Le Musée de Saint-Boniface Museum

Nos histoires ∞ Notre musée
Our stories ∞ Our museum

Le 13 mars 2024

Ville de Winnipeg
Comité exécutif des politiques
Immeuble principal, bâtiment administratif
510, rue Main
Winnipeg, MB R3B 1B9

ENVOI VIA COURRIEL À: cityclerks@winnipeg.ca

Sujet: Demande de contribution au projet d'immobilisation pour la réhabilitation structurelle du toit

Cher comité exécutif,

Veuillez trouver en pièces jointes plusieurs documents en appui de cette demande d'une contribution en **capital de 300 000** $ envers le projet d'immobilisation pour la réhabilitation structurelle de la charpente du toit de l'édifice au 494 avenue Taché, connu comme le Musée de Saint-Boniface.

Cet édifice qui date de 1846-51, est le plus ancien de la Ville de Winnipeg. Il aura bientôt 175 ans! Nous avons trois niveaux de désignation historique : national (1958), provincial (1991) et municipal (1995). La ville a un bail de 99 ans (se terminant en 2062) avec Charité Despins, anciennement les Sœurs Grises. Le conseil d'administration du musée de Saint-Boniface est mandaté par l'arrêté municipal 4824/88 pour exploiter et gérer les opérations, y compris la collection d'artefacts. L'équipe du musée de Saint-Boniface (personnel et conseil d'administration) agit comme gardien de l'édifice, puisqu'il est l'artéfact le plus important de notre collection.

En décembre 2023, le musée a reçu le rapport des ingénieurs nous conseillant d'entreprendre la remise en état de la structure du toit au cours des prochains un à deux ans, avec un délai prévu de huit mois pour achever les travaux. Les estimations préliminaires de classe C chiffrent le projet proche de 1,3 million dollars. Nous nous attendons à ce que les coûts augmentent de 20 à 30 % d'ici à ce que nous ayons obtenu les fonds nécessaires et que les estimations à la classe A soient disponibles.

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Nous serions négligents de ne pas mentionner que dans les jours qui ont suivi le rapport des ingénieurs, nous avons également appris qu'il faudrait apporter des changements au système de chauffage et nous avons reçu des résultats incohérents d'analyse de l'eau indiquant un problème de plomb. Et il ne faut pas oublier qu'il y les a quarante fenêtres historiques à réparer et le bardage à repeindre. Nous avons préparé un plan provisoire pour le déroulement de ce plus grand projet, qui se chiffre dans les quelques millions de dollars. Nous espérons continuer de travailler de proches avec le département des logements municipaux.

C'est pour cette raison que depuis le mois de décembre, le musée a déposé des soumissions auprès de plusieurs programmes gouvernementaux, des fondations, et autres commanditaires. Votre appui financier à la sauvegarde de l'édifice aura sans doute comme effet d'inciter les autres à s'investir et à contribuer vers un projet qui peut devenir une collaboration trilatérale.

En prévision des enjeux autour de la construction, le conseil d'administration prévoit quelques mois de préparations pour une réorientation et un déménagement des opérations du musée. On se prépare pour que les travaux débutent ce juillet 2024 avec une période de construction qui pourrait s'étaler pendant deux ans, jusqu'en 2026. Nous reconnaissons qu'il y a des inconnues à ce stade, mais nous estimons qu'il est important de communiquer avec le public concernant l'impact de la construction sur les activités du musée dans un avenir proche.

Au cours de l'année écoulée, le musée a réussi à réunir près de 440 000 $ ce qui lui a permis d'achever les réparations des bardeaux du toit et des lucarnes, les tests sur les matériaux dangereux, le rapport des ingénieurs et la restauration de trois fenêtres dans le cadre d'une phase d'essai. En plus d'un autre 160 000 $ reçu pour un projet d'accessibilité qui doit commencer cet été.

Nous tenons à vous assurer que le musée est un partenaire engagé qui préfère travailler en partenariat collaboratif et nous vous remercions sincèrement de votre attention et de votre soutien continu.

Respectueusement,

Cindy Desrochers
Directrice

494, avenue Taché • Saint-Boniface, Manitoba • R2H 2B2
www.msbm.mb.ca • 204.237.4500 • info@msbm.mb.ca

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March 13, 2024

City of Winnipeg
Executive Policy Committee
Main Building, Administration Building
510 Main Street
Winnipeg, MB R3B 1B9

SENT VIA EMAIL TO: cityclerks@winnipeg.ca

Subject: Capital Contribution Request for Roof Structural Rehabilitation

Dear Executive Committee,

Please find attached several documents in support of this request for a **capital contribution of $300,000** towards the structural rehabilitation of the roof for the building at 494 Taché Avenue, known as Le Musée de Saint-Boniface Museum.

This building, which dates from 1846-51, is the oldest in the City of Winnipeg. It will soon be 175 years old! We have three levels of historic designation: national (1958), provincial (1991) and municipal (1995). The City of Winnipeg has a 99-year lease (ending in 2062) with Charité Despins, formerly the Grey Nuns. The St. Boniface Museum Board is mandated by municipal By-law 4824/88 to operate and manage the museum, which includes the artifact collection. The museum team (staff and Board of Directors) acts as keeper or guardian of the building, as it is the most important artifact in our collection.

In December 2023, the museum received the engineers' report advising us to undertake the rehabilitation of the roof structure over the next one to two years, with an expected timeframe of eight months to complete the work. Preliminary Class C estimates put the project at close to $1.3 million. We expect costs to increase by 20-30% by the time we have secured the necessary funds and Class A estimates are available.

We'd be remiss if we didn't mention that in the days following the engineers' report, we also learned that changes would have to be made to the heating system, and we received inconsistent water test results indicating a lead problem. And let's not forget that there are the forty historic windows to repair and the cladding to repaint. We've drawn up a provisional plan for this larger project, which will cost in the millions of dollars. We hope to continue working closely with the Municipal Accommodations department.

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That's why, since December, the museum has been submitting applications to several government programs, foundations, and other sponsors. Your financial support to save the building will undoubtedly encourage others to get involved and contribute to a project that could become a trilateral collaboration.

In anticipation of the issues surrounding construction, the Board of Directors and museum staff are planning a few months in preparation for an operational pivot and relocation. We're preparing for the rehabilitation work to begin this July 2024, with a construction period that could stretch over two years, until 2026. We recognize that there are unknowns at this stage, but we feel it's important to communicate with the public about the impact of construction on the museum's activities soon.

Over the past year, the museum has managed to raise almost $440,000, enabling it to complete repairs to roof shingles and dormers, hazardous materials testing, an engineer's report, and the restoration of three windows as part of a trial phase. Plus, another $160,000 raised for an accessibility project due to start this summer.

We would like to assure you that the museum is a committed partner that prefers to work in collaborative partnership, and we sincerely thank you for your attention and continued support.

Yours respectfully,

Cindy Desrochers
Director

494, avenue Taché • Saint-Boniface, Manitoba • R2H 2B2
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Le Musée de Saint-Boniface Museum Roof Structure Restoration Project

Estimated Project Costs

Source			
Crosier Kilgour Partners Consultancy Including Heritage Architect Consultancy		$	51,968.00
Museum Conservator		$	77,700.00
GWHCS Ltd. Class 4 Estimate	646,045 + 20%	$	775,254.00
Business Relocation costs	132,000 annually	$	264,000.00
Subtotal		**$**	**1,168,922.00**
Contingency 10%		$	116,892.00
Total Estimated Project Cost		**$**	**1,285,814.00**

Estimated Project Revenues

Source	Programs			Schedule
City of Winnipeg	Capital request	$	300,000.00	anticipated response March 2024
Government of Canada	National Cost Share Program	$	250,000.00	anticipated response April 2024
Province of Manitoba	Sustainable Communities	$	300,000.00	awaiting program annoucement
Province of Manitoba	Historic Resources Grant Program	$	25,000.00	anticipated response June 2024
City of Winnipeg	Gail Parvin Fund-City Wide Program	$	50,000.00	anticipated response March 2024
City of Winnipeg	Councillor Allard	$	20,000.00	verbal confirmation
Small Community Capital Sponsorhips	4 programs	$	330,000.00	anticipated response Spring 2024
Donations	n/a	$	15,000.00	confirmed funds available
Totals		**$**	**1,290,000.00**	

2023-12-08 Project Number: 2022-1328

Le Musée de Sainte-Boniface Museum
494 avenue Taché
Winnipeg, MB
R2H 2B2

Attention: Cindy Desrochers, Directrice

Re: Le Musée de Sainte-Boniface Museum- Roof Structure Audit

Introduction

The Saint Boniface Museum, constructed from 1846-1851, is the oldest building in Winnipeg. Located on Tachè Avenue, it was originally the home of the Grey Nuns. Built with white oak logs with mortise and tenon joints, the wall construction is an example of pièce-sur-pièce construction with a timber frame and stacked horizontal logs framed to the posts. The Museum building has been designated as a heritage property municipally, provincially, and federally.

A major structural restoration project was undertaken in the 1990's, including creating a raised 3rd floor with open web steel joists and hollow structural steel beams. The 2nd floor was also reinforced. The main roof framing was addressed with significant rehabilitation work. Some of the existing roof rafters were reinforced and the framing was also augmented with new rafters made from glue-laminated manufactured wood sections.

The structural work included a north-south row of new piles through the basement area. The columns supported on these piles were used to support floor loads up to, and including, the third floor.

Crosier Kilgour's scope included performing detailed site review of the roof areas from the interior, coordinating a 3D laser scan performed by Sison Blackburn Consulting Inc., temporary installation of temperature and relative humidity measuring data loggers, and preparing information for the development of a Class 4 cost estimate.

The following report provides our findings, discussion and analysis, and conclusions. Representative photographs of key observations are included in Appendix A. Appendix B shows some of the data developed from the 3D laser scan while Appendix C contains the data logger results. Finally, the cost estimate prepared by GWH Construction Services Ltd. is found in Appendix D.

Background Information

Prior to completing our field work, we reviewed the existing structural information on the roof structure. This information included the design drawings by A. F. Eshmade & Associates Ltd., dated October, 1993 for the various measures undertaken at that time. We also reviewed the thorough condition survey information prepared by Gordon Menzies. We were provided with a detailed numbering of the main roof rafters, a catalogue of observations, and related photographs.

The 1993 structural drawings include details for roof framing connections. They also show new friction piles in the basement that support a row of steel HSS (hollow structural steel) columns that extend up to the underside of the 3rd floor.

Other notes on the Eshmade drawings indicate that some "structural buttresses" were to be removed. These were possibly related to the support of the bell tower. We were not able to confirm on site what components had been removed in the 1993 work.

No drawings were available of the roof framing over the Chapel that extends to the east from the main portion of the building. This attic was also reviewed and our comments regarding the framing of the Chapel roof are included.

Photograph No. 1 shows the east elevation of the building with the Chapel roof in the foreground on the right. The south end of the main roof is on the left.

Site Observations

We reviewed, on a walk-through basis, the condition of the roof framing members, especially the main rafters which run east-west across the roof with a central ridge line. Some of these rafters are the original wood members. Others are glue-laminated, or "glulam", sections as new rafters, installed at approximate half-way points between the original rafters. Photograph No. 2 provides an example of new rafters being installed between the original ones.

A third type, occurring at approximately eight locations, is where a glulam member was installed directly below an original rafter with the intention of the two working as one structural component. This condition is shown in Photograph No. 3. The steel plate with red-oxide primer is intended to share stresses between the two ages of wood.

Rafters typically have a horizontal "collar tie" which is near the peak of the roof and distributes unbalanced forces such as uplift from wind between the rafters on opposite sides of the peak. Some of the Museum rafters had a steel plate gusset installed in 1993 at the peak.

The rafter ties are lower and are analogous to ceiling joists that might be found in a single family residence. They brace the rafters against lateral loads, thus reducing the effective span, and thus, the bending stresses.

In Photograph No. 4, a location is shown where the rafter tie and rafter are both 1993 glulam members. The connection appears to be through-bolts as dictated by the Eshmade drawings. The connection design included shear connectors. These are shallow cup-shaped steel washers that the bolt passes through and that are used in back-to-back pairs. They are dapped into the wood faying surfaces and provide significantly greater capacity through the joint than a through-bolt without shear connectors. They are not visible when the connection is completed so their use could not be confirmed.

The drawings show a mechanical mezzanine built on top of the rafter ties for most of the length of the roof. This was found to correlate with the construction on site. Photograph No. 5 shows some of the equipment on this level. While a plan for the framing of this mezzanine was provided, no design loads were indicated.

It is shown that there was planking on the existing rafter ties before 1993 and that some of the planking, particularly on the west side, was to be removed.

The use of the rafter ties to support a floor level, with its inherent dead (weight of construction) and live (equipment, people) loads is ill advised. It not only requires the rafter ties to act as beams, with bending stresses in addition to axial loads, but also imposes significant vertical reactions on the roof rafters.

Where the original rafters were supplemented with a glulam member, the connection between the two was not performing well in many locations. Photograph No. 6 shows one location where the steel plate with glulam rivets is installed in accordance with our interpretation of the design intent.

Glulam rivets are stubby steel components similar to nails. They have an oval shaped head that gets driven into a round hole in a steel plate. General guidelines are that they be installed in the manufacturing plant to create connections of glue-laminated members and that the side plates be no thicker than 6mm. Since the drawings indicate 9mm side plates, neither of these guidelines were followed for the museum roof reinforcing implemented in 1993.

One of the original rafter-tie-to-original-rafter connections is shown in Photograph No. 7. The tie end is inserted into a deep notch in the rafter.

The Chapel area roof framing was also reviewed. Photograph No. 8 provides a general view of the Chapel attic rafters.

An issue of particular concern was excessive curvature of the glulam rafters. It is difficult to assess the degree that has occurred since installation, since the A.F. Eshmade drawings note that the new members were to be “scribed” up to 38mm to suit the sheathing profile as encountered at the time of installation.

A second important issue is that none of the 1993 members appear to have any fastening to the roof sheathing. In general, a floor or roof system is framed with smaller members in series and they act together because of the lateral support provided by connection to the diaphragm created by continuous sheathing. In Photograph No. 9, the rafter exhibits significant curvature and is not mechanically fastened to the board sheathing of the roof. Similar deformation and gaps exist at the two glulam rafters shown in Photograph No. 10.

