230V/3ph, 92MBH Gas Fired MUA Unit.	No deficiencies were observed or noted during the assessment.	2 - Good	Functionality - Temperature Control	Lifecycle Replacement	1	each	$8,700	$8,700	2008	18	9	9		2026	$0	$0	$0	$0	$0	$8,700	$0	$0	$0	$8,700
59	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-2 Goodman Company (Daiken) Model DCG048115I3BXXXAA. 208-230V/3ph, 115MBH Gas Fired MUA Unit.	No deficiencies were observed or noted during the assessment.	2 - Good	Functionality - Temperature Control	Lifecycle Replacement	1	each	$11,000	$11,000	2006	18	7	7		2024	$0	$0	$0	$0	$0	$11,000	$0	$0	$0	$11,000
60	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-3 Daikin Model DCG060140J3BXXXAA. 208-230V/3ph, 138MBH Gas Fired MUA Unit.	No deficiencies were observed or noted during the assessment.	2 - Good	Functionality - Temperature Control	Lifecycle Replacement	1	each	$13,000	$13,000	2008	18	9	9		2026	$0	$0	$0	$0	$0	$13,000	$0	$0	$0	$13,000
61	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-4 Carrier Gas Fired MUA Unit.	Although no significant deficiencies were observed or reported during the assessment, the unit based on assumed age is in fair condition. Nameplate information to confirm age and capacity was not available for review (faded).	3 - Fair	Functionality - Temperature Control	Lifecycle Replacement	1	each	$11,000	$11,000	2000	18	1	3		2020	$0	$0	$0	$11,000	$0	$0	$0	$0	$0	$11,000
62	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-5 Carrier Model 48LJE006---531CA.	Although no significant deficiencies were observed or reported during the assessment, the unit based on assumed age is in fair condition. Nameplate information to confirm age and capacity was not available for review (faded).	3 - Fair	Functionality - Temperature Control	Lifecycle Replacement	1	each	$11,000	$11,000	2000	18	1	3		2020	$0	$0	$0	$11,000	$0	$0	$0	$0	$0	$11,000
63	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-6 Carrier Model 48LJE006---531CA. 208-230V/3ph, 115MBH Gas Fired MUA Unit.	Although no significant deficiencies were observed or reported during the assessment, the unit based on assumed age is in fair condition.	2 - Good	Functionality - Temperature Control	Lifecycle Replacement	1	each	$11,000	$11,000	2000	18	1	3		2020	$0	$0	$0	$11,000	$0	$0	$0	$0	$0	$11,000
64	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-7 Daikin Model DCG090210I3BXXAAA. 208-230V/3ph, 210MBH Gas Fired MUA Unit.	No deficiencies were observed or noted during the assessment.	2 - Good	Functionality - Temperature Control	Lifecycle Replacement	1	each	$19,700	$19,700	2008	18	9	9		2026	$0	$0	$0	$0	$0	$19,700	$0	$0	$0	$19,700
65	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-8 Carrier Model 48LJE006---531CA. 208-230V/3ph, 115MBH Gas Fired MUA Unit.	Although no significant deficiencies were observed or reported during the assessment, the unit based on assumed age is in fair condition.	3 - Fair	Functionality - Temperature Control	Lifecycle Replacement	1	each	$11,000	$11,000	2000	18	1	3		2020	$0	$0	$0	$11,000	$0	$0	$0	$0	$0	$11,000
66	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-9 Carrier Model 48LJE012510. 208-230V/3Ph, 180MBH Gas Fired MUA Unit.	Although no significant deficiencies were observed or reported during the assessment, the unit based on assumed age is in fair condition.	3 - Fair	Functionality - Temperature Control	Lifecycle Replacement	1	each	$17,000	$17,000	2000	18	1	3		2020	$0	$0	$0	$17,000	$0	$0	$0	$0	$0	$17,000
67	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-10 Carrier Model 48LJE012510. 208-230V/3Ph, 180MBH Gas Fired MUA Unit.	Although no significant deficiencies were observed or reported during the assessment, the unit based on assumed age is in fair condition.	3 - Fair	Functionality - Temperature Control	Lifecycle Replacement	1	each	$17,000	$17,000	2000	18	1	3		2020	$0	$0	$0	$17,000	$0	$0	$0	$0	$0	$17,000
68	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-11 Carrier Model 48LJE012510. 208-230V/3Ph, 180MBH Gas Fired MUA Unit.	Although no significant deficiencies were observed or reported during the assessment, the unit based on assumed age is in fair condition.	3 - Fair	Functionality - Temperature Control	Lifecycle Replacement	1	each	$17,000	$17,000	2000	18	1	3		2020	$0	$0	$0	$17,000	$0	$0	$0	$0	$0	$17,000
69	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-12 Carrier Model 48LJE012---521ca. 208-230V/3Ph, 180MBH Gas Fired MUA Unit.	Although no significant deficiencies were observed or reported during the assessment, the unit based on age is in poor condition.	4 - Poor	Functionality - Temperature Control	Lifecycle Replacement	1	each	$17,000	$17,000	1993	18	-6	0	35	2017	$17,000	$0	$0	$0	$0	$0	$0	$0	$0	$17,000
70	D - Services	D30 - HVAC	D3020 - Heat Generation Systems	D3022.2 - Rooftop AHU Heat and Cool		RTU-13 Engineered Air Model B-250-# Gas Fired Makeup Air Unit.	Although no significant deficiencies were observed or reported during the assessment, the unit based on assumed age is in poor condition.	4 - Poor	Functionality - Temperature Control	Lifecycle Replacement	1	each	$23,500	$23,500	1993	18	-6	0		2017	$23,500	$0	$0	$0	$0	$0	$0	$0	$0	$23,500
71	D - Services	D30 - HVAC	D3040 - Heat HVAC Distribution Systems	D3042 - Exhaust Ventilation Systems		Washrooms/change rooms are serviced by an individual Greenheck rooftop exhaust fans (EF1 to EF-9). One unit services the commercial kitchen exhaust hood.	Exhaust fans are at the end of their expected operational life. Component failures can be anticipated and will begin to occur.	4 - Poor	Functionality - Temperature Control	Lifecycle Replacement	9	each	$9,000	$81,000	1985	15	-17	1	36	2018	$0	$81,000	$0	$0	$0	$0	$0	$0	$0	$81,000
72	D - Services	D30 - HVAC	D3050 - Heat Transfer Terminal and Packaged Units	D3052.3 - Heater		Two Reznor manufactured ceiling suspended gas fired unit heaters are located in the storage area.	No deficiencies were observed or noted during the assessment.	3 - Fair	Functionality - Temperature Control	Lifecycle Replacement	2	each	$2,500	$5,000	1985	18	-14	3		2020	$0	$0	$0	$5,000	$0	$0	$0	$0	$0	$5,000
73	D - Services	D30 - HVAC	D3050 - Heat Transfer Terminal and Packaged Units	D3052.3 - Heater		Force Flow heaters are installed in the washrooms, which can be accessed from the exterior.	The units based on age are at the end of their operational life.	4 - Poor	Functionality - Temperature Control	Lifecycle Replacement	2	each	$1,000	$2,000	1985	18	-14	1		2018	$0	$2,000	$0	$0	$0	$0	$0	$0	$0	$2,000
74	D - Services	D30 - HVAC	D3050 - Heat Transfer Terminal and Packaged Units	D3052.4 - Baseboard Heater		Baseboard heaters, of varying capacities, are installed in the staff office areas.	No deficiencies were observed or noted during the assessment.	4 - Poor	Functionality - Temperature Control	Lifecycle Replacement	4	each	$500	$2,000	1985	15	-17	1		2018	$0	$2,000	$0	$0	$0	$0	$0	$0	$0	$2,000
75	D - Services	D30 - HVAC	D3060 - HVAC Instrumentation and Controls	D3068 - Building Automation Systems		Building includes an internet based BMS that interconnects all the local T-stats. The system is manufactured by Reliable.	No deficiencies were observed or noted during the assessment.	2 - Good	Energy	Lifecycle Replacement	33000	sq.ft.	$1	$33,000	2005	15	3	6		2023	$0	$0	$0	$0	$0	$33,000	$0	$0	$0	$33,000
Subtotal - D - Services - HVAC																					**$40,500**	**$85,000**	**$0**	**$100,000**	**$0**	**$118,400**	**$0**	**$0**	**$0**	**$343,900**

D - Services - Fire Protection

Rec #	Discipline	Uniformat Level 1	Uniformat Level 2	Uniformat Level 3	Uniformat Level 4	Component Type	Component Narrative	Condition Narrative	Urgency Rating	Deficiency Category	Recommendation Type	Quantity	Unit of Measure	Unit Cost	Total Cost	Installation Date	Expected Useful Life	Remaining Useful Life	Recommendation Timing	Photo No.	Event Year	Event Year 2017	2018	2019	2020	2021	2022 - 2026	2027 - 2031	2032 - 2036	2037 - 2041	Total
76	D - Services	D40 - Fire Protection Systems	D4010 - Sprinklers	D4011 - Sprinkler Water Supply		Facility is serviced by a wet sprinkler system. Sprinkler tree is located in the Mechanical Room.	In some event room closets materials are stored too close to the sprinkler heads. As part of maintenance and good housing keeping the stored materials should be removed/relocated to provide required clearances.	2 - Good	Life Safety Code Compliance	Lifecycle Replacement	33000	sq.ft.	$5	$148,500	1985	40	8	8	37	2025	$0	$0	$0	$0	$0	$148,500	$0	$0	$0	$148,500
77	D - Services	D40 - Fire Protection Systems	D4030 - Fire Protection Specialties	D4031 - Fire Extinguishers		Fire extinguishers are installed at designated location in the building. They are inspected annually and replaced as required.	The replacement cost of the fire extinguishers falls below the threshold value of this assessment.	2 - Good	Life Safety Code Compliance	Lifecycle Replacement				$0	2017	10	10	10		2027	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
78	D - Services	D40 - Fire Protection Systems	D4090 - Other Fire Protection Systems	D4095 - Hood & Duct Fire Protection		Commercial kitchen hood fire suppression system.	No deficiencies were observed or noted during the assessment.	3 - Good	Life Safety Code Compliance	Lifecycle Replacement	1	each	$5,000	$5,000	2010	20	13	13	38	2030	$0	$0	$0	$0	$0	$0	$5,000	$0	$0	$5,000
Subtotal - D - Services - Fire Protection																					**$0**	**$0**	**$0**	**$0**	**$0**	**$148,500**	**$5,000**	**$0**	**$0**	**$153,500**

D - Services - Electrical

Rec #	Discipline	Uniformat Level 1	Uniformat Level 2	Uniformat Level 3	Uniformat Level 4	Component Type	Component Narrative	Condition Narrative	Urgency Rating	Deficiency Category	Recommendation Type	Quantity	Unit of Measure	Unit Cost	Total Cost	Installation Date	Expected Useful Life	Remaining Useful Life	Recommendation Timing	Photo No.	Event Year	Event Year 2017	2018	2019	2020	2021	2022 - 2026	2027 - 2031	2032 - 2036	2037 - 2041	Total
79	D - Services	D50 - Electrical Systems	D5010 - Electrical Service and Distribution	D5012 - Low Tension Service & Dist.	(600, 220, 120 V)	Building service is a 208V/3Ph, 800A connection. Main switchboard is a Federal Pioneer 31 Series.	No deficiencies were observed or noted during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	1	each	$60,000	$60,000	1985	40	8	8		2025	$0	$0	$0	$0	$0	$60,000	$0	$0	$0	$60,000
80	D - Services	D50 - Electrical Systems	D5010 - Electrical Service and Distribution	D5012 - Low Tension Service & Dist.		Sub panels are located around the facility.	Some panels have a substantial amount of items stored around or in front of them impeding safe access. Materials needing to be stored should be relocated to more appropriate locations.	2 - Good	Building Integrity	Lifecycle Replacement	6	each	$6,000	$36,000	1985	40	8	8		2025	$0	$0	$0	$0	$0	$36,000	$0	$0	$0	$36,000
81	D - Services	D50 - Electrical Systems	D5010 - Electrical Service and Distribution	D5021 - Branch Wiring Devices		Facility wiring is a combination of concealed wiring and exposed conduit.	No deficiencies were observed or noted during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	33000	sq.ft.	$15	$478,500	1985	40	8	8		2025	$0	$0	$0	$0	$0	$478,500	$0	$0	$0	$478,500
82	D - Services	D50 - Electrical Systems	D5020 - Lighting and Branch Wiring	D5022 - Lighting Equipment		Exterior lighting are weather sealed halide lights and local recessed spot lights in the main entrance area.	No deficiencies were observed or noted during the assessment.	3 - Fair	Functionality - Lighting	Lifecycle Replacement	10	unit(s)	$500	$5,000	1985	20	-12	2		2019	$0	$0	$5,000	$0	$0	$0	$0	$0	$0	$5,000
83	D - Services	D50 - Electrical Systems	D5020 - Lighting and Branch Wiring	D5022.1 - Internal Lighting		Interior lighting in the office, common and gymnasium areas is a combination of suspended and T-bar mounted fluorescent light fixtures.	No deficiencies were observed or noted during the assessment.	2 - Good	Functionality - Lighting	Lifecycle Replacement	33000	sq.ft.	$9	$297,000	2000	30	13	13		2030	$0	$0	$0	$0	$0	$0	$297,000	$0	$0	$297,000
84	D - Services	D50 - Electrical Systems	D5020 - Lighting and Branch Wiring	D5022.2 - Exit Lighting		Exit lights are installed at all exit doors.	No deficiencies were observed or noted during the assessment.	2 - Good	Life Safety Code Compliance	Lifecycle Replacement	15	unit(s)	$540	$8,100	2000	30	13	13		2030	$0	$0	$0	$0	$0	$0	$8,100	$0	$0	$8,100
85	D - Services	D50 - Electrical Systems	D5030 - Communications and Security Systems	D5033 - Telephone Systems		Facility is wired for phone service. Phone jacks are located throughout the building.	Building phone system is expanded and modified as program and staff changes occur.	2 - Good	Functionality - Space Functionality	Lifecycle Replacement	1	each	$25,000	$25,000	2000	25	8	8	40	2025	$0	$0	$0	$0	$0	$25,000	$0	$0	$0	$25,000
86	D - Services	D50 - Electrical Systems	D5030 - Communications and Security Systems	D5037 - Fire Alarm Systems		Annunciator panel is located in the main entrance. Main Fire Alarm panel is located in the mechanical room. Pull stations and alarm bells are located throughout the building.	No deficiencies were observed or noted during the assessment.	2 - Good	Life Safety Code Compliance	Lifecycle Replacement	1	each	$100,000	$100,000	2000	25	8	8		2025	$0	$0	$0	$0	$0	$100,000	$0	$0	$0	$100,000
87	D - Services	D50 - Electrical Systems	D5030 - Communications and Security Systems	D5038 - Security and Detection Systems		Building is equipped with a CCTV system with offsite storage.	No deficiencies were observed or noted during the assessment.	2 - Good	Life Safety Code Compliance	Lifecycle Replacement	1	each	$15,000	$15,000	2010	20	13	13		2030	$0	$0	$0	$0	$0	$0	$15,000	$0	$0	$15,000
88	D - Services	D50 - Electrical Systems	D5090 - Other Electrical Systems	D5092 - Emergency Light & Power Systems		Emergency lights with battery backups are located throughout the facility.	No deficiencies were observed or noted during the assessment.	2 - Good	Functionality - Lighting	Lifecycle Replacement	24	unit(s)	$1,200	$28,800	2000	20	3	5		2022	$0	$0	$0	$0	$0	$28,800	$0	$0	$0	$28,800
89	D - Services	D50 - Electrical Systems	D5090 - Other Electrical Systems	D5092.1 - Emergency Generator		A packaged emergency generator is installed along the side of the building. The unit is rated for 100% facility load.	No deficiencies were observed or noted during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	1	each	$60,000	$60,000	2015	30	28	28	41	2045	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Subtotal - D - Services - Electrical																					**$0**	**$0**	**$5,000**	**$0**	**$0**	**$728,300**	**$320,100**	**$0**	**$0**	**$1,053,400**

G - Building Site Works

G - Building Site Works The facility domestic water supply, and the sanitary and storm sewer systems are connected to the City utilities. Concrete paved walkways connect the building main entrances to the parking areas and street.

