

Heritage Conservation Plan

June 2018



Holy Family Parish Church - 521 4 Avenue - Fernie, BC

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Statement of Significance

Description of Historic Place

The Holy Family Catholic Church is a rectangular brick structure with a high-peaked gable roof and distinctive bell tower. It is located on the northeast corner of 4th avenue and 5th street in Fernie's historic downtown.

Heritage Value

Constructed in 1912, the Holy Family Catholic Church is valued as the finest religious building in Fernie. Located in the historic downtown, the brick building's high, distinct bell tower is visible throughout the city and against the dramatic mountain setting. Its prominent corner lot - located directly across the street from the equally majestic Fernie courthouse - showcases the building effectively and solidifies its significant landmark status.

The name Holy Family was chosen to acknowledge the devotion of the local Catholic congregation families since the late 1890s for their sacrifice of great personal expense and time to enable the construction of both catholic church buildings in Fernie - the first dating from 1897 but destroyed in the 1908 fire, and the subject church building dating from 1912.

The Holy Family Church is a surviving example of the many large stone or brick buildings built to replace wooden structures lost in the 'Great Fire' of 1908. The post-fire building boom created most of Fernie's historic downtown and provided the city with many of its most notable buildings. The church's brick design reflects the city's conscious decision to rebuild using non-flammable materials in response to a series of major fires in its early days.

The optimism and ambition of Fernie's early residents is expressed in the size and grandeur of the Holy Family Catholic Church, the largest church in the BC Interior at the time of its consecration. Fernie was striving to become the region's economic and administrative centre and little expense was spared by local Catholics - who agreed to donate one day's pay per month - in order to create a admirable house of worship. Parishioners also donated the funds to commission the intricate stained-glass windows in the church, each one dedicated to a specific group or individual in the congregation.

The building was designed by Vancouver-based architect, Henry Barton Watson and adapted and constructed by local builder, Robert Kerr. It is unique for its Romanesque-Revival style - a rare architectural style in the interior of British Columbia. Key pieces were sought out abroad, including the red brick from Idaho, an organ from Germany, ash pews from Ontario, and stained-glass windows from Toronto.

The Holy Family Catholic Church is valued as a continuous sacred site serving Fernie's Catholic community since its construction.

Character-Defining Elements

Exterior elements:

- Prominent location on a corner lot in Fernie's historic downtown core
- Romanesque Revival design, with masonry walls, ornate cornice details and prominent bell tower/s.
- Long, rectangular Basilica form with nave, apse and a vestry projecting at northwest corner
- Projecting square bell tower structure with octagonal belfry positioned centrally on the facade and encompassing the front entrance atrium; original cast bell.
- Steep-pitched, synthetic slate clad gable roof with pronounced overhang
- Tongue & groove wood soffits with decorative wood modillions
- Arch-patterned cornice detail in red brick along rooflines
- Cupola-shaped, metal-clad roof lantern at main roof peak
- Tall arched window openings separated by pilasters and featuring stained or art glass
- Concrete foundation
- Red brick cladding on main, upper storeys and tower
- Tall arched openings in bell tower and roof lantern
- large crosses on bell tower and roof lantern peaks

Interior elements:

- Altar of imitation marble (Regalico) with gold filagree - donated by the Ladies of the Altar Society
- Side altars of similar design and materials - donated by the St. Stephen's Slovak Society
- Brass chandeliers
- Ash pews
- Sanctuary fresco
- Series of fourteen wood-frames paintings depicting the arrest and crucifixion of Christ, hanging along the walls of the nave between the art-glass windows
- Twelve art-glass windows (see window map on page 19):
 1. Sanctuary left 3W: (depicts the Last Supper) donated by the 'young people' of the parish
 2. Sanctuary centre 4W: (depicts the Holy Family) donated by the Knight of Columbus, Cranbrook
 3. Sanctuary right 5W: (depicts the Good Shepherd) donated by Mary Eschwig
 4. Bell tower feature window 3Et: (depicts the institution of the Eucharist)
 5. Nave 2S: (depicts Intercession for the Souls in Purgatory) donated by Jana Podbielancik 'in memory' of Christ and the deceased Andrejovj Pestik - text in Slovak
 6. Nave 3S: (depicts The Delivery of the Keys to St. Peter) donated by Thomson & Morrison
 7. Nave 4S: (depicts St. Ann) donated by the Ladies of the Parish
 8. Nave 5S: (depicts St. Nicholas of Myra) donated by the Russian Catholics
 9. Nave 2N: (depicts Christ and the Angel at the Garden of Gethsemane) donated by Kennedy and Mangan
 10. Nave 3N: (depicts the Polish black Madonna - Our Lady of Cestrochau) donated 'in memory' of Polish Catholics
 11. Nave 4N: (depicts the Guardian Angel guiding a child across a bridge) donated 'in memory' of Sunday School Children
 12. Nave 5N: (depicts St. Patrick) donated by P. J. Hughes and family
- Sixteen diamond-pattern stained-glass windows (see window map on page 19) including one round window above the entrance doors with an art-glass centrepiece featuring the coat of arms of the Oblates of Mary Immaculate.

Current Photographs - exterior



Above: view of front and southern elevation, corner of 4th Avenue and 5th Street



Left: view of northern elevation



Above: view of rear elevation (west)



Right: view of front elevation (east)