Excessive curvature was found at a handful of locations. The downward curvature creates tension stresses in the extreme bottom fibers and these are additive to the bending stresses due to the roof loads. The curvature of the rafter noted as W26 has required the office millwork to be notched. Refer to Photograph No. 11.

It is not fully clear what the logic was to retain sections of original rafters in the handful of areas where they were in very poor condition. Photograph No. 12 shows one location where the old wood does not appear to have any residual structural capacity. No roof load can effectively be transferred to the glulam with it there.

The north and south ends of the roof are framed as hips, with rafters of varying lengths framing to the diagonal hip rafters. In Photograph No. 13, the rising original member is fastened only with two nails to the shallow original hip, even though that has been reinforced with a glulam. The same photograph shows a typical problem found with the glulam rivets.

Since the original wood does not completely align with the face of the glulam and the steel plate is rigid, the glulam rivets have a reduced embedment length in the original wood. This condition is exacerbated by the plate being thicker than recommended for rivets.

The connection plates were observed at many locations to be further apart than the specified 1524mm. At some locations, the glulam rafter ties appeared to be tight to the roof sheathing and possibly pushing against it. In Photograph No. 14, the rafter tie is split near the top. The alignment of the crack does not follow the glue lines in the manufactured wood. While the rafter tie could have been an opportunity to connect to both the new and old constructions, the bolting shown here is only through the glulam sections.

At the connection shown in Photograph No. 15, there appears to be a single lag screw into each of the old and newer constructions. These are installed through the “scarfed” end of the connected rafter.

The non-compliant spacing of the glulam rivet connection plates is apparent in Photograph No. 16. In Photograph No. 17, the steel connection plate was apparently installed prior to the tie rafter, as it has been notched around the plate. This interfered with the connection between the rafter tie and the rafter which was observed to be 2 lag screws. Their locations are offset and one was observed to crossing a gap between the two members that it was intended to be joining.

The lag screws on the drawings are indicated to be 89mm long, or approximately the length of the pen in Photograph No. 18 from the thumb to the tip. The lag screw appears to have very limited embedment into the member on the left-hand side.

The capacity of structural anchors, in general, depends on the strength of materials and sizes. It also can be reduced when the anchors are located too close to another anchor or to the edge of the member. The upper lag screw in Photograph No. 19 appears to penetrate into the original wood member but very close to its lower edge. Lag screws in general have lower capacities than through-bolts, and have strict installation procedures that must be followed.

At the joint shown in Photograph No. 20, because of the offset face of the original timber, the glulam rivets are not fully embedded into the wood. A similar condition is shown in Photograph No. 21.

The location in Photograph No. 22 has an original connection between a rafter and the corresponding rafter tie. In a similar manner to Photograph No. 7, the rafter tie is deeply notched into the rafter.

Photographs No.’s 23 to 26 show close-ups of structural distress in the rafter system of the Chapel roof. The rafters in Photographs 23 and 24 have failed and require replacement. An unsuitable previous repair of a partial height “rafter” is shown in Photographs 25 and 26. Also visible is the use of undersized, non-graded lumber for collar ties.

3-D Laser Survey

Sisson Blackburn Consulting Inc. were retained to perform a 3D laser survey of the roof. The survey data was collected from the interior of the 3rd floor and from the Chapel attic. From the point cloud of information, the images provided in Appendix B were created. In particular, the curvature and sag of some of the rafters was confirmed and quantified by the laser survey data.

An overall plan of the roof is shown on Drawing S2.1. Sections through the south hip, the Chapel attic, and an east-west rafter location are provided in Sections 1, 2, and 3, respectively on Drawing S4.1. These sections confirm that there are issues with the alignment of the rafters and provide a means to approximate its measurements.

Data Logger Information

Data loggers were installed at two locations – one near the south end of the 3rd floor and the other inside the Chapel attic. These were used to create the graphs provided in Appendix C. These are graphs of the interior temperature and the relative humidity over time. The readings were scheduled at 6 minute intervals, giving the jagged appearance of the lines. Due to the short length of overall time of the installation, the scale of the graphs is exaggerated. For example, for the office area, the temperature variation is under 3 degrees Celsius.

The swings in relative humidity with temperature in the attic are as expected, with the RH readings higher with lower temperatures. Colder air has less capacity for moisture so the relative value is higher.

The week of February 14th, 2023 was unusually warm, resulting in atypical data for the Chapel Attic.

The purpose of attaining the data logger information was to confirm that no environmental conditions that could be measured could be affecting the condition of the wood framing. With the low values for both temperature and humidity and small ranges of variation, the current operation conditions can be ruled out as affecting the structure.

Discussion and Analysis

Our visual review confirmed that some of the roof framing members exhibit excessive deflection. From our observations, several concerns were raised regarding the loading conditions imposed on the rafters, the lack of connection to the roof sheathing, and the connection details between the framing components.

While the 1993 drawings indicate that there were previously some areas of decking on the rafter tie level, the use of this space as a floor to support mechanical equipment was progressed further at that time. Neither the original rafter ties nor the added glulam ones appear to be fully designed to support what is essentially a mechanical mezzanine. This applies both to the members and to the connections used at their supported ends.

The connection for the original, 1846-1851, ties to the original rafters is a deep notch into the rafter each end. The notch reduces the rafter capacity. It could be suitable for the original construction, especially with the added rafters from 1993. However, it is not suitable for transferring mezzanine loads. The modern rafter ties to rafters' connections have through-bolts but several locations were noted with lag screws which have a lower load capacity.

The individual rafters are intended to resist vertical loads, such as roof weight and snow, and lateral loads from wind. The rafter tie, located at close to half height, braces the rafter and shares the lateral load to the opposite side of the roof. Making the rafter ties also act as beams, imposes significantly different load reactions onto the rafters. It is our professional opinion that these added loads, and the lack of connection to the roof diaphragm, are the main factors affecting the alignment of the rafters.

The laterally unsupported length of the compression “flange” of a bending member, has an inverse effect on its load capacity. Being unsupported laterally from the peak to the floor except at the rafter ties, significantly reduces the load capacity. All rafters, new or original or built-up, should have connections to the roof decking.

It is quite likely that the various timber-to-timber connections were difficult to install, given the congestion of framing and other items such a sprinkler lines. At several locations, the design details showing through-bolts and shear connectors, appear to have been replaced with lag screws.

For the detail intended to stitch an old rafter to a new one as a built-up section, the steel plates with glulam rivets do not appear to have been suitable. This is due to the lack of alignment of the wood faces. These rivetted plates were also observed to have been installed at spacings much greater than indicated in the design.

At some locations, the existing framing members exhibit splits. These appear as cracks in the face of the member and are due to shrinkage due to loss of moisture. Unless they propagate through the full width of the member, they are not typically a structural concern. Some of the observed cracking of the glulam members, parallel to the bending stresses, does require repairs.

Where rafters exhibit excessive deflection, it not only affects their serviceability but can also affect their structural capacity.

As conceptual repairs for costing, we have proposed the following structural work:

1. **To alleviate some of the load that is currently transferred to the rafters:** Installation of a new row of 8 columns supporting a new beam below the rafter ties that support the mechanical level floor. These columns will be directly over ones that are in the 2nd floor space. A stub column will be installed to the top of the existing column and support an adjustable column in the height of the 3rd floor.
   The adjustable columns will support a continuous beam that will be connected to the rafter ties, essentially adding support near their mid-span. Continuous solid blocking will be installed between the various ties, above the beam, to brace them against torsional effects.

2. **To connect rafters to the roof sheathing:** Installation of manufactured sheet metal angles between all of the rafters and the roof boards at a regular spacing. These cold-formed metal components are manufactured to transfer longitudinal shear loads. They are easily installed and some flexibility regarding the spacings and locations can be accommodated.

3. **Repair of the connection between original and added glulam rafters:** Installation of manufactured sheet metal plates between the two at a regular spacing. These are similarly designed to transfer shear loads and will be easier to install than the 9mm structural steel plates.

4. **Address Rafters with excessive curvature:** For the specific locations where the excessive curvature is especially problematic, the installation of new replacement rafters has been considered.

5. **Replace failed Chapel roof framing:** The estimate includes for the installation of replacement rafters and collar ties where required.

6. **Miscellaneous carpentry repairs:** Performing localized repairs. For example, injection of separations between plies in specific glulam members.

We have reviewed the conceptual scope tasks with Gerhard Hoppenheit of GWH Construction Services and have provided him with descriptions, approximate quantities, sketches and photographs for his use in preparing a Class 4 estimate of costs.

Capital Cost "Class 4" Estimate

The Class 4 estimate is included in Appendix D. It indicates that the projected capital cost for the repairs is $615,281.00, plus GST.

Due to the complications for access and other site restrictions, phasing of the work would be difficult to coordinate and would very likely create increases in the project cost. Given the many and serious structural concerns raised by our review, the repairs should be performed in the immediate term, defined as beginning within the next year.

In addition to the structural scope, GWH has included allowances for such things as local modifications to millwork to accommodate the new columns. There is also an allowance for temporary disconnects for the fire protection system and affected mechanical and electrical work. However, removal of heritage items or personal effects has not been included as it is assumed this would be performed by Museum staff.

The estimate is for the work that would be performed by a General Contractor or Construction Manager and is intended to align with a bid price that would be received for this work in 2024. It does not include any design fees for engineers or other consultants nor consultant fees for work during the construction phase.

Summary and Conclusions

The roof structures of the main Museum Building and of the Chapel attic exhibit serious structural issues and require structural repairs in the immediate term. Several concerns are present with respect to the roof rafters and the rafter ties. Repairs will include work throughout the area to connect the rafters to the roof sheathing and to improve timber-to-timber connections.

We trust that this report provides you with the information that you require but, given its complexity, we would like to meet with you and review our findings in person. In the meantime, do not hesitate to contact myself or our John Wells with any questions that arise.

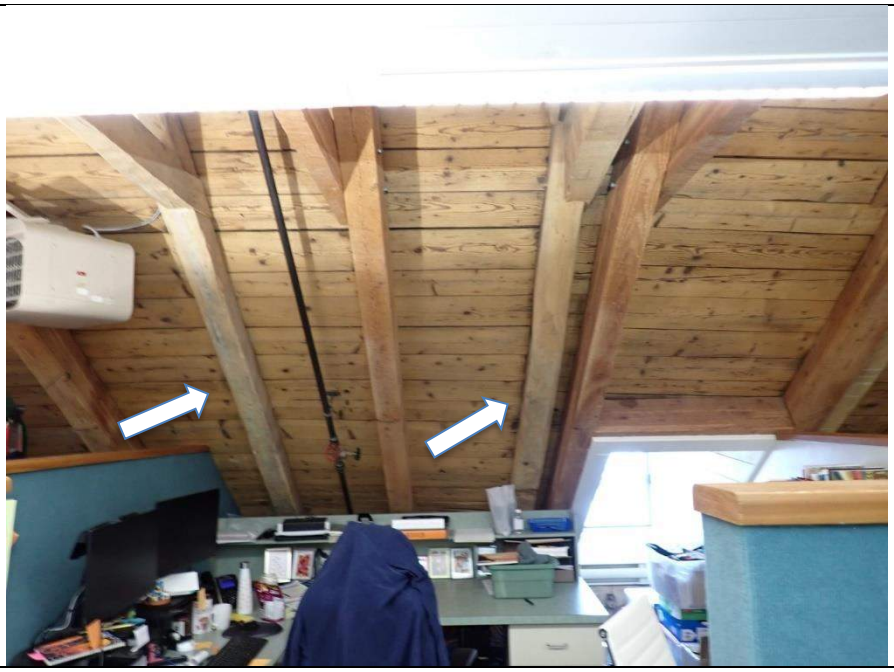
Kathy J. Pratt, C.I.M., LEED AP, P. Eng.
/kjp

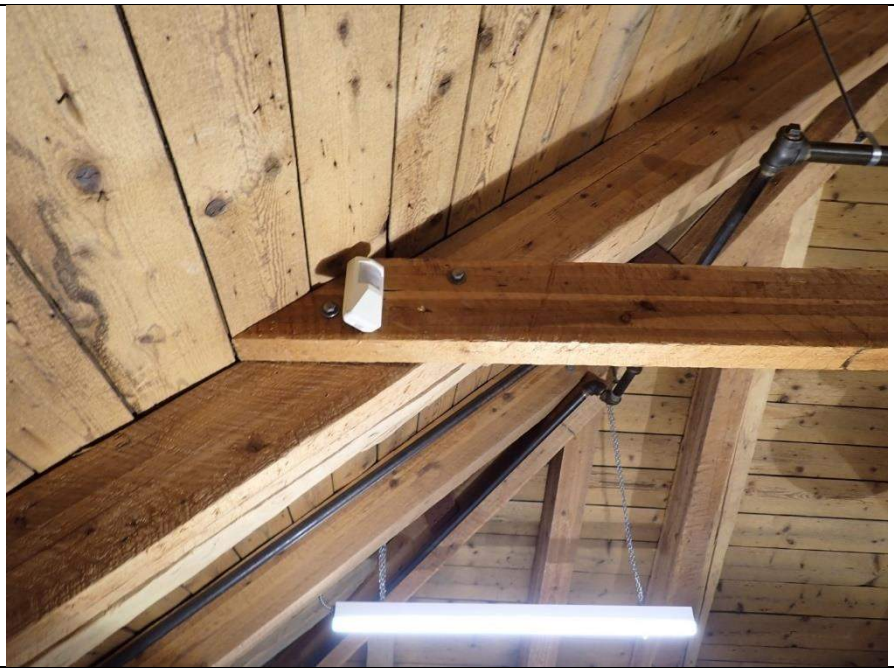
PROVINCE OF MANITOBA
K.J. PRATT
12-08
6457
REGISTERED PROFESSIONAL ENGINEER

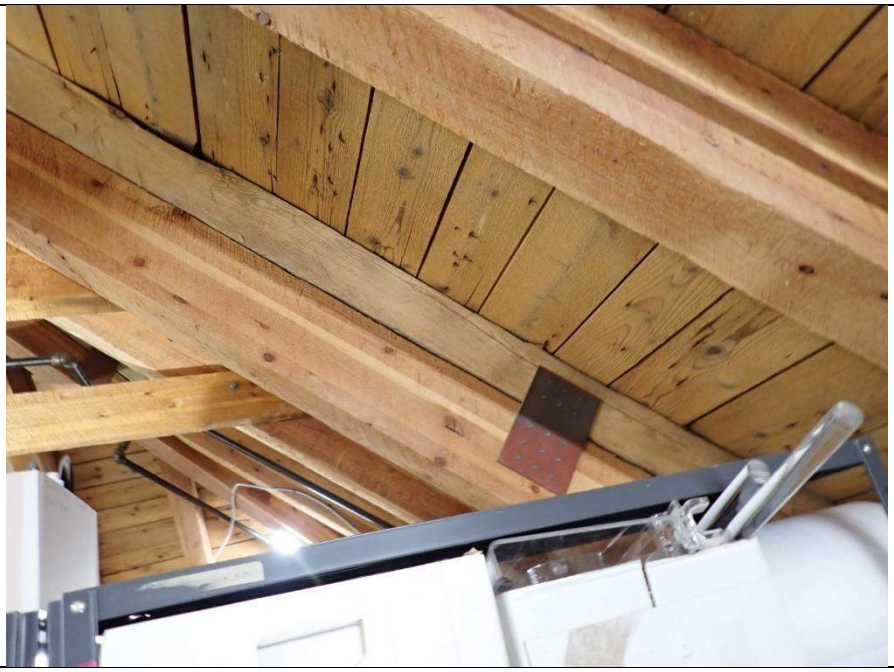
APEGM
Certificate of Authorization
Crosier Kilgour & Partners Ltd.
No. 235 Date: 2023-12-08

Appendix A

Photographs

Photograph #1: View of main roof and chapel roof from east side.	
Photograph #2: Original rafters at arrows.	

