



BANK STREET SCHOOL CONDITION ASSESSMENT REPORT

Prepared For:

GREATER VICTORIA SCHOOL DISTRICT NO. 61

556 BOLESKINE ROAD

VICTORIA, BC.

Attn:

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1 Introduction

1.1 Terms of Reference

This report has been prepared by D. Mattson Construction Services (Consultant) exclusively for the Greater Victoria School District No 61 (Client) in 2020. The content reflects the Consultant's best judgment in light of the information reviewed at the time of preparation. The information, data, recommendations, and conclusions contained in this report are based on conditions revealed through limited visual inspections only and are subject to budgetary, time, and other constraints and limitations contained in the agreement between the Consultant and the Client.

The purpose of this assessment report is to:

- Assess the site, building envelope, building interiors, mechanical and electrical systems and associated components to provide a summation for the general condition of components for upgrading, repairing, or replacement considerations by the Client.
- Address possible building code issues and identify building upgrades for consideration by the Client that may be required to bring the building up to date with regard to the current edition of the building code, construction standards and best practices.
- Identify projects that can be categorized as Health & Safety, Maintenance or Life Cycle Replacement/Upgrades for the reliability of systems and components or whether there would be a health or safety issue, or major loss if it were not repaired/replaced.
- Identify the required scopes of work needed to restore the building to a usable condition for consideration by the Client.

1.2 Background

The subject building was originally constructed circa 1910-11 and served as a public school until approximately 1970. The Victoria College of Art have operated in the building since 1975. Very few upgrades have been conducted to the facility.

Bank Street School is Heritage Registered with the Victoria Heritage Register (VHR). Heritage Registered is not protected by Bylaw and is noted as ineligible for funding by the Victoria Heritage Foundation.

1.3 Scope of Service

D. Mattson Construction Services (DMCS) was retained by Marni Vistisen-Harwood of the Victoria School Board to conduct a field review and assess the roof membrane assembly the building assemblies, systems and components, and prepare this report, with a Class D costing summary of identified major capital projects.

The scope of our service includes discussions with the Client and a walk-through review of the facility to summarize existing conditions necessary to provide this report.

Detailed environmental, civil, structural, mechanical & electrical reviews are outside of the scope of this assessment.

2 Executive Summary

This Condition Assessment Report describes and summarizes a review conducted at the Bank Street School located at 1625 Bank Street, Victoria, BC. The building description summary can be found on page 5.

The building (Cira 1910) has a footprint of $\pm 3650 \text{ ft}^2$ / 340 m^2 . Due to the age of the building, methodology of construction and lack of upgrades, the building requires significant rehabilitation/upgrades to the site, civil works, structural assemblies, all exterior and interior finishes, and the mechanical and electrical systems with regard to code compliance and current conditions.

With regard to code compliance, this will include, but not be limited to, seismic upgrades, building envelope rehabilitation, accessibility standards for people with disabilities, exiting requirements, mechanical HVAC and plumbing, and electrical safety standards. Code compliance would be triggered upon application of a Building Permit.

1. A summary of our key observations found that due to the overall age of the facility:
 - Servicing the water supply, civil and sanitary discharge piping should be anticipated.
 - Most of the asphalt surfaces require maintenance and rehabilitation.
 - As a result of the age of the building materials, the construction detailing and installation practices utilized during time of construction and, repairs and past maintenance practices, all exterior finishes require rehabilitation. Upgrades would include, insulation, exterior sheathing, windows and doors.
 - The roofing materials appear original and require replacement. Roof has leaked in several location over time. The standard for repairs is unknown.
 - No fall protection system in place per WorkSafeBC requirements.
 - Settlement and fractures are present in the concrete foundation around the perimeter of the building.
 - Settlement of the foundation is causing minor spider cracking in mortar joints of the masonry walls.
 - The exterior brick clad walls are load bearing, supporting the floor framing.
 - Interior finishes, components and accessories should generally be considered past the useful service life for the component. Replacement of most interior components should be anticipated.
 - Interior framing would likely have no fire stopping/ fire blocking. There is a significant amount of wall penetrations that require fire caulking in order to comply with the Code.
 - Known hazardous materials are present in the building.
 - Mechanical and electrical systems were not reviewed. However, due to the age of the mechanical and electrical systems and components, we suggest most components are past the useful service life for the component. Replacement of all Mechanical and Electrical components should be anticipated.
 - The original heating and ventilation systems are no longer operational.
 - The facility has no fire protection or, fire alarm installed.
 - The building is not accessible for people with disabilities
 - Field assessment summaries of building components can be found in Appendix A.
2. A general approach to recommendations will result in:
 - Structural design and methodology for underpinning the foundation should be anticipated if any updates are considered.
 - The roof, exterior wall finishes, and components will require removal for seismic upgrading and life cycle replacement. For these upgrades, it should be anticipated most of the components that would need to be removed would be damaged beyond repair or, their ability to be reused.
 - For the removal of most interior finishes/ components a High-Risk hazardous materials abatement is required based on the level of asbestos, lead and vermiculite in the building. Other than wood trims and other similar woodwork, most components would not be suitable for reuse.
 - A major impact for budget and occupancy for any mechanical HVAC, plumbing or, electrical upgrades.
 - A significant cost for design and upgrades to provide accessibility standards for people with disabilities.