Rec #	Discipline	Uniformat Level 1	Uniformat Level 2	Uniformat Level 3	Uniformat Level 4	Component Type	Component Narrative	Condition Narrative	Urgency Rating	Deficiency Category	Recommendation Type	Quantity	Unit of Measure	Unit Cost	Total Cost	Installation Date	Expected Useful Life	Remaining Useful Life	Recommendation Timing	Photo No.	Event Year	Event Year 2017	2018	2019	2020	2021	2022 - 2026	2027 - 2031	2032 - 2036	2037 - 2041	Total
90	G - Building Sitework	G30 - Site Civil/Mechanical Utilities	G3010 - Water supply	G3011 - Potable Water Distribution and Storage		Domestic water is supplied by a buried copper pipe which is connected to the City water supply system.	No deficiencies were observed or reported during the assessment. However, based on age the system is considered to be in fair condition, and a study to assess and confirm the condition of the mostly concealed utility is recommended.	3 - Fair	Building Integrity	Lifecycle Replacement	33000	sq.ft.	$1	$33,000	1985	30	-2	4		2021	$0	$0	$0	$0	$33,000	$0	$0	$0	$0	$33,000
91	G - Building Sitework	G30 - Site Civil/Mechanical Utilities	G3020 - Sanitary Sewer	G3021 - Piping		Sanitary drainage is likely provided by a black iron pipe.	No deficiencies were observed or reported during the assessment. However, based on age the system is considered to be in fair condition, and a study to assess and confirm the condition of the mostly concealed utility is recommended.	3 - Fair	Building Integrity	Lifecycle Replacement	33000	sq.ft.	$1	$33,000	1985	30	-2	4		2021	$0	$0	$0	$0	$33,000	$0	$0	$0	$0	$33,000
92	G - Building Sitework	G30 - Site Civil/Mechanical Utilities	G3030 - Storm Sewer	G3031 - Piping		Storm water sewer system is likely cast iron pipes connected to the City utility.	No deficiencies were observed or reported during the assessment. However, based on age the system is considered to be in fair condition, and a study to assess and confirm the condition of the mostly concealed utility is recommended.	3 - Fair	Building Integrity	Lifecycle Replacement	33000	sq.ft.	$1	$33,000	1985	30	-2	4		2021	$0	$0	$0	$0	$33,000	$0	$0	$0	$0	$33,000
92	G - Building Sitework	G20 - Site Improvements	G2010 - Roadways	G2012 - Paving & Surfacing		Asphalt paved roadway is provided	The asphalt paved roadway is in fair condition.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	32300	sq.ft.	$18	$581,400	2000	20	3	4		2021	$0	$0	$0	$0	$581,400	$0	$0	$0	$0	$581,400
93	G - Building Sitework	G20 - Site Improvements	G2020 - Parking Lots	G2022 - Paving & Surfacing		Asphalt paved parking area	The asphalt paved parking area is in fair condition.	3 - Fair	Functionality - Space Functionality	Lifecycle Replacement	22000	sq.ft.	$18	$396,000	2000	20	3	4		2021	$0	$0	$0	$0	$396,000	$0	$0	$0	$0	$396,000
93	G - Building Sitework	G20 - Site Improvements	G2030 - Pedestrian Paving	G2035 - Exterior Steps & Ramps	G2032 - Concrete Paved Walkway	Concrete walkways are provided at main, rear and side entrances to the building.	The concrete walkways are in good condition. No significant deficiencies were observed or reported during the assessment.	2 - Good	Building Integrity	Lifecycle Replacement	1500	sq.ft.	$9	$13,500	1985	25	-7	5		2022	$0	$0	$0	$0	$0	$13,500	$0	$0	$0	$13,500
Subtotal - G - Building Sitework																					**$0**	**$0**	**$0**	**$0**	**$1,076,400**	**$13,500**	**$0**	**$0**	**$0**	**$1,089,900**
Totals																					**$52,500**	**$1,116,500**	**$230,800**	**$118,000**	**$1,137,900**	**$1,680,344**	**$614,480**	**$235,875**	**$12,800**	**$5,199,199**

F·CAP·X

Photo 1 B1021 Steel I-beams require Painting

Photo 2 A1031 Crack in Slab-on-Grade near GL's 9.1 & Q

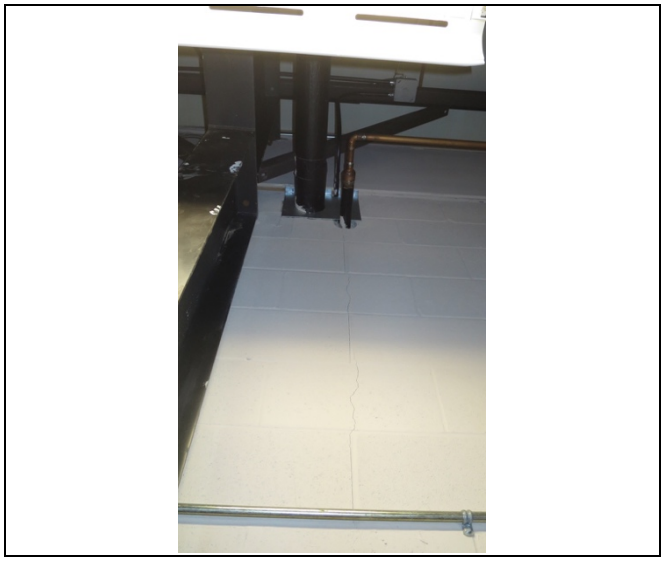


Photo 3 A1031 Crack in CMU at GL's 9.1 & O

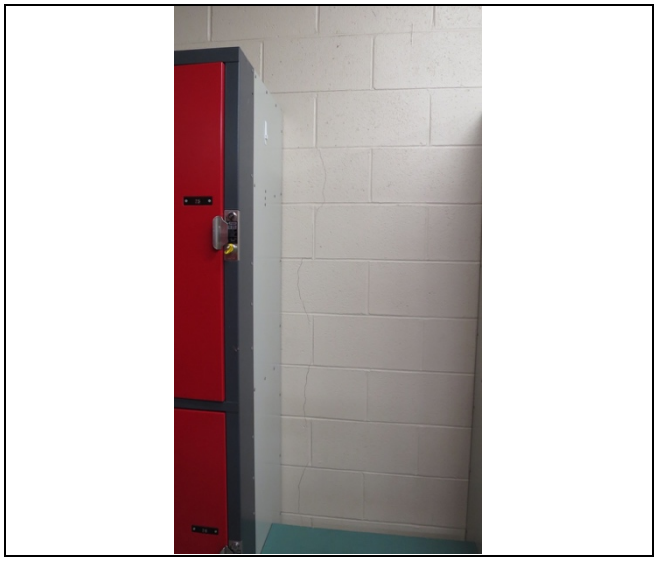


Photo 4 A1031 Crack in CMU at GL's 9.1 & M

Photo 5 A1031 Crack in Slab-on-Grade near GL's 8 & D

Photo 6 B2011 Water behind masonry Block

Photo 7 B2011 Landscape Grade above Finished Floor

Photo 8 B2011 Roof Leak Water behind masonry Block

Photo 9 B2011 Water behind Masonry Block- Deteriorating Corner

Photo 10 B2021 Exterior Windows

Photo 11 B2023 Storefront Assembly - Main Entry

Photo 12 B2032 Exterior Doors require Paint

Photo 13 B3011 Metal Roofing

Photo 14 B3011 Asphalt over Metal Roof Repair

Photo 15 B3011 Metal Roof Repair

Photo 16 B3011 Rusting Gutter

Photo 17 C1011 Painted Fixed Partitions

Photo 18 C1013 Movable Court Glass Wall

Photo 19 C1013 Non-Movable Court Glass Wall

Photo 20 C1013 Lobby Security Grille

Photo 21 Folding Partition-Stored

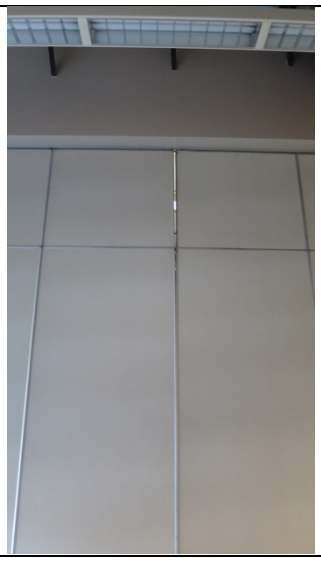


Photo 22 Activity Room Folding Partition-Requires maintenance

Photo 23 C1031 Toilet Partitions

Photo 24 C1032 Millwork

Photo 25 C1037 Lockers

Photo 26 C1030 Gym Equipment

Photo 27 C1030 Gym Equipment

Photo 28 C3012 Mirrored Walls in exercise room

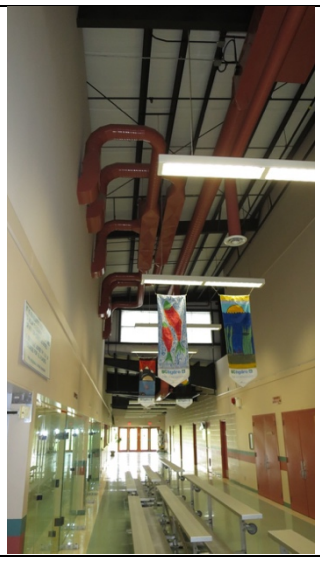


Photo 29 C3033 Painted Ductwork & Ceiling Purlins

Photo 30 D2000 - Fountain & Water Bottle Station

Photo 31 D2013 - Lavatories

Photo 32 D2014 - Commercial Sinks

Photo 33 D2014 - Sinks

Photo 34 D2022 - Hot Water Service

Photo 35 D3022.2 - RTU-12

Photo 36 D3042 - Exhaust Fans

Photo 37 D4011 - Sprinkler Tree

Photo 38 D4095 - Hood Fire Protection

Photo 39 D5022.1 - Internal Lighting

Photo 40 D5030 - Data & Telecom

Photo 41 D5092.1 Emergency Generator

Building Enclosure Condition Assessment Report | Project 20513.000

Sportsplex - Campbell River, 1800 South Alder Street, Campbell River, BC

To The Owners, City Of Campbell River
c/o Mr. Jason Decksheimer
City Of Campbell River
385 S Dogwood St
Campbell River BC V9W 8C8

Draft Submitted April 4, 2019 by
RDH Building Science Inc.
730 Grant Avenue #208
Courtenay BC V9N 2T3

Contents

Appendices

1 Introduction

1.1 Terms of Reference

RDH Building Science Inc. (RDH) was retained by The Owners, City Of Campbell River (City) to undertake an assessment of the current condition of the building enclosure of the buildings located at 1800 South Alder Street, Campbell River, BC.

This report documents the current condition of elements of the building enclosure. It may also provide information related to the specific sources of moisture or other physical factors which have resulted in the observed conditions.

This report has been undertaken for The Owners, City Of Campbell River and is not to be relied on by others.

1.2 Report Organization

Background information relevant to this building and the condition assessment is provided in Section 1 of this report.

The report is organized in accordance with five primary elements of the building enclosure as well as interior operating conditions:

1) Walls

2) Windows and Doors

3) Roofs

Our specific observations and other factual data related to these elements are contained in an appendix that corresponds to each of these elements. Section 2 discusses our observations and the implications with respect to current and future building enclosure performance. Recommendations for rehabilitation and renewal of building enclosure assemblies are provided where appropriate. Further, observations regarding specific maintenance items may be made if they relate to a proposed rehabilitation or renewals recommendation; however, this report does not constitute an overall maintenance and renewals plan.

The recommendations for rehabilitation and renewal are summarized in Section 3. Construction cost estimates and proposed timing associated with the recommendations made are presented with a discussion of alternate conceptual approaches, phasing and advantages of various implementation scenarios where appropriate.

1.3 Documents Reviewed

The documents provided to and reviewed by RDH are listed in .

TABLE 1.1 DOCUMENTS REVIEWED	
DOCUMENT DESCRIPTION	
Architectural Drawings	Weber and Associate Architectural Consultant Inc.
Engineered Building Fabrication Drawings	Varco-Pruden Buildings
Structural Drawings	Yolles Consulting Engineers Inc.

TABLE 1.1 DOCUMENTS REVIEWED	
Electrical Drawings	Arnold Nemetz $ Associates Ltd.
Mechanical Drawings	DAS Limited

1.4 Building Description

A description of the buildings is provided in Table 1.2. The Building is primarily a pre-engineered steel building manufactured by Varco-Pruden Buildings.

TABLE 1.2 DESCRIPTION OF BUILDING	
Name	Campbell River Sportsplex
Address	1800 South Alder Steet Campbell River, BC
Date of construction	1994
Building enclosure requirements	N/A
Number of storeys	1
Type of construction	Steel
Structural system	Steel Structure on concrete foundation

1.1 Building History

A brief history of activities and events relating to the building enclosure assemblies as reported to us or as described in the documents reviewed is listed in .

TABLE 1.3 BUILDING ACTIVITIES RELATED TO ENCLOSURE PERFORMANCE	
DATE	
1994 to Present	Membrane repair work has been performed on the walls and roof areas.

2 Discussion of Building Enclosure Performance

2.1 Walls

Conditions and performance of the wall assemblies at interfaces that occur between the walls and other major elements of the enclosure (windows, doors and roofs) are discussed in later sections of this report. This section therefore focuses on the wall assembly itself as well as penetrations and other features within the walls areas.

The metal cladding at the Sportsplex is part of the pre-engineered building system and employs what is typically referred to as a "face seal" strategy for rainwater management. Face seal walls are not tolerant of moisture penetration past the cladding as there is no effective means for drainage or drying.

Face seal wall assemblies control rain penetration primarily through the water tightness of the exterior cladding surface, and the continuity of the exterior shedding surface between the cladding and other wall elements, penetrations and interfaces (e.g. windows, vents, etc.).

Water tightness and the continuity of the cladding surface are critical performance factors, and they are difficult to achieve during construction and onerous to maintain over the service life of the building. There is significant likelihood that some level of moisture entry behind the cladding will occur. Therefore, face sealed wall areas with a high exposure to wind driven rain are still vulnerable to water ingress and damage.

The long wetting periods and short drying periods in a coastal climate limit the drying potential of a face sealed wall assembly. Moisture that reaches the insulation behind the cladding is likely to be retained for long periods of time and can cause corrosion of the metal framing components and cladding attachment components. As is difficult to interface the insulation with penetrations and areas such as the top and bottom of walls leakage may also result when water penetrates the cladding. The degree to which the exterior walls are exposed to the weather (wind driven rain) has a direct impact on their performance. Most of the wall areas are not protected by roof overhangs and are considered to be exposed.

Key observations are described in a following section of the report.

There are two general wall assemblies at the Sportsplex which comprise of:

- → The lower level of wall consists of painted block against an insulated steel stud back up wall. Refer to Table 2.1 below.
- → Metal cladding installed directly onto the metal wall structure. Faced batt insulation is compressed against the back of the metal cladding. Refer to Table 2.2 below.