Photograph #3: Glulam installed below original rafter.	
Photograph #4: New glulam rafter and horizontal rafter tie.	

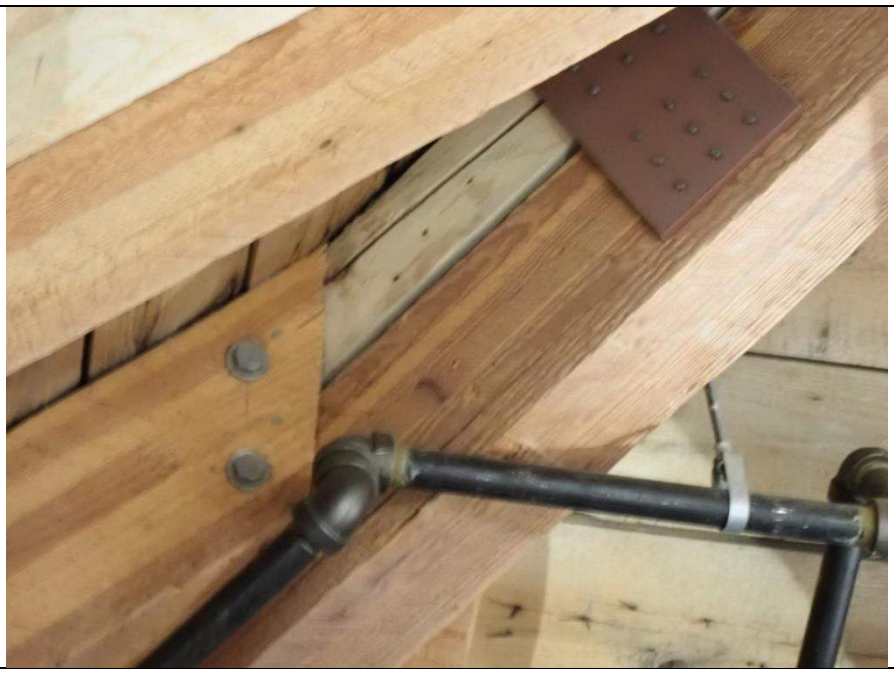
Photograph #5: Mechanical equipment on created mezzanine level.	
Photograph #6: Steel plate with glulam rivet connection of original rafter to new.	

Photograph #7: Original rafter tie to rafter connection at arrow. Note deep notch of rafter.	
Photograph #8: View of Chapel attic framing.	

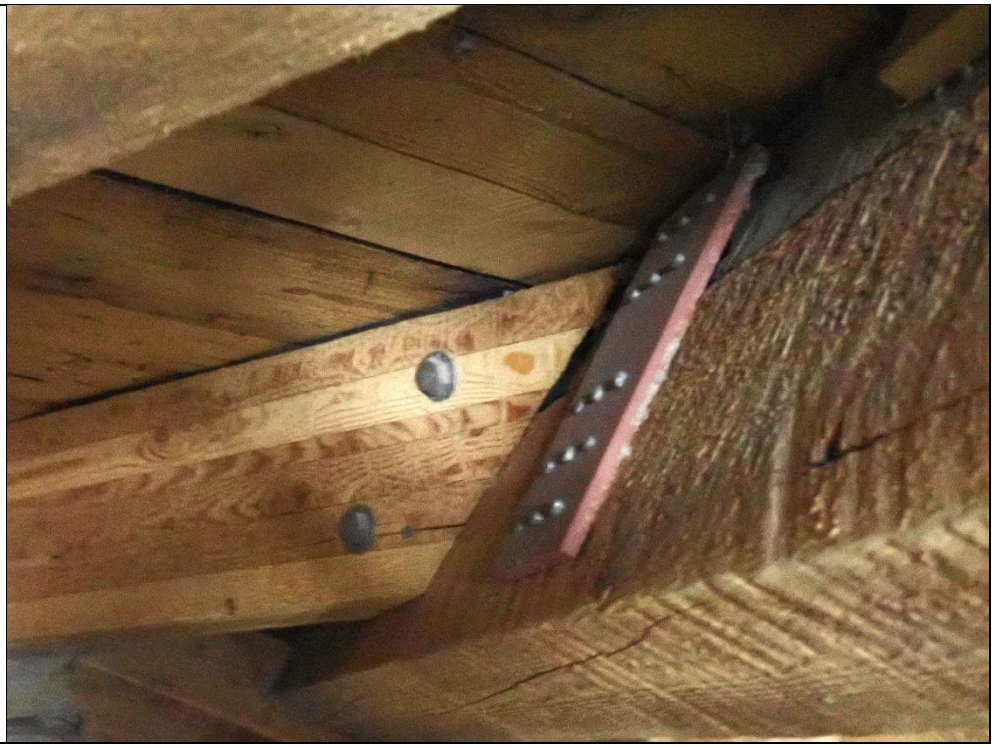
Photograph #9: Curvature of glulam member at north end of roof.	
Photograph #10: Curvature of adjacent glulam rafters at west wall and gaps to sheathing.	

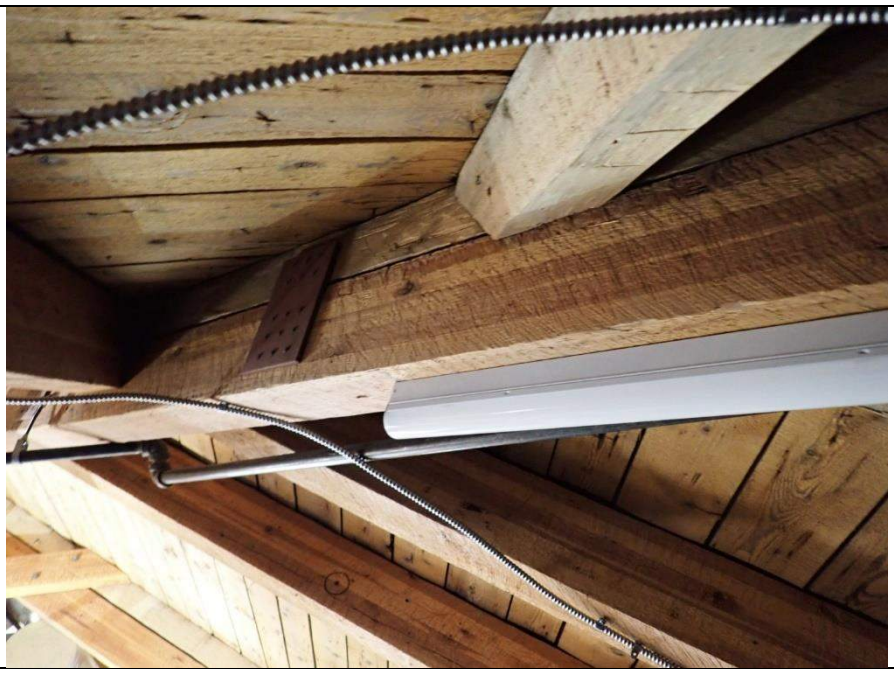
Photograph #11: Curvature of glulam, denoted as W26, requiring notch in millwork.	
Photograph #12: Failed original member above new glulam. No connection of glulam to sheathing.	

Photograph #13: Original rafter meeting built-up hip. No connection between rafter and glulam. Two nails only to original hip member. Gap behind connection plate at arrow.	
Photograph #14: Large gap at built-up member. Connection of rafter tie only to new member.	

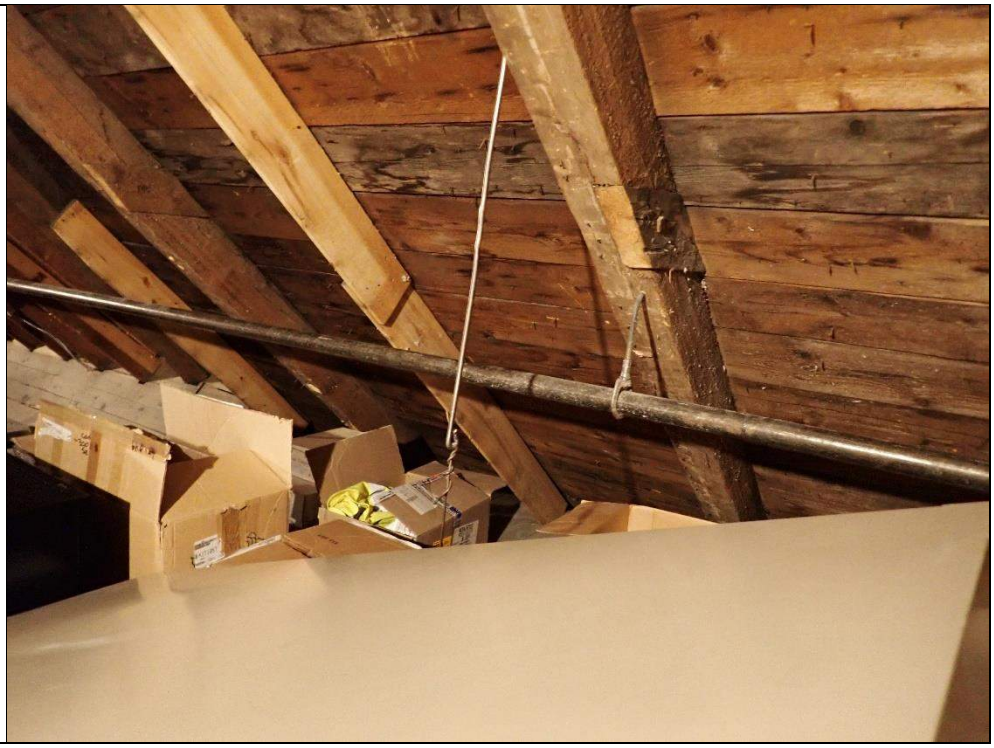
Photograph #15: Lag screws into angled end of glulam. One into failed original member and one into glulam reinforcement.	
Photograph #16: Connection plate maximum design spacing (1524mm) far exceeded.	

Photograph #17: New rafter tie dapped at connection plate. Lag screw with reduced embedment into original member at arrow.	
Photograph #18: Lag screw with minimal embedment into hip member.	

Photograph #19: Top lag screw near bottom of original member.	
Photograph #20: Glulam rivets with minimal embedment into original timber.	

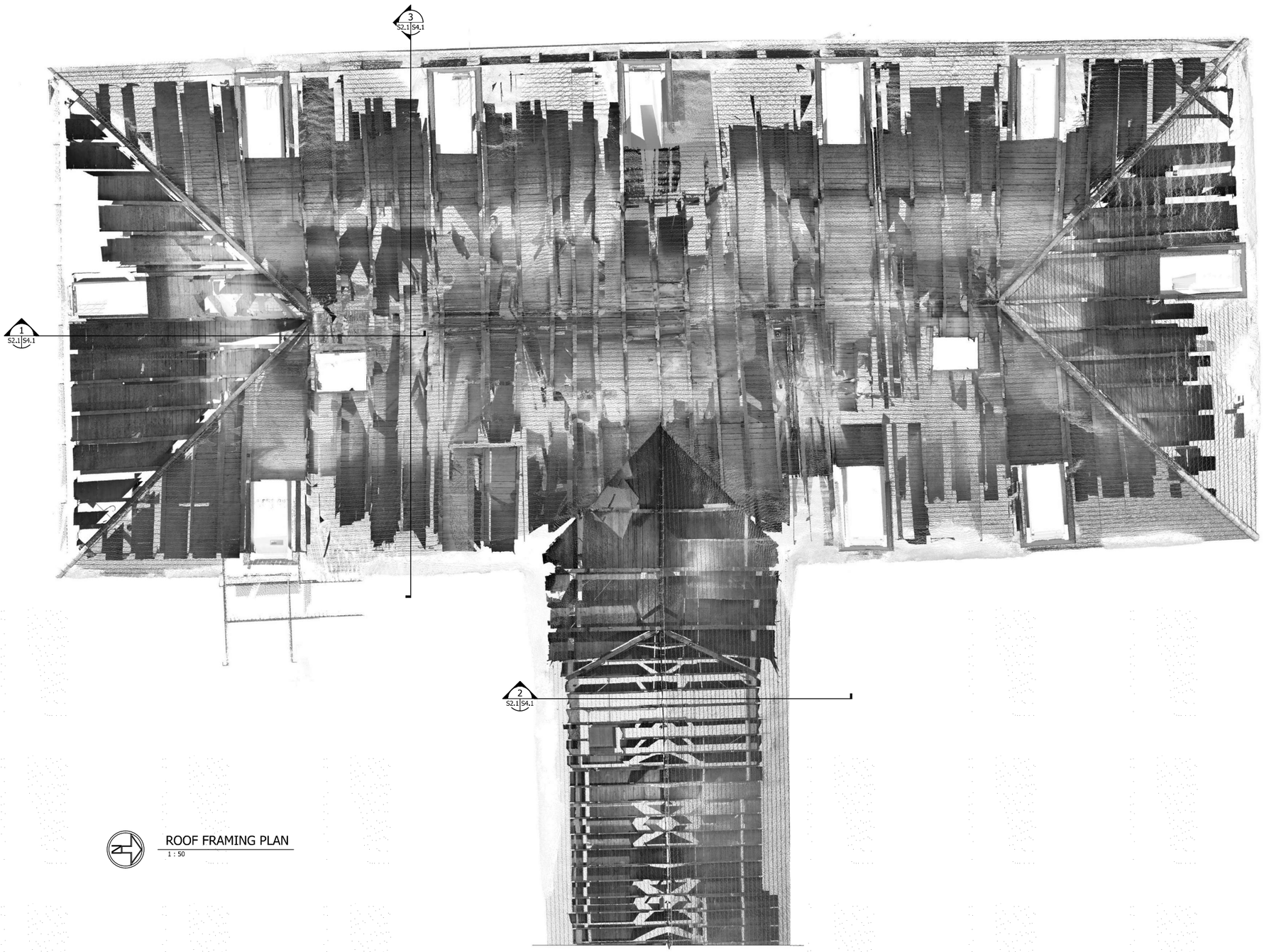
Photograph #21: Glulam rivets not fully embedded in original member.	
Photograph #22: Original rafter tie to rafter connection with deep notch.	