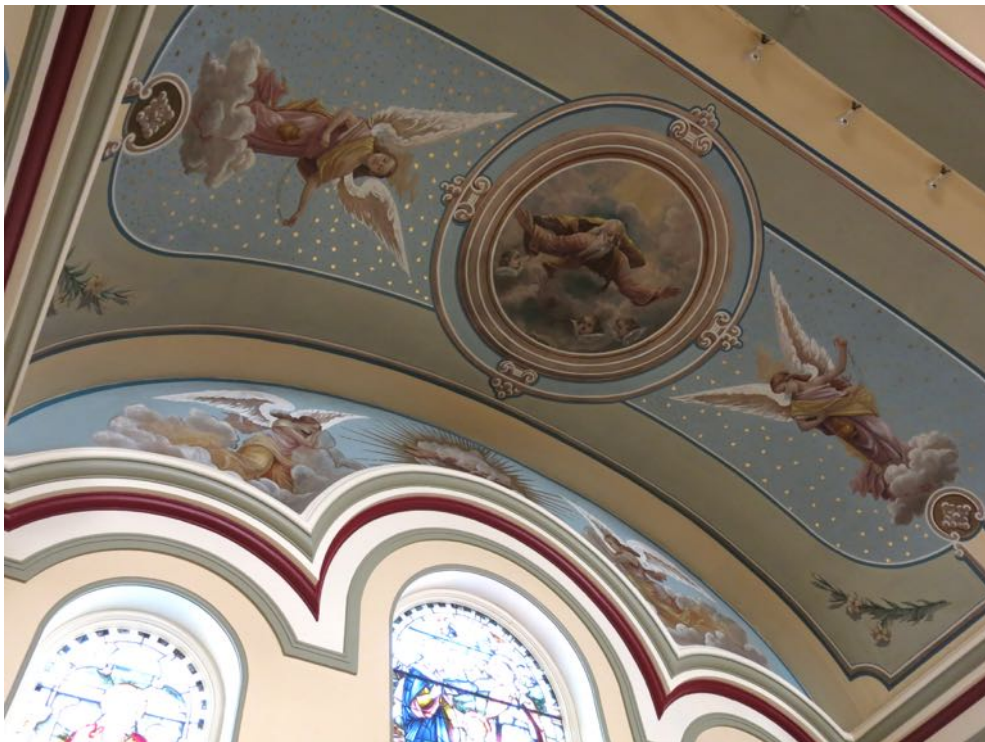
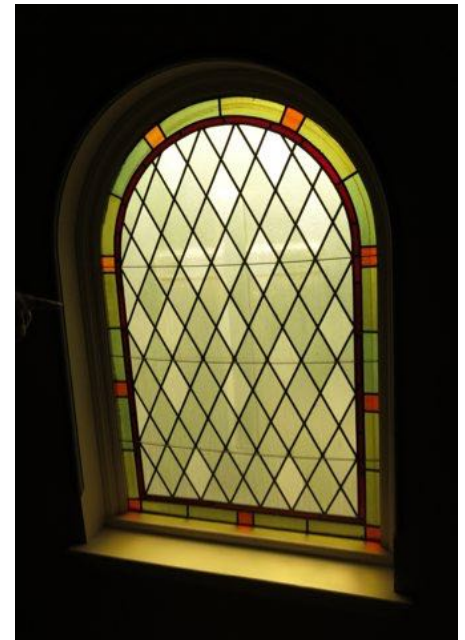
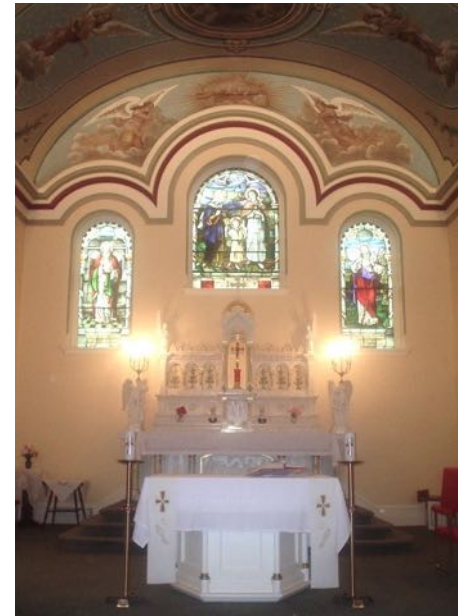
Below: signage at the entrance (corner of 4th Ave and 5th St.)

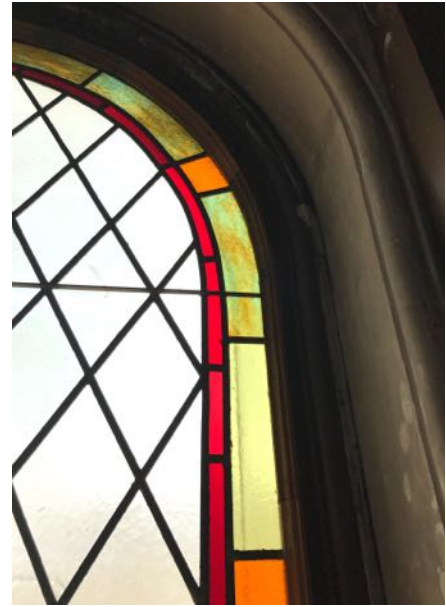


Current photographs - interior

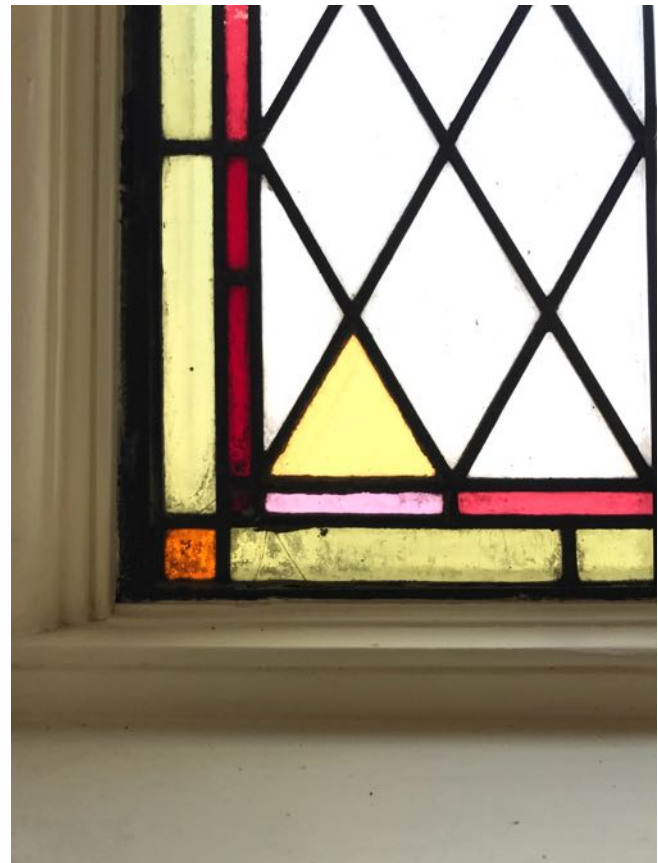


Above: partial view of nave, sanctuary, chandeliers and pews
Top right: Sanctuary with its three art-glass windows and altar
Right: one of the sixteen diamond-pattern stained-glass windows
Below: sanctuary ceiling fresco
Bottom right: detail from one of the art-glass windows





Top left: Madonna & child painting. **Top middle:** one of the fourteen wood-frames paintings hanging on the nave walls
Top right: detail of one of the sixteen diamond-patten stained-glass windows
Bottom left: sanctuary ceiling fresco
Bottom right: view of the sacristy