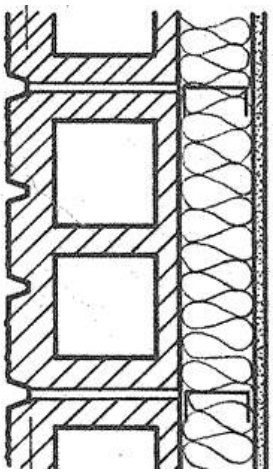
TABLE 2.1 BLOCK WALL ASSEMBLY	
Block Veneer Walls	Confirmed by Exploratory Openings
 Exterior Interior	**Exterior** ⇢ Painted Concrete Block ⇢ 2.5" Steel Stud Framing (varies) ⇢ 2.5" Fibreglass batt insulation (varies) ⇢ Polyethylene vapour barrier ⇢ Gypsum wall board (varies) **Interior**
	

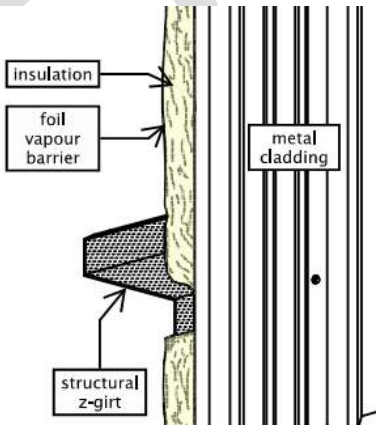
TABLE 2.2 METAL WALL ASSEMBLY	
Metal Clad Walls	Confirmed by Exploratory Openings
	**Exterior** ⇢ Metal Cladding – Exposed Fasteners ⇢ Design 3.5" batt insulation with integral foil vapour barrier **Interior**

TABLE 2.2 METAL WALL ASSEMBLY	
	

→ The interface between the metal cladding and the block wall generally reflects the architectural details. Refer to Figure 2.1 below.

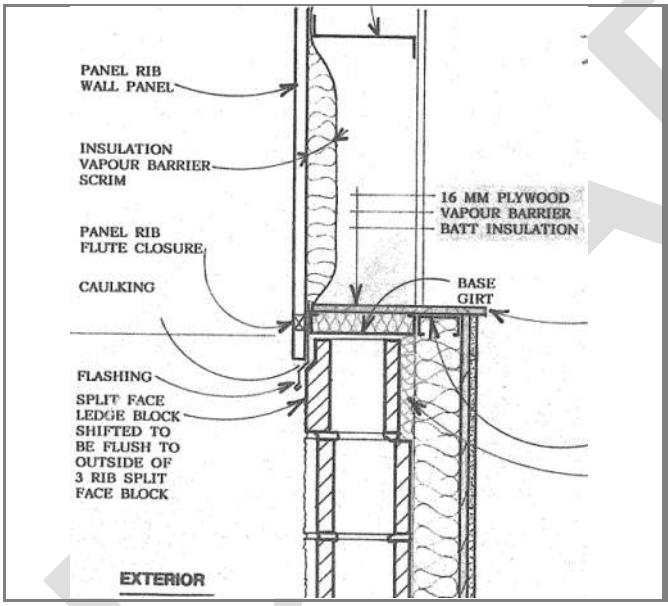


Figure 2.1 Metal to Block Interface

The interface between the metal cladding and the block wall along the base of the wall appeared to be generally consistent with the architectural detail.

2.1.1 Observations

Key visual observations noted during the site assessment related to the walls include:

→ Overhangs can provide a varying degree of protection for the exterior walls. The majority of the walls have no overhang protection (Figure 2.2) and are considered to have a high exposure to weather.

Figure 2.2 Wall Protection

Wall cladding is exposed to rain fall.

→ Corrosion on the surface of the metal cladding under covered locations (Figure 2.3).

Figure 2.3 Cladding Corrosion

Surface corrosion at protected cladding locations such as directly under gutters.

→ Surface corrosion on exposed cladding fasteners and on metal panel at fastener penetrations (Figure 2.4).

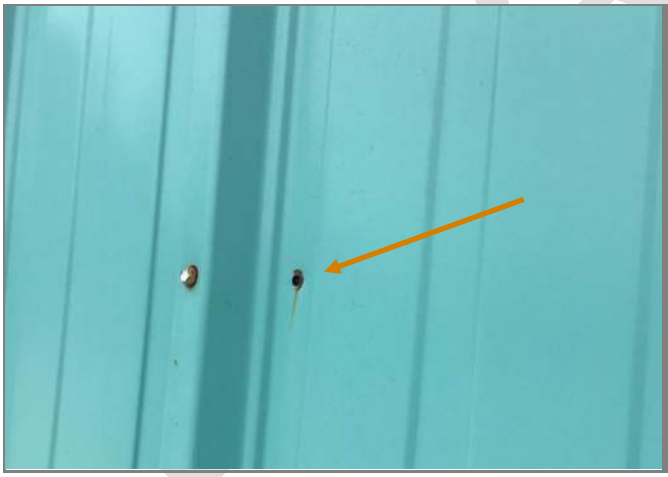


Figure 2.4 Cladding Fasteners

Corrosion identified on fasteners and at fastener penetration.

→ Wet insulation at base of wall details including below windows (Figure 2.5).

Figure 2.5 Cladding Insulation

Bottom of insulation wet at pinch point of insulation blanket.

→ Window head flashing and sill flashings are originally installed without a seal to the window which can result in unintended wetting of the insulation behind the metal cladding (Figure 2.6). Many window perimeters have had remedial sealant installed.

Figure 2.6Window Sill Flashing

Debris visible below the window sill flashing.

→ The metal soffits are generally an extension of the wall cladding. The profile and colour are the same as the metal cladding. The majority of the metal soffits were found to be corroding (Figure 2.7).

Figure 2.7 Soffits

Corrosion of the metal soffits.

→ Cracking in the block wall was observed at several locations as well as spalling of the block (Figure 2.8).

Figure 2.8 Block Wall

Spalling at block wall corner and cracking noted.

→ Joints in the sill flashing at the base of the metal cladding above the brick was simply overlapped at the few locations reviewed (Figure 2.9). The sill flashing is intended to protect the top of the block wall. It is noted that much of the block spalling and efflorescence is occurring at corners.

Figure 2.9 Cladding Sill Flashing

Open joint in the head flashing of the block wall.

→ Window sill flashings and perimeter sealant are in place to protect the block (Figure 2.10). The sill flashing is intended to protect the top of the block wall.

Figure 2.10 Window Sill Flashing

Covers the bottom course of block.

2.1.2 Discussion and Recommendations

The general performance of the wall can also be gauged by looking at the results of our Observations from the exploratory work which is more defined in Appendix A.

Metal Cladding

The exploratory work confirms that significant and ongoing remedial work has been performed to the metal cladding over several years to maintain the performance of the building. We understand that there are still several areas that are experiencing intermittent water leakage to interior spaces.

The general condition of the metal cladding is reasonable for its age. The main field of the cladding provides adequate resistance to water penetration, detailed areas at the base of wall, windows and other mechanical penetrations are resulting in wet insulation or leakage to the interior. Typically a cladding assembly with exposed fasteners could undergo a fastener replacement program and some improved sealant work to result in continued performance, however in the case of the Sportsplex metal clad wall assembly the amount of detailing in the building enclosure cannot be greatly improved without major modifications.

In regards to insulation value the design drawings call up 3.5" of batt insulation panels which is nominally results in an R-Value of approximately R-12. Due to the constriction of the insulation at the structural z-girts the effective R-Value of the metal clad wall assembly will be much less. It is noted that the current effective R-value requirement in the building code for metal buildings is R-14.5 effective.

For the detailed wall areas, implementing a strategy of improved surface water shedding details and sealing, in an attempt to perfect the face seal of those areas, is not recommended. We recommend that the exposed areas of the metal cladding be removed and replaced with a rainscreen cladding assembly and improved air barrier detailing. There is a potential to retain the metal cladding at large wall areas with no penetrations as shown in the figure below, although there is a risk of future leakage through perpetrations such as fasteners or lights etc.

Figure 2.11 South West Elevation - Metal Cladding

Potential location to retain metal cladding.

This report contemplates the replacement of the metal cladding in conjunction with the window replacement and roof replacement. Further consideration to retain certain portions of the metal cladding could be considered as the renewal program is developed.

Block Wall

We did not note any significant water leakage through the block wall, however we did observe efflorescence through the paint, cracks in the block extending through the paint coating and spalling of the block. The block wall resists moisture primarily through the continuity of the paint coating. The block has some capacity to absorb moisture and slowly dry to either the exterior or interior depending on the direction of the vapour drive. Concentrated leakage into the block wall will likely not dry due to the presence of paint coating and interior poly vapour barrier. Concentrated leakage can occur through discontinuities in the paint or water drainage from the metal cladding above into the cores of the block. As the block relies on the paint coating as a face seal wall assembly it is important to adequately protect the top of the block and maintain the paint coating.

This report contemplates two options to address the block wall portions of the building:

- → Repair the cracks and spalled portions of block. Repaint portions of the block as required after the repair work. Adequately protect the top of the block and provide a significant drip edge during the metal cladding renewal program.
- → Repair the cracks and spalled portions of block. Repaint portions of the block as required after the repair work. Overclad the block wall to create a rainscreen wall assembly. There are many cladding options such as Hardie lap siding or panel, metal or stucco.

The over cladding of the wall will provide some redundancy in the assembly and cracks in the block will be protected by the cladding and likely not result in significant water leakage into the building, whereas simply recoating the block at repair locations will not prevent water ingress if the block continues to crack through the paint coating.

RECOMMENDATIONS	
1	Replace the metal soffits.
2	Metal Wall Option A - Replace metal wall cladding with a new improved rainscreen cladding assembly.
3	Metal Wall Option B - Retain the existing wall assembly and perform maintenance as required. Modifications will be required with the installation of the new roofing.
4	Block Wall Option A- Repair the block wall and maintain the existing wall coating with improved detailing.
5	Block Wall Option B- Repair the block wall and over clad with a rain screen assembly.

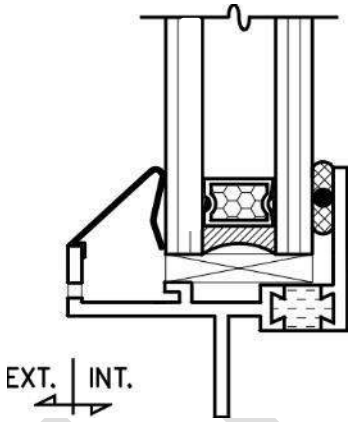
2.2 Windows & Doors

2.2.1 Windows

The windows on this building are aluminum windows installed in 1994. They have thermally broken aluminium frames with dual-glazed insulating units (IGU). They are classified as “concealed barrier assemblies” (described in Table 2.3). There are sliding operable units on the ground floor only.

The window assemblies are typical of those installed 26 years ago and have a proven record of poor resistance to interior condensation and rainwater leakage. The insulated

glazing unit seal consists of a butyl poured in place seal. These types of seals do not tend to last as long as metal spacer bar type seals.

TABLE 2.3 WINDOW ASSEMBLIES	
1. Punched Aluminium Windows	
	
Manufacturer	Not Available
Age	26
Drainage	Weepholes
Thermal Break	Yes
Opener Type	Awning
Flashing	Sill and head.
Perimeter Flashing or Sealant	Random remedial sealant at metal cladding. Sealant at Brick
Sub Sill Drainage	No

The windows rely on the exterior metal glazing stop to shed water away from the horizontal mullions of the window frame. The lack of a seal between the metal glazing stop and the glass due to discontinuities in the gaskets can allow a significant amount of water to enter into the glazing cavity beneath the glass. To prevent water that enters the glazing cavity from leaking into the building, there is:

- → A gasket of glazing tape seal between the innermost face of the glass and the window frame.
- → A thin cap seal application of silicone seal over the irregular surface interface at the screw fastened mitre corners of the aluminium window frame.

The sealant at the mitred corner joints is susceptible to failure and screw splines and interfaces are vulnerable to leakage. At the exploratory openings made below windows, we did observe evidence of water leakage directly below the windows into the wall construction below, however we did not observe damage to the concealed metal materials

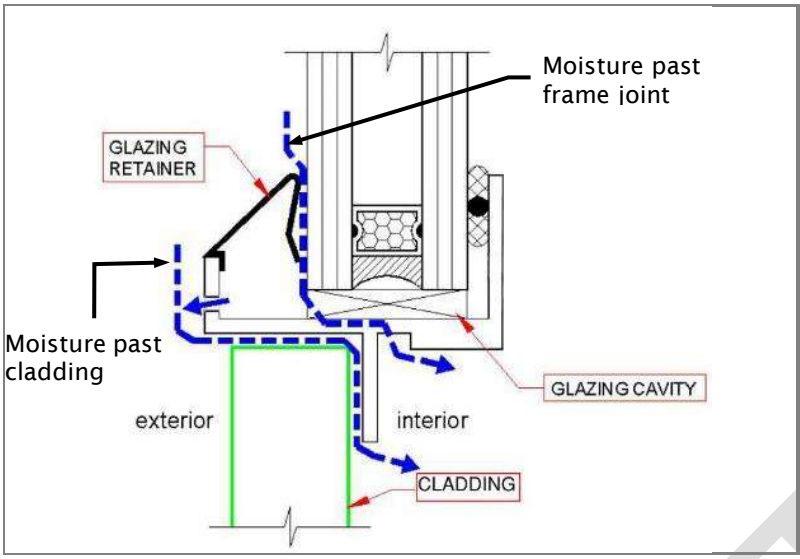


Figure 2.12

Key components of existing aluminium-framed window assemblies at MHC and potential water paths

There have been some window renewals over the past 5 years to replace the existing glass within the window assembly. The majority of the window glass is original.

2.2.2 Storefront Windows

We performed a cursory review of the storefront doors and windows at the front entrance and side entrance of the building. We understand that these windows and door are not original and have been installed in the last several years. Our focus was primarily spent on smaller punched windows. No leakage has been reported through these windows and therefore our review consisted was visual only.

This type of storefront window assembly is typically intended for areas low exposure to wind driven rand and typically would be installed at locations with overhangs. These windows have insulated glazing units with an aluminum spacer bar which is appropriate for these large glass sizes.

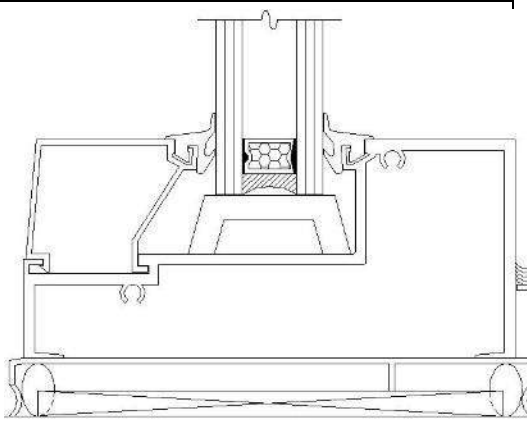
TABLE 2.4 WINDOW AND DOOR ASSEMBLIES	
1. Storefront Aluminium Windows and Doors	
	
Manufacturer	Unknown
Age	5

TABLE 2.4 WINDOW AND DOOR ASSEMBLIES	
Drainage	Concealed Weepholes to sub sill
Thermal Break	Yes
Opener Type	Door
Flashing	None
Perimeter Trim or Sealant	Sealant
Sub Sill Drainage	No

2.2.3 Observations

Key visual observations noted during the site assessment related to the windows include:

→ Remedial exterior perimeter sealant at the upper level windows on most elevations (Figure 2.13). This sealant has reached the end of its effective service life at most locations reviewed.

Figure 2.13 Window Sealant

Multiple applications of sealant installed at window perimeters.

→ We performed localized spray testing to identify the source of ongoing leakage below the hall way clerestory windows on the east elevation. Water was directed at the centre of the windows and at the perimeter interface with the cladding (Figure 2.14). No water ingress was observed dripping on the interior during the test. When the metal cladding was removed below the window we found that the insulation was wet. The water testing identified discontinuities in the perimeter interface of the window.

Figure 2.14 Water Test

Water testing at the hall window on the east elevation and the resultant moisture identified in the insulation below.

→ Failed seal of the insulated glazing unit (Figure 2.15). Several windows were found to have moisture between the glass units. This typically indicates the end of the glazing unit service life.

Figure 2.15 Window Seal

Movement of the glass seal can result in fogging between the units.

→ It does appear that some of the insulated glazing units, specifically in the exercise rooms, have been replaced, however we noted that some of the glass stops were broken during the replacement (Figure 2.16).

Figure 2.16 Window Glass Stop

Broken glass stop.