Photograph #23: Failed rafter in Chapel attic.	
Photograph #24: Failed rafter in Chapel attic.	

Photograph #25: Unsuitable rafter replacement – does not extend to peak.	
Photograph #26: Lower end of same replacement used instead of a rafter.	

Appendix B

3d Laser Scan Results



ROOF FRAMING PLAN

1 : 50

Consultant

CrosierKilgour

Structural Engineering & Building Performance

Rev	Date	Issuance
A	2023-11-27	ISSUED FOR REVIEW

NOTE:
PRELIMINARY
DRAWING
DO NOT USE FOR
CONSTRUCTION

Project

SAINT BONIFACE MUSEUM
ROOF INVESTIGATION

494 TACHE AVE,
WINNIPEG, MANITOBA

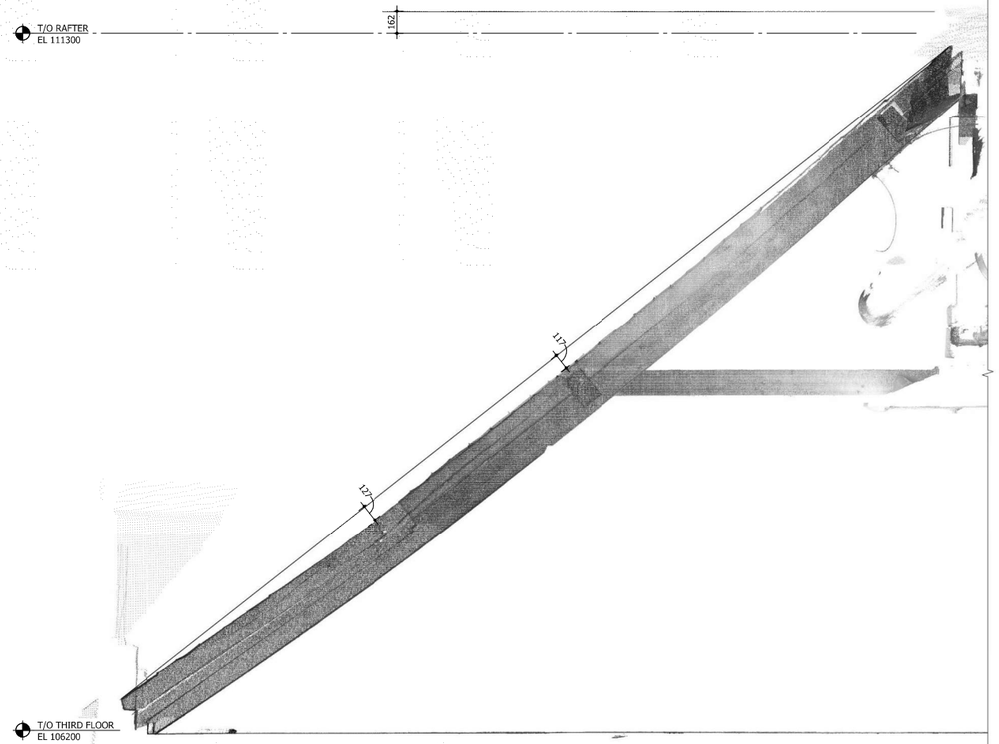
Sheet Title

ROOF FRAMING PLAN

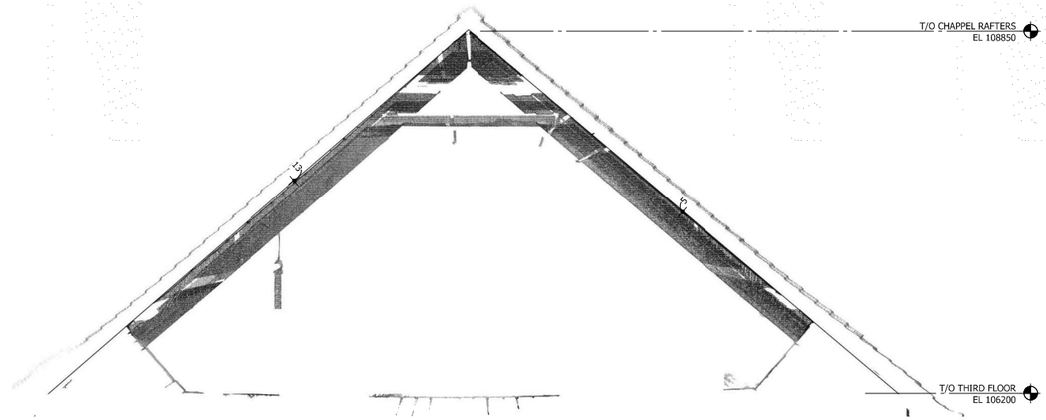
Design	KJP
Drawn	PEM
Project	2022-1328
Revision	A

Sheet

S2.1



1 SECTION
S2.1 | S4.1
1 : 20



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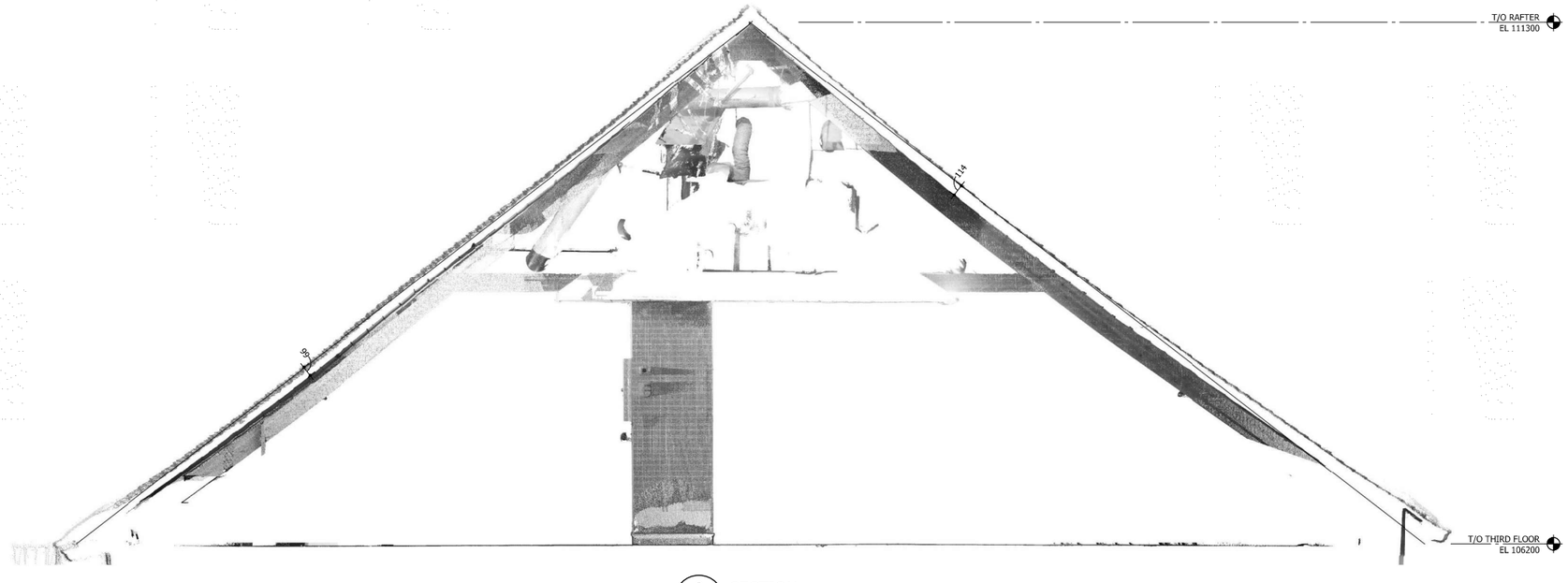

3 SECTION
S2.1 | S4.1
1 : 25

Consultant

CrosierKilgour
Structural Engineering & Building Performance

Rev	Date	Issuance
A	2023-11-27	ISSUED FOR REVIEW

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Project
SAINT BONIFACE MUSEUM
ROOF INVESTIGATION

