

FAITH IN RUINS:  
CURATED DECAY FOR THE GOTHIC ARCHES  
OF SAINT JOHN

*by*  
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## ABSTRACT

As trees reach old age they begin to seed the next generation of growth beneath their limbs, and even in the sequence of decay, the standing dead continue to nourish the forest community. In the urban community of Saint John, New Brunswick, a city rich with built heritage from a prosperous past, the aging religious architecture that once sustained the population have become vulnerable to the common practice of demolition due to obsolescence and neglect.

Saint John witnessed the end of the Gothic Arches, a building conceived as a cathedral of Methodism in 1882 which, over two decades of neglect, decayed into a contentious historic burden and subsequently into a mound of stone debris in December 2019. This thesis confronts architectural erasure and presents an alternative strategy for the preservation of this historic building through benign ruination. A post-mortem architectural analysis of the material and spatial qualities of the site generate an approach for reuse positioned as a retroactive possibility for the building's curated decay, released of servitude and high in spirit<sup>1</sup>. As heritage infrastructure and mentor, the fragmented building seeds itself a renewed cultural future.

## ACKNOWLEDGEMENTS

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## AUTHOR'S PROLOGUE

It was not a surprise - an expected end after many years of declining health. As prepared as one may be to face the realities of life, death is that sudden lack of air in the room, that feeling of your heart simultaneously racing and it frozen in place; death holds out its arm as you try to push by and stalls your forward fleeing. Even if you see its arm clearly outstretched in front of you, the abrupt end is no less difficult to accept.

Reconciling loss, in the sense of a change that you know will never be reversed, is a difficult process which does not necessarily get easier with more experience. Terminally ill; structurally unsound; pronounced dead at the scene; beyond repair; passed away; demolished. They lived a good long life; they were so

young; it was time to go; we didn't have enough time. Questions unanswerable and endless 'what ifs', loss sends one through a series of rational and arbitrary thoughts and emotions in an effort to lock in the memories of the loved one and a silent struggle to imagine your own life with this new absence.

On December 11th, 2019, I faced the irreversible loss of a cherished building: the Gothic Arches of Saint John, New Brunswick. Indeed, the subject of my thesis project and the focus of my research since the early summer when the building was quietly aging in place, prior to any development activity of the fall. Among spectators, I witnessed the church be transformed into a pile of rubble and debris by the hiss of the excavator as it tore into the walls until the final stones of the grand edifice were pulled to the ground over the course of an agonizing three winter months.

This architectural ending was abrupt, but expected. It was no secret that the previous twenty years of neglect had detrimental consequences for the massive stone church. My initial motivation

for selecting this site was to draw attention to the sleeping giant and invigorate the conversation around it's uncertain future with representations of the church in an imagined state of architectural "remains" that projected a theoretical "loss" of the cherished site. There is energy in failure. I thought that perhaps visualizing the structure in a ruinous form may instigate reform in the city's status quo: its eagerness erase what has failed. Instead, sudden development interest put into motion the actions toward real loss; the church building has been demolished, and any faith in its continuation is now ruined.

I am writing this thesis at a time of an urban crisis for Saint John. The city is broke, the population ticker is still, the poverty rate above national average, and conditions do not seem to be improving with any hurry. The nature of this crisis has been part of the city's narrative since the 1970s when industry and population began to sharply decline. The urgency with which I write is related to the historic architecture of Saint John that is defenceless against the self-destructive forces of economic desperation and apathy toward old, vacant buildings. In the past

decade, the city has demolished many buildings in an effort to ‘cut losses’, to clean up, or to clear land for new development. Since the vast majority of the urban centre is composed of Victorian and pre-war era construction, these casualties are ‘historic’ by age and design, but unprotected by any heritage conservation legislation.

This architectural thesis began many years ago for me out of experiencing the frequent demolition of heritage buildings in my home city, Saint John. Like a recurring dream, demolition sites of stately Victorian era buildings became familiar but no less unsettling. The many economic downturns of the city has left the population in a position unable to support the architectural riches inherited from a prosperous past. With my experience and interest in the management of the city’s built heritage, I extend the ensuing thoughts and possibilities to this community and beyond as a necessary dialogue for valuable and vulnerable heritage.

Like the ceaseless rise and fall of the Bay of Fundy tide water

at the perimeter of Saint John, the cycles of people and place will continue to shape the community. With this work, I aim to share optimism, even in a time of loss, that with each cyclical fall the spirit and character of the city is not washed away.

*"When the building stands complete and in use, it seems to want to tell you about the adventure of it's making. But all the parts locked in servitude make this a story of less interest. When its use is spent and it becomes a ruin, the wonder of its beginning appears again. It feels good to have itself entwined in foliage, once more high in spirit and free of servitude."*

*- Louis Kahn, Silence and Light 1968*



# INTRODUCTION

INTRODUCTION

For twenty years the Gothic revival style church, formerly the Centenary-Queen Square United Church, sat under-utilized and neglected. Constructed in 1878, this grand, stone church building is a testament to the social, economic and cultural 'highs' of Saint John's legacy as a once thriving shipbuilding city as well as now in it's contemporary circumstance, the church also bares the scars of the city's 'lows' of economic and population struggles throughout the decades.

Positioned in the time of autumn 2019, just before news of the imminent demolition which took place, this thesis is a site specific architectural response to the unfortunate end for the church, which was commonly known as the Gothic Arches. This is a retrospective inquiry into an alternative reality for the building that confronts to the status quo of Saint John's impatience for progress, culture of 'clearing', and mainly the practice of building demolition, effectively leaving no trace and depriving future generations of tangible engagement with the historic site.

This thesis is a provocation for a re-thinking of heritage

conservation philosophy and practices in terms of the modern obsession with wholeness and loss aversion. The vulnerability of under-utilized church buildings is a Canada-wide issue as National Trust for Canada Regeneration project leader, Robert Pajot says, “every community in the country is going to see old church buildings shuttered, sold off or demolished”.<sup>1</sup> When times are tough, or when immediate resources are unavailable, this thesis asks, is there a new definition or approach for heritage conservation that is more versatile in the expectations and outcomes of ‘saving’ places?

I put forward a declaration of the importance of architectural continuity for Saint John under the premise that the agent of continuity is more than simply persistence - it is also versatility, creativity and change. The explorations of this thesis present a new definition for adaptive reuse as a heritage conservation approach concerning architecture that is adapted for new use as a ruin.

An important objective of this thesis is to explore possible

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<sup>1</sup> CBC News. “From sacred to secular: Canada set to lose 9,000 churches, warns national heritage group”. March 10 2019

alternatives to the conventional ending (demolition) of vacant heritage buildings. Curated architectural ruination, inspired by the gentle yet active processes of ecological succession, is proposed as a relevant option for the struggling Maritime city. This idea is based on an informed intuition of the structure and materiality of the building and well as a deep understanding of the urban context. By releasing a building from its servitude, it allows for other operations and meaning to grow out of the non-habitable structure such as salvage of material, learning from its assembly, and taking pleasure from its fragmented form and lasting cultural values. From this study has emerged a new perspective for creative, unorthodox heritage conservation that embraces inevitable change.

The exploratory and analytical drawings will inform a design strategy for transitioning the architecture of the Gothic Arches into public ruins over time. Additionally, the documentation of the church in its final state and as it devolved through the demolition will serve as a modern record of the site, or rather as its eulogy.