→ Windows within the block wall appear to be in better shape compared to the windows in the metal clad areas. This is likely due to their more protected locations at the lower level. We did note that there were several failed insulated glazing units in these windows. The perimeter sealant has not yet reached the end of its service life however it would be prudent to replace the sealant at the time of renewals. (Figure 2.17).

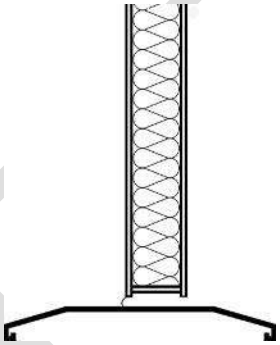
Figure 2.17 Windows in Block

Exterior sealant.

Failed insulated glazing unit.

2.2.4 Doors

The doors primarily consist of steel swing doors with single and double leaf swing doors. Many of the doors have adequate overhang protection, in the form of canopies or overhang protection. Due to the location of the complex many of the doors are likely exposed to some wind driven rain.

TABLE 2.5 DOOR ASSEMBLIES	
1. Aluminium Doors	
	
Manufacturer	Unknown
Age	26
Drainage	none
Flashing	None
Perimeter Trim or Sealant	Remedial sealant
Sub Sill Drainage	No

2.2.5 Observations

Key visual observations noted during the site assessment related to the doors include:

→ Corrosion identified on several of the painted steel doors and the steel columns (Figure 2.18).

Figure 2.18 Exterior Doors

Repainting of steel doors and columns required.

2.2.6 Discussion and Recommendations

There have not been any reports of significant leakage around the doors. Considering that there are only a small portion of doors that are exposed we suggest that improvements be considered when adjacent renewal work is performed which would include renewing gaskets, painting and sealant work.

RECOMMENDATION	
6	Replace the exterior windows with higher performing windows and improved detailing.
7	Repaint exterior steel doors. The replacement of gaskets and sealants should also be considered at this time. Repainting of exterior metal columns should be completed in conjunction with the door painting.

2.3 Roofs

The metal roofing at the Sportsplex is a similar to the metal wall cladding assembly. The metal roofing at the Sportsplex is also part of the pre-engineered building system and employs a “face seal” strategy for rainwater management. Face seal roofs of this type are not tolerant to moisture penetration past the roofing and can retain water within the insulation panels for long periods of time as there is no effective means for drainage or drying.

Key observations are described in a following section of the report.

There is only one common roof assembly comprised of:

→ Metal roofing installed directly onto the metal roof structure. Faced batt insulation is compressed against the back of the metal roofing. Refer to Table 2.6 below.

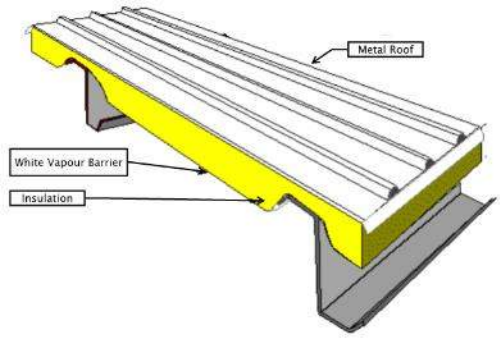
TABLE 2.6 METAL ROOF ASSEMBLY	
Metal Roof	Confirmed by Exploratory Openings
Exterior  Interior	**Exterior** ⇢ Metal Roof ⇢ Insulation with integral foil vapour barrier **Interior**

TABLE 2.6 METAL ROOF ASSEMBLY


A common service life applied to metal roofs of this type is 30 years. At the current age of 26 years, the metal roofs are approaching that common service life limit.

A common service life for exposed fasteners for metal roofs is 10-15 years. The limit of service life for fasters can be considered as any of the following:

- → Permitting water ingress around the fasteners. This can be by gasket deterioration or fastener / roofing separation.
- → Corrosion of the fasteners.

No past fastener renewal work has been reported.

2.3.1 Observations

Key visual observations noted during the site assessment related to the roof include:

→ The foam gaskets at the roof edges are a key component to resist water ingress behind the panel. We found the gaskets are deteriorated and therefore not effective (Figure 2.19).

Figure 2.19 Roof Gaskets

Deterioration of the foam roof edge gaskets.

→ The roofing is secured to the structure with exposed metal fasteners. We observed corrosion on the majority of the fasteners (Figure 2.20).

Figure 2.20 Roof Fasteners

Surface corrosion on exposed metal fasteners.

→ Corrosion was found at the edge of the metal roofing at a lap joint in the 2 exploratory openings made (Figure 2.20).

Figure 2.21 Roof Corrosion

Corrosion of the metal roof panel.

→ Patches and seals at penetrations through the metal roofing have failed in several locations (Figure 2.22). As there is not a moisture barrier below the metal to protect the insulation discontinuities in the roof seal will result in wet insulation and potential leakage into the building.

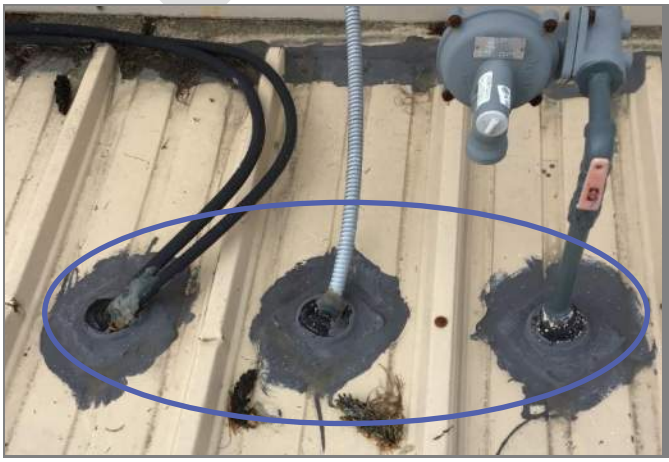


Figure 2.22 Roof Penetrations

Damaged roof seals.

→ Where the roofing ends along the plane of an exterior wall there is no means to direct water away from the wall panels (Figure 2.20). Given the amount of membrane remedial work observed it reinforces the assumption that this detail does not effectively keep water out of the wall assembly.

Figure 2.23 Roof Eave to Wall Junction

Failing gaskets will not keep water from draining behind the metal wall cladding and wetting the insulation.

This condition occurs at many locations on the building.

→ A thermal scan was performed at random locations from the interior. A location was selected just outside the women's change room below the clerestory window where leakage has been reported. The thermal scan shows cooler temperatures in the insulation blankets which could be the result of water in the insulation (Figure 2.24).

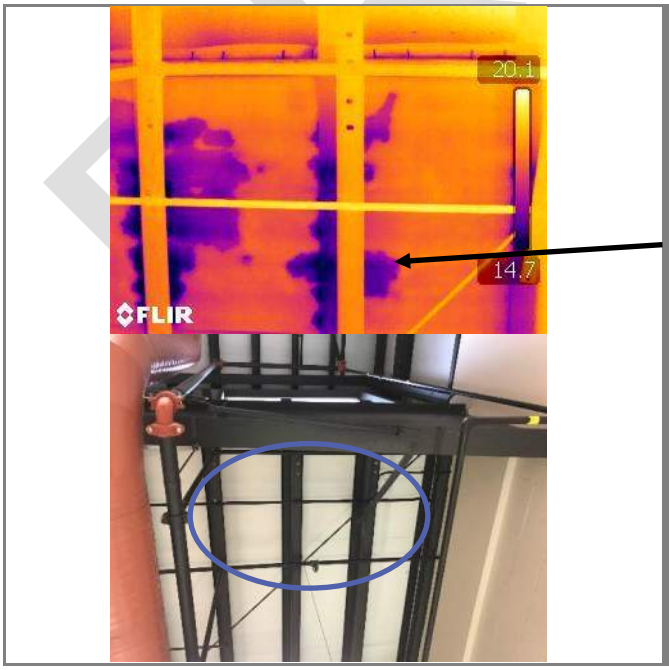


Figure 2.24 Roof Thermal Image

Thermal Image of the underside of the roof insulation blanket.

Dark blue indicates cooler temperatures and likely wet insulation.

2.3.2 Discussion and Recommendations

The general condition of the metal roofing is reasonable for its age. However the number of mechanical penetrations and wall interface details has led to an intensive maintenance program and leakage issues.

Installation of new fasteners will not resolve the metal roof's current leakage problems primarily due to the number of penetrations through the roof.

Our visual review confirms that significant and ongoing remedial work has been performed to the metal roofing over several years to resolve leakage issues and as preventative maintenance. We understand that there are still several areas that are experiencing water leakage to interior spaces. Our thermal scans have confirmed that leakage occurs into the insulation blankets at numerous locations. The wet insulation will reduce the thermal resistance of the insulation.

In regards to insulation value the design drawings call up 3.5" of batt insulation panels which nominally results in an R-Value of approximately R-12. Due to the constriction of the insulation at the structural metal roof channels the effective R-Value of the metal roof assembly will be much less. It is noted that the current effective roof R-value requirement in the building code for metal buildings is R-18 effective.

In regards to renewing the metal roofing there are many options to consider. We have contemplated two strategies.

Option A – Replacement of the metal roof like for like.

This option would include the removal of the existing metal roof and replacement with a similar metal roof panel. There would be no adjustments to the insulation value. We understand that new mechanical equipment is scheduled for the roof. Improved detailing could be achieved if the projects occurred simultaneously. Although the insulation would not be disturbed the interior of the building would likely have to be vacated under work areas due to the risk of material dropping through the insulation blankets to the interior.

Option B – Overcladding with an added moisture barrier, insulation and new metal roofing. This assembly is more complex than simply replacing the metal roofing in Option A, however it does provide a more traditional metal roof which includes a protected moisture barrier. The moisture barrier below the metal roofing will act as a secondary layer to seal around all roof penetrations. In addition, there is an opportunity to add insulation to the assembly and improve the thermal performance of the roof. This assembly has less risk of future leakage into the building than the replacement of the metal described in Option A. The new assembly would be installed over the existing roof creating little to no disruption to interior operations.

RECOMMENDATION	
8	Metal Roof Option A - Replace the metal roof and retain the insulation. Make improvements to detailing.
9	Metal Roof Option B - Overclad the existing roof with a new exterior insulated metal roof assembly.

3 Recommendations

3.1 Summary of Rehabilitation Needs

Our recommendations are based on a combination of factors including a review of design drawings and other available documentation, information collected at the building through visual observations and exploratory openings, as well as experience and knowledge gained from investigations of many other buildings with similar assemblies and details.

3.2 Summary of Recommendations

Table 3.1 lists all building enclosure rehabilitation and renewal tasks that were identified in Section 3 of this report. These recommendations form the basis for the costing that is provided and discussed in the following section of this report.

TABLE 3.1 SUMMARY OF RECOMMENDATIONS	
1	Replace the metal soffits.
2	Metal Wall Option A - Replace metal wall cladding with a new thermally improved rainscreen cladding assembly.
3	Metal Wall Option B - Retain the existing wall assembly and perform maintenance as required. Modifications will be required with the installation of the new roofing.
4	Block Wall Option A- Repair the block wall and maintain the existing wall coating with improved detailing.
5	Block Wall Option B- Repair the block wall and over clad with a rain screen assembly.
6	Replace the exterior windows with higher performing windows and improved detailing.
7	Repaint exterior steel doors. The replacement of gaskets and sealants should also be considered at this time. Repainting of exterior metal columns should be completed in conjunction with the door painting.
8	Metal Roof Option A - Replace the metal roof and retain the insulation. Make improvements to detailing.
9	Metal Roof Option B - Overclad the existing roof with a new exterior insulated metal roof assembly.

3.3 Estimated Rehabilitation Project Costs

It is important to understand that the budget construction costs are based on our experience with similar projects; they are presented as probable costs for the program listed in the previous section and are based on approximate unit rates without a complete design developed. Budget estimates will be refined and a more precise overall figure will be obtained during the design, construction documents, and tendering phases of the project. The actual cost will be established when the contractors bid on the project and when a contract is awarded. The construction industry pricing environment can vary significantly and is dependent, to a certain extent, on factors external to the actual project.

In addition to construction costs, allowance needs to be made for project costs such as fees, permits and owner contingencies. In order to assist you in planning and to advise on the relative magnitude of other project costs, The Estimated Project Costs for the recommended rehabilitation program have been provided in our Enclosure Renewals Budgeting Letter Dated September 26, 2018. An owner contingency of 10% is included. An owner contingency is essential in rehabilitation construction to account for costs that may arise in the event of unforeseen damage or issues not directly related to the enclosure rehabilitation project.

3.4 Next Steps

The condition assessment report presents conceptual level recommendations with respect to rehabilitation and renewal activities. It is important to understand that these recommendations do not provide a basis for implementing remedial work. Conceptual recommendations need to be developed, refined, and documented in detail before the construction work can be tendered to contractors or a building permit obtained.

The next step typically begins with the design process where the consultant considers alternative ways of addressing existing problems and assists you in making decisions with respect to specifics of the rehabilitation program. Once decisions are made, the selected design is developed and documented in greater detail in the form of drawings and specifications. These documents indicate the exact extent and nature of the remedial work, materials to be used etc.

The drawings and specifications are used to obtain bids from pre-qualified contractors, obtain a building permit to carry out the work, and as the basis to carry out the rehabilitation work. Once a contractor has been selected, usually on the basis of the lowest submitted bid, the project can move into the construction stage. During this stage, the remedial work program that has been designed by the consultant (with Owner involvement and agreement) is implemented, and repair and reconstruction takes place on-site. The consultant administers the construction contract and undertakes periodic field review of construction as the work proceeds. It is also common for the consultant to provide a maintenance and renewals plan (or update an existing plan) for the rehabilitated enclosure assemblies upon completion of the construction.

Yours truly,

Robin Breuer | AScT, RRO
Associate, Senior Project Manager
rbreuer@rdh.com
250 703 4753
RDH Building Science Inc.

encl.

Appendix A

Observations

Campbell River Sportsplex

Sportsplex BECA

Created: 04-04-2019
Creator: Robin Breuer (@RBR)
Status:
Dates: 09-10-2018 - 04-04-2019

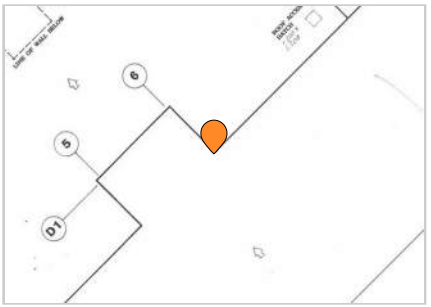
Description

RDH performed a building enclosure condition assessment on September 11th, 2018.

The following Observations were made during our Assessment.

#6 - Roof Edge

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-11-2018



Task messages (time in PDT)

Robin Breuer — 11 Sep 09:42 AM

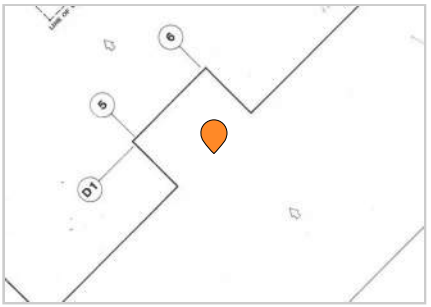
Robin Breuer — 11 Sep 09:43 AM

Robin Breuer — 29 Mar 12:05 PM

Observations
1. Remedial membrane work has been performed between the roof edge flashing and the metal roofing.
2. The edge of the metal roofing at lap joints is showing signs of corrosion.