494 TACHE AVE,
WINNIPEG, MANITOBA

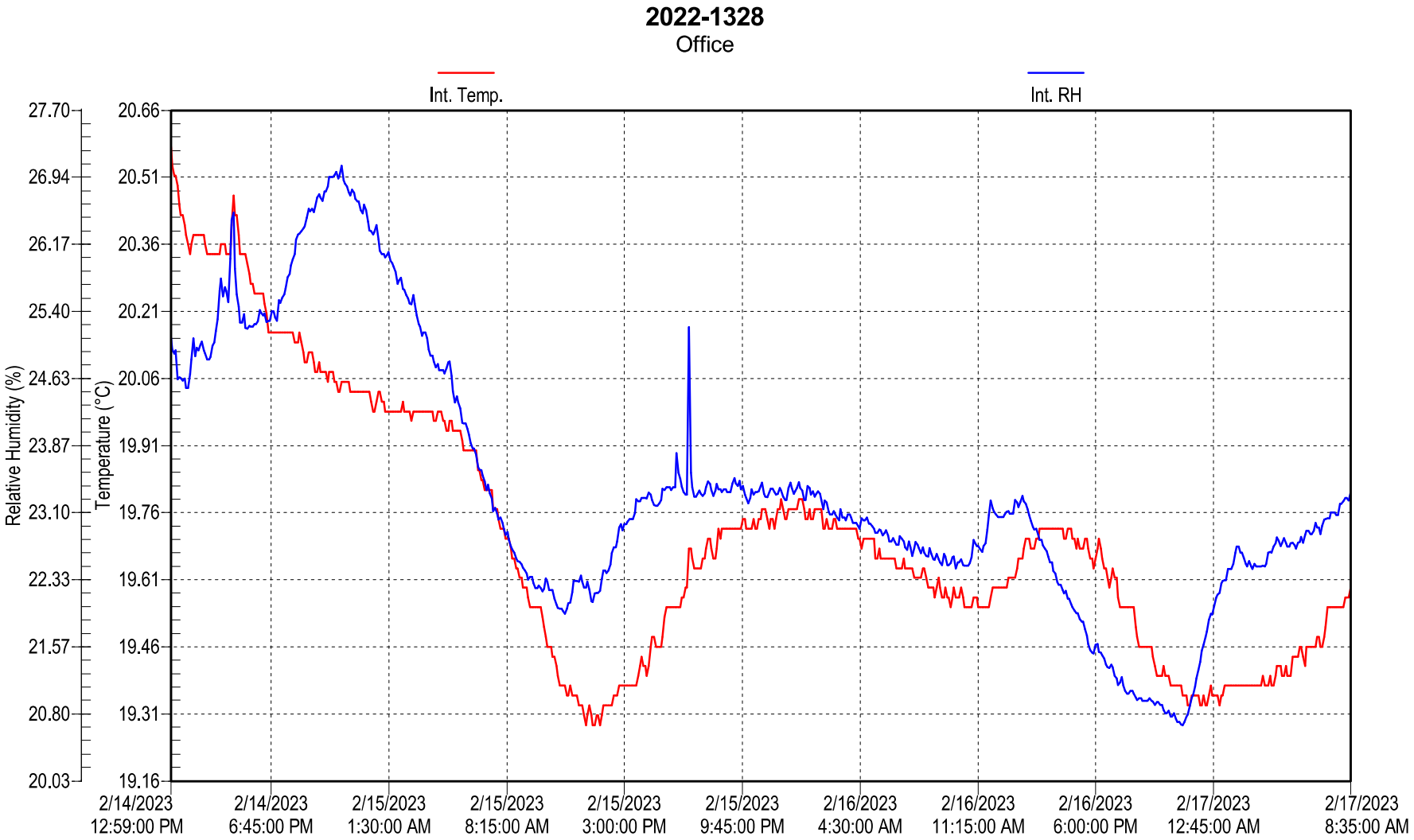
Sheet Title
SECTIONS

Design	KJP
Drawn	PEM
Project	2022-1328
Revision	A

Sheet
S4.1

Appendix C

Data Logger Graphs


2022-1328
Office
Int. Temp.
Int. RH
Relative Humidity (%)
Temperature (°C)
27.70
26.94
26.17
25.40
24.63
23.87
23.10
22.33
21.57
20.80
20.03
20.66
20.51
20.36
20.21
20.06
19.91
19.76
19.61
19.46
19.31
19.16
2/14/2023 12:59:00 PM
2/14/2023 6:45:00 PM
2/15/2023 1:30:00 AM
2/15/2023 8:15:00 AM
2/15/2023 3:00:00 PM
2/15/2023 9:45:00 PM
2/16/2023 4:30:00 AM
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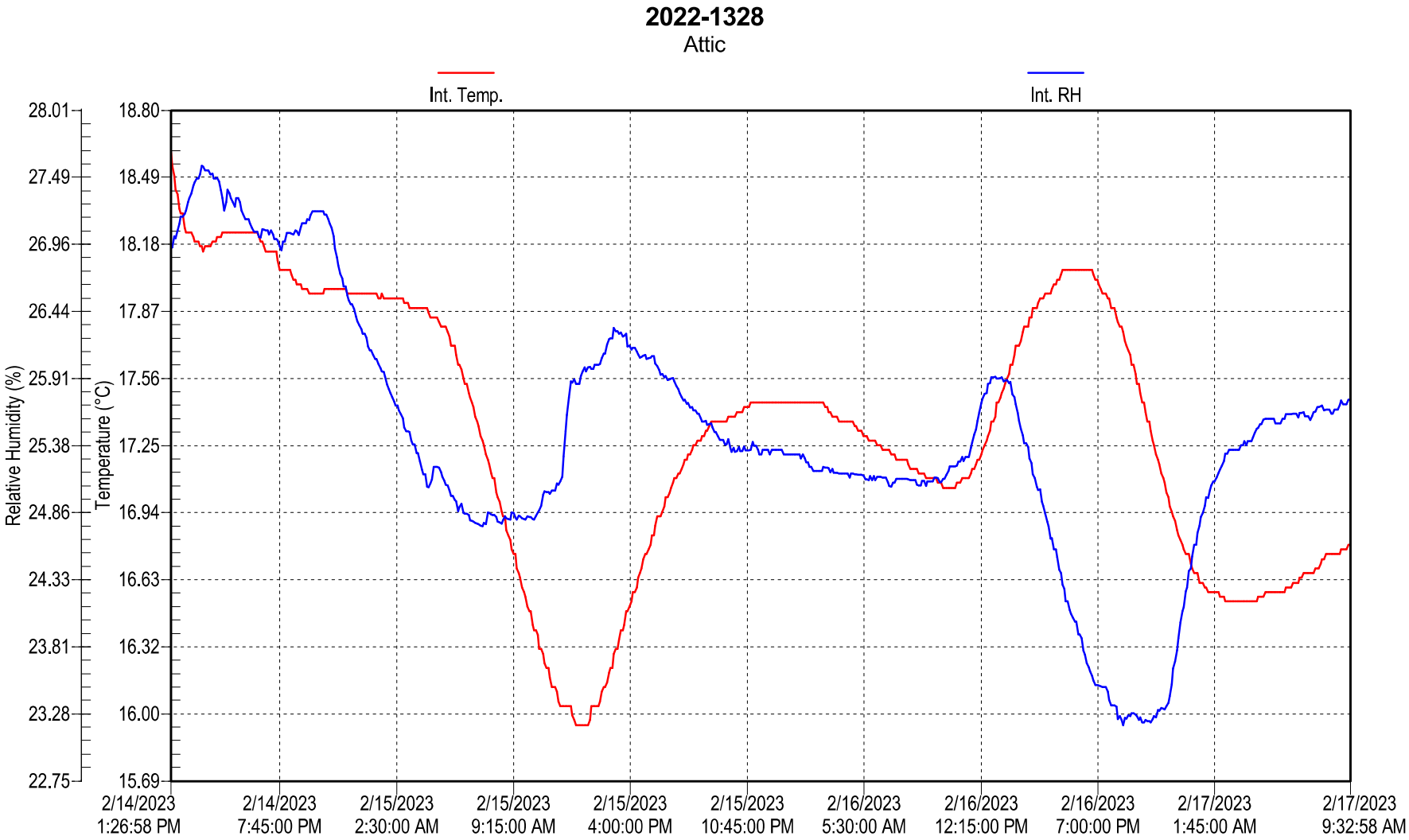

2022-1328
Attic
Int. Temp.
Int. RH
Relative Humidity (%)
Temperature (°C)
28.01
27.49
26.96
26.44
25.91
25.38
24.86
24.33
23.81
23.28
22.75
18.80
18.49
18.18
17.87
17.56
17.25
16.94
16.63
16.32
16.00
15.69
2/14/2023 1:26:58 PM
2/14/2023 7:45:00 PM
2/15/2023 2:30:00 AM
2/15/2023 9:15:00 AM
2/15/2023 4:00:00 PM
2/15/2023 10:45:00 PM
2/16/2023 5:30:00 AM
2/16/2023 12:15:00 PM
2/16/2023 7:00:00 PM
2/17/2023 1:45:00 AM
2/17/2023 9:32:58 AM

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Appendix D

Class 4 Cost Estimate

GWH

Construction Management Services Ltd.

Crosier Kilgour & Partners Ltd.

Class 4 Costing Services

Class "4" Estimate

St Boniface Museum Roof Framing Repairs

494 Tache Avenue

Winnipeg, Manitoba

Based on Drawings / Sketches and Memorandum

Dated November 27, 2023

Final Estimate December 1, 2023

Crosier Kilgour & Partners Ltd.
610-234 Donald Street
Winnipeg, Manitoba
R3C 1M8
Attention: Kathy Pratt CIM, LEED AP, P Eng.

GWH

Construction Management Services Ltd.
419 Laidlaw Boulevard
Winnipeg, Manitoba
R3P 0K8

Telephone 204-661-9492
Cellular 204-296-8916

Crosier Kilgour & Partners Ltd.
610-234 Donald Street
Winnipeg, Manitoba,
R3C 1M8

December 1, 2023

Attention: Kathy Pratt CIM, LEED AP, P Eng.

Dear Kathy:

Re: Class 4 Construction Estimate St Boniface Museum Roof Framing Repairs, Winnipeg, Manitoba

Brief Project Description: St Boniface Museum Roof Framing Repairs: Based on Drawings / Sketches and Memorandum dated November 27, 2023.

- Install New Supply Columns and Beam Line to support current rafters and rafter ties.
- Installing plates and angles to connect roof deck to new and existng glulam rafters and to original rafters
- Repairs to the Chapel Rafters
- Additional Rafters in Museum area to upgrade failed rafters
- Millwork and Partition modifications to allow work to be completed
- Fire Protection and Related Mechanical and Electrical Disconnects and Reinstallations to facilitate the new carpentry works
- All work to be controlled by a General Contractor in this estimate.

Scope of Work Provided by GWHCMS Ltd and Documents Received from Client:
Attached please find our class 4 construction estimate, for the above noted project, based on Drawings / Sketches and Memorandum issued by Crosier Kilgour & Partners Ltd. November 27, 2023.

Class 4 Total Estimate Construction Cost:
The overall estimated cost of the entire project is valued at $615,281.00 + GST including a 20% Contingency and Risk Allowance. **See Appendix A for Estimate and Detailed Breakdown.**

Estimate Accuracy:
The accuracy of this estimate at Class 4 should range between - 30% to +60%, of the tender prices you will be receiving. We never estimate to be low bidder rather mid bid in a bidder group of at least 5 general contractors (GC). This percentage in accuracy is due to the current unpredictability of the market and GC participation at tender as of today.

Exclusions and Assumptions:
The following list of exclusions should be considered by all parties while reviewing the estimate.

Exclusions and Clarifications are as follows:

- Design, Engineering and Project Administration Costs Are Not Included
- All costs are based on current year and month costs
- Contract Based on CCDC 2 2020 Stipulated Sum Contract, Not Construction Management
- GST is Extra
- Escalation not included
- Furniture and Personal Possession and Equipment and Artifact Moving by others
- Market Conditions considered.
- Cash Allowances are not included
- Hazardous Material removal allowance has not been made

Explanation of Allowances Used in this Estimate, (Not all will Apply):

Design Contingency: Used at all levels of estimate Class 5, 4, 3, 2 and 1 depending on drawings completeness, example; Schematic design, Design and Development, Working Drawings of Pretender. Values typically range from 30%, 20%, 15%, 10% 7%, and 5%. Will be used when drawings and overall project design are developing also when we are not certain if project will be tendered withing 30 to 60 days once the estimate is completed. As the estimate costs are based on the day the estimate is completed.

Market Condition Contingency: Used when we anticipate weak or poor tender / bidder turnout, also for specialized or unique projects, small projects under $500,000.00 in value, also if the market is saturated with work and builders are very busy. Values typically range from 5%, 10% to 20%.

Estimate Contingency: Used when the risk in our estimate is above a tolerance which is higher than the normal tolerance we develop as we progress through the design process. Perhaps if only 1 estimate is called for, or we unable to connect with the market place as the design package is too vague and subject to changes or early on in design. Values typically range from 5% to 10%.

Location Factor Contingency: Used when the project has the following conditions.

- Room, Board, Travel, Labour when traveling. The cost is applied typically for trades as our general requirements usually cover these costs for the GC only.
- Overtime or lost production due to either loner or shorter days to make-up for lost travel time.
- Or, out of town Living Costs and Travel and Related Labour Costs.
- Material shipping costs and related packing and storage costs.
- Low bidder turnout due to location and nature of work.
- Project and schedule delay risk die to supply chain or labour shortage issues.

Normal factor would be 5% to 100% of project cost, special circumstances could brin this from 100% to 300% of project cost depending on remoteness of the project location in Canada.

Ownership and accuracy of the estimates, provided by GWHCMS Ltd.:

All estimates, reports, and similar documents prepared by GWHCMS Ltd. Shall remain the property of GWHCMS Ltd. The client will have access to all documents and worksheets related to the project and they shall be made available upon request.

Pricing by GWHCMS Ltd. reflects probable construction costs obtainable in the location of the project as of the date of the report and is a determination of fair market value for the construction of this project and should not be taken as a prediction of low bid.

This pricing assumes competitive bidding for every portion of the construction work including all subcontractors as well as the general contractor, and assumes a minimum of five (5) general bidders. If fewer bids are received, the bid results can be expected to be higher.

It is recognized, however that GWHCMS Ltd. does not have control over the cost of labor, materials or equipment, over a contractor's methods of determining bid prices, or over competitive bidding, market or negotiation conditions.

Accordingly, GWHCMS Ltd. cannot and does not warrant or represent that bids or negotiated prices will not vary from this nor any subsequent estimate of construction cost or evaluation prepared by or agreed to by GWHCMS Ltd.

Trusting you will find the attached information helpful, please feel free to contact us at your convenience should you have any questions or concerns.

Respectfully yours,



Gerhard Hoppenheit C.E.T., P.Q.S., G.S.C.
President
GWH Construction Management Services Ltd.

GH/sh

Appendix A

St Boniface Museum Roof Framing Repairs

Class 4 Estimate Summary

Estimate: Including
Structural Repair and Mechanical, Fire Protection and Electrical Allowance Estimate

GWHCMS Ltd. 01-Dec-23

Project Name: St Boniface Museum Structural Upgrades GFA 1700 m2
Includes Basement Area

Client: Crosier Kilgour Partners Ltd.

Estimate Class: 4 -30% + 60% Margin of Error 8 Month Schedule
Project Planned September through April

Item #	Description	Quantity	Unit	Rate	Cost
1	**Demolition and Excavation and Retaining Walls**				
	Misc. Demolition Allowance for Access and New Work	28	days	$600.00	$16,800
2	**Masonry**				
	N/A				$0
3	**Metals**				
	Teleposts 8000# Capacity 12' Tall Adjustable	8	each	$400.00	$3,200
	Shoe Custom Built to Carry and Splice Glulam Beam	8	each	$400.00	$3,200
	Misc. Fasteners	1	ls	$2,500.00	$2,500
	Misc. Plates 200 and Ties 1000 (Simpson Strong Tie Brand)	1	ls	$2,000.00	$2,000
4	**Carpentry**				
	Millwork Modification Allowance	1	ls	$5,000.00	$5,000
	Partition Modification Allowance	1	ls	$3,000.00	$3,000
	Install 175 x 380 Glulam Beam 26m with Connections	26	m	$310.00	$8,060
	Install 130 x 190 Glulam Rafters next to Curved, Curved to Remain	45	m	$110.00	$4,950
	Open Roof 6 Locations for 6 Rafters to be Installed and Repaired	6	each	$1,800.00	$10,800
	Chapel Attic Roof Repairs Rafters and Rafter Ties 2 x 8	264	m	$60.00	$15,840
	Misc. General Repair Allowance	1	ls	$7,500.00	$7,500
	Misc. Carpentry and False Work and Fasteners	1	ls	$5,000.00	$5,000
5	**Mechanical and Fire Protection (No Defined Work Scope)**				
	Fire Protection:				
	Daily Drain and Refill Wet or Air System (Glycol Not Allowed for)	192	days	$175.00	$33,600
	Sprinkler Line Modifications To Allow Work to Take Place	1	ls	$25,000.00	$25,000
	HVAC				
	Disconnect and Reconnect Equipment To Allow Work to Occur	1	ls	$10,000.00	$10,000
6	**Electrical Work (Allowance No Defined Work Scope)**				
	Misc. Disconnect and Reconnect Mechanical Lights and Power Plugs (Allowance)	1	ls	$10,000.00	$10,000
	Subtotal				$166,450
	General Requirements				$285,000
	Permits, Bonds, Insurance 3.25%				$14,672
	General Contractor OH and Fee 10%				$46,612
	Contingency and Risk Allowance 20%				$102,547
	Grand Total				$615,281

Cost per m2 = $361.93

St Boniface Museum Structural Upgrades 01-Dec-23

General Requirements

Prepared for: Crosier Kilgour Partners 8 Month Schedule

Prepared By: GWHCMS Ltd. Class 4

Item Name	Quantity	Unit	Rate	Total
General Clean-up	8	Month	$500.00	$4,000
Snow Removal	0	month	$500.00	$0
Garbage Bins(1) Waste	0	month	$150.00	$0
Haul Waste to Dump & Recycler	2	trips	$450.00	$900
Final Clean-up	1	ls	$1,500.00	$1,500
Dewatering	0	month	$400.00	$0
Small Tools and Barricades	8	Month	$2,500.00	$20,000
Heavy Equipment Rentals				
Bobcat Skid Steer	0	month	$2,500.00	$0
Boom Crane and Operator	1	month	$3,500.00	$3,500
Scissor Lift	0	month	$850.00	$0
Swing Stage	0	month	$1,200.00	$0
Scaffolding / Shoring	1	ls	$1,500.00	$1,500
Silt Fence	0	lf	$1.50	$0
Site Fence and Gates	100	lf	$30.00	$3,000
Temp. Site Office	8	month	$2,500.00	$20,000
Temp. Sanitary	8	month	$1,200.00	$9,600
Cell Phone, PC, Site Com.	8	month	$500.00	$4,000
Security Drive By (Fire Watch)	8	month	$5,000.00	$40,000
Security Camera System and Monitoring	0	month	$825.00	$0
Temp. Power	8	month	$150.00	$1,200
Temp. Panels and Feeders	0	ls	$1,000.00	$0
Temp. Lights	0	ls	$1,000.00	$0
Hoardings	0	ls	$1,000.00	$0
Temp. Hoarding Heat	0	month	$5,000.00	$0
Heat Closed in Building	0	sf	$4.50	$0
Ventilation (Exhaust Fans)	0	month	$500.00	$0
Superintendent	8	month	$8,500.00	$68,000
Project Manager	4	month	$6,500.00	$26,000
Foreman	8	month	$7,500.00	$60,000
Travel (GC Only)	0	month	$1,200.00	$0
Safety Coordinator	8	month	$1,000.00	$8,000
Cartage and Freight Storage Rentals	8	ls	$250.00	$2,000
Courier	4	month	$100.00	$400
Misc. Fuel	8	month	$50.00	$400
Safety Equipment, Railings, Fall and Water Work Protection	1	ls	$1,000.00	$1,000
Signage	1	ls	$500.00	$500
As-Builts	1	ls	$2,500.00	$2,500
O & M's	3	each	$500.00	$1,500
Warranty	1	ls	$1,500.00	$1,500
Site Reports and Images	8	month	$250.00	$2,000
Demobilization	1	ls	$2,000.00	$2,000
				$285,000

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Structural Engineering & Building Performance
Strong Relationships, Enduring Solutions.