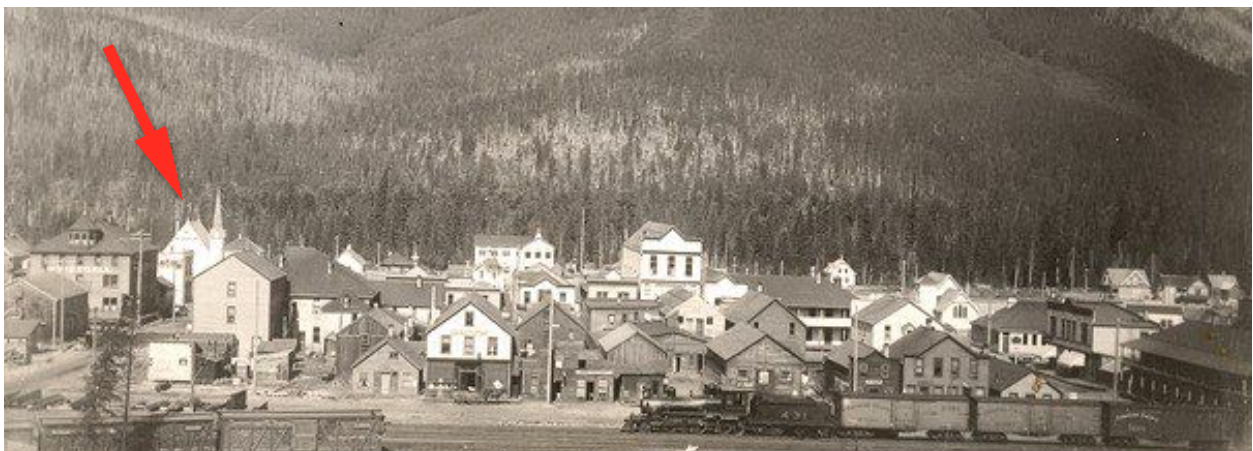
Construction Chronology

The Holy Family Parish's roots can be traced back to 1896 when Father John Welsh, OMI was sent to the Fernie area to minister the growing population of Catholic railway and mine workers, estimated at about 200 men. Welsh initiated the construction of the first Catholic church building in Fall of 1896. The wood-frame church building, in Gothic Revival style, was completed only in June of 1897 because of the severity of the winter at the time. While the building was in progress, services were held in the dining room of a Hotel. During the church's construction, some new families came to Fernie from Cape Breton. The dedication of these families, who donated one day's pay each month towards the construction, inspired Father Welsh to name the church Holy Family. Father Welsh later moved away to serve congregations in Rossland, New Westminster and Vancouver. This first white church with its prominent spired bell-tower, was located at 3rd Avenue and 6th Street (at the time known as Pellatt Avenue and Hanson Street), and is easily identified for its colour and form in early Fernie photographs. The first Holy Family church can be seen from the rear in the photograph below of a fire near Fernie in 1904.



Above: Forest fire just outside Fernie in early spring, 1904. source: BC Archives C-08275

Below: Fernie in 1902. source: BC Archives C-08277



Right - interior photograph of the first Holy Family Church, destroyed in the 1908 fire, was included in the 1910 Fernie District Catholic Directory (held at the Fernie Museum).



The Parish purchased additional property in 1902, not far away from the location of the first church - six lots along Cox Street between Howland and McPherson Avenue - the property of the current Holy Family site. The intention was to build a Catholic hospital here. A concrete-block rectory was erected here in 1905. Welsh's 1897 church was destroyed in the devastating fire of August 1908, but the rectory was one of the few Fernie buildings to survive it. A temporary wood-frame building was constructed immediately after the fire, at the site of the present Family Centre, near the rectory, and served as a interim church between 1908 and 1912.



Sunday morning congregation at temporary R. C. Church

source: Progressive Fernie 1908-1909. Published by the District Ledger in August 1909, 1 year after the 1908 fire. source: VPL Special Collections

In May 1909 a note in the District Ledger newspaper stated¹ that the Catholic Church had installed a bell in the church, the first church bell in post-fire Fernie. The temporary church served the congregation as a hall and school for several decades until the Holy Family School was constructed at the back of the site in 1929.

The excavation for the current Romanesque-Revival brick church building, based on plans from Vancouver architect Henry Barton Watson, was started by the Eschwig Brothers as early as June 1910. Watson had also designed the 1909 Catholic St. Patrick's church in Vancouver - which too was a grand, Romanesque-Renaissance Revival style building. The construction of the current church was delayed however in the winter months, and then further delayed due to the economic downturn sparked by the March, 1911 mine strike which lasted 8 months. Excavation resumed in June 1911, in the midst of the strike, with much of the work carried out by volunteer parishioners who were not working at the mines at the time. The builder this time around was local contractor, Robert Kerr, who is remembered for rebuilding the Queen's Hotel after the 1908 fire. Kerr is attributed in local newspapers with the design of the church building, although it is likely that this is because he was involved, together with Father Michels, in the modification and adjustment of the architectural drawings on the ground. The church was inaugurated on November 10, 1912 with Reverend F. J. Althoff (Vicar general of the Diocese) parish founder Father Welsh (in attendance from Vancouver), several clergy from neighbouring towns and the parish priest Reverend Michels who had lead the fundraising and helped Kerr with the construction management. At the time of its inauguration the church had a seating capacity of 700, and was the largest church in the Interior of BC². The new church, described as the finest building in Fernie in local newspapers, boasted many custom features, especially on the interior. Most notable are the painted art glass windows, made in France at a cost of \$200 each, and inscribed with the names of individual or groups who sponsored them. The window donors and other church elements such as the altars, reflect the cosmopolitan composition of the congregation.



The photo on the left shows the church building upon completion, likely in Fall 1912. Its historic address was 98 Howland Avenue, until the street and civic addresses were changed in Fernie to the current numbered system. The edge of the wooden temporary church building, which had served for four years and will become the church hall/school for another two decades, can be seen on the bottom right corner of the photo.

source: photo # 4846do Fernie Museum

¹ District Ledger newspaper. May 13, 1909, page 8

² *Fernie Past and Present*. District Ledger Newspaper. June 28, 1913. page 10

Property history and accessory buildings

The wooden temporary church building served as a hall and school (starting in 1920) until a new Holy Family School building was constructed in 1929, at the back of the property. The sisters of St. Joseph ran the school from 1920 (starting in the wood building) until it was closed in 1956. The below photographs show the 1929 school building front (facing the 5th Avenue - then known as McPherson Avenue) and rear (as visible from 4th Avenue).



Far left - Front view of the Holy Family School building in 1935 (photo # 5248)

Left -partial rear view of the Holy Family School building in the 1940s (photo #0002). source for both: Fernie Museum.

Another important building on the property was the concrete block rectory (aka the Sister's Home or the Nunnery), built in 1905, it was located directly behind the 1912 church. This building was home to the Sisters who ran the school from 1922 until 1956, and later it housed the first Fernie and District Historical Society museum from 1979-1999. It was demolished in 2012. All three buildings - the school (1), the Sister's Home (2) and the church (3) can be seen in the below 1980 photograph taken by Beautiful BC magazine (source: BC Archives i-07998).