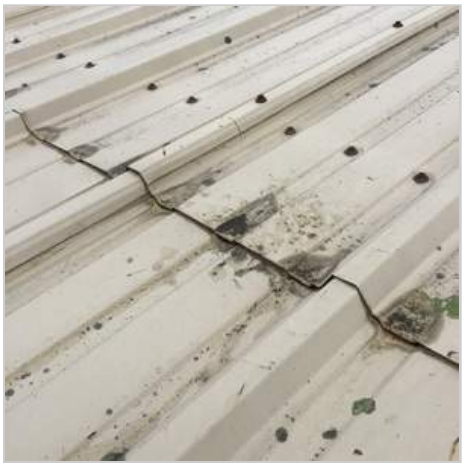
#7 - Metal Roofing @ lap joint

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-11-2018



Task messages (time in PDT)

Robin Breuer



11 Sep 09:44 AM

Robin Breuer

11 Sep 09:50 AM

Robin Breuer

11 Sep 09:50 AM

Robin Breuer

11 Sep 09:51 AM

Robin Breuer

11 Sep 09:51 AM

Robin Breuer

11 Sep 09:52 AM

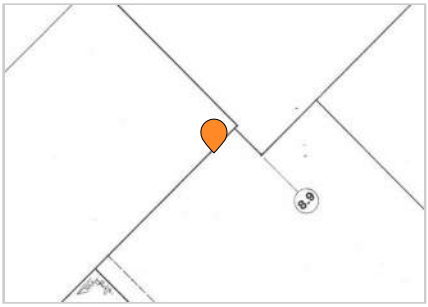
Robin Breuer

Observations
1. The tops of the metal fasteners are surface corroded. The body of the fastener is free from corrosion.
2. The insulation above the lap joint is clean and dry.
3. the butyl sealant remains soft and effective.

03 Apr 08:32 PM

#24 - Roof Gutter

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 10:20 AM

Robin Breuer

11 Sep 10:20 AM

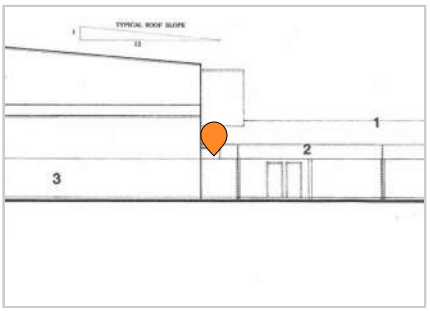
Robin Breuer

Observations
The outside let of the roof gutter is secured through the top of the metal roof.
The inside of the gutter was corroded. This corrosion will continue and result in holes through the gutter.

03 Apr 07:34 PM

#37 - Soffit to Wall Interface

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 12:24 PM

Robin Breuer

11 Sep 12:24 PM

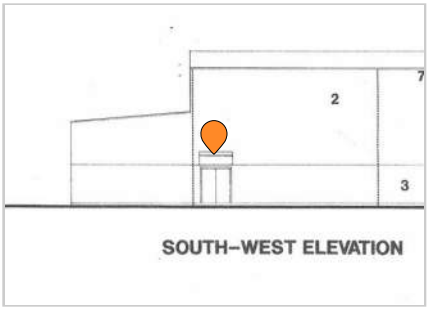
Robin Breuer

Observations
There is a significant gap in the air barrier at the junction between the soffit space and the adjacent wall. The sofft extends past the insulation blankets which act as the air barrier and vapour barrier. Renewal strategy should address the air barrier continuity at this typical locations.

03 Apr 08:17 PM

#31 - Metal Canopy

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

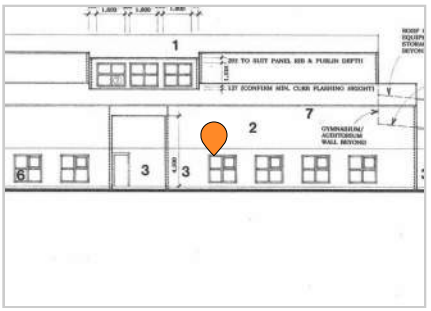
11 Sep 11:55 AM

Robin Breuer

11 Sep 11:55 AM

#28 - Ground Floor Window Sealant

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 11:51 AM

Robin Breuer

11 Sep 11:51 AM

Robin Breuer

11 Sep 11:51 AM

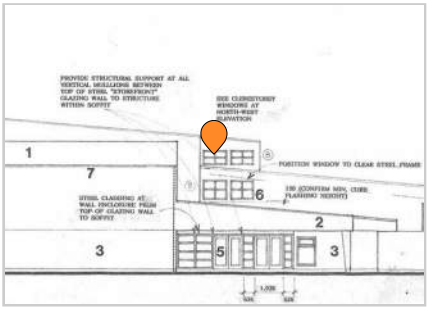
Robin Breuer

Observations
A urethane sealant is installed around the perimeter of the windows to seal to the block. The sealant is softening and yellowing indicating it has reached the end of its service life.

03 Apr 07:52 PM

#1 - Metal Cladding @ Window Sill

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-11-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 09:27 AM

Robin Breuer

11 Sep 09:28 AM

Robin Breuer

11 Sep 09:35 AM

Robin Breuer

11 Sep 09:36 AM

Robin Breuer

11 Sep 09:36 AM

Robin Breuer

11 Sep 09:37 AM

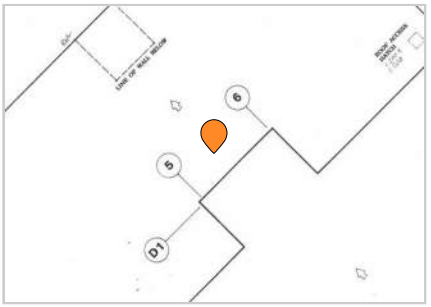
Robin Breuer

Observations:
1. Sealant work has been performed at the window perimeter. The sealant is aged and is at the end of it's service life.
2. Metal cladding under the window was removed. The insulation was found to be wet at fastener locations.
3. Liquid membrane patches were installed between the metal roof and the cladding .

29 Mar 11:48 AM

#4 - Roof Drains

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-11-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 09:34 AM

Robin Breuer

11 Sep 09:34 AM

Robin Breuer

11 Sep 09:34 AM

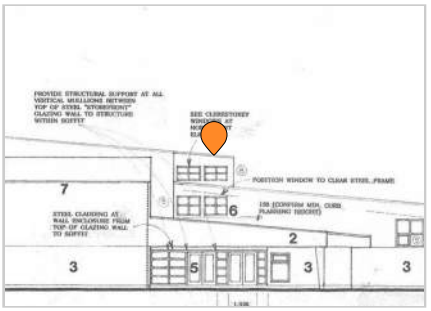
Robin Breuer

Observations
1. Gutters from upper metal roof areas drain onto the lower metal roofing.
2. Back sloped metal roofing counter flashings have resulted in a build up of debris against the metal cladding from the upper roof drains.

29 Mar 11:58 AM

#5 - Windows

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-11-2018



Task messages (time in PDT)

Robin Breuer — 11 Sep 09:38 AM

Robin Breuer — 11 Sep 09:39 AM

Robin Breuer — 11 Sep 09:39 AM

Robin Breuer

11 Sep 09:40 AM

Robin Breuer

11 Sep 09:46 AM

Robin Breuer

11 Sep 09:46 AM

Robin Breuer

11 Sep 09:48 AM

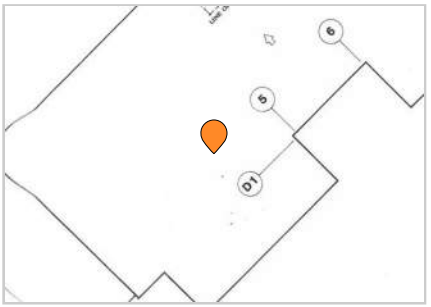
Robin Breuer

Observations
1. Water staining on the interior sill of the windows were observed at several locations.
2. remedial sealant work has been performed at the perimeter of many windows.
3. Insulation under the windows was found to be wet which could be a result of leaking joints in the window frame.
4. The seal between the insulated glazing unit and the window frame is failing at several locations reviewed.

29 Mar 12:02 PM

#3 - Metal Roof and Roof Penetrations

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-11-2018



Task messages (time in PDT)

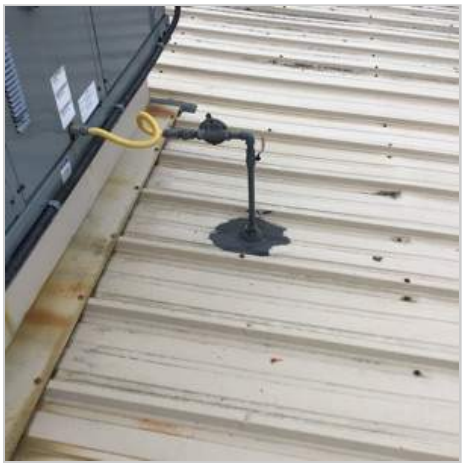
Robin Breuer

11 Sep 09:32 AM

Robin Breuer

11 Sep 09:32 AM

Robin Breuer



11 Sep 09:33 AM

Robin Breuer

11 Sep 09:33 AM

Robin Breuer

Observations
1. Exposed metal roofing fasteners are corroded.
2. Liquid membrane has been installed to seal around penetrations in the metal roofing such as gas lines or mechanical equipment. The liquid membrane is not part of the original roof assembly and is considered remedial work.

29 Mar 11:55 AM

#38 - Roof Ridge Edge Flashing

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018

Task messages (time in PDT)

Robin Breuer

11 Sep 01:10 PM

Robin Breuer

11 Sep 01:10 PM

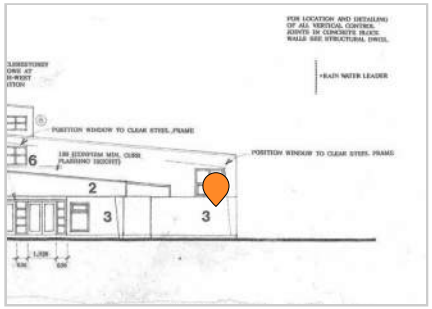
Robin Breuer

Observations
The gasket between the roof edge flashing and the metal roofing is deteriorated and not performing as intended. This is a primary seal to keep water out of the roof and wall assembly.

03 Apr 08:20 PM

#33 - Block Wall

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 11:49 AM

Robin Breuer

11 Sep 11:49 AM

Robin Breuer

11 Sep 01:40 PM

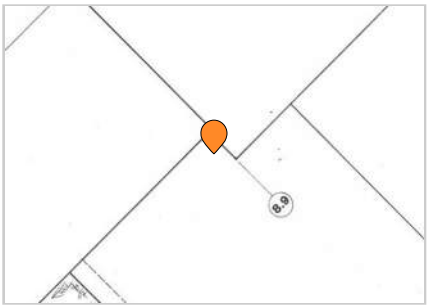
Robin Breuer

Observations
Cracking and spalling of the block wall was observed at an outside corner.
Unsealed corner posts and window interfaces could lead to water leakage onto the top of the block wall behind the coating resulting in cracking and spalling of the block.

03 Apr 08:08 PM

#11 - Wall Cladding Interior Corner

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer — 11 Sep 12:52 PM

Robin Breuer — 11 Sep 12:52 PM

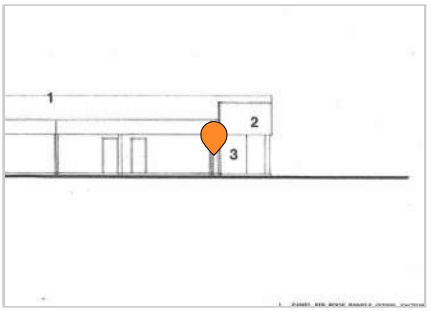
Robin Breuer — 11 Sep 12:52 PM

Robin Breuer — 01 Apr 11:20 AM

Observations
We removed an portion of the metal cladding at an inside corner below the end of a metal gutter. Debris and water staining was visible at the cladding joint in the corner. Corrosion on the fastener holes was noted. As there is exposed insulation in the cladding lap joint moisture at this location could be wicked in to the system by the insulation.

#32 - Steel Columns

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer — 11 Sep 11:57 AM

Robin Breuer — 11 Sep 11:57 AM

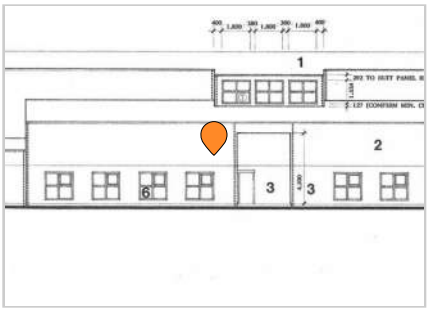
Robin Breuer — 11 Sep 11:57 AM

Robin Breuer — 03 Apr 08:06 PM

Observations
The steel columns are corroded and require repainting. A heavier coating may be prudent at the column base.

#14 - Interior Wall Area Below Roof Eave

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer — 11 Sep 01:49 PM

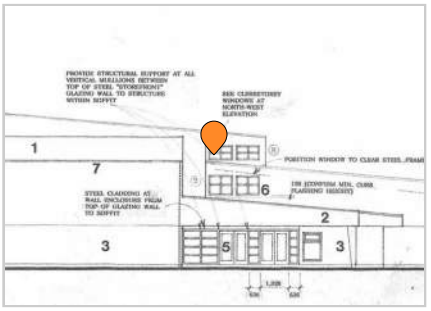
Robin Breuer — 11 Sep 01:49 PM

Robin Breuer — 03 Apr 09:59 AM

Observations
Significant water staining on the inboard side of the insulation panel.

#26 - Water Test Roof Edge

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 11:11 AM

Robin Breuer

11 Sep 11:27 AM

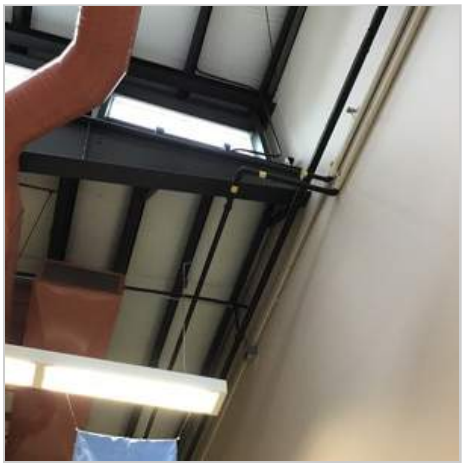
Robin Breuer

11 Sep 11:29 AM

Robin Breuer

11 Sep 11:45 AM

Robin Breuer



11 Sep 11:45 AM

Robin Breuer

Water was sprayed along the roof edge flashing above the clerestory windows with reported leakage. Water drops onto the floor below were observed during the test.

03 Apr 07:42 PM

#27 - Metal Soffits

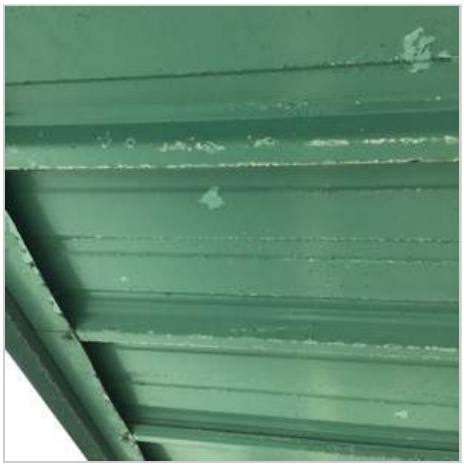
Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018

Task messages (time in PDT)

Robin Breuer

11 Sep 11:47 AM

Robin Breuer



11 Sep 11:47 AM

Robin Breuer

Observations
Corrosion was observed on the underside of the metal soffits. This can occur if the metal is not cleaned or is washed by rain water. Although cleaning and repainting is a renewal options, repainting may only last a few years before peeling and corrosion reoccurs.

03 Apr 07:48 PM

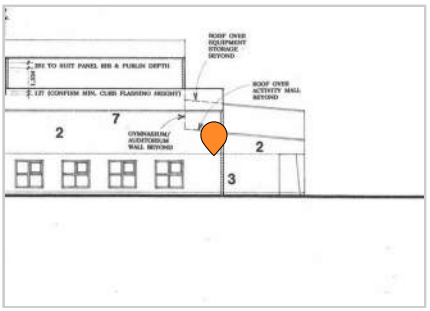
Robin Breuer

Corrosion was observed on the painted metal columns. Painting would be an appropriate renewal approach.