FOREST PROCESSION

## RESEARCH QUESTION

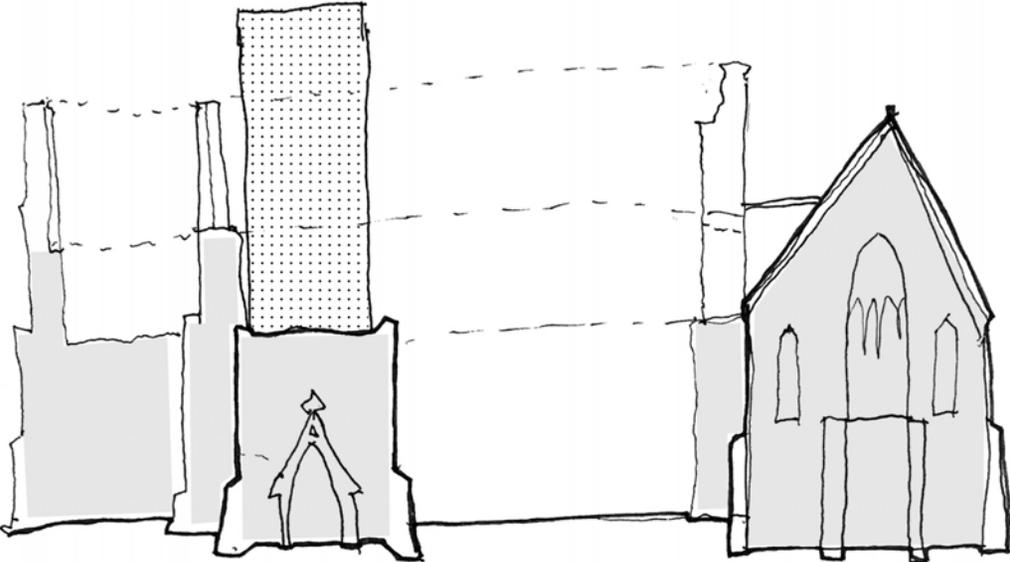
Is there a middle-ground between Conservation and Demolition that provides an alternative strategy for the protection of significant yet abandoned places when conventional Heritage Conservation practices cannot be achieved?

## THESIS STATEMENT

Considering the heritage values and the decaying condition of the Gothic Arches, a balanced yet unorthodox approach to preserving its cultural and architectural continuity can be realized through “benign ruination”, a process of incremental deconstruction and selective preservation of the building material. This process of transformation from heritage building into ‘historic infrastructure’ can foster a new age of traditional building trades and its creative rehabilitation will reclaim the site as an ephemeral refuge for the community.

BENIGN + RUINATION

“*adj.* kind disposition, gracious” + “*v.* to reduce to a state of decay, collapse”



An incremental and conscious un-building of the architecture using the principles of “curated decay” resulting in a new fragmented form.

## LEXICON OF TERMS

*Heritage Infrastructure:* A pragmatic cultural resource and amenity that serves the public as a substructure for investigation of material, design, construction assemblies, and phenomenological value that benefits the network of built heritage of the region through the skilled labourers, craftspeople, and professionals.

*Benign Ruination:* An incremental and conscious un-building of architecture using the principles of “curated decay” resulting in a new fragmented form.

*Curated Decay:* A concept by Caitlin DeSilvey (2017) that applies new theories of materiality and ecology to the concerns of critical heritage studies.

*Postpreservation:* Considered an experimental heritage practice of inaction that values the natural course of decay for heritage objects or places.

*Official Heritage:* Objects, sites, buildings, or tradition which has been assigned with the status and duty to contribute to cultural memory work.

PART ONE

*Opening Hymn*

PART ONE - OPENING HYMN

STORY OF PLACE:  
*SAINT JOHN, NEW BRUNSWICK*



View of Saint John and Harbour Source: Author

The Gothic Arches, formerly the Centenary-Queen Square United Church, exists in a city of significant history, of maritime culture and economy, and of resilient character - or, as self identified, a “gritty city”. This characterization may be because of it’s rough-around-the-edges Victorian era neighbourhoods, or perhaps its heavy industrial sites which crest all corners of the city’s landscape. Nonetheless, much of Saint John’s resilience can be derived from a narrative of development highs and lows of a boom-or-bust economic climate. This section provides the history and urban context of which the thesis site is deeply embedded.

The early history of Saint John is tied to the Bay of Fundy,



Princess Street, Saint John 1864 Source: Saint John Free Public Library



South End Saint John 1860 Source: Saint John Free Public Library

the city's harbour, and the ships that ebb and flow from it. It's location between the United Kingdom and the states of New England positioned Saint John as a crucial economic link for international trade during the "golden age of sail", around the mid 18th-century into the 19th-century. This period of wood sailing ships was also 'golden' for Saint John's industrious population since, not only was the port full of shipbuilding docks, but lumbering and timber was the major export out of New Brunswick. Additionally, the well protected harbour and extreme tides made Saint John the ice-less 'winter-port' where trade could continue (by domestic rail) while the ports of Montreal were frozen<sup>1</sup>. This strategic location was also an entry for immigration to the rest of Canada from the time of British and French pioneers up to the world war periods. One of the most consequential influx of people through the port was the landing of the Loyalists after the American Revolution, on May 17, 1783. This expansion of population as well as the development of the region lead to the incorporation and naming of Canada's first city, Saint John, in 1785.

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1 Raska, Jan. Strategic Winter Port: A History of the Port of Saint John.



Market Slip Saint John Source: Saint John Free Public Library

In the later half of the 19th-century, Saint John experienced a downturn in their booming economy. With the shift away from wood, ships of steel and iron sunk the shipbuilding industry and took the lumbering trade with it, since the steam powered boats could pass the ice-jammed St. Lawrence River<sup>2</sup>, and all while in-land rail systems between the states and provinces gained speed. These economic ‘busts’ occurred just prior to the most devastating and transformative event in the city’s history, the Great Fire of 1877.

The term ‘Great’ attached to the incident signifies the magnitude of conflagration in relation to the scale of the city as well as the international reputation it gained as ranking as “one of the most destructive urban fires in 19th-century North America”<sup>3</sup> Approximately 200 acres of the southern peninsula was razed in the conflagration. Bordered on the west by the Saint John Harbour and by Courtenay Bay on the east, sixteen hundred buildings were

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2 Raska, Jan. *Strategic Winter Port: A History of the Port of Saint John*.

3 Hale, C. *The Rebuilding of Saint John New Brunswick 1877-1881*. p.1



Aftermath of Great Fire 1877,  
P86-58 Saint John stereographs, PANB.



King Street, looking west in the aftermath of the Great Fire -  
June 1877. P86-53 Saint John stereographs, PANB.

destroyed and eighteen lives were lost<sup>4</sup>.

“As a result of the loss of dwellings, approximately 13,000 people were left homeless. Many commercial buildings, three theatres, thirteen churches, and a number of public buildings such as the Custom House, Savings Bank, Post Office, City Building and schools were destroyed. Fifteen vessels, mainly schooners, burned at their moorings.”<sup>5</sup>

The tragedy turned the large part of the city to ruins, reduced to smoldering mounds of former buildings, homes and livelihoods. (See Fig.1, page 13)

Erasure and ruination are themes of urban transformation that will be explored through this thesis study in subsequent sections, however, at this pivotal moment in the story of Saint John, the transformation which occurred directly after the fire was the dramatic architectural revolution of the city. As a lumbering port, naturally, the original city was primarily constructed of wood - a crowded collection of peaked roofs, shutters, shingles

4 Shorter, G. W. *The Saint John fire of 20 June 1877*. p.15  
5 *ibid.*



Prince William Street Post-Fire  
Source: Saint John Free Public Library

and clapboard. The rebuilding of Saint John did not repeat the Maritime Georgian structures, rather, in the spirit of resiliency and fortitude the new structures, quite literally, rose from the ash as bold and sophisticated structures of Victorian fashion. Most significantly, Saint John was constructed using the latest techniques and materials of the late 1870s and adhered to a novel building and inspection legislation that rigorously endorsed masonry construction and design: non-combustible materials that would resist the spread of flame. The enhanced building law regulated the overall height, roof type (flat roof with masonry parapets), fire-proof dividing walls, and other elements to ensure safety<sup>6</sup>. Public and commercial buildings and certain areas of the city banned the use of wood for construction.