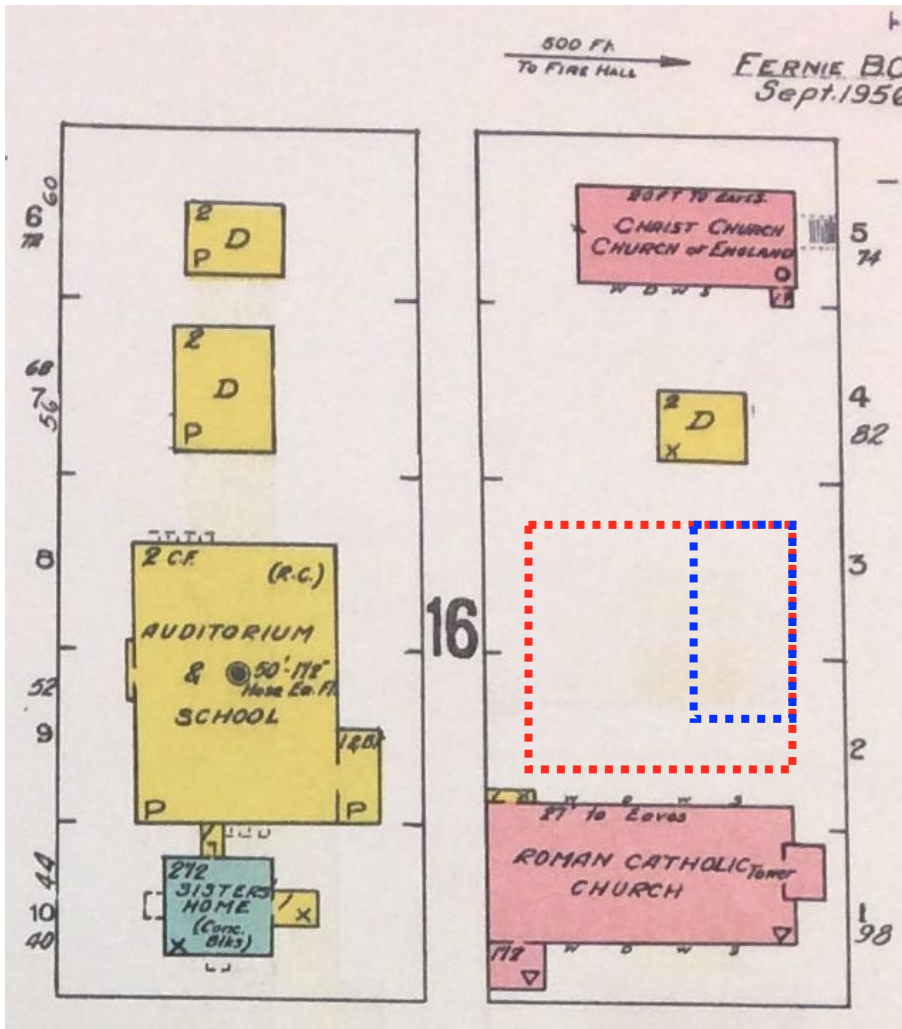




The Family Centre stands to the north of the church on 4th Avenue.
 source: photo # 5390do - Fernie Museum

The 1929 school building was used as a parish centre from 1956 until it was demolished in 1987 and the current Family Centre was constructed in 1988. The existing Family Centre is positioned in line with the church building entrance, facing 4th Avenue. It is owned and operated by the Holy Family Parish providing space for events, administration and gathering of the Parish. It also provides rentals space for daycares, youth gymnastics and dance studios and for organizations providing English as a second language.

The below crop of the 1956 fire insurance plan for Fernie (sheet 1) shows the Catholic Church's six lots with the school building, the Sister's Home and the church itself. The colours indicate the construction material - yellow for wood-frame, (The letters R.C. stand for Rough Cast stucco cladding) blue for concrete block, and pink for brick.



The current location of the family Centre is outlined in red and the approximate footprint of the temporary wooden church (1908-1912) is outlined in blue.

source for fire insurance plan: BC Archives 10476A

Documented interventions - Holy Family Church Building

Soon after construction of the church building in 1912, as early as 1915 if not before, protective multi-light storm windows were installed over most of the church windows. These gridded storms are visible in the below photographs dating from 1915 and 1922 and 1940s, and were finally removed in 1981. The bottom left photograph taken in 1958, shows that the top bell-tower window was damaged or missing by mid-century. The bell-tower window doesn't appear to ever have been protected before 1981.

Below left: crop from photo # 0297, dated 1915. source: Fernie Museum

Below right: crop from photo # 5088do, dated 1922. source: Fernie Museum

Bottom right: crop from photo # 3219do, dated 1940s. source: Fernie Museum

Bottom left: crop from Beautiful BC magazine aerial, dated 1958. source: BC Archives



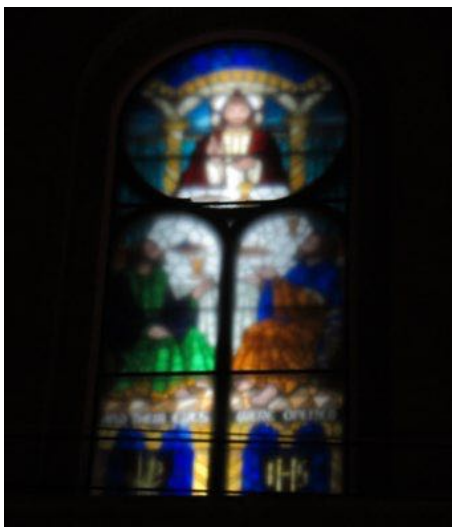
The below photograph of the church taken in 1980 for Beautiful BC magazine, shows temporary wood frames placed on several of the windows, likely to aid the imminent removal of the storm windows in one piece. It appears that the storm windows were removed in 1981 and replaced with the current black covers.



Far left: the Holy Family Church in 1980 photographed by Beautiful BC magazine. source: BC Archives i-08452

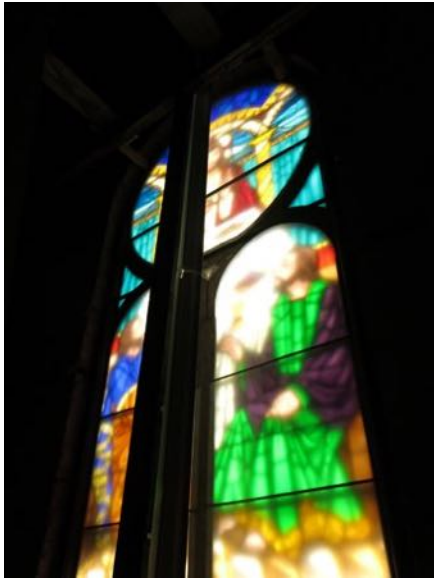
Left: crop from the above cited photo, showing the temporary wood frames around one of the windows.

Likely at the time of the protective panel replacement, the surviving 1912 bell-tower windows were removed and replaced with a new art-glass window depicting the institution of the Eucharist. This window is illuminated at night from inside the bell-tower. The original diamond-pattern stained-glass bell tower window assembly leans against a wall inside the bell tower today.



Far left: the illuminated bell-tower window as seen today from the exterior at night source: Stephanie Rogers

Left: the original 1912 diamond-pattern bell-tower windows leaning against a wall inside the bell tower today.



Left: The current bell-tower window as seen from inside the bell tower. The vertical form in the centre is a florescent light that gets turned-on at night to illuminate the window. Sheets of white poly carbonate have been installed on the inside of the window and may be the cause of the blurred image seen at night from the exterior.

In 1963 the art glass windows underwent an "extensive releading and reglazing programme" (see footnote on page 19).