3. Notable:

➤ Environmental:

- Soils testing is recommended for the previously removed oil tank if, historical records cannot determine if all contaminated soils were adequately removed.
- Hazardous Materials testing was conducted by Island Environmental Health & Safety Ltd, June 2020. It is noted, most interior wall and ceiling assemblies throughout the school contain asbestos and lead paint. The attic space is insulated with vermiculite and known to contain levels of asbestos. Due to the levels of containment and types of construction a high-risk abatement program is anticipated for the entire school to remove all asbestos, lead and vermiculite.
- Removal of the original brick encased oil-fired boiler will require high-risk abatement.
- The presence of rodent droppings should be anticipated in the wall cavities and attic space. A detailed exposure and abatement plan/program are required.
- The presence of lead should be anticipated in solder joints on the galvanized roof membrane and ornate galvanized metalwork on the building façade as well some paint.
- Further information and clarifications for environmental elements, risk of exposure and recommended abatement can be found in the Appendix D.

➤ Structural:

- The facility is designated "H1 – High Level 1" by the Seismic Risk Assessment report conducted by Stantec 10 September 2018.
- Roof membranes will require full replacement to conduct seismic upgrades to roof decks.
- Structural upgrades to the balloon framed walls, floor diaphragms and stairwell openings will be significant.
- Further information and clarifications for seismic risks can be found in the Appendix E.

4. Budget figures in this report are to be considered Class D cost estimates only. Accurate figures can only be obtained by establishing detailed scopes of work and receiving quotes from qualified contractors and/or, engaging a professional cost consultant.

- Rehabilitation/replacement costs for the building components is indicated in Appendix B.
- For consideration of cost savings, by combining future upgrades and component lifecycle replacement projects, the Owner could realize savings for the repairs to the foundation and concrete floor, envelope systems (i.e. cladding roofing, doors and windows), interior finishes, and mechanical & electrical systems.

5. The following estimated replacement and repair costs are based on existing use, size, construction materials, and associated components of the building and site. All listed costs will change once a complete usage, scope of work, and detailing have been established. Costs provided for demolition are guesstimate values only. A hazardous material survey is required before a demolition permit would be issued by a local jurisdiction.

I. Rehabilitation estimated repair and upgrade costs.

- Building: \$7,534,000 for ±10,950 ft². / 1296 m².