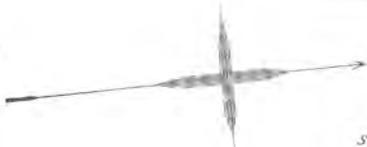
Within a year of the fire, much of the city was under construction or already rebuilt - in a fury of ambitions construction activity. Imagine the energy of an entire city in transformation, and the incredible grief and hardship transformed into hope and vibrancy. The tragic loss propagated a new culture of construction and a

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6 Shorter, p.93



THE STORY OF  
**THE GREAT FIRE**  
 IN ST. JOHN, N.B.  
 JUNE 20<sup>TH</sup> 1877.  
 By George Stewart, Junr'  
 BELFORD BROS PUBLISHERS, TORONTO  
1100 ST. JAMES ST. W. TORONTO



Scale 500 Feet to 1 Inch.

FIG. 1 EXTENT OF GREAT FIRE

new species of architecture. It was a time of profound influence:

“Labourers, contractors, builders and architects from many places in Canada and the United States were drawn to the city by the building boom. The architects came from such centres as Toronto, Montreal, Boston, New York and, of course, Saint John itself. Many among them had European experience. Never before had the city had so many building experts and artisans at its disposal. Their varied backgrounds, expertise and training, as well as the competitive atmosphere induced by their large numbers resulted in a challenging and creative atmosphere. Opportunities for employment were plentiful, and the vast supply of materials and craftsmen who knew how to use them permitted a broad expression of imagination and ingenuity.”<sup>7</sup>

The architectural genetics of Saint John is found not only in the local adaptations of the high Victorian style but also in the detailed assembly of materials and ornamentation by the skill of craftspeople from generations departed, yet not entirely out of reach since traces of their work survives.

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7 Hale, p.93



Urban Renewal Program c. 1960  
Source: Ian MacEachrn, "The Lost City"

Saint John's urban and economic development slowed significantly until a rise during and after the world wars with the corresponding retrofit of the shipbuilding dry docks (c. 1930s) to manufacture steel vessels. With modernity settling into the post-war Saint John, the City embarked on a new urban planning project that would clean up "slums" and introduce new zoning and segregated uses, as well as a massive highway bridge connecting east-west that would sever the city north from south. The Saint John Urban Renewal Program, initiated in the 1950s and proceeded until 1970. John Leroux, art historian and architect, published a book of photographs, aptly titled "The Lost City", which picture neighbourhoods of the city in its pre-renewal form. Leroux names this development period "the disaster of Urban Renewal in Saint John" (Leroux p. 10) and describes the nature of the development mindset at the time:

"Those making policy decisions were older men grasping at sweeping rationalist engineering solutions in a post-war world desensitized to cities reduced to rubble. Rebuilding from the ground up was championed by everyone from architect Le Corbusier

on the global front to members of the Saint John Town Planning Commission on the local.”<sup>8</sup>

This out-with-the-old, in-with-the-new mindset is not unique to Saint John since many city centres in North America participated in this wholesale clearing of dense, often poor, residential neighbourhoods, replacing these with modern commercial and public constructions. This “renewal” had proven not to be beneficial in all cases, and the port city especially experienced a different type of clearing. The city’s population began to decline in the 1970s after the modernization activity was completed and people fled to suburban regions, which also directly effected the ‘hollowing out’ of Saint John’s uptown core, where vacancy began to permeate. Statistics from the City’s “Population Growth Framework” documentation describes the decline in population over the last 45 years by almost 25%. “In 1971, our population was 89,039. By 2016, our population had fallen to 67,575. The 2016 Census indicated that our community now has the distinction of being the only Census Metropolitan Area (CMA) in Canada to

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8      Leroux, J. *The Lost City*, p.10

shrink during that period”<sup>9</sup>

On top of this low populous, poverty rates for Saint John are currently above the national average rate by 8.3%<sup>10</sup>. It is a paradoxical situation that the major historic city of the Province is deprived population but also supports 20-25% of New Brunswick’s GDP through its primary industrial base, including Canada’s largest oil refinery which was responsible for nearly 60% of New Brunswick’s total exports in 2017. In addition to petroleum products, a further 30.5 million metric tonnes of cargo travelled through the Port of Saint John in 2017. The port also plays a key role in tourism, bringing nearly 210,000 cruise ship guests and crew to the city in one season<sup>11</sup>. A 2019 describes the city’s financial profile as “A Sustainability Crisis”. It reports, “A succession of decisions in past decades have resulted in a debt of over \$230 million. This means that 11% of the annual municipal operating budget goes toward servicing the debt. The city currently has an estimated infrastructure deficit of \$435

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9 City of Saint John. *Population Growth Framework*. 2018.

10 *Sustaining Saint John: A Three-Part Plan*. Government of New Brunswick. July 2019.

11 *ibid*

million”<sup>12</sup>.The city has been in a financial crisis for years, and is not showing many signs of growth or stability.

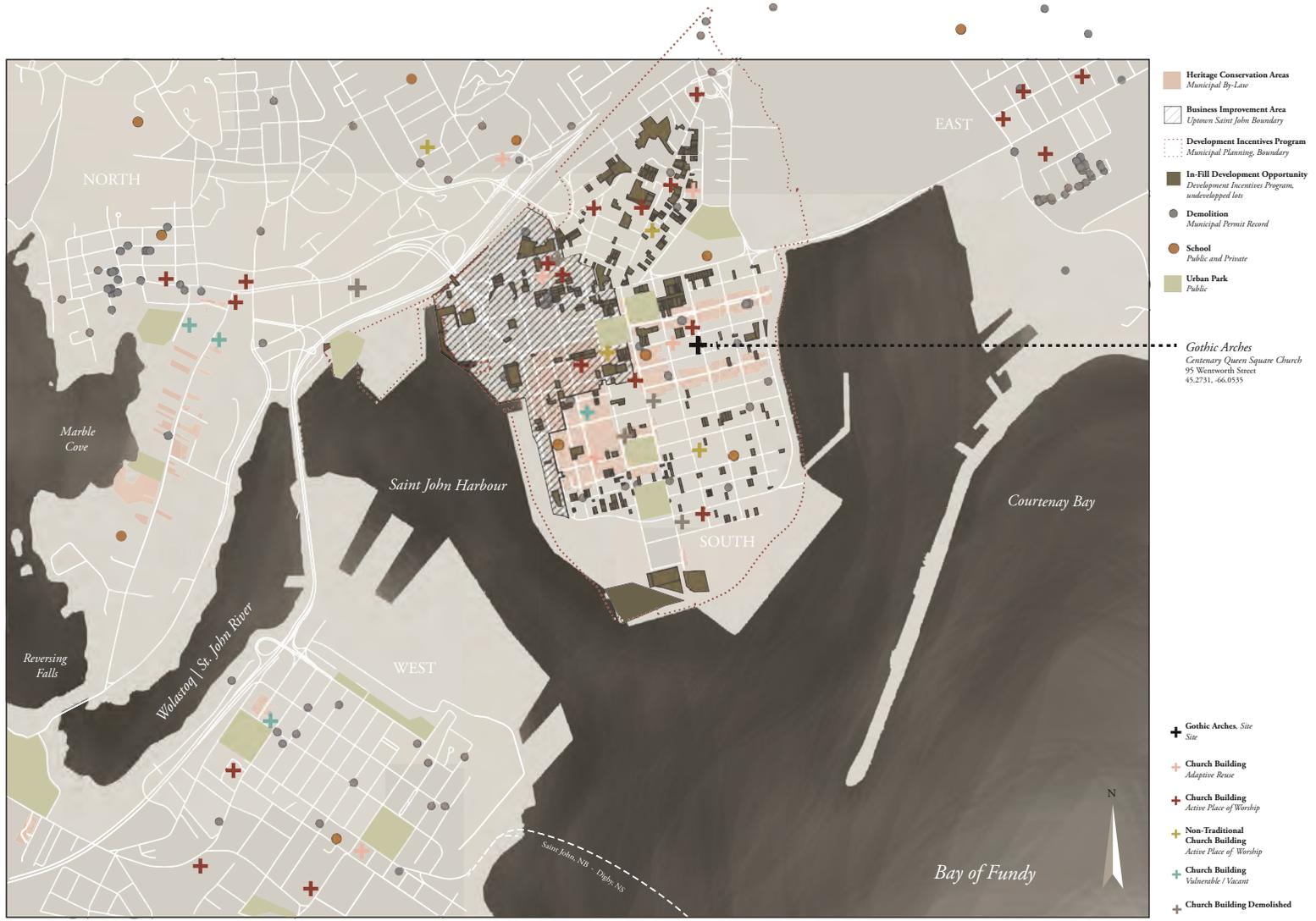
This portrait of Saint John in recent years depicts a city that does not have the resources to heavily invest in a major heritage redevelopment - an old crumbling church, for example. However, not investing in heritage and culture, in my view, adds to the deficit of the city in terms of its depleting cultural capital for the generations beyond this difficult moment in time.