03 Apr 07:49 PM

#30 - Block Wall

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 11:52 AM

Robin Breuer

11 Sep 11:52 AM

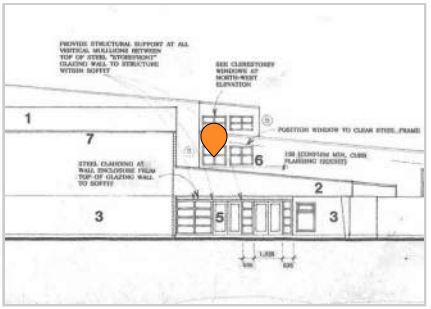
Robin Breuer

Observations
Spalling of the block was observed at two corners. This is likely a result of water trapped behind the block. Water behind the block could be a result of discontinuity in the paint coating or from the wall panels above.

03 Apr 08:01 PM

#17 - Remedial Work

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 02:22 PM

Robin Breuer

11 Sep 02:22 PM

Robin Breuer

11 Sep 02:22 PM

Robin Breuer

11 Sep 02:23 PM

Robin Breuer

11 Sep 02:23 PM

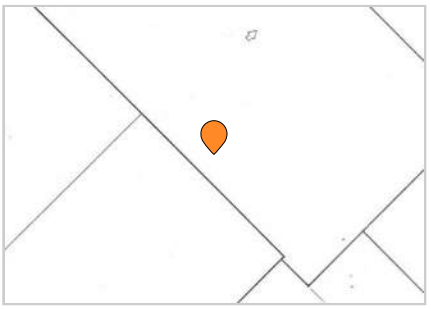
Robin Breuer

Observations
Remedial sealant work and membrane work has been performed at numerous wall and roof interfaces including:
1. Between base of wall flashing and roofing.
2. Between metal cladding and base of wall flashing.
3. Sealant installed between window frames and sill flashing.
4. Sealant installed between window head flashing and cladding.
5. Sealant installed at the interface between the roof gutter and the wall cladding.
We understand this work was done to resolve the leakage into the hall below the clerestory windows.

03 Apr 07:08 PM

#21 - Base of Wall Flashing at Roof Interface

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 10:08 AM

Robin Breuer

11 Sep 10:09 AM

Robin Breuer

11 Sep 10:10 AM

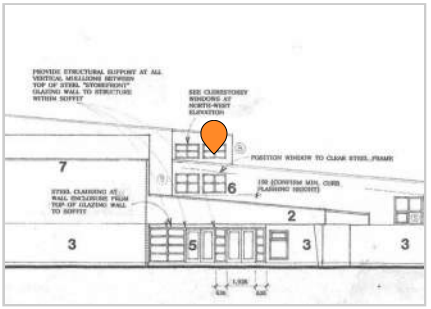
Robin Breuer

Observations
The gasket seal between the base of wall flashing and the metal roof is deteriorated in many locations reviewed. We found that the gasket is cracked, or separated from the roof surface. This has resulted in debris and likely water blowing past the primary roof seal.

03 Apr 07:23 PM

#25 - Window Test

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 10:50 AM

Robin Breuer

11 Sep 11:08 AM

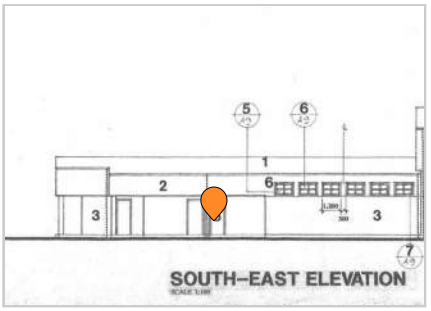
Robin Breuer

We tested two clerestory windows with report leakage into the hall below. We sprayed the perimeter of the windows with a spray wand. No active leakage was observed into the interior space below.

03 Apr 07:38 PM

#18 - Steel Exterior Doors

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 02:15 PM

Robin Breuer

11 Sep 02:15 PM

Robin Breuer

11 Sep 02:15 PM

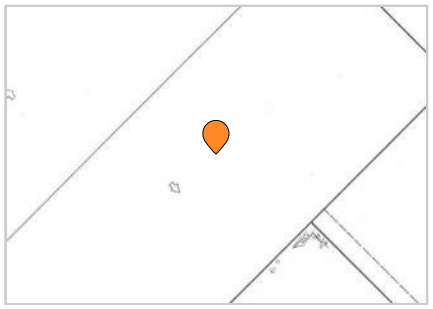
Robin Breuer

Observations
The exterior steel doors are all in similar condition. Corrosion is observed on most doors.

03 Apr 07:09 PM

#19 - Rooftop Mechanical Units

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 09:55 AM

Robin Breuer

11 Sep 09:55 AM

Robin Breuer

11 Sep 09:55 AM

Robin Breuer

11 Sep 09:56 AM

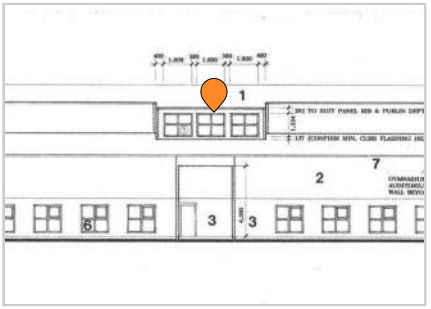
Robin Breuer

Observations
Remedial membrane work has been performed to seal the mechanical units to the metal roofing.

03 Apr 07:11 PM

#35 - Gutter Drains

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 11:31 AM

Robin Breuer

Observations
Roof gutters drain onto the lower roofs. This has resulted in more advanced corrosion of the metal roof components below the downspouts.

03 Apr 08:12 PM

#40 - Gutter Interface with Wall

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018

Task messages (time in PDT)

Robin Breuer

11 Sep 12:02 PM

Robin Breuer

11 Sep 12:03 PM

Robin Breuer

11 Sep 02:46 PM

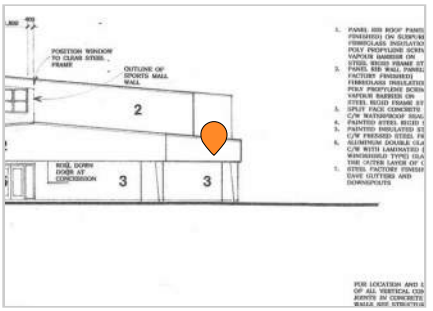
Robin Breuer

03 Apr 08:28 PM

Observations
1. Remedial membrane work has been performed at the wall to roof interface leading up to the gutter.
2. Efflorescence was observed on the face of the block below the gutter.
3. Moisture was observed at the base of the block wall below the gutter termination.

#36 - Metal Soffit

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer — 11 Sep 11:59 AM

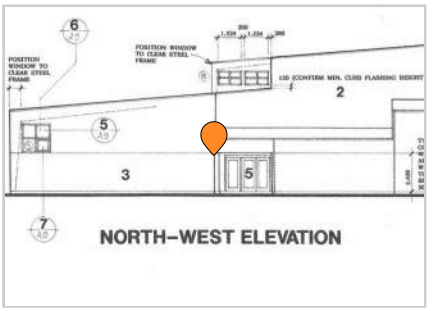
Robin Breuer — 11 Sep 11:59 AM

Robin Breuer — 03 Apr 08:14 PM

Observations
Corrosion of the metal soffit was observed. Ensure the exhaust ducts do not vent into the soffit.

#29 - Exterior Steel Columns

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 11:53 AM

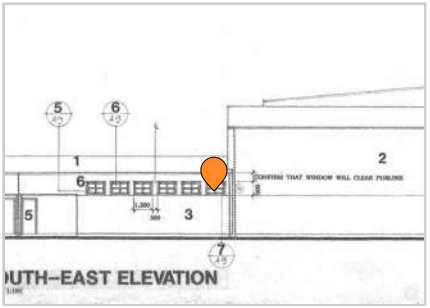
Robin Breuer

Observations
The paint on the metal columns requires renewal. As there is corrosion on most of the posts the paint renewal will require advanced surface preparation.

03 Apr 07:59 PM

#15 - Window in Metal Wall Panel

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 02:09 PM

Robin Breuer

11 Sep 02:10 PM

Robin Breuer

11 Sep 02:11 PM

Robin Breuer

11 Sep 02:11 PM

Robin Breuer

11 Sep 02:12 PM

Robin Breuer

Observations
1. water staining behind window sill flashing.
2. Corrosion of metal panel at fastener holes.
3. Corrosion of metal jamb flashing at cut ends.
4. Failed sealant at window sill.

03 Apr 10:03 AM

#23 - Roof Edge Flashing

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018

Task messages (time in PDT)

Robin Breuer

11 Sep 10:15 AM

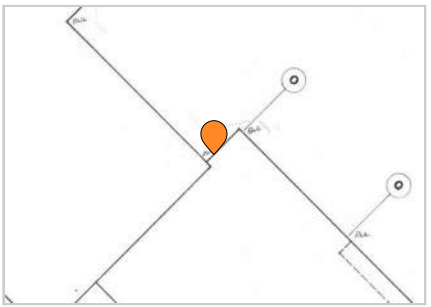
Robin Breuer

Observations
The edge flashing has lifted off the sealant exposing the edge of the metal roofing below.

03 Apr 07:31 PM

#13 - Wall Cladding to Roof Interface

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 01:00 PM

Robin Breuer

11 Sep 01:00 PM

Robin Breuer

11 Sep 01:01 PM

Robin Breuer

Observations
The joint between the metal roofing and the base of the metal panels has been sealed with liquid roof membrane. Although this remedial procedure may have reduced water leakage into the building, it has also restricted drainage from the metal panels.

03 Apr 09:58 AM

#10 - Roof Mechanical Penetrations

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018

Task messages (time in PDT)

Robin Breuer — 11 Sep 12:55 PM

Robin Breuer — 11 Sep 12:55 PM

Robin Breuer — 11 Sep 12:55 PM

Robin Breuer

11 Sep 12:56 PM

Robin Breuer

11 Sep 12:56 PM

Robin Breuer

11 Sep 12:57 PM

Robin Breuer

11 Sep 12:57 PM

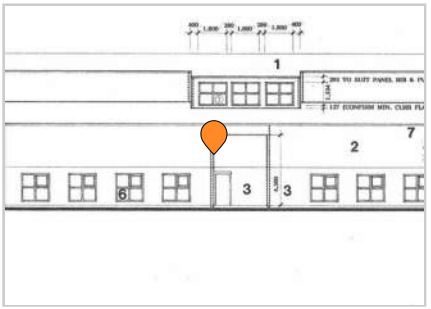
Robin Breuer

Observations
There are multiple mechanical penetrations through the metal roof. All locations have had liquid membrane repairs performed. Several of the repairs have failed at locations including pipe and cable penetrations through the roof.

01 Apr 11:16 AM

#16 - Metal Wall Panel Corner Above Block

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 01:37 PM

Robin Breuer

11 Sep 01:38 PM

Robin Breuer

11 Sep 01:38 PM

Robin Breuer

11 Sep 01:39 PM

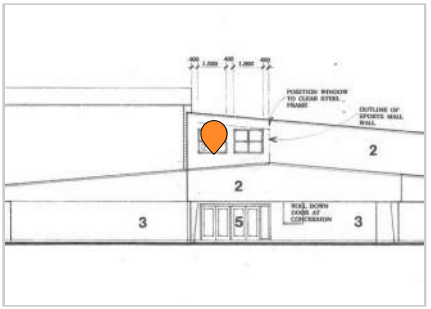
Robin Breuer

Observations
1. Bugs behind metal wall panel.
2. Metal cladding corrosion at fastener holes.
3. Wet insulation at the base of the insulation.
4. Poorly jointed/sealed sill flashing over block wall below.

03 Apr 10:07 AM

#39 - Metal Cladding Below Window

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 12:38 PM

Robin Breuer

11 Sep 12:38 PM

Robin Breuer

11 Sep 12:39 PM

Robin Breuer

11 Sep 12:40 PM

Robin Breuer

11 Sep 12:41 PM

Robin Breuer

11 Sep 12:42 PM

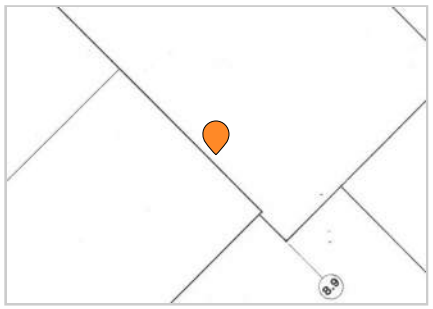
Robin Breuer

Observations
1. Remedial sealant is installed around the perimeter of the window.
2. The insulation below the window was clean and free from significant staining.

03 Apr 08:23 PM

#22 - Roof Edge Cap

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 10:03 AM

Robin Breuer

11 Sep 10:05 AM

Robin Breuer

11 Sep 10:05 AM

Robin Breuer

11 Sep 10:06 AM

Robin Breuer

11 Sep 10:06 AM

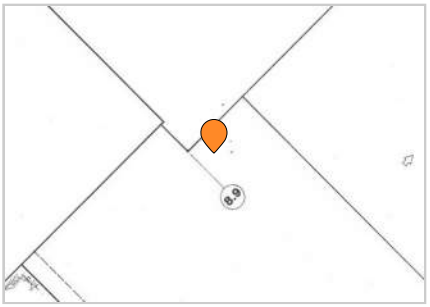
Robin Breuer

Observations
1. Fasteners securing the edge flashing are corroded.
2. The butyl sealant seal between the roof and the edge flashing is dried and not effective to keep water away from the fastener holes.
3. The joint between the edge flashings are not sealed.

03 Apr 07:30 PM

#9 - Wall Cladding Corner Post

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 12:53 PM

Robin Breuer

11 Sep 01:03 PM

Robin Breuer

Observations
We removed a corner post above a base of wall remedial detail. There was no significant staining observed on the upper insulation behind the corner post. We did observe an accumulation of debris at the base flashing below the corner post. The bottom of the insulation in the corner post had signs of moisture contact. The base of wall details for a building of this type can result in the lower portion of the insulation to wick water up from horizontal flashings.

01 Apr 11:11 AM

#8 - Roof to Wall Interface

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018

Task messages (time in PDT)

Robin Breuer

11 Sep 12:49 PM

Robin Breuer

11 Sep 12:50 PM

Robin Breuer

11 Sep 12:50 PM

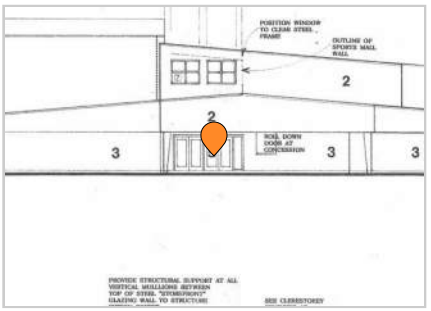
Robin Breuer

Observations
Liquid membrane has been installed a the transition between the wall panels and roof panels to address water leakage. This is located above the end of the roof indicating that it could be a common roof termination issue.

01 Apr 11:07 AM

#34 - Storefront Windows and Doors

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 11:58 AM

Robin Breuer

11 Sep 11:58 AM

Robin Breuer

11 Sep 11:58 AM

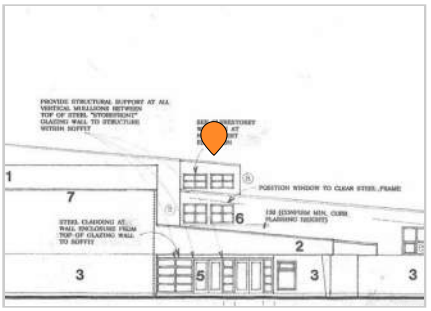
Robin Breuer

Observations
Windows and doors have recently been installed at the entry and side entry of the building. Sealant is installed at the jambs and head. No sealant is installed at the sill to allow for drainage.