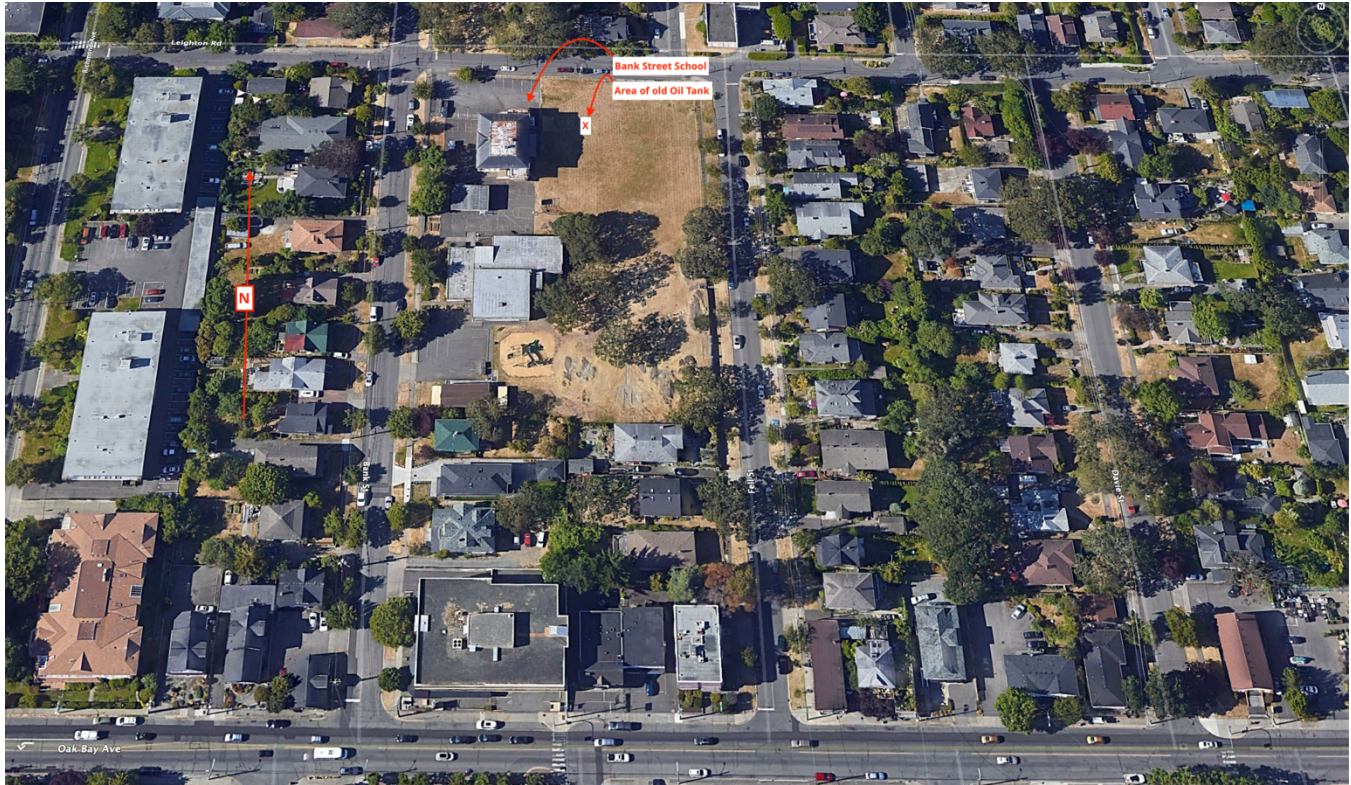
II. As-is estimated building replacement cost.

- Replacement building at \$3500 m².: \$4,536,000 ±10,950 ft². / 1296 m².

III. Demolition estimated costs.

- A budget of \$250,000 should be carried for demolition costs.

2.1 Aerial Photo



2.2 Building Description

- Original construction: Circa 1910.
- Facility is 2 stories with full height basement that extends approximately 2m above finished grade. Construction consists of concrete perimeter foundation with solid brick exterior walls and wood framed interior. Building footprint is approximately $\pm 3650 \text{ ft}^2$ / 340 m^2 .
- The roof is Bellcast Style and consists of slate tile on the pitched surfaces and heavy gauge galvanized sheet metal for the flat roof areas and decorative rooftop capitals. Most roofing materials are original.
- Exterior finishes consist of concrete, clay brick cladding and galvanized metal capitals, cornices and modillions for the architectural detailing. Windows and doors are original. Windows are wood frames and sash with single glazing. Exterior doors and frames are wood.
- Interior wall and ceiling finishes consist of painted plaster. All doors and frames are wood.
- Several interior windows are present throughout to allow for natural light transfer.
- Flooring consists of finished concrete in the basement level and resilient flooring on the main and second floors.
- Mechanical: Plumbing consists of copper supply piping and cast-iron sanitary piping. 3-Washrooms are provided. Heating and ventilation consisted of a garbage burner, an oil-fired furnace and a large single fan air handler and electric base boards.
- Electrical service to the building is underground. Power for the facility is 200A 3-Phase.
- There is a phone and data system by overhead drop.
- Electrical lighting system is comprised of a combination of outdated incandescent lights on the exterior and interior. Most interior lighting remains florescent T12 fixtures.
- Facility is not protected with fire protection sprinklers and is not required by the Building Code. However, for the size and usage of the building it is recommended a fire suppression system be installed to protect the building and contents.