December 10, 2023 Proposal Number: 2022-1328

Le Musée de Saint-Boniface Museum
494 avenue Taché
Winnipeg, MB
R2H 2B2

Attention: Cindy Desrochers, Directrice

Re: Le Musée de Saint-Boniface Museum- Roof Structure
Proposal for Engineering Services

Thank you for requesting our involvement with the above-noted project. Based on the findings and recommendations of our December 8th report, intervention is warranted to the roof structure of the Le Musee de Saint-Bonface Museum in order to help ensure the long-term structural integrity of the building. The following summarizes our proposed scope of services and associated professional engineering service fees to design and implement a remediation program.

PROJECT UNDERSTANDING

The investigation completed by Crosier Kilgour confirmed that some of the roof framing members exhibit excessive deflection. From our observations, several concerns were raised regarding the loading conditions imposed on the rafters, the lack of connection to the roof sheathing, and the connection details between the framing components. Where rafters exhibit excessive deflection, it not only affects their serviceability but can also affect their structural capacity.

Based on the structural analysis of the findings, we have proposed the following structural work for the roof structure:

1. Installation of a new row of 8 columns supporting a new beam below the rafter ties that support the mechanical level floor.

2. Installation of manufactured sheet metal angles between all of the rafters and the roof boards at a regular spacing.

3. Installation of manufactured sheet metal plates between the two at a regular spacing.

4. At specific locations where the excessive curvature is especially problematic, installation of new replacement rafters will also be considered.

5. Replace failed Chapel roof framing.

6. Miscellaneous carpentry repairs.

The following summarizes our proposed scope of professional services in the design, procurement, and construction phase services for the recommended scope of work.

PROPOSED SCOPE OF SERVICES

The remediation work proposed is highly atypical; thus, regular yardstick costs are not available to aid in accurate budget construction costing for the proposed work. As you are aware, we engaged the services of a quantity surveyor with specific experience in the construction industry and a recommended Class D budget construction cost of $615,000.00 was put forward. The cost is for construction only and excludes professional engineering services. Also, please understand that at the Class D level, the actual construction cost is anticipated to be within -25 to +30 percent of this estimate, which represents a considerable range.

In order to help enhance the budget construction cost, we propose to update the construction cost once the design development work is completed and the potential impact on interior operations (furniture, mechanical/electrical services, etc.) may have on both the operation of the facility but the overall project cost. We understand that significant changes to the mechanical system are in the proposal stage for the facility. The location of the current mechanical system layout will potentially provide a significant impediment to the implementation of the roof structural framing repairs. Thus, careful planning and possible decanting will be required in order to ensure the two scopes of work are appropriately integrated.

Typically, the two most common forms of procurement consist of a Design-Bid-Build process in which the design professional provides a set of contract design drawings and specifications which are then released to a select pool of contractors with sufficient experience in this area. Finding contractors with sufficient experience in heritage timber restoration is a potential challenge, based on the unique scope of work. Due to the relatively small scope of work, in a design-bid-build contract, we are unlikely to attract suitable contractors. The larger and more experienced contractors experienced in managing site operations are unlikely to be competitive against smaller contractors that have relatively very little experience in managing facility operations during a significant structural restoration.

In addition, managing the facility operation with sufficient site protection, including but not limited to accommodating the interior furnishings, mechanical and electrical equipment provides a potentially significant unknown. It would be difficult to effectively anticipate all the requirements, particularly integration of the mechanical and electrical changes with site operations. We are therefore highly concerned that there could be a high probability of significant changes in scope and thus, cost during construction to accommodate unforseen items pertaining to site operations and mechanical/electrical changes.

We therefore recommend that consideration be given to utilizing the Construction Management method of procurement. In this scenario, once the schematic design work is completed by the design professional, an RFP is issued to prospective reputable contractors with specific experience working on existing buildings. Each of the larger contractors we would propose have “special project” sectors that specialize in this type of work, essentially working within active operation facilities to execute significant projects, particularly in public/institutional buildings. For the pricing of the work, the CM executes competitive sub-trade pricing from the various qualified trades to complete the work, as designed and specified in the contract documents. Thus, a competitive tender for the actual work is ultimately achieved via sub-trade agreements. The construction managers tend to draw bids from the effective sub-trades, due to their long-standing work in the construction industry.

A CM contract is broken down into two phases; pre-construction services and construction phase services. During the pre-construction phase, the CM meets regularly with the design team and facility stakeholders to establish which impediments need to be accommodated in addition to phasing/decanting and logistics. Once these factors are potentially accounted for, accurate updated budget construction costing is developed by the Construction Manager. A further advantage of using the CM for budget pricing over a quantity surveyor is that the CM is ultimately charged with implementing the project within the budget estimate provided prior to the tendering of the sub-trades; essentially, they have to complete the project.

If the budget estimates are ultimately well above the original projected costs, attempts at value-engineering the project are implemented in order to achieve a satisfactory cost to the stakeholders. Under this phase, compromises are discussed, both in scope and site operations to help lower the construction cost. If/when the projected cost reaches an acceptable level, Phase 2, the construction phase is implemented for execution of the work.

Thus, based on the complexity of the actual work and accommodating site operations for the museum, we recommend that the Construction Manager method of procurement be utilized.

The following table summarizes the scope of design services and associated professional fees.

Scope Item	Cost
Design Phase Services 1. Development of schematic design drawings for CM RFP. 2. Advancing drawings to design development for updated budget pricing. 3. Drawings and specifications to 99 percent and Class A Pricing (10%), including incorporation of phasing and logistics to accommodate site operations.	 $7,500.00 $5,000.00 $10,500.00
Procurement • Development of CM RFP and issuance to appropriate contractors with experience in specific area of remediation. • Assessment of bids, letter of recommendation.	$4,800.00
Construction Phase Services 1. Site inspections of work in progress, issuance of field observation reports, summarizing observations and instructions to the contractor. Allow 16 inspections @ $900.00 per inspection. 2. Project administration: managing bi-weekly site meetings, processing contractor invoices, etc. Allow $4,000.00/month at 6 months	 $14,400.00 $24,000.00
Sub-Total	**$66,200.00**
Disbursements • Heritage Architectural allowance services by Mr. Jim Wagner; to be invoiced hourly. • Initial consultations in design development phase by SMS Engineering for mechanical and electrical services impact from structural remediation intervention. Recommended allowance; actual cost to be invoiced at cost.	 $3,000.00 $5,000.00
Total	**$74,200.00**

Thus, total professional fees comprise $74,200.00, excluding government taxes. Please note that mechanical and electrical engineering costs are subject to change, depending upon the impact the

proposed system changes have on execution of the work. We have carried an allowance, which will be drawn down hourly as required. If any significant mechanical and/or electrical engineering services are deemed to be required, a separate proposal will be developed by SMS at that time and only implemented after approval of the client.

For execution of the design work, the vast majority of the program consists of structural repairs and modifications, thus, Crosier Kilgour will act as prime consultant. Due to the heritage listing for the building, we also propose to enlist the services of a recognized heritage architect, Mr. Jim Wagner, MAA. A heritage permit will be required; thus, Mr. Wagner's input will be necessary to help ensure that the work proposed is in alignment with appropriate heritage restoration guidelines. Mr. Wagner was Parks Canada heritage architect prior to retiring and now works as a sub-consultant on the most prominent heritage restoration projects in the Province of Manitoba.

In terms of timing, we anticipate that 10 to 12 weeks will be required to advance the documents to the Design Development stage, procure the CM and update the budget pricing. Thus, the necessary budget information should ultimately be achievable before the end of March. Finalizing the design documents and tendering of the sub-trades could theoretically proceed immediately thereafter.

Invoicing

Regarding invoicing, progress invoices would be issued at monthly intervals throughout the Design and Construction Document phase. During the Investigation and Preliminary Design phase, fees would be billed progressively in step with design progress. Similarly, Construction Phase services would be billed according to the Contractor's progress.

Additional Services

Additional services for Client-requested changes will be charged out at hourly rates according to the following schedule. Alternatively, a fixed fee for the additional work may be negotiated at the time of the change. The following summarizes our standard hourly rates for 2023.

Principal	$200.00
Senior Engineer	$175.00
Engineer	$160.00
Engineer-in-Training	$125.00
Senior Technologist	$165.00
Intermediate Technologist	$150.00
Technologist	$125.00
Senior AutoCAD Technician	$135.00
AutoCAD Technician	$110.00
Contract Administrator	$145.00
Administrative	$110.00

There shall be no change to the scope of Services provided hereunder except by written agreement between the Client and Engineer.

TERMS AND CONDITIONS

The Services would be completed pursuant to our standard Terms and Conditions, and we have appended a copy for your review.

AUTHORIZATION

The undersigned authorizes Crosier Kilgour & Partners Ltd. to proceed with the Le Musée de Saint-Boniface Museum- Roof Structure remediation in accordance with this proposal.

I accept the above and the attached Terms and Conditions, and hereby authorize Crosier Kilgour & Partners Ltd. to proceed with the work as described in this proposal. The agreement created by my acceptance of this letter, including the Terms and Conditions attached hereto, shall be referred to as the "Agreement".

Authorized by:

_____
Company Name (please print)

_____ _____
Name (please print) Title

_____ _____
Signature Date

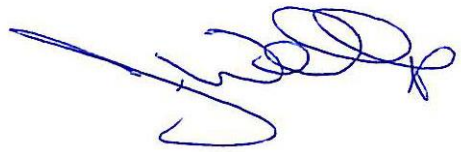
Client Address for Notice purposes:

_____
_____
_____
_____

CLOSURE

We appreciate the opportunity to provide a proposal for consulting services for the above-noted project and trust the above provides the information you require. We would like to thank you again for the opportunity to work on this project. If you require additional information or clarifications, please do not hesitate to contact the undersigned.

Yours truly,



John A. Wells, Ph.D., P.Eng.
Principal

TERMS AND CONDITIONS

1. Standard of Care: The Engineer shall provide the Services with the degree of care, skill and diligence reasonably to be expected of a professional engineer on similar projects at the time and place where the Services are rendered. No other express or implied warranty shall apply.

2. Limits on Liability: The Engineer is not responsible for acts or omissions of either the Client or third parties (other than those for whom the Engineer is responsible at law). The Engineer is not a guarantor of the Project and its responsibility shall be limited to performance of the Services in accordance with the above Standard of Care. Furthermore, the Client and Engineer expressly agree that any claims the Client may have against the Engineer, its servants, employees and subconsultants on the Project shall be absolutely limited to:

(a) claims brought within the shortest period prescribed by the limitation statute applicable to the Site, and in any event, not later than six (6) years from issuance of the Engineer's final invoice for Services provided;

(b) direct damages arising out of provision of the Services. The Engineer shall bear no liability whatsoever for any consequential loss, injury or damage incurred by the Client, including but not limited to claims for lost profits or loss of markets, even if it has been advised of the possibility of such damages;

(c) the lesser of the total cost of construction exclusive of applicable taxes or five times the total consulting fees exclusive of applicable taxes.

Without limitation to the foregoing, the Engineer shall not be liable for any damages, interest, costs or other expenses arising out of failure of any manufactured product or any manufactured or factory assembled system of components to perform in accordance with the manufacturer's specifications, advertising, product literature or written documentation on which the Engineer reasonably relied to provide the Services.

3. Risk Allocation: The Client shall be responsible for all site conditions existing at the date of execution of the Agreement. The Engineer shall not be responsible for structural conditions concealed by existing finishes or latent defects in existing or new materials unless such conditions or defects were readily apparent or were capable of discovery upon visual observation or upon investigation which was reasonably required of the Engineer in performance of the Services.

4. Indemnification: The Client shall indemnify and hold harmless the Engineer and its directors, officers, employees, and agents, from and against any and all claims, damages, losses and expenses, including legal fees on a solicitor-client basis, arising out of or resulting from, in whole or in part, the negligent act or omission or wilful misconduct of the Client or anyone for whom the Client is responsible at law.

5. Billings/Payments: The Engineer shall invoice the Client as contemplated in the Agreement, which invoices shall be payable upon receipt. Accounts not paid within 30 days of invoice date shall be subject to interest at CIBC's prime lending rate plus 1.5% calculated monthly. The Client shall furthermore be liable for payment of the Engineer's collection costs, including legal fees on a solicitor-client basis, for any account unpaid within 90 days of the invoice date.

7. Reimbursement of Expenses: In addition to the fees payable under this Agreement, the Client shall reimburse the Engineer for its reasonable out-of-pocket expenses relating to the provision of the Services.