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12 *Sustaining Saint John: A Three-Part Plan*, Government of New Brunswick, July 2019.



*Saint John*  
 New Brunswick



Saint John  
New Brunswick  
URBAN CONDITION 2019

STORY OF SITE:  
*THE GOTHIC ARCHES, 95 WENTWORTH STREET*



Original Methodist Church, 1839 Source: Harold E. Wright

1839 was the centennial year for the founding of British Methodism, and was the year the original Centenary Methodist Episcopal Church was built in Saint John<sup>1</sup>, however it was destroyed in the great fire of 1877. Following the devastation, the Centenary Methodist church was the first to commence rebuilding and was the last to be completed of over a dozen churches. Its design, scale and construction was deemed a significant improvement to the original wood Georgian style church. Rebuilt of limestone, the massive Gothic revival style sanctuary and Sunday school annex were conceived by New York Architect, John Welch. The splendid Gothic hall of the Sunday school was completed before the main

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<sup>1</sup> MacLean, Faith D., et. al. *Milestones in Methodism: a History of Centenary-Queen Square United Church of Canada, Saint John, N.B., 1791-1966.* p. 30



The Centenary-Queen Square Methodist Church,  
approximately 1910 Source: Saint John Public Library



Gothic Arches Interior just prior to demolition  
Source: Author

church and held service there before its official dedication in August, 1882<sup>2</sup>. [See illustration for an interpretation of the architectural description of the magnificent building]

In 1925 the church changed its name with the creation of the United Church of Canada, and again in 1939 when it was joined by its neighbouring congregation (by a few city blocks) Queen Square Methodist Church. The Centenary-Queen Square United church, in its last identity, was a place of worship for 117 years in the grand church building, until 1998 when the congregation decided to move out, sell the building or, as a last resort, demolish it entirely<sup>3</sup>. This was the building's first threat of loss.

The church building was purchased by a concerned, local citizen for \$40,000 in the year 2000 and its identity was changed again to be known as the *Gothic Arches*, a multi-use community centre. The building was used as an occasional performance space, community event space, and rented parts of the hall to small businesses. It

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2 *Milestones in Methodism*, p. 42

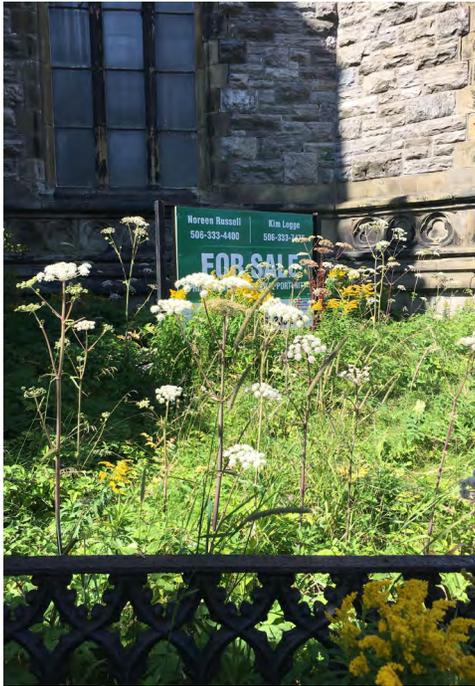
3 Congregational minutes from 1998, Maritime Conference Office of The United Church of Canada

was reported to have been burdened with a heating bill of \$20,000 annually, which simple calculations can determine that small scale public use could not sustain that cost. As a result of the high operation costs, maintenance was deferred. The building condition continued its decline and soon after, the owner listed it for sale in 2011 with the declaration that it would have to be demolished if a new owner was not found in 6 months. This was the building's second threat of loss. With luck, the church was sold to a Toronto group, Ethos Development, in 2012 who had big dreams for the site - but ultimately bigger than the city could support.



Imagery from Pre-Design Report for the Condos of Gothic Arches by Acre Architects Source: Ethos Development Group

The new development interest in the building was exciting to the community with hopes that this was the heroic effort that would save the church. The schematic proposal, prepared by Acre Architects of Saint John, was a real estate driven condominium development which involved adapting the church building into four levels, removing the Sunday school hall completely and replacing it with a ten story glass tower. A total of 21 units would be stacked inside the grand gothic shell and another 50



For Sale August 2019 Source: Author

in the new addition. Marketing and impressive visuals of this scheme failed draw the desired attention in the form of early investors for the condo model to initiate development. In 2015, the group realigned the proposal with a scaled-down proposal for 25 units contained within the existing structures on the site. This second residential proposal was again unsuccessful and the building endured several more years of being unheated, unoccupied, and undesired. Other smaller scale proposals came forward for the building, such as a ‘Gothic Brew Pub’, however, no actions were taken. Yet another ‘for sale’ sign adorned the corner lawn in 2016.

The declined condition of the church building accelerated and it had been added to the City’s Vacant and Dangerous Buildings list. The purpose of the list is to monitor the vacant buildings (which are many) scattered about the city and to encourage building safety compliance through regular notices to the building owner with pressure to make required repairs. The ultimate compliance is, however, demolition. Three more years the church rested untouched, vacant, silent. A third unspoken threat of loss was

sensed by an anxious community.

This is where the story of the Gothic Arches meets a sharp turning point. As a result of the structural uncertainty of the stone, a new buyer (October 2019) with 'high-end' residential development plans for the site initiated a complete demolition of the church on December 11th, 2019 which endured for over three months of destruction. The anxiety surrounding the building's fragile status was put to an end.





SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION



NORTH ELEVATION

**STORY OF STATUS:**  
*VACANT, VULNERABLE, VALUABLE*

Vacancy is a building status that often has the associated public perceptions of uselessness, obsolescence, and unworthy of rehabilitation. When a building becomes vacant in an urban centre, its chances of vandalism, damage, nuisance to adjacent properties and neglect increase, and certainly a vacant building is a fire hazard - a risk that Saint Johnners are sensitive to considering the city's dramatic history.