2.3 Scope of Assessments

In preparation of this report, no existing drawings were provided for review. The Seismic Assessment Report and Hazardous Materials Report and were provided for reference. A site visit was conducted on June 23, 2020. The review is visual in nature and conducted to provide an assessment of the roof assembly, roof membrane and, the building envelope.

During our review, we examined, site drainage, visible foundations, exterior elevations, most interior rooms and finishes, major mechanical and electrical components. The attic and roof assembly where not accessible at time of our review.

The SD61 Facilities Manager, representatives from Iredale Architecture and Vancouver Island EH&S and the facility operator attended the site to assist with building access and to provide a snapshot of overall maintenance and history of the building. The Consultant has not been asked to provide updated drawings, site direction, or remediation at this time.

Detailed structural, mechanical, and electrical reviews are outside of the scope of this assessment. No destructive examinations or testing was conducted during the assessment. Our review and assessment methodology are intended to identify existing conditions and life cycle of common building components.

2.4 Expected Useful Service Life

Expected Useful Service Life (USL) time frames referenced for the building components are based on available manufacturer's literature, warranties, theoretical industry standards, Building Owners and Managers Association of BC (BOMA) Preventative Maintenance Guidebook and the Canadian Mortgage and Housing Corporation (CMHC) Life Expectancy Guidelines. All construction systems and components are subject to a wide variety of factors that affect their life expectancy, including quality of materials, quality of installation, environmental conditions and quality of maintenance programs. As a result of these variations, some components may outlive their expected service life, while others may not.

2.5 Component Assessment Information

The facility field assessments found in the appendices of this report provides descriptions of the site, building envelope, building interiors, mechanical and electrical systems and associated components.

- Components are briefly described in the Observations/Comments section of the facility assessment report and are provided with current age, estimated service life and a general condition rating. A description of the general condition rating (GCR) is provided in Table 1 of this report.
- Components that require projects for repair, replacement, or upgrade are highlighted within the Projects section of each facility assessment.
- Projects are itemized with category type and provided with an urgency timeline for scheduling the project(s). A description of the Project Categories and Urgencies are provided in Tables 2 and 3 respectively of this report. Included are cost estimate values within the project sections.
- An Order of Magnitude class D cost estimate is provided on an item by item summary and is located in Appendix B of this report.

2.5.1 GENERAL CONDITION RATINGS (GCR)

The following is a guide to field assessment ratings. The GCR identifies the general condition of a component

Table 1 – General Condition Rating		
Condition	GCR	Definition
Poor Critical	0	Component is at end of useful service life, has either failed, or is at imminent risk of failing. Repair or replacement is recommended within the current year.
Poor	1-3	Component approaching end of useful service life, exhibits significant deterioration and/or has significant issues reported by client / maintenance staff. Repair or replacement is recommended within 1 to 2 years.
Fair	4-6	Component exhibits minor deterioration and/or has issues reported by client / maintenance staff and requires attention. Repair or replacement is recommended within 3 to 5 years.
Good	7-9	Component does not exhibit deterioration and/or does not have significant issues reported by client / maintenance staff and does not require immediate attention. Repair or replacement is typically recommended in alignment with component lifecycle within 6 to 10 years.
Good New	10	Components that do not have significant deterioration and do not have any lifecycle replacement events recommended within 10 years.

2.5.2 PROJECT CLASSIFICATIONS

The following is a guide to classify project categories. Deficiencies are identified with four category types.

Table 2 – Project Categories		
Category	Type	Definition
Health & Safety	1	Projects required to eliminate potential health and safety danger. Repair or replacement is recommended within current year. Projects are highlighted yellow.
Component Restoration	2	Projects required to return components to designed operational standards and extend useful service life.
Arrest Deterioration	3	Projects required that, if not attended to, will result in continued deterioration and could lead to failure of the component.
Operational	4	Projects required to maintain either the appearance or operation of a component.
Maintenance	5	Projects allocated for scheduled routine maintenance.

2.5.3 PROJECT URGENCY LEVEL

The following is a guide to identify urgency of the scheduling for project categories.

Table 3 – Project Urgency Timeline	
Urgency	Definition
0	Immediate. Repair, replacement or maintenance is recommended within current year.
1	Project for repair, replacement, or maintenance is recommended within 1 to 2 years.
2	Project for repair, replacement, or maintenance is recommended within 3 to 5 years.
3	Project for repair, replacement, or maintenance is recommended within 6 to 10 years.