03 Apr 08:11 PM

#2 - Roof Edge Transition To Cladding

Priority 2 | Robin Breuer | -
Plan: A3
Created 09-11-2018



Task messages (time in PDT)

Robin Breuer — 11 Sep 09:29 AM

Robin Breuer — 11 Sep 09:29 AM

Robin Breuer — 11 Sep 09:29 AM

Robin Breuer

11 Sep 09:30 AM

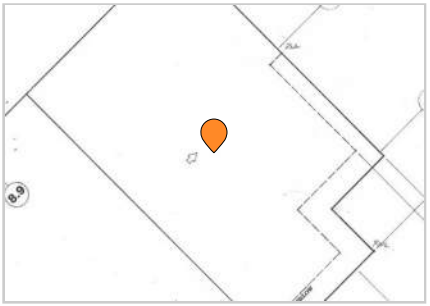
Robin Breuer

29 Mar 11:51 AM

Observations
1. The weather gaskets are loose and falling out in some locations. The weather gaskets are also intended to keep insects out.
2. Remedial sealant has been installed between the metal roof and the edge flashing.
3. Corrosion through the metal edge flashing is noted at the corner joint.
4. Corrosion of the metal cladding was identified under the roof edge flashing.

#12 - Photovoltaic Panels

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 12:57 PM

Robin Breuer

11 Sep 12:58 PM

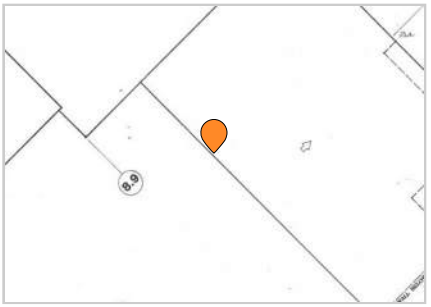
Robin Breuer

Observations
1. Significant pine needle debris has accumulated around the photovoltaic panels.
2. The metal panels supports have been secured directly through the metal roofing panels.
3. Corrosion on the support legs at the metal panel was identified. The corrosion could affect the bond of the caulking seal to the metal roofing.

01 Apr 11:22 AM

#42 - Metal Roof Ridge

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 04-03-2019



Task messages (time in PDT)

Robin Breuer

03 Apr 08:40 PM

Robin Breuer

Observations
Membrane patches have been installed along the metal roofing ridge flashing to seal damage.

03 Apr 08:41 PM

#45 - Soffit Space Below Gutter

Priority 2 | Robin Breuer | -
Plan: A2
Created 04-03-2019

Task messages (time in PDT)

Robin Breuer — 03 Apr 08:48 PM

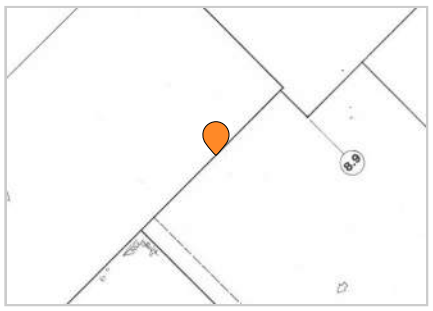
Robin Breuer — 03 Apr 08:48 PM

Robin Breuer — 03 Apr 08:49 PM

Observations
We noted surface corrosion on the steel structure at the roof eave below the gutter. This was observed from within the soffit space.

#43 - Roofing Fasteners

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 04-03-2019



Task messages (time in PDT)

Robin Breuer

03 Apr 08:42 PM

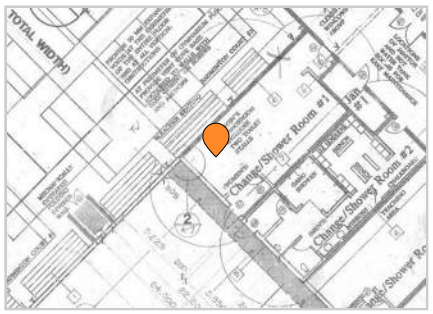
Robin Breuer

Observations
Surface corrosion was observed on most roofing fasteners.
This indicates that the fasteners have reached the end of their useful service life.

03 Apr 08:43 PM

#44 - Roof Vapour Barrier

Priority 2 | Robin Breuer | -
Plan: A2
Created 04-03-2019



Task messages (time in PDT)

Robin Breuer

03 Apr 08:45 PM

Robin Breuer

Observations
The vinyl coating on the insulation blankets is delaminating at localized areas. This should not affect the vapour resistance of the blanket, but it could be an indication that there is moisture in the insulation.

03 Apr 08:46 PM

#47 - Thermal Scan

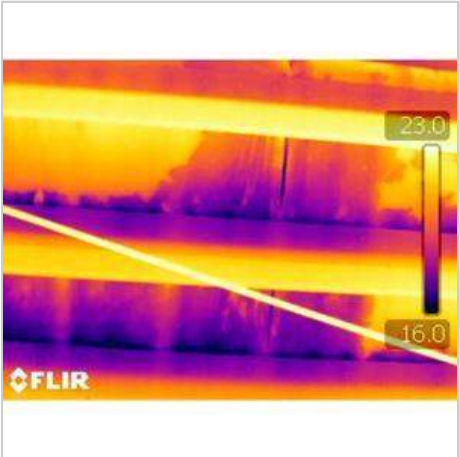
Priority 2 | Robin Breuer | -
Plan: A2
Created 04-04-2019

Task messages (time in PDT)

Robin Breuer

04 Apr 11:17 AM

Robin Breuer



04 Apr 11:17 AM

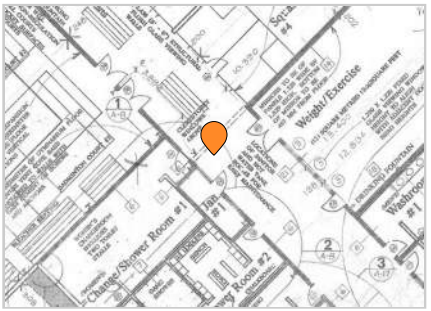
Robin Breuer

Dark blue indicates colder temperature and could be contributed to water in the insulation blanket.

04 Apr 01:45 PM

#46 - Thermal Scan

Priority 2 | Robin Breuer | -
Plan: A2
Created 04-04-2019

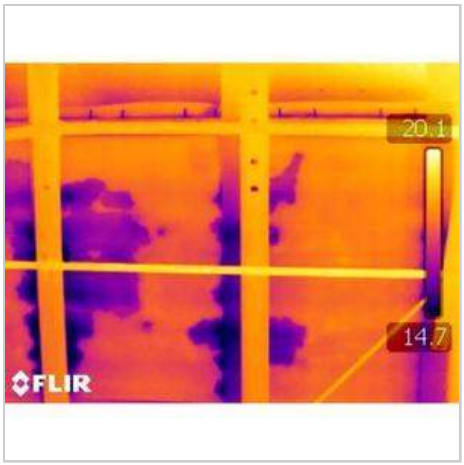


Task messages (time in PDT)

Robin Breuer

04 Apr 11:14 AM

Robin Breuer



04 Apr 11:14 AM

Robin Breuer

Dark blue indicates colder temperature and could be contributed to water in the insulation blanket.

04 Apr 11:16 AM

#49 - Thermal Scan

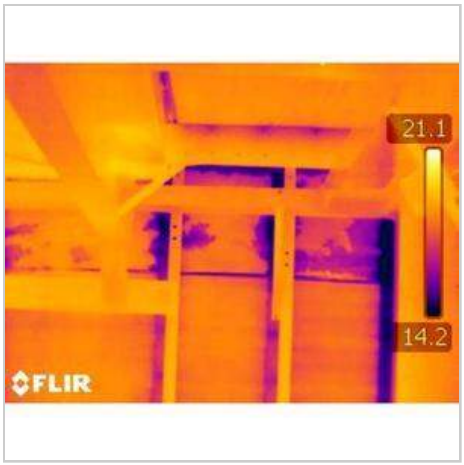
Priority 2 | Robin Breuer | -
Plan: A2
Created 04-04-2019

Task messages (time in PDT)

Robin Breuer

04 Apr 02:05 PM

Robin Breuer



04 Apr 02:05 PM

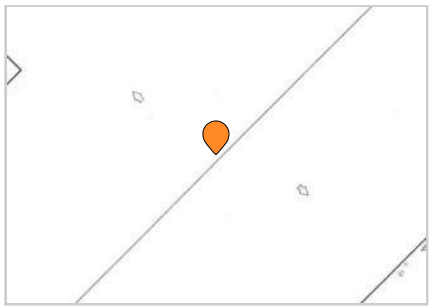
Robin Breuer

Dark blue indicates colder temperature and could be contributed to water in the insulation blanket.

04 Apr 02:05 PM

#20 - Metal Roof Ridge Cap Exploratory Opening

Priority 2 | Robin Breuer | -
Plan: A16 - roof PLAN
Created 09-12-2018



Task messages (time in PDT)

Robin Breuer

11 Sep 09:57 AM

Robin Breuer

11 Sep 09:57 AM

Robin Breuer

11 Sep 09:57 AM

Robin Breuer

11 Sep 09:58 AM

Robin Breuer

11 Sep 09:58 AM

Robin Breuer

Observations
1. Membrane patches are installed at cracks in the metal ridge flashing.
2. The metal roofing is corroding at fastener penetrations.
3. Insulation below the metal roofing is free from staining at the location reviewed.
4. The bottom edge of the metal roofing panel is corroding.
5. The butyl sealant at the panel lap joints remains soft and functional.
6. The foil vapour barrier is exposed at joints in the insulation blanket indicating that the insulation value is negligible at joints in the insulation blankets.

03 Apr 07:20 PM

#48 - Thermal Scan

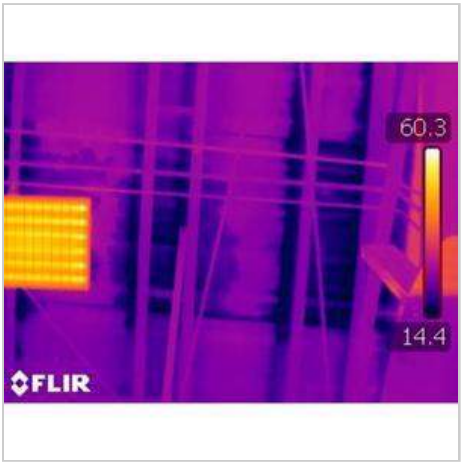
Priority 2 | Robin Breuer | -
Plan: A2
Created 04-04-2019

Task messages (time in PDT)

Robin Breuer

04 Apr 02:02 PM

Robin Breuer



04 Apr 02:02 PM

Robin Breuer

Dark blue indicates colder temperature and could be contributed to water in the insulation blanket.

04 Apr 02:02 PM

#50 - Thermal Scan at Active Leak Location

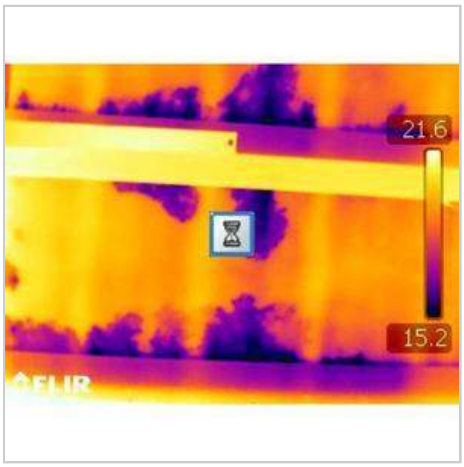
Priority 2 | Robin Breuer | -
Plan: A2
Created 04-04-2019

Task messages (time in PDT)

Robin Breuer

04 Apr 02:06 PM

Robin Breuer



04 Apr 02:06 PM

#52 - Thermal Scan at Previous leak Location

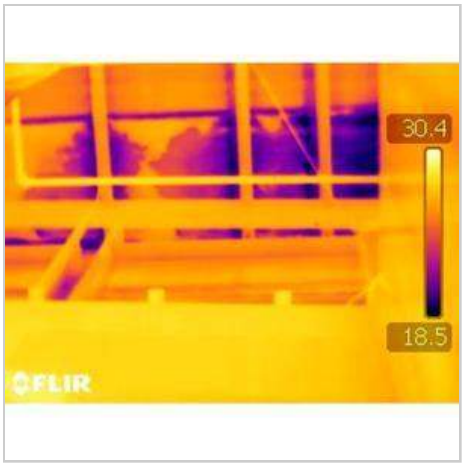
Priority 2 | Robin Breuer | -
Plan: A2
Created 04-04-2019

Task messages (time in PDT)

Robin Breuer

04 Apr 02:18 PM

Robin Breuer



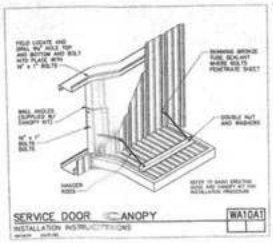
04 Apr 02:18 PM

Robin Breuer

Dark blue indicates colder temperature and could be contributed to water in the insulation blanket.

04 Apr 02:19 PM

VARCO-PRUDEN CONSTRUCTION DETAILS



1 GYMNASIUM EXTERIOR DOOR CANOPY

ROOF SLOPE < 1:12

ROOF PLAN

SCALE 1:100

PERMASTEEL

VARCO-PRUDEN BUILDINGS

Built On Superior Service

WEBER AND ASSOCIATE
ARCHITECTURAL CONSULTANT INC.
401 - 938 WEST EIGHTH AVENUE
VANCOUVER, BRITISH COLUMBIA
CANADA V5Z 1E5
TEL: (604) 731-6550
FAX: (604) 731-4470

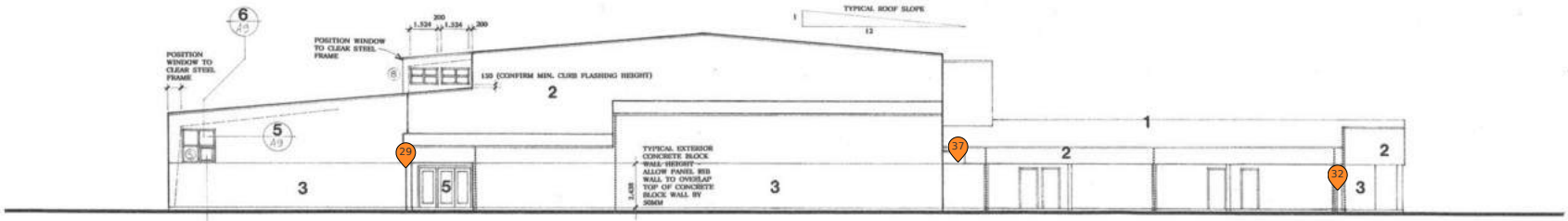
CAMPBELL RIVER SPORTSPLEX

A16

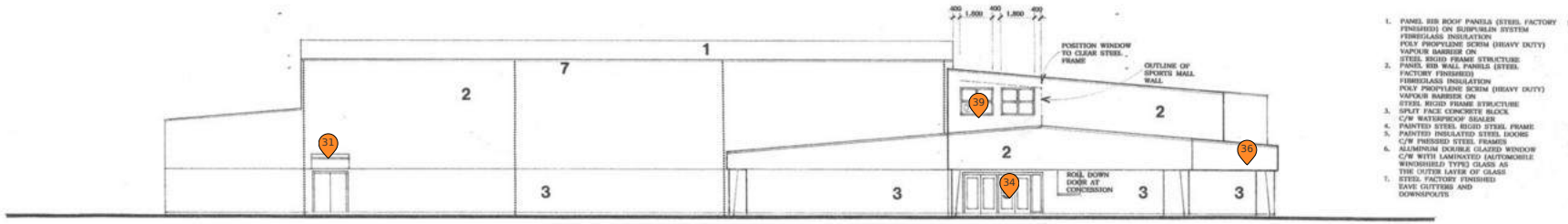

FLOOR PLAN
SCALE 1:100
CAMPBELL RIVER SPORTSPLEX
Large Activity Room
1850 SQUARE FEET
Small Activity Room (North)
1850 SQUARE FEET
Small Activity Room (South)
1850 SQUARE FEET
Service Courtyard
Catering Kitchen
Activity Mall
Gymnasium / Auditorium
62.760 (TOTAL WIDTH)
25.370 (INSIDE TOTAL WIDTH)
36.312 (INSIDE TOTAL LENGTH)
66.834 (TOTAL LENGTH)
Sports Mall
Lobby
Entry
Administration
Office #1
Office #2
Office #3
First Aid
Mech.
Elect.
Convertable Racquetball Squash #1
Convertable Racquetball / Squash Court #2
Squash Court #3
Squash Court #4
Weight/Exercise
Change/Shower Room #1
Change/Shower Room #2
Change/Shower Room #3
Change/Shower Room #4
Washroom #1
Washroom #2
Washroom #3
Washroom #4
Washroom #5
Washroom #6
Concession
Equipment Storage
HANDICAPPED ACCESSIBLE FACILITY
NOTE: CATERING KITCHEN & CONCESSION TO HAVE EQUIPMENT AS SUGGESTED BY KETZA PACIFIC CONSTRUCTION AS WELL AS ADDITIONAL EQUIPMENT WHICH MAY BE PROVIDED BY THE DISTRICT OF CAMPBELL RIVER. CONFIRM LAYOUTS WITH THE DISTRICT OF CAMPBELL RIVER. PROVIDE ALL SERVICE CONNECTIONS AND VENTING AS REQUIRED TO OPERATE EQUIPMENT.
FLOOR OF WALK IN FREEGERATOR TO BE THERMALLY ISOLATED AT FLOOR
DATE
REVISIONS
PERMASTEEL
VARCO-PRUDEN BUILDINGS
AMCA INTERNATIONAL
Built On Superior Service
KETZA CONSTRUCTION
WEBBER & ASSOCIATE
ARCHITECTURAL CONSULTANT INC.
401 - 958 WEST EIGHTH AVENUE
VANCOUVER, BRITISH COLUMBIA
CANADA V5Z 1E5
TEL: (604)731-6530
FAX: (604)731-4470
A 2