The City of Saint John has a by-law in place which manages the vacant and dangerous buildings. This legislation is a mechanism for the municipality to identify, monitor and regulate buildings and properties that are possibly a hazard to public safety, but vacancy as a common qualifier:

Unsightly Premises and Dangerous Buildings and Structures By-Law:

*“WHEREAS, Common Council considers that unsightly premises, dangerous, vacant and unoccupied buildings or structures are a major blight affecting the quality of life in residential and non-residential neighbourhoods, and that these conditions can negatively impact the property value of real estate due to negative perceptions of unsafe and deteriorating residential and non-residential neighbourhoods;*

*AND WHEREAS, buildings or structures that become vacant or unoccupied, dilapidated or unsound due to their structural strength, can become a hazard to the safety of the public;”* (Recitals, p. 4)

Buildings which meet this criteria populate a list which authorities monitor and subsequently initiate compliance measures with the



Property in Saint John subject to neglect and hesitant redevelopment, 2017 Source: Author

property owners. The main objective of this regulatory by-law is to provide a process for enduring the building standards and general public safety. As a property becomes increasingly risky due to prolonged periods of neglect and inaction, the city may order a permit for demolition of the premises<sup>1</sup>.

It has been observed, however, in this community flush with heritage - or “old” - stock of buildings and short on resources, this buildings policy was abused for years by individuals who would rather not invest in their run-down vacant building in a city struggling with population, and would prefer to wait out the consequences until a municipal order to demolish is issued. Hypothetically, the clearing of an urban lot opens up a new revenue stream for the owner with a surface parking lot for suburban commuters. Recent amendments to the by-law and improved planning strategies has curbed this behaviour, however building neglect and demolition remain a threat to the urban historic fabric of Saint John.

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1 City of Saint John, *Unsightly Premises and Dangerous Buildings and Structures By-Law*



Saint John County Courthouse, street-facing elevation after interior fire, 1919. Source: Robert Boyce



Saint John County Courthouse, rear elevation after interior fire, 1919. Source: Robert Boyce

It is not often the case that a building in Saint John is spared the wrecking ball after chronic neglect and vacancy, and especially after destructive event like a fire. One outstanding example of a building given a second chance at life after a devastating fire is the Saint John County Courthouse, prominently stationed at the ‘head’ of King’s Square since its construction in 1826<sup>2</sup>. The sandstone beaux-arts style courthouse remarkably escaped the devastation of the Great Fire of 1877 but did catch flame in 1919, claiming the entire interior structure and roof leaving only the stone walls standing. As newspaper reports depict, the politics and decision-making surrounding its future was not dissimilar to the network of options and challenges faced today with urban development<sup>3</sup>. After much debate of whether to start anew or restore the ‘historic’ structure (it was surprising for citizens to recognize its historic value in the 1920s), it was decided to rebuild the courthouse with the use of the original sandstone stone structure. It continued to serve as the

2 The Canadian Register of Historic Places, Saint John County Court House National Historic Site of Canada

3 Newspaper archive Saint John Standard, July 20, 1920; source: Robert Boyce



Interior of former Synagogue, under construction May 2019  
Source: Author

city's courthouse from 1924 to 2013 and was declared a National Historic site in 1974. The building is now currently undergoing an adaptive reuse as a performance theatre. This story of the courthouse standing as a stone ruin for roughly four years is an insightful precedent of seeking an alternative to demolition, even with dire odds.

In terms of religious architecture of the city, there has been in recent years a number of rehabilitation projects which facilitate new use. On Carleton street, the former Shaarei Zedek Synagogue narrowly escaped demolition by the City in 2018 when a local company, Cooke Aquaculture, acquired the property and invested in its rehabilitation. The 149 year old church is now office space which sensitively maintained the double-height of the church nave with open-concept work stations.

Not all church buildings are so fortunately renewed. In September 2018, four churches of the Saint John region closed their doors with the decision of the New Brunswick Catholic Diocese to make drastic cuts for budgetary needs that were not being met by



Church of St Andrew and St David, Vacant.  
July 2018 Source: Author

dwindling congregation numbers. A total of nine churches in the province of New Brunswick have been closed and face an uncertain future<sup>4</sup>.

The vulnerability of church buildings are recognized as a nationwide concern. From her 2016 speech, Executive Director of the National Trust for Canada, Natalie Bull outlines the gravity of this issue,

“Faith groups are the second largest real-estate holder in Canada, second only to the Government of Canada itself. We may be talking about more than 27,000 buildings, and it is expected that at least 30 percent of them will be on the chopping block in the next few years. So for heritage advocates, places of faith are front and center on our list of species at risk.”<sup>5</sup>

Preserving heritage churches can be a challenge, considering often their large scale and interior volumes, as well as the religious iconography analogous with church architecture. These challenges and lack of resources or interest often beset long

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4 CBC News. “9 Catholic churches in Saint John diocese to shut doors”. April 18, 2018

5 Bull, Natalie, 2016



Prince William Street, August 2017 Source: Author



The Gothic Arches, August 2019 Source: Author

periods of vacancy before decided action.

In Saint John, a unique phenomenon of the slow-paced port city is, as I may call it, ‘*preservation by neglect*’. So much of the city’s Victorian era buildings remain relatively intact and unchanged through decades of latent development. After the population began to decline in the 1970s and the work of Urban Renewal had ceased, development pressure in the central peninsula nearly vanished. This lack of attention to the “old city” effectively saved the built fabric from overzealous renovators, developers, and new construction. The historic architecture, although in desperate need of maintenance, endured decades of disregard while historic urban centres of other cities eroded due to growth and intervention.

This concept of neglect as an agent of preservation is a hypothesis, admittedly controversial, which I present in this thesis as an open-minded pursuit for an alternative to the status quo of demolition of vulnerable, vacant, yet still valuable buildings in Saint John.

STORY OF ENDINGS:  
*ERASURE OF URBAN HERITAGE*

This thesis positions the demolition of a building equal to its erasure. When a building is erased by demolition, more than its physical presence and its role in contributing to its context or landscape is lost. It plays an active role as part of the genius loci, or spirit of place, as well as connecting the past to present in the collective memory.

Demolition of “unofficial” heritage buildings - structures without formal designation, yet possess characteristics of heritage value nonetheless - has been common practice in Saint John, a practice which I view as part of the trailing values born out of the Urban Renewal era. The convention of clearing ground for new development is not automatically a negative process, however removing a building with heritage values on



The Anglin House, Demolition November 2019  
Source: Author



The City-owned "Jellybean Buildings," Demolition April 2017  
Source: Author

the premise that it simply no longer fulfills modern commercial or 'use' value is imprudent and relies only on the potential of short-sighted returns. In the name of progress, the removal of outdated buildings from the urban fabric has created a pattern of 'speculative demolition' behaviour, the case when a building is razed with the prospects of new development on the land at a future time. In Saint John it seems that many demolitions have been speculative without yielding a new construction, in fact the land on which the building once stood often remains a vacant lot - a despondent void in the streetscape. There should be an immediate and urgent need for land to justify the erasure of the city's built heritage.

Among the countless cases of demolition of heritage structures in Saint John there are a few in particular that come top of mind for Saint Johnners with sore memory of their erasure. With this common practice of speculative demolition in mind, as well as the vulnerable status of 'vacant' or 'poor condition', it is concerning to notice a number of buildings in the city that are at risk of the same fate due to impatient behaviour.