2.6 Limitations

This report is based on visual observations and data acquired from the Client and is limited to major items and maintenance activities. We note private property was not inspected. Site reviews are conducted by visual observation only. Unless otherwise agreed in writing by the Consultant, this report shall not be used to express or imply warranty to the property for a particular purpose.

Budget figures in this report are to be considered Class D cost estimates only and are our opinion of a probable current dollar value for typical market rates and maintenance requirements.

Accurate figures can only be obtained by establishing a scope of work and receiving quotes from qualified contractors and/or, engaging a professional cost consultant.

Please note that any conclusions, recommendations, or opinions of probable costs presented in this report must be viewed in light of the information available from the data obtained from the Client and the visual examination completed during our field review.

The work reflects the Consultant's best judgment in light of the information reviewed at the time of preparation and is not providing advice about mould, mildew, pollutants, contaminants or other hazardous materials. It is recommended that an Environmental Consultant be retained for these services.

Any use that a third party makes of this report, or any reliance on decisions to be made based on it, are the responsibility of those third parties. The Consultant's accept no responsibility for damage, if any, suffered by any third party due to decisions made or actions taken based on this report.

3 Assessment Summary

- **Site:** is generally flat and in fair condition. The adjacent field was not reviewed. Field maintenance is the responsibility of French school district, Conseil scolaire francophone de la Colombie-Britannique.

Projects are recommended for;

- Servicing the water supply, civil and sanitary discharge piping.
- Maintenance and rehabilitation of the asphalt surfaces.
- Surveying the Civil Sub-soil water and sanitary discharge.
- Soils testing recommended for the previously removed oil tank.

- **Roof / Exterior Finishes / Building Envelope:** appear to be all from original construction. All exterior finishes are in poor condition and past the estimated service life (ESL) of the component. The building has never had any structural upgrades.

Projects are recommended for;

- Roofing and associated components (seismic upgrading), fall protection and maintenance.
- Exterior finishes require replacement/rehabilitation/maintenance of all building envelope assemblies and exterior openings.
- Seismic upgrades to the wall and roof assemblies will be required as outlined in the BC Building Code.
- Building insulation. Heat loss/gain is significant on this building due to the lack of insulation.
- Hazardous materials abatement.

- **Interior Components:** most interior components are from original construction, well used and past the ESL of the component. There is visual presence rodent activity in the building.

Projects are required for;

- Wall repairs/rehabilitation /seismic updating, insulation upgrades and painting.
- Firestopping and fire caulking.
- Flooring replacement and seismic upgrading.
- With regard to the Building Code and fire rated assemblies numerous wall and ceiling assemblies do not meet the intent of the building code and require updating the assembly to achieve the required fire rating of the assembly.
- Hazardous materials abatement.

- **Mechanical systems:** are from original construction excluding, the baseboard heaters and hot water tank. Existing equipment/components are generally past ESL and would likely require replacement.

Mechanical Projects are required for;

- Mechanical ventilation and plumbing systems upgrades are required in order to conform to Code.
- Fire Dampers, Firestopping and fire caulking.
- Building has no fire protection and is recommended.

- **Electrical systems:** Although most of the electrical system is not from original construction as the facility was originally constructed without electricity, most of the electrical equipment is past ESL.

Electrical Projects are required for;

- Scheduled maintenance of all switch gear.
- Electrical Inspections of all equipment.
- Electrical Service and lighting upgrades.
- Life safety systems, fire alarm and the exit and emergency lighting systems are required in order to conform to Code.

4 Recommendations

This document provides an inventory of infrastructure and building components, a snapshot of the condition in relation to life expectancy and formulates a program of capital renewal projects over a five-year window. For this document to be of value, the plan must be revisited every year, by Staff to review projects completed, changing conditions/demands, changing priorities, and to amend the planning spreadsheet to provide for the next five-year plan. Focus will always be on preparing projects for the next capital year. The primary reference document will not need revision for five years and then only subject to amendment for significant changes that have occurred.

-END-

5 Appendices

A. FIELD ASSESSMENT SUMMARY

B. CLASS D COSTING SUMMARY

C. ADDITIONAL PROJECT PHOTOS

D. HAZARDOUS MATERIALS REPORT - Island EH&S

E. SEISMIC RISK ASSESSMENT – Stantec