8. Intellectual Property: The copyright in all drawings, reports, specifications, bills of quantities, calculations and other documents prepared or provided by the Engineer in connection with the project belong to the Engineer. The Client is entitled to keep a copy (in electronic and hard copy version) of the documents for its records and shall have a non-exclusive, royalty-free license to use the documents for the purpose of constructing the project. The Client shall not use the documents other than for the purpose of constructing the project without the Engineer's prior written approval and upon such terms as may be agreed between the Client and the Engineer.

9. Authority of Engineer: The Engineer will have authority to act on behalf of the Client to the extent necessary in order to provide the Services.

10. Termination: This Agreement may be terminated by either party upon: (a) failure of the other party to perform its obligations hereunder that has not been cured within five (5) working days following a written notice thereof from the non-breaching party (or, where the breach cannot reasonably be cured within such period, the breaching party has failed to commence and diligently pursue curing the default); or (b) the other party becomes insolvent or makes a general assignment for the benefit of creditors, or an insolvency proceeding is begun against the other party that is not dismissed or stayed within thirty (30) days. Notice of termination shall be provided to the party in default in writing. In the event of termination, the Engineer shall be paid fees and reimbursable expenses incurred to the effective date of termination, without set-off or deduction. The rights and obligations under Sections 2, 3, 4, 8, and 10 shall survive the termination of this Agreement.

10. Notices: Any notice or other communication under this Agreement shall be in writing and shall be delivered personally or sent by registered mail, postage prepaid to the addresses listed in this Agreement. Any notice or communication sent by registered mail shall be deemed to have been received on the third business day following the date of mailing. If mail service is disrupted by labour controversy, notice shall be delivered personally.

11. Dispute Resolution: Either party shall have recourse to the Courts of Manitoba for resolution of any dispute or claim arising from this Agreement. Disputes between the parties shall be determined in accordance with the laws of Manitoba

Heather Beerling Museum Conservator
139 Dorchester Ave
Selkirk MB R1A0K4
2044828581
heatherbeerling@gmail.com
GST Registration No.: 822540936RT0001

Estimate

ADDRESS
Cindy Desrochers St. Boniface Museum 494 Tache Ave Winnipeg MB R2H 2B2

SHIP TO
St. Boniface Museum 494 Tache Ave Winnipeg, MB R2H 2B2

ESTIMATE #	DATE	
1002	10/12/2023	

DATE	ACTIVITY	DESCRIPTION	TAX	QTY	RATE	AMOUNT
10/12/2023	**Services**	Conservation consultant during restoration projects over 12 months	G	1	0.00	0.00
10/12/2023	**Services**	Preplanning list of recommendations for preservation of artifacts and scheduling of artifact preservation activites. Report provided. Photo documentation- focus on 3rd floor and areas adjacent to areas of work that could be damaged due to construction, and contractor access areas. File photographs according to date and floor taken. Ongoing photo documentation of artifacts areas and building for duration of project.	G	5	1,000.00	5,000.00
	Services	Lead and assist with packing up of artifacts on 3rd floor. Pricing	G	16	1,000.00	16,000.00

DATE	ACTIVITY	DESCRIPTION	TAX	QTY	RATE	AMOUNT
		includes 2 people to pack 3 dimensional artifacts, textiles, maps in cabinets. Photograph items as packing, box inventory, label boxes. Artifacts under bathroom area in basement moved out of the way of contractors to provide access for trades to conduct accessibility upgrades. Cover display cases and artifacts on 2nd floor with plastic sheeting to protect from dust that may fall from ceiling. Obtain quotes for packing materials. Price does not include cost of packing materials such as archival tissue paper, boxes, Rubbermaid containers. Price does not include packing and moving of items that are not artifacts, furniture, library books, files, computers, or interpretation materials and supplies.				
	Services	Pack, cover, move to safer location fragile items on 2nd and 1st floor. Take pictures off walls, take down light in main floor chapel-includes rental of lift to reach light. Take down textiles on 2nd floor. Take	G	5	1,000.00	5,000.00

DATE	ACTIVITY	DESCRIPTION	TAX	QTY	RATE	AMOUNT
		down papier mache Mary and crate in place. Leave in chapel. Pack artifacts removed due to construction. Photograph and inventory artifacts being packed.				
	Services	Attending meetings with contractors as required, weekly walk through to check artifacts for damage due to construction activities. Answer questions as necessary, emails, phone calls. Provide recommendations as needed.	G	30	1,000.00	30,000.00
	Services	Lead artifact move of artifacts back into place, unpack, vacuum artifact where necessary. 2 people . Final report and photos provided to client.	G	18	1,000.00	18,000.00
					Subtotal:	74,000.00

Includes mileage. Does not include packing materials. Includes a second conservator to help with packing and unpacking.

SUBTOTAL	74,000.00
GST @ 5%	3,700.00
TOTAL	**$77,700.00**

TAX SUMMARY

RATE	TAX	NET
GST @ 5%	3,700.00	74,000.00

Accepted By

Accepted Date

MSBM Upgrades and Restoration

2024 TO 2026

ROOF & DORMER SHINGLES, TEST WINDOWS, ENGINEERING

JANUARY TO MARCH 2024

Funding secured of $440,000

3RD FLOOR RAFTERS & OFFICES

APRIL 2024 TO MARCH 2025

Require

1.25 million

HEATING AND COOLING

SUMMER 2024

Cost unknown, but being projected at 1 million

MAIN FLOOR ACCESSIBLE DOOR & WASHROOMS

SEPTEMBER TO DECEMBER 2024

Funding secured of $160,000

POTABLE WATER REMEDIATION

SUMMER 2025

Cost unknown, need to identify source of contamination

WEST FAÇADE WINDOWS, DOORS, SIDING

SUMMER 2025

Require

750,000$

(lead & asbestos remediation)

REMAINING WINDOWS, DOORS, SIDING

SUMMER 2026

Require

750,000$

(lead & asbestos remediation)

CREATE MAINTENANCE ENDOWMENT FUND

DECEMBER 2026

Fund that will allow for a more sustainable restoration maintenance

3RD FLOOR EMPTY & EXHIBITS CLOSED IN BY END OF JUNE 2024

STAFF MOVE OPERATIONS OFFSITE, BUT LOCALLY 2024 TO 2025. CREATE A MOBILE 175TH TOUR LEADING UP TO THE RE-OPENING. EXHIBITS ARE REFRESHED IN 2025 WHILE WINDOWS, DOORS, SIDING WORK HAPPENS ON WEST FAÇADE.

GRAND RE-OPENING FOR 175TH CELEBRATION

Le Musée de Saint-Boniface Museum

Nos histoires ∞ Notre musée
Our stories ∞ Our museum

PROFILE

The St. Boniface Museum Board is continued in the City Charter and enacted by a City of Winnipeg By-Law. Board members are nominated by City Council and are tasked with overseeing and managing the museum on behalf of the City of Winnipeg. Le Musée de Saint-Boniface Museum collects, preserves, researches, and interprets a collection of artifacts relating to Western Canada's French-Canadian and Métis heritage, while acknowledging the historical contributions of First Nations and religious communities. The Museum aims to provide visitors and students with experiences that will encourage greater awareness, appreciation and understanding of the French-Canadian and Métis cultures in Manitoba.

Built between 1846 and 1851, this former Grey Nuns' convent houses the Museum and is in fact its principal artifact. It is the oldest remaining structure in the city of Winnipeg – on its original foundation - and the largest oak log building in North America. The first hospital in Western Canada, the building is also a symbol of the 19th century missionary and social services effort carried out in the West by the Grey Nuns from their St. Boniface base. Open to the public year-round, it is a place where colonialism and its policies can be explored and where dialogue can safely occur.

Mission

The Musée de Saint-Boniface Museum safeguards the history and heritage of French-Canadian and Métis people in Manitoba as a mirror for the community and a window for others. The Museum collects, preserves, researches and interprets artifacts of significance to French-Canadian and Métis people to further collective understanding of our contribution to the development of the Province of Manitoba.

Vision

Le Musée de Saint-Boniface Museum shall be known as an indispensable point of reference for those wishing to learn about the heritage of French-Canadian and Métis peoples in Manitoba.

Visitors

The Museum normally hosts approximately 18,000 visitors annually. They represent a broad spectrum ranging from researchers and school and university students to Canadians from other provinces, and American and other international tourists. As well, an increasing number of local visitors are discovering the Museum and the building for the first time despite their relative proximity.

REVISED MSBM 2024 - 2027 CORE OPERATIONAL PLAN

MSBM and its City appointed board as per By-Law 4824/88 oversee the management of Le Musée de Saint-Boniface Museum, housed within the Grey Nuns' National Historic Site. Ensuring multi-year funding, at a rate that incorporates CPI, would allow the museum to ensure its assets are cared for and that it can continue to be a centrepiece to both the heritage and tourism sectors. It is our belief that by investing in our cultural heritage, the City of Winnipeg should view the museum, its staff and the preservation of the building and artifacts as integral to the success in: OurWinnipeg 2045 strategy, Poverty Reduction Strategy, Indigenous Accord and the Newcomer Welcome and Inclusion Policy. The MSBM Board and staff are committed to engage collaboratively and work with the appropriate civic departments to meet the identified goals.

MSBM is positioned to continue achieving its goals as broken down in the following categories:

1) **Alignment** with City of Winnipeg Policies and Strategies
2) **Governance** and Administration
3) **Outreach & Accessibility** year-round through public access, both onsite and offsite
4) **Education** & **Public Programs** through tailored programs for varied markets
5) **Heritage Collections** protection and preservation
6) **Exhibit** collaborations with community partners
7) **Revenue generation** focusing on seven funding streams
8) **Protecting & preserving Winnipeg's oldest building**

	Governance & Administration	Outreach & Accessibility	Education & Public Programs	Heritage Collections	Exhibit Collaboration	Revenue Generation	Protecting & Preserving Building
Our Winnipeg 2045	LG 1.15 SE 5.4	G7 2.3 & 2.4 EP 3.8 HW 4.9 CB 6.42	G7 2.4 EP 3.8 SE 5.5 CB 6.43	G7 2.3 ER 2.14 SE 5.5 CB 6.43	G7 2.3 SE 5.5 CB 6.42	G7 2.2 & 2.6 EP 3.7 & 3.8 HW 4.11 CB 6.42	G7 2.2 & 2.6 EP 3.7 & 3.8 HW 4.11 CB 6.43
Poverty Reduction Strategy	1.3 3.1 3.8	3.9 6.4 6.9	3.9 6.9	6.9	6.9	3.1	6.9
Indigenous Accord	TRC - Call to Action 67 & 68 & 92	TRC - Call to Action 68	TRC - Call to Action 62 & 80	TRC - Call to Action 70	TRC - Call to Action 83	TRC - Call to Action 72	TRC - Call to Action 79
Newcomer Welcome and Inclusion Policy	3.1 4.2 i - iv 4.3 iii 5.2	4.1 i - iv 4.2 iv 4.3 ii - iii	4.1 i - iv 4.2 iv 4.3 ii - iii	4.1 i - iv 4.2 iv 4.3 ii - iii	4.1 i - iv 4.2 iv 4.3 ii - iii	n/a	n/a

Grant Alignment with City Policies & Strategies

a) **OurWinnipeg**

G.7 – Heritage Conservation
Collaborate with other stakeholders 2.3 & 2.4 & 2.6
Within the Development Plan, the museum can increase the city's ability to meet the following goals:
LG 1.15 – Community Capacity Development
ER 2.14 - Heritage Conservation
EP 3.7- Heritage Investment
EP 3.8 – Culture and Heritage Value
EP 3.10 – Indigenous Economic Development
HW 4.9 - Inclusive Public Spaces
SE 5.4 – Reconciliation with Indigenous Peoples
SE 5.5 – Indigenous Lens
SE 5.9 – Heritage Conservation
CB 6.43 – Heritage Conservation

b) **Poverty Reduction Strategy**

Goal 1.3 – Grants – Alignment and Equity
Goal 3.1 – Equity, Diversity and Inclusion Strategy
Goal 3.8 – Living Wage for All City Employees
Goal 3.9 – Indigenous Economic Development
Goal 6.4 – City Managed Facilities – Community Group Use of Space
Goal 6.9 – Community Benefits in City Funded Space

c) **Indigenous Accord**

MSBM has declared its focus on the following calls to Action: 62, 67, 68, 70, 72, 79, 80, 83, 92

Our Goals:

- Collaborate with Indigenous Communities to provide exhibition space.
- Provide basic museum training opportunities to Indigenous Communities.
- Collaborate with Indigenous Communities to create an appropriate Repatriation Policy.
- Create opportunities for Indigenous Students/Youth to work in a museum setting.
- Collaborate with Indigenous Communities to plan, develop, and evaluate museum activities including: exhibits, educational programs, public programs.
- Observe National Day for Truth and Reconciliation with an appropriate event.
- Engage with Indigenous Communities as part of our Strategic Planning Process.
- Create inclusive and accessible barrier free spaces

d) **Newcomer Welcome and Inclusion Policy**

4.1 – A Welcoming City
ii. Create welcoming and orientation opportunities for Newcomers to learn about and connect with the City.
4.2 – A City without Racism
iv. Work to build understanding between Newcomers and Indigenous peoples.
4.3 – Equitable & Accessible Services
iii. Improve access to recreation for Newcomers and adapt services and programs to meet newcomers' unique needs.
iv. Support Newcomer community use of City facilities

Governance and Administration

The St. Boniface Museum Board, first established by the City of St. Boniface in late 1959, now functions under the authority of the City of Winnipeg. Upon the amalgamation of Winnipeg with St. Boniface and other surrounding municipalities in 1972, the Board's "continuation" was specified in the City of Winnipeg Act; the Board is still referred to in the Charter of the City.

As presently constituted, the Board consists of eight citizen members and one councillor, all of whom are appointed for two-year terms by city council, following nominations sought on an annual basis. Any City of Winnipeg elector who is functional in both official languages is eligible for appointment to the Board.

The St. Boniface Museum Board meets bi-monthly and oversees all sectors of activity at Le Musée de Saint-Boniface Museum. It is responsible for MSBM's strategic planning and fiscal responsibility. Active standing committees meet quarterly and include Finance and Operations, Human Resources, Collections, Reconciliation, and Building Restoration – Capital.

MSBM produces audited financial statements and a comprehensive report of activities on an annual basis. Permanent staff support board members' roles by preparing various reports and submitting information as needed and required throughout the year.