STATUS: DEMOLISHED



A Simms Brush Factory,  
1901  
*Demolition 2014*  
*[Vacant Lot / Industrial*  
*yard]*



B Union Station,  
1933  
*Demolition 1973*  
*[Vacant Lot for 18 years,*  
*now Harbour Station*  
*Arena]*



C General Hospital,  
1931  
*Agar Place*  
*Demolition 1995*  
*[Semi-Vacant Lot], copper*  
*dome salvaged*



D Customs House,  
1877-81  
*Prince William Street,*  
*Demolition 1961*  
*[Vacant Lot]*

STATUS: VULNERABLE



E New Brunswick Museum,  
1934  
*Douglas Avenue*  
*[AT RISK]*



F St. Peter's Catholic  
Church,  
1885  
*Clarendon Street*  
*[VACANT 2018]*



G St. Vincent's High School,  
1902,  
*Cliff Street*  
*[VACANT 2002]*



H Church of St. Andrews  
and St. Davids,  
1878  
*Germain Street*  
*[VACANT 2017]*

PART TWO

*Reflection*

PART TWO - REFLECTION

HERITAGE PARADIGM:  
*POSTPRESERVATION*

Part One introduced the local context which frames the ideas of this thesis in terms of a site-specific response to the social, political, economic, and historic setting of the Gothic arches within Saint John. It has been an important discovery to link the evolving beliefs and developments that take shape over time. The following chapters of Part Two are explorations of theory within the topic of architectural heritage, ruination, imagination and ecological succession as inspiration for allowing life to grow from endings.

*Postpreservation:*

The reversed outcomes of the 1960s Urban Renewal Program became

apparent in the 1970s with the devastating social and cultural costs to the city that followed the clearing of neighbourhoods and the expansion of a major highway across the city. The wholesale destruction of parts of the city later provoked a shift in the City of Saint John's planning and development to take a more balanced approach that recognized the benefits of rehabilitating viable districts and historic streetscapes instead of rebuilding from a blank canvas<sup>1</sup>.

“The 1973 Comprehensive Community Plan endorsed ‘preserving the pace, lifestyle, and landscape of the city centre’ through accessing federal Neighbourhood Improvement Program grants, encouraging pedestrian traffic, expanding public transit, and preserving historic buildings.”<sup>2</sup>

This shift also initiated the creation of Saint John's Heritage Conservation Areas By-law in 1982, and the designation of more than a dozen blocks of buildings in the commercial and residential core named the “Trinity Royal Heritage Conservation Area”. Its area expanded in later years, as well as the creation

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1 Leroux, J. *The Lost City*. p. 18

2 Marquis, G. *Uneven Renaissance: Urban Development in Saint John, 1955-1976*. p. 103

of many other designated areas of the city. This was one of the country's early examples of comprehensive municipal heritage legislation that recognized the importance of spatial context for the preservation of urban heritage, as opposed to singularly designated objects or buildings. Modelled after the *Standards and Guidelines for the Conservation of Historic Places in Canada*, the mandate of the Saint John Heritage By-law and regulations, is to preserve the contiguous historic streetscape and to guide any changes or work to the building's exterior to be in keeping with the character of the architecture. These broad terms have been adopted from the universal system and underlying values toward heritage promulgated by the work of UNESCO World Heritage Committee.<sup>3</sup>

“Heritage is increasingly officially defined and governed by a common set of philosophies that have their origins in a particular, modern, Euro-American way of thinking about the relationship between the past and the present, a desire to order and categorize and a late-modern obsession with vulnerability,

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3 Harrison, R. *Heritage: Critical Approaches*. p.18

uncertainty and risk”<sup>4</sup>

Saint John adhered to this conventional model of Heritage Conservation which is grounded in an aversion to change and protection from loss, and rightfully so for a city that has experienced two major episodes of widespread erasure of its built fabric.

The ‘Protection’ of registered heritage districts, sites or objects infers action to be taken against harm or loss of the subject. Archaeologist, Caitlin DeSilvey discusses “The language that we use when an object or structure is recognized for its potential contribution to cultural memory work immediately presumes a threat, a risk of loss.”<sup>5</sup> This has resulted in a Heritage Paradigm that has been change-adverse and “draws clear distinction from the past”, as Rodney Harrison writes, “in that the building and objects that were being preserved were seen as separate from (and, perhaps most importantly, more valuable

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4 Harrison, p. 9

5 DeSilvey, C. *Curated Decay: Heritage Beyond Saving*, p 3



Germain Street, Trinity Royal Heritage Conservation Area  
Source: Tourism SJ

than) those from the quotidian present.”<sup>6</sup> In Saint John, the Heritage By-law has provided the designated areas with stability, both in market values and business, as well as neighbourhoods with favourable ‘livability’ and character. The heritage areas, needless to say, have also been the most significant draw for tourism to the city. The success of the ‘official heritage’ areas of Saint John can be contrasted by the susceptibility of the rest of the urban south-central peninsula (which could be entirely designated as ‘heritage’ by the same virtue). The polarization of heritage boundaries has created (in some places) a visible imbalance of investment, attention and ‘proper’ conservation activity. Properties outside of the boundaries of the Heritage Conservation Areas By-law escape the design limitations - they are open to interpretation for interventions - but are also subject to development whims, the pervasive behaviours of building neglect and demolition.

The Gothic Arches property was not included in any of the City’s designated Heritage Conservation Areas, although its location

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6 Harrison. p.18

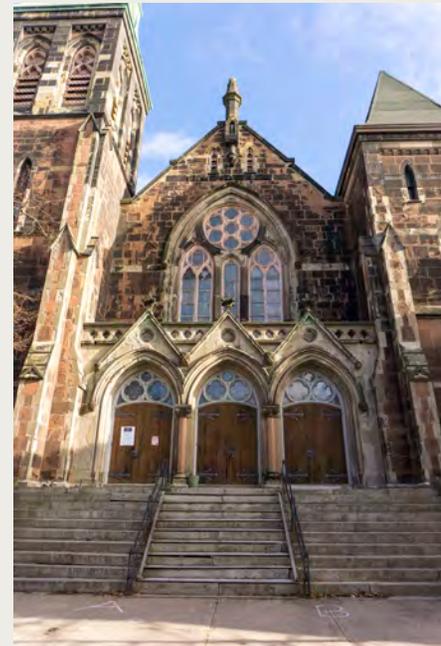
positioned it at the cross-roads of three adjacent heritage areas (Orange Street, King Street East and Princess Street Heritage Conservation Areas); its location is unavoidable if one were to stroll through the neighbourhood. The gothic church did hold status as a Local Historic Place, listed (2008) on the *Canadian Register of Historic Places* but did not have any form of Municipal heritage legislation that provided protection (or deterrent) from demolition.

For a moment, we will venture down the path of “what ifs”. In an alternative version of Saint John’s heritage boundaries, what if the Gothic Arches was part of the ‘official heritage’ of the city - would its inclusion within the By-law have saved it from its fate of obsolescence, neglect, and demolition? Further to this question, relating to this thesis proposal, what if the Gothic Arches was part of the ‘official heritage’ and ruination was proposed - would it have success with adapting to this new ‘use’ and resist demolition? Although the property might have received more support through its later life from eligible heritage grants, my reaction to these questions is: it probably wouldn’t have been

saved, and ruination as a preservation approach probably would not be accepted. I offer this perspective to draw attention to the creative possibilities for ‘protecting’ or adaptively reusing heritage sites that have not yet been received by the cannon of heritage conservation.

#### VULNERABLE HERITAGE:

A current example of a church in critical circumstance is the **Church of St. Andrew and St. David** located at 164 Germain Street within the Trinity Royal Heritage Conservation Area. It is a prominent Neo-Gothic style church with a long congregational history in the city which also houses a world-class Casavant pipe organ. Despite its significance, this building has been closed by the current, dwindling congregation and was sold to developers in October of 2018. After no activity, the building was listed for sale again in September 2019 and once again most recently in February 2020 for \$320,000. (Source: Saint John Real Estate Board) This narrative of vacancy, real estate subjectivity, and uncertainty has an uncanny resemblance to the story of the Gothic Arches building. It is not clear if its official heritage status will be the factor which saves this building.