NOTE ALL WINDOW SIZES INDICATE ROUGH OPENINGS

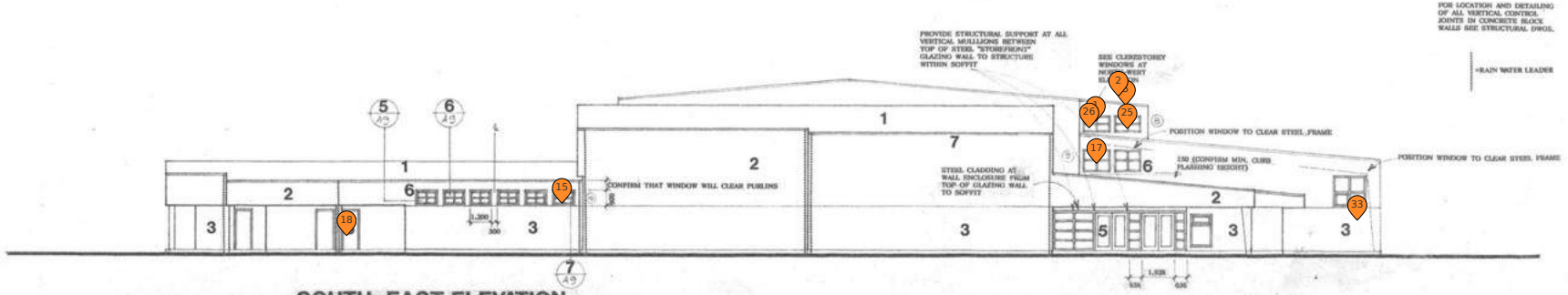
NORTH-EAST ELEVATION



NORTH-WEST ELEVATION



SOUTH-WEST ELEVATION



SOUTH-EAST ELEVATION

SCALE 1:100

PERMASTEEL
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CAMPBELL RIVER SPORTSPLEX

A3

Gym Storage Expansion

Storage space is currently inadequate, awkward for programing, and in need of additional area in order to remove the shipping container being used for storage overflow. One of the difficulties with the current storage situation is that only one gym has direct access to the storage room. This means when the gyms are divided the activities in the gym closest to the storage room are disturbed while set up and take down of activities are underway in the far gym. In an attempt to reduce the amount of disruption, set-up time is extended which shortens the time available for activities.

To address the shortage and accessibility of the gym storage, a new storage room is proposed on the southwest side of the gyms. This room would have access to both sides of the gym so that either gym could access without disturbing the other side. Items in this room would be those that might be needed by either gym. Access is also provided directly to the exterior for loading directly into either gym during special events.

The existing storage room would continue as a general storage for administration and the overall facility, items only needed by the north gym, as well as storage for items which are associated with the outdoor activities and the summer camps. Exterior doors are added to provide direct access from the exterior.

10. GYM STORE — 215,200

SUBSTRUCTURE				**16,000**
Foundations				
Strip footings, including excavation and formwork	123	m²	130.00	16,000
STRUCTURE				**49,000**
Lowest Floor Structure				
Slab on grade, say 150mm thick	123	m²	85.00	10,500
Roof Structure				
New OWSJ and metal deck roof structure to extension to be structurally separate from existing	123	m²	313.00	38,500
EXTERIOR ENCLOSURE				**79,200**
Walls Above Grade				
New exterior walls to extension: Metal Cladding, Hat Channel, 50mm Semi-Rigid Insulation, Horizontal Z-Girts at 600mm oc, Air Barrier, 16mm Ext Grade GWB, 150mm Steel Studs at 400mm oc, Batt Insulation, Vapour Barrier, GWB, Paint	159	m²	374.80	59,800
Windows & Exterior Doors				
Hollow metal exterior double swing doors with hardware and frame	1	Pair	1,500.00	1,500
Roof Finish				
New roof to match existing - 2-ply SBS	123	m²	145.50	17,900
PARTITIONS & INTERIOR DOORS				**14,300**
Standard Partitions				
16mm GWB one side to former exterior wall	86	m²	110.00	9,500
Interior Doors				
Hollow metal double swing doors with hardware and framing for new doors	2	Pairs	2,400.00	4,800
FINISHES				**4,500**
Floor Finishes				
Sealed concrete flooring	123	m²	15.00	1,800
Ceiling Finishes				
Exposed ceiling finish to new extension, paint	123	m²	14.00	1,700
Wall Finishes				
Paint to interior walls	86	m²	12.00	1,000

CAMPBELL RIVER SPORTSPLEX
CAMPBELL RIVER, BC

26th August, 2016

MECHANICAL					23,200
Drain tile c/w drain rock, filter cloth etc.	40	m	70.00	2,800	
Add roof drains c/w local pipework, insulated and tied into existing	1	Sum	7,500.00	7,500	
Add sprinkler heads incl. seismic, engineering etc.	18	Heads	300.00	5,400	
Heating & ventilation - allowance	123	m²	55.00	6,800	
General contractor's on site overhead costs related specifically to the Mechanical trade	1	Sum	700.00	700	
ELECTRICAL					19,100
Distribution Systems	1	Sum	3,690.00	3,700	
Lighting & Utility Power Systems	1	Sum	8,610.00	8,600	
Communications Systems	1	Sum	6,150.00	6,200	
General contractor's on site overhead costs related specifically to the Electrical trade	1	Sum	600.00	600	
SITEWORK					5,000
Landscaping					
Tie in new extension to landscaping	1	Sum	5,000.00	5,000	
ANCILLARY WORK					4,900
Demolition					
Cut exterior walls for 2 new double door sets	8	m²	75.00	600	
Remove exterior wall cladding	86	m²	50.00	4,300	

GENERAL REQUIREMENTS AND FEE		44,700
General Requirements	15%	32,300
Fee	5%	12,400

CONTINGENCIES - STIPULATED BY CITY OF CAMPBELL RIVER COUNCIL POLICY		182,000
General Contingency	25%	65,000
Engineering, Legal, Construction, Financial, Administration Costs	25%	65,000
Inflation Allowance	20%	52,000

CONSTRUCTION TOTAL (Excluding GST)	441,900

8. CAPITAL PROJECT MANAGEMENT

TABLE OF CONTENTS

CITY OF CAMPBELL RIVER COUNCIL CAPITAL PROJECT MANAGEMENT POLICY

Adopted: March 13, 2006 Council Resolution No. ic06-0065

8.1 CAPITAL PROJECT MANAGEMENT

8.1.1 PURPOSE

- To achieve the best value, to protect the integrity of the City's infrastructure, and to provide a logical and transparent process for the delivery of all capital projects.

8.1.2 GENERAL STATEMENT

The City, through the provision of services as a local government, must undertake capital projects of various scope and size. The responsibility for capital project administration (from design through to construction) is generally positioned within the Engineering Services Department.

The considerations outline herein are to be used as guidelines and used in tandem with the Engineering Services Manager's professional discretion and judgment.

8.1.3 CORPORATE PRINCIPLES

8.1.3.1 PROFESSIONAL ETHICS

Employees shall not use their authority or office for personal gain and shall seek to uphold and enhance the City's image by:

- maintaining unimpeachable standards of integrity in all their business relationships;
- fostering the highest standard of professional competence amongst City employees;
- maximizing the use of resources for which they are responsible so as to receive the maximum benefit for the City.

8.1.3.2 DECLARATION OF INTEREST

Any personal interest which may encroach or may reasonably be deemed by others to affect the impartiality of an employee in any matter relevant to their duties, should be declared by the employee to their supervisor.

8.1.3.3 CONFIDENTIALITY & ACCURACY OF INFORMATION

Information received in the course of duty must be respected and shall not be used for personal gain. Information given in the course of duty should be true, fair and not designed to mislead.

8.1.3.4 COMPETITION

When considering the advantages to the City of maintaining a continuing relationship with a contractor, any arrangement which might in the long term prevent the effective operation of fair competition, should be avoided.

8.1.3.5 GIFTS

To preserve the image and integrity of employees and the City, business gifts should be actively discouraged. Gifts, other than those of very small intrinsic value, shall not be accepted.

8.1.4 BUDGET

Department Managers are responsible for ensuring budget funds are available in duly authorized accounts before making commitments for any capital projects.

8.1.5 CAPITAL PROJECT MANAGEMENT GUIDELINES

8.1.5.1 CAPITAL PROJECTS TO BE COMPLETED BY CITY FORCES

The City is the owner and operator of the public utilities which includes the potable water treatment and delivery system, the sanitary sewage collection and treatment system and the rainwater collection and treatment system. The City recognizes its legal and moral obligations to ensure the integrity and effectiveness of these systems and as such will retain all responsibilities for the operations, maintenance and capital renewal of all existing underground City utilities. Should circumstances be such that in-house resources are not available to undertake such operations, maintenance and capital renewal works, this work may be contracted out if so approved by the appropriate authority as detailed in section 8.1.6.

8.1.5.2 CAPITAL PROJECTS TO BE COMPLETED BY EXTERNAL FORCES

Apart from incidental works and repairs, the City will contract out all capital works not specifically described in section 8.1.5.1 above. This would generally include roads, sidewalk, curbing, electrical, traffic signals, landscaping, pumping and treatment facilities and also includes the installation of any new or extended underground utilities. Should circumstances be such that contracted services are not readily available or should there be evidence that suggests that alternate means of completing these capital works would be in the City's best interest, then alternate construction means may be pursued subject to the approval of the appropriate authority as detailed in section 8.1.6.

8.1.6 CAPITAL PROJECT MANAGEMENT PROCEDURE

8.1.6.1 CAPITAL PROJECTS UNDER $250,000

For capital projects with a total value of less than $250,000, the Department Manager or designate will evaluate the capital project in terms of the estimated cost, budget availability, anticipated construction schedule, and construction management alternatives and will obtain the approval of the Director as to how the capital project shall be managed.

8.1.6.2CAPITAL PROJECTS BETWEEN $250,000 AND $1 MILLION

For capital projects with a total value between $250,001 and $ 1 million, the Department Manager or designate will evaluate the capital project in terms of the estimated cost, budget availability, anticipated construction schedule, and construction management alternatives and will obtain the approval of the Director and the City Manager as to how the capital project shall be managed.

8.1.6.3 CAPITAL PROJECTS EXCEEDING $1 MILLION

For all projects with a total value exceeding $1 million, the Department Manager or designate will evaluate the capital project in terms of the estimated cost, budget availability, anticipated construction schedule, and construction management alternatives and will obtain the approval of the Director, City Manager and Council as to how the capital project shall be managed.

Such approval by Council to proceed with construction should not be given for any capital project exceeding $1,000,000 unless all of the following steps have first been completed:

i) Capital project concept is proposed (by staff, Council or general public) and presented to Council for formal consideration.

ii) Council endorses the capital project concept and directs staff to proceed with a feasibility study. The feasibility study must define the anticipated scope of the project concept, review the technical merits of the project concept, provide order of magnitude cost estimates (Class 'D'), review the financial impacts of the project concept and review the City's financial capacity, establish probable project start and completion dates, and identify all available options for managing the conceptual project through to completion.

iii) Council reviews and accepts the findings of the feasibility study and then directs staff to proceed with a preliminary design. The preliminary design must include a recommendation on the final scope of the project, provide a Class 'C' cost estimate, establish a preliminary financing strategy for the project, provide a preliminary construction schedule and a recommended project management strategy.

iv) Council reviews and accepts the findings of the preliminary design and directs staff to proceed with detailed design. The detailed design would provide a clearly defined detailed final scope of work, a Class 'A' or pre-tender cost estimate, a detailed project schedule, a detailed financing strategy and a detailed project management strategy.

v) Council reviews and accepts the findings of the detailed design and directs staff to proceed to tender (if constructed by outside forces) or to construction (if constructed with in-house forces). If required, tenders would be prepared and issued in accordance with the City's purchasing policies.

vi) If the project is tendered, Council reviews and awards the tender, subject to the project budget, schedule and management strategy being consistent with the final detailed design report.

vii) Upon project completion, a final post-construction review report on the project will be presented to Council. The final post-construction report must provide a description of the final scope of work, a summary of actual construction costs, a summary of the actual construction schedule, a comparison with the detailed design report and a list of recommendations for further improving future capital projects.

8.1.7 DEFINITIONS

8.1.7.1 CLASS A ESTIMATE (FINAL DESIGN OR PRE-TENDER)

This is the highest level of estimate, based on quantities and unit prices from a detailed design or direct quotation by supplier. The detailed design should be in the order of 95% to 100% complete. This category is to be used to confirm that the project is within available budget prior to proceeding or prior to issuing tender documents and is also used to evaluate tender submissions. Class A estimates will be reviewed and approved by a qualified professional engineer with appropriate project-related experience and expertise.

Class A estimates to include the following:

- 10% general contingency allowance

- 10% allowance for engineering, legal, construction, financial and administration costs
- 5% contingency allowance for inflation
- review and approval by a qualified professional engineer

8.1.7.2 CLASS B ESTIMATE (50% DESIGN)

This estimate is based on the early stages of detailed design work and is used as a check to ensure that the project is not substantially outside of the budgetary estimates established during the preliminary design stage. The detailed design should be between 40 and 60% complete, with all necessary site investigations and studies completed. Quantities should be accurate within 80% of the final design.

Class B estimates to include the following:

- 20% general contingency allowance
- 20% allowance for engineering, legal, construction, financial and administration costs
- 15% contingency allowance for inflation

8.1.7.3 CLASS C ESTIMATE (PRELIMINARY DESIGN)

This estimate is based on the preliminary design that provides a recommended scope of work for the specific project. It includes estimates for consultant design fees where a proposal has not been received. This category is prepared with limited site information and is based on probable conditions affecting the project and past experiences with similar projects.

Class C estimates to include the following:

- 25% general contingency allowance
- 25% allowance for engineering, legal, construction, financial and administration costs
- 20% contingency allowance for inflation

8.1.7.4 CLASS D ESTIMATE (FEASIBILITY STUDY)

This estimate is based on little or no site specific detailed engineering but provides magnitude of order or 'ball park' estimates and is derived from lump sum or unit costs from comparable projects of similar magnitude. This category is used in developing long term capital plans and for comparing conceptual options.

Class D estimates to include the following:

- 30% general contingency allowance
- 30% allowance for engineering, legal, construction, financial and administration costs
- 25% contingency allowance for inflation