In 2003, a Holy Family Church Restoration Committee was formed to address the building's repair, maintenance and conservation. The Committee commissioned and managed the following interventions:

Phase 1 (2005):

- interior professional cleaning of the entire church - walls, ceilings, statues, floors, pews
- interior painting of walls, ceilings, pillars, window trim and baseboards
- professional cleaning by a conservator of the 1912 sanctuary fresco
- refurbishing by a conservator of gold leaf on altars
- replacement of glass shades in chandeliers

Phase 2 (2007-2010):

- New roof in synthetic roofing slate - Galveston Light Grey 'full slates' by Authentic Roof - made of a proprietary thermo-polymer olefin compound to look like natural slate. (<http://www.authenticroof.com/cms/products/general/>)
- sanding and repainting of all window and door trim
- upgrading of the sound system

Phase 3 (2013):

- building of new signage at the front of the Church mirroring the Romanesque style of the building

Phase 4 (2015):

- replacing all flooring in the Church
- refreshing paint on all baseboards
- digging out of basement and new concrete slab poured

Phase 5: October 2017

Commissioning of this Statement of Significance and Heritage Conservation Plan

Condition Assessment - The church is in overall good condition.

Exterior

Brick cladding

The brick work is in good condition overall. The original brick from Sandpoint, Idaho was set with a narrow joint of scored red mortar. There are number of visible repairs and unfortunately, little attention was paid to the type of brick or mortar used in the repair work. The back wall of the church illustrates this clearly.



Brick repair on the back wall showing different types of bricks used, different mortar types and joint width. This needs to be monitored as incompatible materials can cause additional damage



Far left: On the back wall expanding spray foam has been used to unsuccessfully fill gaps between the soffit and brick. Other gaps show activity from birds looking for nesting places in the roof.

Left: Repair work can be seen in one of the window arches with incorrect mortar colour and joint type.

Bottom: original red mortar and the narrow scored joint.



Foundation

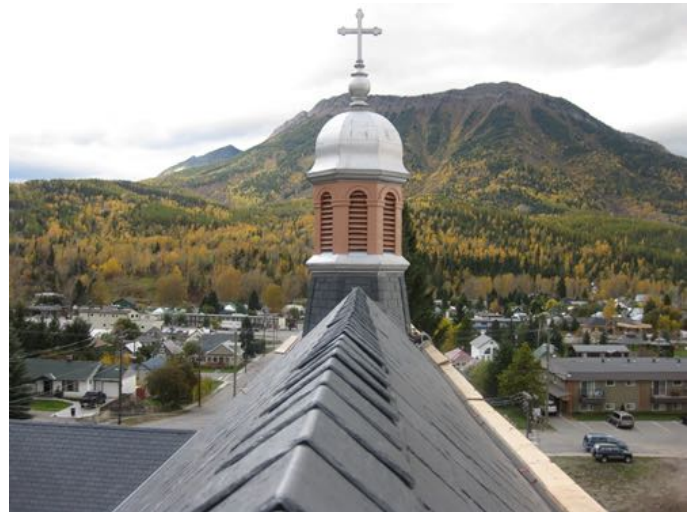


There are some substantial cracks in the concrete foundation, notably at the rear of the church.

Some repair work has been done but it should be assessed periodically by an engineer.

Roof

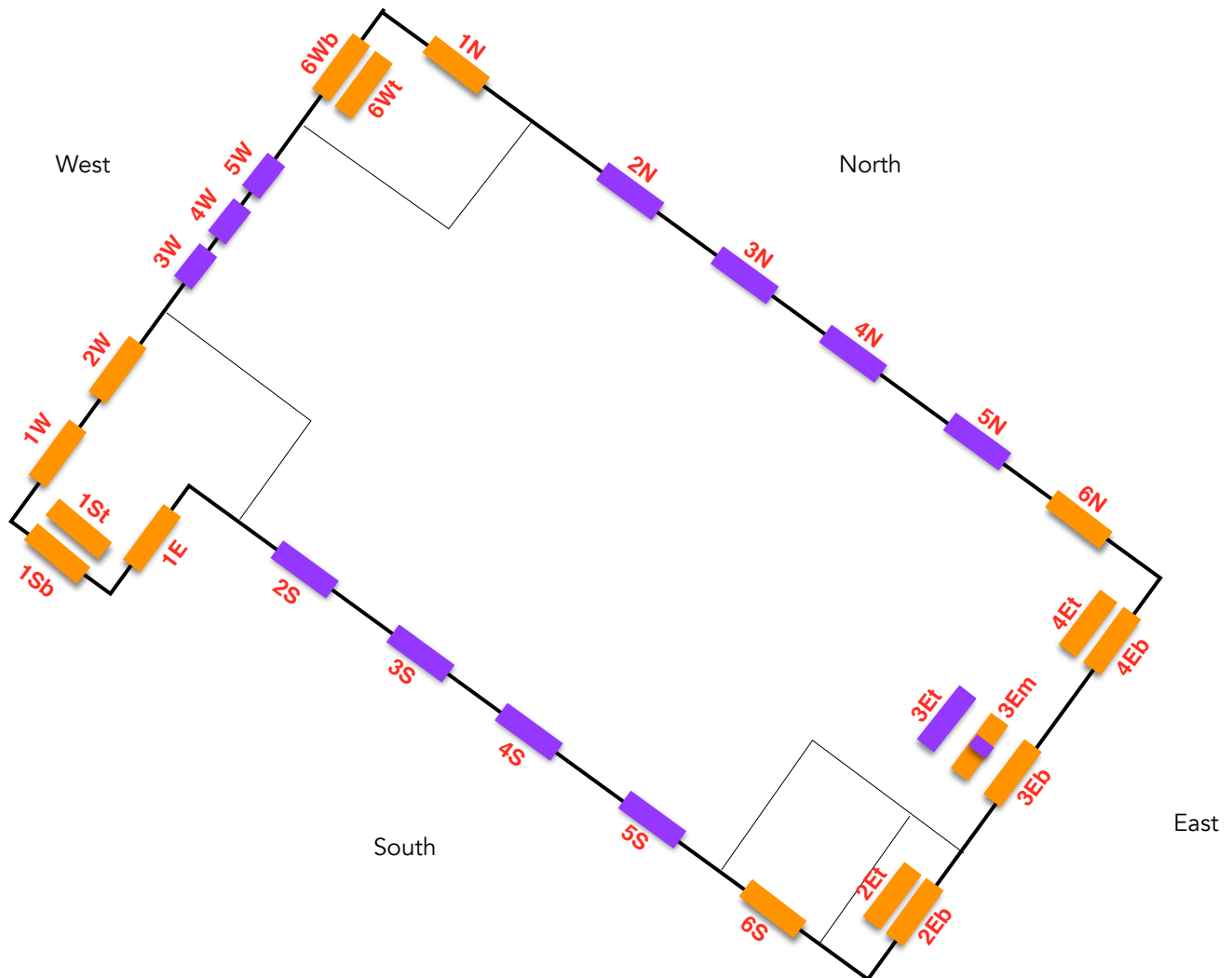
A new synthetic slate roof was installed in 2006, a product that comes with a 50-year warranty. The current condition of the roof, 12 years later, is excellent.