2024 - 2027 MSBM will:

- **Secure multi-year funding to ensure stability for the organisation and to upgrade the current temporary part-time positions to their previously FTE prior to the City of Winnipeg's grant cuts more than ten years ago.**
- **Work collaboratively with CUPE Local 500 to develop the next 3-to-5-year collective agreement.**
- **Work collaboratively with the appropriate civic departments for inclusion in the various strategies and policies, especially around accessibility, diversity, inclusion and belonging.**
- **Ensure continued board & staff development with emerging societal trends.**
- **Ensure implementation of our recently updated governance policies and the newest strategic plan.**

Building restoration and temporary closure impact:

- **Work collaboratively with CUPE regarding the unusual circumstances for staff.**
- **Advocate with the city of Winnipeg to support the museum's application to the Legacy Fund for its 175th anniversary.**
- **Assist staff in networking to identify partners for : temporary operating locations, obtain a vehicle for museum purposes due to the programming & outreach pivot**

IMPORTANCE OF MUSEUMS

92% of Canadians say that museums help them learn about the world, and 80% think museums are a highly credible source of information.

Outreach & Accessibility year-round through public access, both onsite and offsite

MSBM is open to the public for self-guided visits on a year-round basis. In the off-season, access is 5 days per week, and in the summer season 7 days per week. MSBM provides special community programming with free access days for all at staple community events such as Louis-Riel Day in February, Manitoba Day and Doors Open Winnipeg in May, Canada Day on July 1st, Culture Days in September, Thursday evenings, and its annual holiday season's kickoff weekend in early December. Additionally, MSBM typically runs standard programming that includes family fun days or themed walking tours in the summer months. To maintain engagement virtually, MSBM has created engaging experiences for various target audiences online (historical vignettes and videos on YouTube, educational worksheets and activities, virtual tours and activities for schools, access to in-house documentaries, virtual exhibits). The MSBM is closed on civic or statutory holidays (except for Louis-Riel Day and Canada Day, Terry Fox Day) and closes for cleaning and/or inventory work in early January.

Permanent staff leverage project dollars from other funders to provide specialty programs that vary annually (beadwork and moccasin-making sessions, specialty evenings with historical talks or demonstrations, finger weaving classes, etc.).

MSBM is also partner to other staple community events and supports the successes of: Heritage Winnipeg's annual Doors Open event; Red River Heritage Fair; APTN's Indigenous Day Live event; Folklorama's Pavillon Canadien-français; Culture Days; Jeudis de la francophonie and various pop-up markets. MSBM is committed to supporting these organizations' successes in 2024 - 2027 in whichever way is most practicable.

2024 - 2027 MSBM will:

- **Review admission policies to be more equitable and inclusive.**
- **Maintain and deliver a full year of program of events.**
- **Increase our outreach to more community groups who could make use of the community spaces in the museum.**
- **Increase in accessibility and communication opportunities through a refreshed website, a monthly newsletter, and social media presence.**
- **Foster partnerships with community organizations that will enhance MSBM's ability to deliver inclusive programs.**

Building restoration and temporary closure impact:

- **Pivot onsite museum experiences to offsite at a location yet to be identified.**
- **Increase in attending community events through outreach.**
- **Reduced calendar of events.**



TOURIST PARTICIPATION

Compared to other metropolitan areas of Canada. Winnipeg has a 72.1% tourist participation rate in cultural activities,

versus Toronto at number 2 with a participation of 2.4%.

Education through tailored programs for varied markets

Approximately 5,500 people typically participate in a school or group tour every year, with the majority comprised of local students from our communities' schools. MSBM accommodates groups of up to 75 people and provides two standard guided tours: Museum only OR Museum and Cathedral cemetery. Additionally, a variety of hands-on curriculum-based activities can be added to the tour to complement learning. Guided tours are the most labour-intensive sector of MSBM's core operations, requiring one staff member for each 15 participants.

Activities related to this sector include: platform development; content development and creation; editing; troubleshooting; accompanying resource development; reservations and booking confirmations; regular promotion; outreach; on-going hiring, training, scheduling and supervision of occasional staff (interpreters); program delivery; purchases and materials management; tech upgrades; survey reviews; program review and improvements. Permanent staff leverage project dollars from other funders to accomplish special initiatives (implementation of new programs, translation of new content, purchase of new program materials, targeted promotions, etc).

In 2023, the museum created the Education & Public Programs Coordinator position to focus on this core work area. We were successful in filling this temporary part-time position with an experienced bilingual teacher. Our objective for the next year is to convert the position from part-time to full-time due to the work volume required to ensure our ambassadors can deliver the multiple educational and public programs in a professional manner.

The 2024 - 2027 MSBM will:

- **Focus on creating a standardized training program for the museum ambassadors to better equip them to deliver the multiple programs offered in both French and English.**
- **Seek opportunities to become more inclusive of newcomers by attracting diverse staff with other language skills.**
- **Review and update programs to reflect current curriculum outcomes.**
- **Create targeted educational packages for teachers looking to have pre and post activities for their students. Summer programming will focus on families, summer camps, and day cares.**
- **Seek funding to convert this current part-time position to a FTE.**

Building restoration and temporary closure impact:

- **Train our museum ambassadors to equip them for the changes in programming due to the closure of the museum.**
- **Focus on our virtual tours and programming. We are partnering with Connected North to deliver lessons to remote communities across Canada.**
- **Seek funding to bring our programming into schools. The museum will be travelling to French and French immersion schools to deliver our programs and share our collection.**
- **Focus on our walking tours around the St. Boniface community, such as our popular St. Boniface cemetery tour.**
- **Review and update current programs to adapt them to the changes in location.**
- **Create tours and programs for new exhibitions outside the museum.**

ROLES OF MUSEUMS

96% of Canadians agree that museums

spark curiosity, provoke wonder, promote creativity, and a love of learning.

Heritage collections protection and preservation

Le Musée de Saint-Boniface Museum's collections document the evolution of the Francophone and Métis communities since their establishment in the Canadian West, particularly as Manitoba developed. The collection numbers some 30,000 artifacts and grows at a rate of approximately 100 objects per year.

The collections can be divided into four main categories:

- Historic (furniture, craftsmen's tools, professional equipment, objects linked to pioneer life and agriculture, objects linked to religious observance, objects related to leisure, entertainment, and musical instruments)
- Ethnological (First Nations and Métis clothing and textiles, tools, archaeological specimens)
- Fine arts (paintings, sculptures, watercolors etc)
- Archival (1,300 photographs and 1,800 rare / older books)

Approximately 90% of the collection is stored at two different locations: one space for the smaller and more delicate objects (textiles, china, radios, etc) and one leased warehouse space for the larger items (furniture, agriculture items, hospital equipment, woodworking tools, etc).

Activities related to this sector include object donations/acquisitions, object/artifact loans, cataloguing process, collaboration with researchers and response to the general public's inquiries, care of artifacts, storage method improvements, inventory, database management, consultative services to others, on-going research, as well as planning and executing special projects.

In 2023 the museum created the Cataloguing Coordinator position to focus on this core work area. We were successful in filling this temporary part-time position with a recent graduate from Applied Museum Studies from Algonquin College. Our objective for the next year to convert the position from part-time to full-time due to the work volume required to protect and preserve a collection of this size.

2024 - 2027 MSBM will:

- **Collaborate with Indigenous partners to create a repatriation policy.**
- **Continue data input and verification in the new collections database.**
- **Continue improvements to storage methods.**
- **Transcription of journals from the first museum collector.**
- **Seek project funding to create digital display of an exhibit.**
- **Seek funding for the creation of an Indigenous Cultural Advisor to review the museum's collection and identify items for repatriation and assist in creating the community relationships required to be successful in this goal.**
- **Seek funding to convert this current part-time position to a FTE.**

Building restoration and temporary closure impact:

- **Ensure accessibility to all records during closure (cannot be stored/archived).**
- **Moratorium on donations/acquisitions.**
- **Increased expenses for conservation approved supplies (packing materials, movers, crates, containers).**
- **Identify community partners to help with storage for most at risk artifacts.**
- **Engage a Conservator as a consultant during the restoration work period.**

THE COMMUNITY

3 in 4 people think museums are a very important part of Canadian society, and 84% agree that museums improve the quality of life in a community.

Exhibit collaboration with community partners

MSBM **exhibit themes** reflect its collections and influence the way exhibitions are developed.
The themes are:

- The Indigenous Peoples – under redevelopment with community partner
- The origins and development of the Métis Nation including the Bison Hunt
- The Red River Settlement; the arrival of the missionaries and the Grey Nuns
- Louis Riel and the creation of Manitoba
- Manitoba 150 – Its Peoples
- Women's survival in the settlement and early years through textile arts
- Nurses Alumni – NEW
- Winnipeg 150 – NEW partnership opportunity with the City of Winnipeg Archives

Activities related to this sector include a team-based approach to exhibit creation. Curation of new exhibits are prepared with the lens of '***nothing about me, without me'***. To achieve this, the museum will seek inclusion of the appropriate community members to join the exhibit team. This work includes, research, text writing, artifact and archival identification, display creation, determine what aspects are physical, digital, hands-on, interactive elements all with the objective of telling a story with a clear audience in mind. Collaboration with the education staff and the outreach staff are crucial to the success of the exhibit-based programming.

2024 - 2027 MSBM will:

- **Collaborate with Indigenous partners in the Indigenous Peoples' exhibit.**
- **Collaborate with the Nurses' Alumni in the installation of their exhibit.**
- **Collaborate with the City of Winnipeg Archives for a Winnipeg 150 exhibit.**
- **Undertake an accessibility review of all exhibits.**
- **Undertake a systematic review of all exhibit texts.**

Building restoration and temporary closure impact:

- **Identify alternate community spaces to create temporary exhibits.**
- **Increased expenses for the installation of off-site exhibits.**



RECONCILIATION

94% of Canadians agree that museums have a role to play in addressing reconciliation, racial injustice, and gender inequality.

Revenue generation focusing on seven funding streams

Le Musée de Saint-Boniface Museum self-generates approximately 25 to 30% of its current operating budget through the following streams: admissions, school program fees, gift shop sales, room rentals, workshop fees, donations, and fundraising. The most successful stream is the physical and online gift shop that offers a variety of souvenirs, gifts and heritage-themed items related to the fur trade and the Francophone and Métis cultures. MSBM has the potential to increase its revenues from school programs and workshops with the collaboration of the Outreach and Education sectors. Working closely with Les Amis/Friends of MSBM Inc, we will create sponsorship opportunities and organize fundraisers with the intention of creating awareness and fund development.

2024 - 2027 MSBM will:

- **Implement the conversion of its current point of sales system to a cloud-based system.**
- **Grow its online store presence.**
- **Consolidate multiple sales platforms into a single platform.**
- **Partner and support diverse local artisans.**
- **Add new levels of membership to the current program.**
- **Create sponsorship opportunities.**
- **Organize fundraising activities with Les Amis/Friends of MSBM Inc.**

Building restoration and temporary closure impact:

- **Expected loss of 50% in self-generated revenue in year 1 with the temporary closure, 75% in year two**
- **Identify a temporary location for the Giftshop to operate.**
- **Increased collaboration with Les Amis / Friends of MSBM on fundraising, including creation of a capital campaign website.**

ECONOMIC IMPACT

According to Manitoba Tourism,

museums contribute $115.4 million to the economy of Manitoba, which

equals to roughly 172,000 provincial visits.



20,000+ STAFF EMPLOYED

Beyond entry-level positions, tourism creates a wide range of options for all types of employment at all pay scales in Manitoba.

Protecting and preserving Winnipeg's oldest building, built in 1846

MSBM has over 16,000 square feet of used space at 494 Taché Avenue, whether those be public-access spaces, exhibit spaces, storage, or administrative/office spaces. A regular cycle of cleaning to maintain general cleanliness is imperative. Additionally, the grounds require regular maintenance and upkeep, as well as seasonal attention. The building itself – arguably the largest artifact of the collection – and its systems (sprinkler, furnace, duct work, elevator, surveillance) require on-going monitoring, service contracts and occasional special attention. Permanent staff leverage project dollars from other funders to accomplish major or specialized work. Tri-partite agreements between the City of Winnipeg, the Province of Manitoba and the Department of Canadian Heritage have historically been responsible for major renovations and upgrades. Additionally, two off-site storage facilities require regular monitoring and checkups as well as scheduled maintenance, inspections, systems maintenance, and cleaning.

The museum's heating is part of a shared steam heating system with Residence Despins and Actionmarguerite (Taché Centre). Both of these institutions are undergoing efficiency audits and will be bringing changes to their systems. This will force MSBM to also change its system. We are working closely with our neighbours and have involved the appropriate civic department in the efficiency audit. We will be faced with an upgrade to our systems in the next year or two.

- Housed Grey Nuns' Convent NHS, leased by the City of Winnipeg until 2062
    - Municipally Designated Site (1995, Grade 1)
    - Provincial Heritage Site (1991)
    - National Historic Site (1958)

The Heritage Consultant, hired in 2022, prepared and submitted a building condition assessment identifying work required to the following elements:

- Roof and dormers
- Windows and shutters
- Woodwork for various elements: balcony railing, bell tower, drip edge, siding
- Painting of the building exterior

Early 2023 estimates place the cost of required work at approximately $1.4 million.

2024 - 2027 MSBM will:

- **Advocate for leadership from the City of Winnipeg to take the lead and responsibility for the building maintenance as per the 1991 agreement between The Crown and the City of Winnipeg.**
- **Engage the tri-partite agreement holders to ensure the restoration work to the character defining elements of the building are preserved, to maintain its multi-level designations.**
- **Continue to apply to the various programs for funding to undertake the restoration work.**
- **Collaborate with neighbors and civic departments with efficiency audits and upgrades.**

Unexpected elements of work added - new projections place the work at more than $5 million.

- **Roof structure rehabilitation.**
- **HVAC (impact due to campus heating changes).**
- **Lead in potable water.**
- **Continue with windows, shutters, siding work.**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A museum is a not-for-profit, permanent institution in the service of society that researches, collects, conserves, interprets and exhibits tangible and intangible heritage. Open to the public, accessible and inclusive, museums foster diversity and sustainability. They operate and communicate ethically, professionally and with the participation of communities, offering varied experiences for education, enjoyment, reflection and knowledge sharing.

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