From her book, *Curated Decay: Heritage Beyond Saving*, Caitlin DeSilvey introduces the concept of ‘Postpreservation’ which posits a transition from an action-driven (often reaction) philosophy of Heritage Conservation to an unconventional notion of in-action which allows for a natural course of decay to occur with heritage objects or places, and to also value this active process of ruination. ‘Postpreservation’ is considered an experimental heritage practice that suggests rethinking the care of vulnerable sites and calls for a stance that reconciles ephemeral qualities into cultural heritage preservation practices. The idea that heritage structures produce meaning not only in their preservation and persistence, but also in their decay and disintegration is discussed in several case studies in the book.

“In this book, I explore the implications of a set of unorthodox premises: the disintegration of structural integrity does not necessarily lead to the evacuation of meaning; processes of decay and disintegration can be culturally (as well as ecologically) productive; and, in certain contexts, it is possible to look beyond loss to conceive other ways of



The Gothic Arches, Wentworth Street 2019  
Source: Author

understanding and acknowledging material change.”<sup>7</sup>

DeSivley’s ideas have inspired new thoughts and intrigue in the development of this thesis, in terms of passive intervention which seeks meaning in slow, outwardly “unproductive” processes of nature, and ultimately looking beyond loss. However, leaving an urban structure to deteriorate entirely is not plausible, nor ethical. What can be gained from DeSilvey’s unorthodox approach is to both acknowledge and embrace change with regards to heritage conservation as a way to sustain cultural meaning. Cornelius Holtorf explains in his article titled, “Averting Loss Aversion in Cultural Heritage”,

“If each heritage object is considered as a process of becoming rather than a state of being, its meaning is not given but constantly evolving and the object can be expected to fulfill a valuable function in society ever after being subjected to major alterations.”<sup>8</sup>

This thesis seeks an approach to protecting the obsolescent church deemed ‘beyond saving’ by means of passive, incremental,

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7 DeSilvey, p. 5

8 Holtorf, C. *Averting Loss Aversion in Cultural Heritage*. p. 418

and curated changes that ultimately ‘ruin’ the building, while simultaneously regenerating it. It is important to recognize, as Federica Goffi writes, “Buildings do not become quasi-eternal by preservation alone, but rather through a re-generation process, which entails design as well as conservation. Built conservation is interpreted here as a process which moves forward in time allowing for imagination and change, while assuring continuity of identity.”<sup>9</sup>

The “curated decay” approach is unquestionably outside of conventional models of heritage conservation philosophy, and is especially in contrast with the heritage practice of Saint John. Embracing change rather than bracing for its threat is the alternative philosophy presented here as a new heritage paradigm using this iconic building as a case study for Saint John.

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9 Goffi, F. *Time Matter(s): Invention and Re-Imagination in Built Conservation*, p. 202

## ENGAGING WITH RUINS

*“By their very nature, ruins gather together different moments in time: they are an obvious remnant of the past that stubbornly remains in the present, yet they also point to a future when the present will have become history.”*

P. Dobraszcyk, *The Dead City: urban Ruins and the Spectacle of Decay*

In some respects, it is fair to say the Gothic Arches could have been declared a ruin in its last years of existence since its function as a building was suspended and its material had aged beyond an aesthetically pleasing patina. The status of ruin was never given, but citizens did label the former church as crumbling, abandoned, derelict, an ‘old wreck’... a shame. If not these characteristics, what constitutes a ruin?

The dictionary definition of ruin is “The state or condition of a fabric or structure, esp. a building, which has given way and collapsed.” (Oxford English Dictionary). Besides interior plaster, some roofing debris and damaged stone of the exterior, there was no collapse or critical structural failures, however, the fabric of the building was in a rapidly declining condition and the utility of the property had certainly given way. Beyond a collapsed state of building, a ruin can be more broadly characterized as a place of suspended utility, unfit for habitation. In Western cultures, ruins predominantly are remnants of structures which have been destroyed by disaster or by violence of war, subsequently monumentalized, or are ancient remains used as memory devices and historic narration. Whatever the physical result of a ruin may be, there is an associated process of ruination that occurred and continues to unfold.

The process of the Gothic Arches’ ruination began decades ago with the deferral of maintenance and attention. It began when the durability of its structure was misjudged and ignored. It began when the main users of its original purpose as a place

of worship moved out. It began when the heat was turned off, and when the basement filled with water from frozen pipes. The process of ruination of the Gothic Arches has not been caused by an accidental disaster or by acts of conflict, but by a slower, silent, dispassionate form of destruction - the consequences of abandonment ruin buildings.

Ruination cannot be discussed without examining decay - a processes which contributes to the aesthetic of ruins. Decay is a biological process that occurs initially at micro scale but eventually acts as a reductive force in materials.

“Decay occurs when a complex of biological, chemical, and physical processes - each driven by specific agents and elements - combines to break down the integrity of a substance and to make its components available for enrollment in other projects. The decomposition catalyzed by enzymes and microorganisms, for example, releases nutrients and increases the fertility of surrounding substrates, allowing for the emergence of new forms of growth.” (Desilvey p. 11)

This concept will reemerge later in Part Two, as an allegorical

hypothesis relating to the release of ‘nutrients’ or knowledge through deconstruction or the breaking down of material.

There exists a conflict of “letting be” and “making good” a decaying building, such as this forthcoming proposal. The initial musings of this thesis was a curiosity with how the Gothic Arches building would eventually collapse - as nature reclaims the material arrangement of the church. This is a Ruskinian sentiment, to let nature take its course and allow the picturesque to emerge from the fallen structure... but this, of course, is an unrealistic option for an urban residential neighbourhood; and an unethical safety hazard. There is an overarching factor of public safety in an urban context. Municipal authority will mitigate risk of hazardous building conditions or public spaces, and enforce risk-adverse regulation. A rural building, however, left unattended on private property has more liberty to age in place for longer without urgent pressure to remediate the untidy condition.

There will be an enormous amount of attention, monitoring, planning,

and intervention required to assist with the transformation into an urban ruin. Here, ruination as a result of these actions should be perceived not as a loss or death, but as a change of purpose, still holding meaning.

‘Benign Ruination’ is new definition of ruin that does not necessarily fit into defined typologies such as ruins of antiquity or monuments since this proposed ruin is *in process* and it is in the *present*. The Gothic Arches ruin would be a decided undertaking that involves the reduction of the building’s material and form into a fragmented state, which is unlike the historic objects received from the past. This strategy is not only an expanded definition of adaptive reuse, where actions are taken to re-purpose heritage structures, it goes beyond this to defining a new approach for heritage conservation practice. Consciously un-building a piece of architecture goes against convention as previously explored - however it does serve a similar purpose of enriching the heritage fabric of the city and achieves the cultural memory work assigned to heritage sites.

INCOMPLETENESS:  
*IMAGINATION AND FRAGMENTATION*



*Egon Schiele, "Old Gabled House in Krumau," 1917. Albertina, Vienna.*

We are constantly piecing together strands of information in order to form a whole - of an image, in conversation, in film, or a story. The mind is not only capable of, but also obsesses over deciphering incomplete messages in order to draw conclusions. For example, the active eye of an observer will fill in gaps, missing detail and line-work of an artist's sketch of a portrait or landscape; the viewer's imagination constructs the subject as much as the artist. Part of the intrigue of a gestural composition is the amount of wholeness or detail that it lacks, and the animation that it sparks in the mind.