Art-glass and stained-glass windows

The church features 27 original windows made by the Luxfer Prism Co. (Toronto), for the 1912 building, and one 3-part feature art-glass window in the bell-tower dating from the 1980s which replaced a diamond-pattern 1912 stained-glass window. All the windows except for the bell-tower window, have been covered on the exterior over the decades by protective panels - wood sash storms until 1981, and the current covers since 1981. "...extensive re-leading and reglazing" of the 1912 windows was carried out in 1963³. The map below shows their location in the building and whether they are diamond-pattern stained-glass windows (indicated in orange), or art-glass windows (indicated in purple).

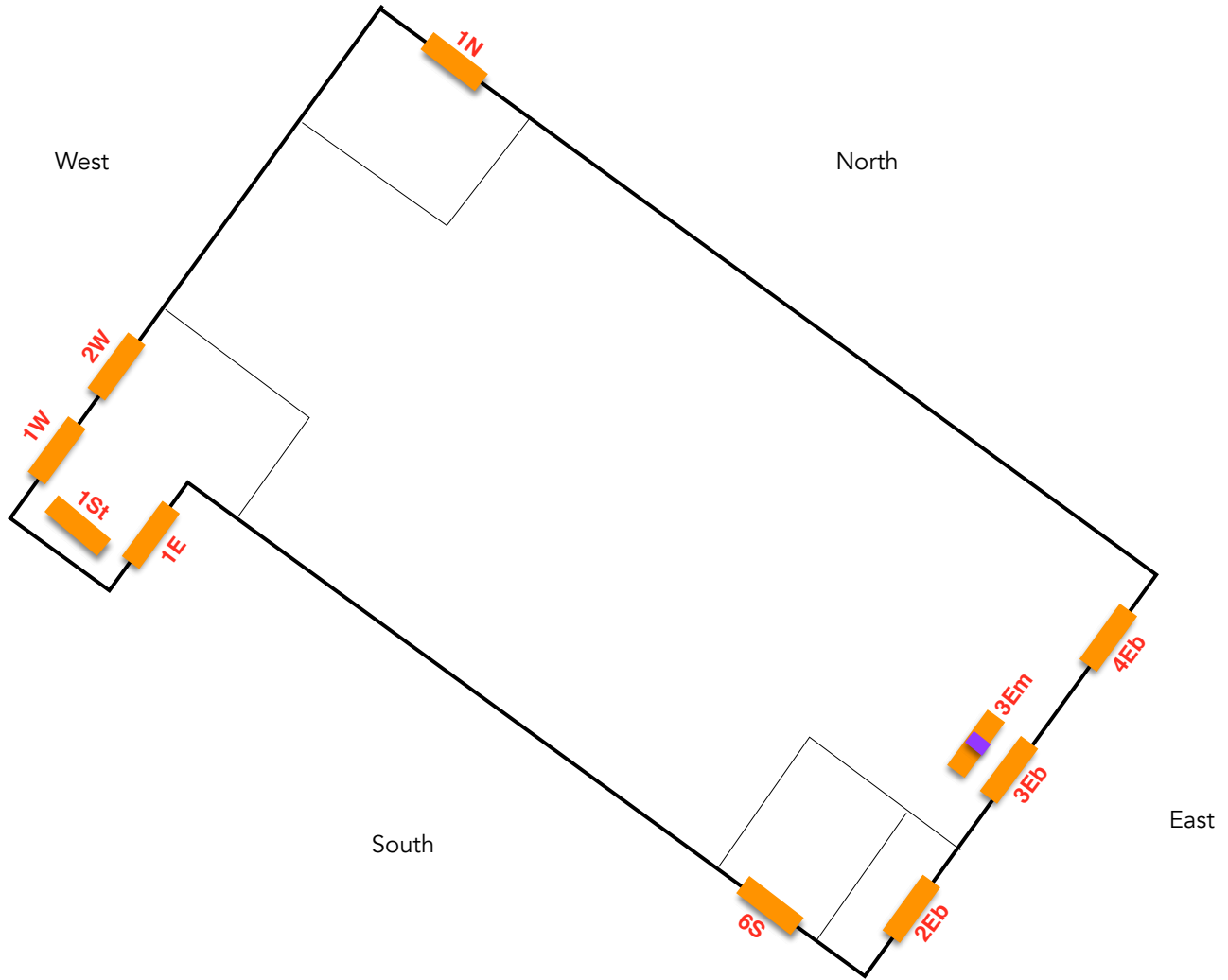
Overall, the art-glass windows (indicated in purple) are in good condition and do not need repairs. Most of the diamond-pattern stained-glass windows however, are damaged in places and are in need of repairs.



³ Golden Jubilee Booklet, June 1963. Holy Family Parish, Fernie BC

Window condition assessment

The below map indicates the windows that have been identified as needing repairs by a professional historic glass conservator - Stephanie Rogers. See following pages with detailed photos of the windows identified as needing attention.



1W Office area - faces west

Three sections - one is opener
Bottom boarder is bowed
Some re-bars are bending



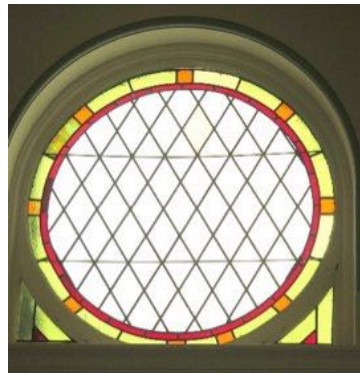
2W Office area above shelving - faces west

Only a few minor cracks



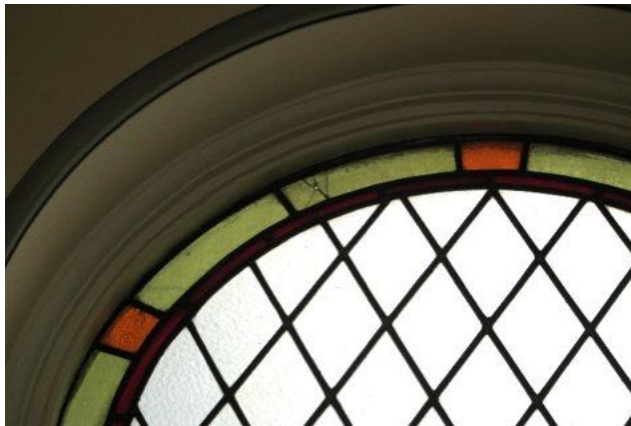
1St Over office door - faces south west

Window in three sections, round part with two corner sections at bottom
Light is visible at top of round portion
A few cracks in all parts of the window



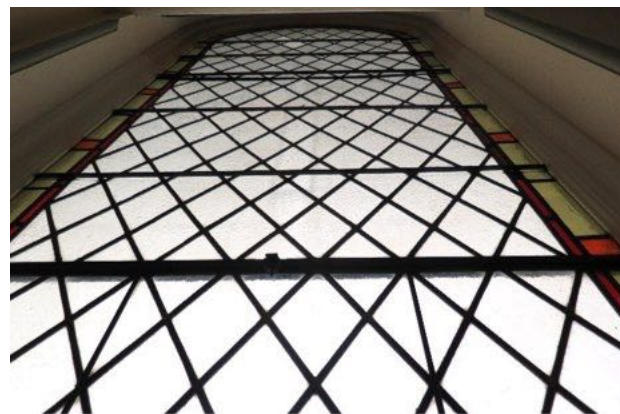
1E Office - facing East

Slightly bowed at bottom boarder
A few cracks, one is covered with tape
Window is opener.
Seems to be in three sections



6S Large panel at back of church (crying room) - facing south

This is the worst panel
Is an opener
Non of the re-bars are attached to the window
Some old on-site repairs
Seems to be in three sections.





2Eb Bathroom window - faces East

Seems to be in relative good shape
Some of the lead is broken at lower re-bar



3Eb Transom over entry doors - faces East

A few cracks but otherwise looks in good shape



1N Back - Northwest corner of Church

Opener window
Seems in good shape but will probably need to be re-caulked in frame



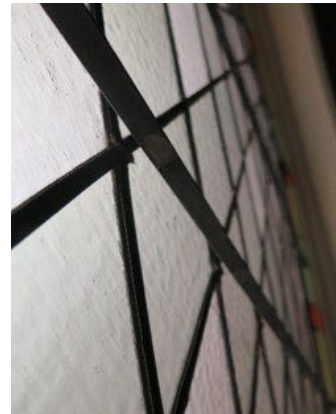
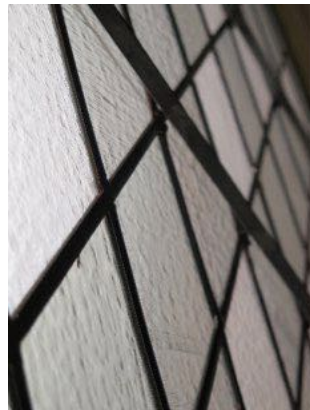
3Em Over entry doors (art-glass centre) second storey window

Three section window, one circular panel and two corner sections at bottom of panel
Left corner piece has daylight showing on curved part
Centre panel is bowed a bit at bottom
Some minor cracks in centre window
Two large re-bars seem to be puttied in and painted
Centre window may be in three sections.



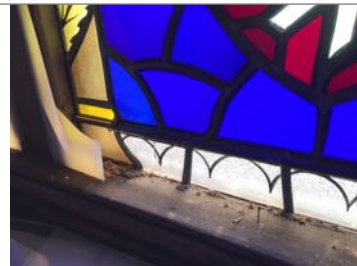
4Eb Back stairwell to upstairs - faces east

Window is actually two separate windows
Bottom panel is bowed at the bottom
Re-bars are not attached
Has a lot of rattle



3Et Bell-tower art glass window

the interior white poly carbonate on the bottom corner is missing/broken. An examination of the illumination set-up and the performance of the poly carbonate inside the bell-tower is needed.



Window panels

The stained and art glass windows are protected by vacuum-formed panels held in place with a wood moulding. The moulding is in good condition but needs attention to repair some split wood and all trim needs painting. The panels are in very good condition with no obvious signs of damage. The dark colour appears to be intentional/original and not discolouring due to UV rays or dirt.



Left: typical panel showing embossed cross and raised edge that provides rigidity

Middle and right: panels need cleaning to wash away accumulated dirt. Moulding and sills need attention to the paint and caulking

Replacement of the protective panels for aesthetic reasons (the Restoration Committee currently prefers a transparent protective panel) must consider a material and installation model that will perform to the same standard of protection that the current panels have provided for the last 40 years.

Interior

The interior of the church is in excellent condition and is regularly very-well maintained. The parish facilities are checked and maintained annually and the church is cleaned on a regular schedule.



Conservation Objectives

Preservation is the overall conservation objective for the Holy Family Church.

The church will continue on its original site at the corner of 4th Avenue and 5th Street. No additions are currently proposed for the site. All Character Defining Elements as identified in the Statement of Significance will be Preserved or Restored. Minor repair, maintenance and monitoring projects have been identified for the exterior, mostly involving windows and brick.

The below conservation treatment definitions are taken from the Standards & Guidelines for the Conservation of Historic Places in Canada (2nd edition).

Preservation: The action or process of protecting, maintaining and/or stabilizing the existing materials, form and integrity of an historic place or of an individual component, while protecting its heritage value.

Restoration: The action or process of accurately revealing, recovering or representing the state of a historic place or of an individual component, as it appeared at a particular period in its history, while protecting its heritage value.

Rehabilitation: The action or process of making possible a continuing or compatible contemporary use of an historic place or of an individual component, through repair, alterations, and/or additions, while protecting its heritage value.

Recommended Conservation Procedures

Windows- Restoration⁴ (Repair)

The Holy Family church windows are extremely valuable. There are very few 1912 churches that can claim to have their original windows surviving and intact. Work with a professional historic window conservator for any assessment, testing, cleaning or interventions - is crucial. Do not allow non-specialized trades or parishioners to have any physical contact with the windows without consulting such a professional, even for routine cleaning.

Off-site window repair is crucial

A very common but extremely harmful practice in the stained-glass industry is performing major window repairs in place. Undertaking major repairs in situ provides only a quick fix. A window cannot be properly repaired or restored in place if it is bulging or sagging far out of plane, if over 5% of the glass is broken, or if solder joints are failing. A great deal of stress can be introduced into the glass by forcibly flattening the window in place and soldering on additional bracing. At a comfortable distance the window may look fine, but upon close inspection the stress cracks in the glass and broken solder joints become obvious. Windows subjected to this treatment will deteriorate rapidly, and much more costly restoration will likely be necessary within a few years (while a proper repair can easily last two generations or more).

Planning removal and reinstallation

The risk of damaging the windows can be very great if their removal and reinstallation have not been carefully planned. Removing an old window can sometimes be as big a job as repairing it. This is a time for maximum patience. The panel will have to be taken out slowly and gently. Any attempt to force it out is likely to cause more damage. If it's a leaded window with considerable damage, attaching a piece of plywood or drywall to hold the window in place is prudent. Ensure that vacant openings will be weathertight for an extended period—whether the openings are covered by plywood, acrylics, or polymer film. If desired, images of the window can be printed on adhesive film and applied to rigid plastic and installed in the openings as temporary facsimiles during studio restoration.

Test removal: Windows **6Wb** and **6Wt** are in the stairwell at the front of the church facing west. They are not in need of repair. Window **6Wb** will be the “test” window for removal procedures, window cleaning and examination of the protective panel before embarking on the planned removal and repair of the damaged windows.

Windows may have detached from the saddle bars and begun to sag, bulge, and bow extensively. This point varies from window to window. Generally, however, a window sagging or bulging more than 1½” (38mm) out of plane has reached the point where it should be removed from the opening to be flattened out. Under these conditions, it is essential to note if the support system or leading pattern has failed so it may be corrected before the window is reinstalled. The window must be allowed to flatten over a few weeks in a horizontal position. This will minimize stress on the solder joints and glass. Once

⁴ adapted from Preservation Brief #33 - The Preservation and Repair of Historic Stained and Leaded Glass (Technical Preservation Services—US National Park Service)

the window has flattened, the original support system should be reattached and additional support added as necessary. Flattening windows also provides a good opportunity to apply new waterproofing to help prevent further deterioration. Today, a wide variety of traditional and synthetic compounds are employed. Allow plenty of time for careful, thorough work. Large projects can take several months, especially if complete releading is necessary.

Protective panels for stained-glass windows

"More damage has been done to church stained glass windows and frames from unvented protective covering materials, than from all storms, fires and vandals combined" - National Preservation Society, 1996 Study of Stained Glass

A variety of protective glazing materials are available. They include polycarbonates, acrylics, laminated glass, plate glass, and tempered glass. The plastic products are very strong, lightweight, and relatively easy to install, but will scratch, haze, and yellow over time, despite UV inhibitors. They also have a high coefficient of expansion and contraction, so the frames must be designed to accommodate change induced by temperature fluctuations. Poor installations in restrictive frames cause distorted reflections from bowing panels and often damage the historic frame. Protective panels of glass are heavier and more difficult to install, making them more expensive than plastic. However, glass will not bow, scratch, or haze and is usually the best option in aesthetic terms; laminated glass provides additional impact resistance.



A common error in installing protective glazing is to create a new window configuration (see photo above). Insensitive installations that disregard the original tracery destroy the window's aesthetics—and the building's. On this pair of neo-gothic church windows, the aluminum frame grid used for protective

glazing disregards the original tracery of the window on the left. The grid mars the appearance of the window inside and out. It also impairs the overall historic character of the building. The plastic storm glazing has been removed from the adjacent window to restore the original window appearance.

When protective glazing is added, it should be ventilated. If a window is not ventilated, heat and condensation may build up in the air space between the ornamental glass and the protective glazing (creating a "greenhouse effect").

Protective glazing should be installed in an independent frame between $\frac{5}{8}$ " (16mm) and 1" (25mm) from the historic glass. This allows the protective panel to be removed for periodic maintenance of both the historic window and the new glazing. The conditions of the air space between the two layers should be monitored on a regular basis; condensation should never collect on the window.

No ideal formulas have been developed for venting the air space between the ornamental glass and the protective glazing, but it is typically vented to the outside (unless the building is air conditioned most of the year). Generally, a gap of several inches is left at the top and bottom when glass is used, or holes are drilled in the protective glazing at the top and bottom when polycarbonates and acrylics are used. Small screens or vents should be added to keep out insects. Finally, it is important to realize that most original plating was "rough plate" or "ribbed" and never had a modern polished reflection. Some glass tinted the transmitted light intentionally, as originally designed: in this case any new or replacement plating should simulate this effect to respect the artisan's intention.

Brick Cladding - Preservation (monitor mortar repairs)

The condition of the brick cladding is good but a variety of recent inconsistent mortar interventions (see condition assessment) suggest that this work may not perform well over time. Monitor mortar performance regularly, especially at the end of each winter.

Look for evidence that the new mortar may be harder than the historic bricks (not good) and thus augmenting moisture ingress to the brick surface around the mortar (the visible edges). If it becomes evident that the bricks around the new mortar repairs have spalled and eroded, leaving the mortar in place - this would be a sign the mortar mix was incorrect and the area will need to be repointed again, using a professional conservation mason and a compatible, historically appropriate mortar.

Keep in mind the following guidelines when repointing or repairing brick:

Correctly matching mortar extends well-beyond just matching color. In order to confirm the degree of compatibility between any new mortar and the historic mortar and/or masonry units that it bonds, the following characteristics should also be tested/examined and matched:

- Texture
- Physical Properties
- Hardness
- Water Vapor Permeability
- Tooling (Shape of the Mortar Joint)

It is important that repair mortar be matched so that it is compatible with both the surrounding masonry units as well as the contiguous mortar.

Use mortars that will ensure the long-term preservation of the brick assembly. Mortar should be compatible in strength, porosity, absorption and vapor permeability with the existing bricks. Bedding and pointing mortars should be less durable than the bricks themselves (i.e. a bit softer) .

If new mortar is not matched and compatible, you run the risk that the **new repair mortar may contribute to the deterioration of the wall** instead of protecting it; or, that the visual impact may be unacceptable if the colour, texture or tooling does not match the historic mortar or is not compatible with the historic bricks.

All repointing work on historic masonry buildings should be preceded by an analysis of the mortar and by an examination of the bricks and the techniques used in the original construction of the wall. Except for pure conservation work, the exact physical and chemical properties of the historic mortar are not of major significance as long as the new mortar:

- matches the historic mortar in color, texture, and detailing
- is softer (measured in compressive strength) than the brick; and
- is as soft, or softer (measure in compressive strength) than the historic mortar

Wood elements - Restoration (repair)

Fill in burrows made by wildlife in wood soffit
Prep and repaint protective panel wood moulding

Concrete foundation - Preservation (monitor cracks)

Assess existing foundation cracks using a professional engineer.
If repairs are needed, use professional conservation mason to conduct repairs.

Research Resources

BC Archives: Archival photographs, Fire Insurance Plan for Fernie 1956.

GSG Gomm Stained Glass: <https://www.gsg-art.com/how-to-ship-big-stained-glass-panels.html>

Fernie Free Press. March 20, 2015. *Riders dig deep for Fernie community: Local players help to dig out basement of 100-year old church.*

Fernie Historical Association. 1967. Backtracking With Fernie Historical Association.

Holy Family Parish. June 1963. Golden Jubilee Booklet (Held at UBC Special Collections)

The Fernie Ledger newspaper - various articles from 1908, 1910 and 1911 and the announcement of the church opening on November 9, 1912 titled *Opening of the Church of the Holy Family.*

Fernie Museum: Archival photographs, 1910 Fernie District Catholic Directory, Inventory listing for Holy Family Church and Priest House.

Fernie Progress magazine. 1909. Vancouver Public Library Special Collections.

Fine Type of British Priest. February 5, 1910. Vancouver Daily News newspaper page 15

Holy Family Fernie Parish website <http://www.holyfamilyfernie.ca/history>

Lambeth Jeune Dang Research Group. 1979. A Survey on Heritage Buildings in Fernie.

Preservation Brief #33 - The Preservation and Repair of Historic Stained and Leaded Glass (Technical Preservation Services—US National Park Service)

Rogers, Stephanie. February 8, 2018. Fernie Catholic Church Stained Glass Window Assessment.

Saskatchewan Heritage Foundation Brick Masonry Conservation Bulletin

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