“As an emancipatory tactic, the imagination gives credence to multiple subjectivities, making it harder for any single narrative to dominate our understanding of a given historical

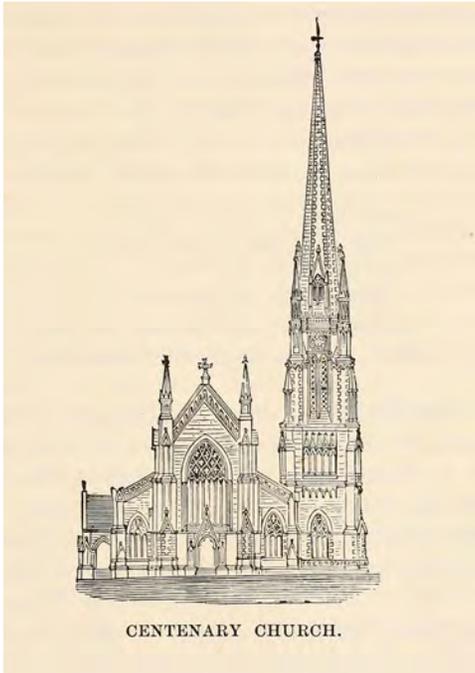


Image of the steeple design that was never constructed  
Source: Milestones in Methodism

event, place, or group of people.”<sup>1</sup>

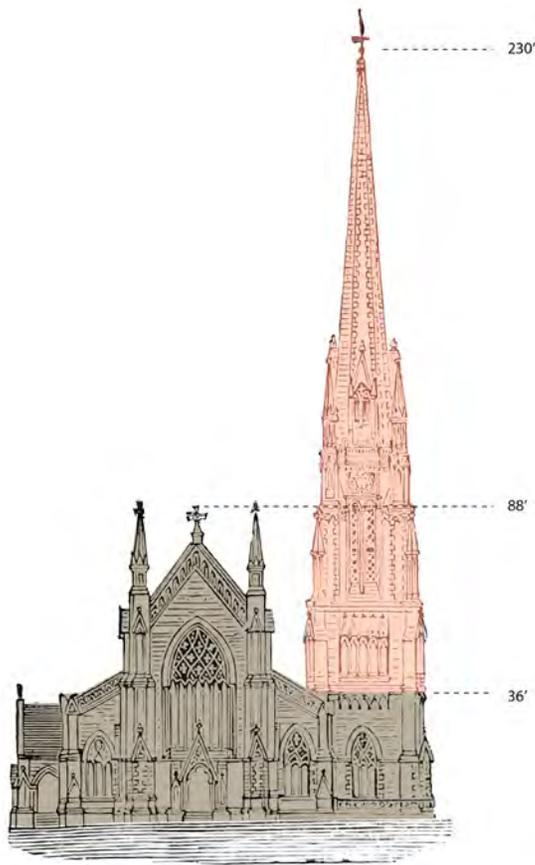
The Gothic Arches, in this thesis proposal, will stand as a fragment of its former state, however, not mourning its former wholeness. As a fragmented architecture, the remaining elements evoke the use of its visitors’ imagination by gathering information from what exists, traces of what was, and seeking what may have been. This mental reassembly of the Gothic Arches is an authentic phenomenological experience that a complete building does not activate.

Similarly, a construction and/or demolition site reveals all about the making of a building and a visitor can gain new understanding of the building from this material and spatial experience.

“The word ‘building’ contains the double reality. It means both ‘the action of the verb build’ and ‘that which is built’ - both verb and noun, both the action and the result. Whereas

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1 Dobraszcyk, P. *Dead City*. p.10



CENTENARY CHURCH.

Imagine the site had the steeple been constructed  
 Source: digital representation, author

‘architecture’ may strive to be permanent, a ‘building’ is always building and rebuilding.”<sup>2</sup>

The process of Benign Ruination will provide many different views and perspectives of the building’s assembly.

Another source of imagination is the architect’s original design for an enormous Gothic steeple, which was never realized at the time of the church’s rebuilding. This was alleged to be because the Centenary Church was over budget and behind schedule - perhaps due to its elaborate design and scale. The unrealized steeple design has, however, permeated the site with imaginings of ‘*what ifs*’ throughout the church’s entire existence since the massive stone base was constructed at the South-East corner of the building with nothing to support above its second storey. To engage with this fragmented history, the proposal includes a re-imagined tower addition as a new function for a past design.

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2 Brandt, S. *How Buildings Learn*, p 2

THE “STANDING DEAD”:  
NATURAL CYCLES OF A FOREST

*“Biological and ecological concepts of decay are full of activity, exchange, acquisition, and redistribution. Decay is life-giving as it is life-taking.”*

Stephen Cairns and Jane M. Jacobs, *Buildings Must Die: A Perverse View of Architecture*

A guiding element of this thesis is the consideration and relevance of naturally occurring cycles - the fundamentals of which are birth, death, and transformation (or rebirth)- perhaps as consolation to the witnessing of urban heritage sites being “transformed” into piles of material debris. In nature, all processes of transformation are connected in complex cycles of

regeneration - of direct and indirect reciprocity of energy and nourishment among all beings. Forest ecology, in particular, is an intense system of continuous regeneration. The soils, microorganisms, wildlife, plants, and of course trees all participate and sometimes interchange roles in the ever-evolving structure of the forest community.

Forest management is a study and practice of sustainable maintenance and harvesting of forest environments. This involves a process of understanding, planning and implementation to achieve the environmental, economic, cultural objectives of a healthy forest. This type of stewardship is akin to many conservation principles of Heritage management. There are particularly similar aspects of old-growth forest restoration practices to heritage in the sense that the forest community is managed in a way to encourage trees to reach old age, for the benefit of the forest's long-term future.

“Old growth is not simply a marker of past glory, an elegy for all that once was. It is a promise of the future, a glimpse of the systemic soundness we will not see completed in our

lifetimes but that can fire our hopes for the timelessness to come”<sup>1</sup>

It has been determined that old-growth trees, or trees of a certain maturity depending on the species, are of special significance to a forest since the seeds which they produce are reservoirs of both genetic diversity and reproductive fitness and have a valuable function in maintaining the adaptive potential of tree species<sup>2</sup>. New Brunswick author and forester, Jamie Simpson, explains,

“Seeds from large, mature trees tend to produce seedlings with better growth characteristics. This is thought to be because these older trees have survived decades of competition for sunlight and nutrients. These ‘winning’ traits can be passed on to their progeny.”<sup>3</sup>

For example, the giant of the Acadian Forest, the white pine, regenerates through seed production but only when the tree reaches

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1 Davis, M.B. (ed.). *Eastern Old-growth forests: Prospects for Rediscovery and Recovery*.

2 Mosseler, A., J. Major, and O. Rajora. *Old-growth red spruce forests as reservoirs of genetic and reproductive fitness*.

3 Simpson, J., *Restoring the Acadian Forest: A guide to forest stewardship for woodlot owners in the Maritimes*. p. 54

20 years of age, with full seed production at 50 years, and good crops occurring every 3 to 5 years<sup>4</sup>. This describes a scale of time that is unprofitable for commercial woodlots, and typically the trees would be harvested before able to seed. The white pine was over-harvested in the 1800s since New Brunswick supplied the shipbuilding demand for England's Royal Navy; white pine is now relatively scarce in the Acadian Forest. Aged trees drop seeds to the soils where they are acclimatized and genetically compatible, and therefore it is important to protect the elders of the forest.

Architecturally, the former church building claims the same importance in the city in terms of age and genetics, ie: construction typology. The Gothic Arches bears the "seed" for new growth among the community in the form of its exemplary masonry and timber construction - which are the common material traits of the historic city. This building can provide material wisdom for trades and professionals alike, those who investigate and interact with the materials through acknowledging architectural

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4 Simpson, p.127



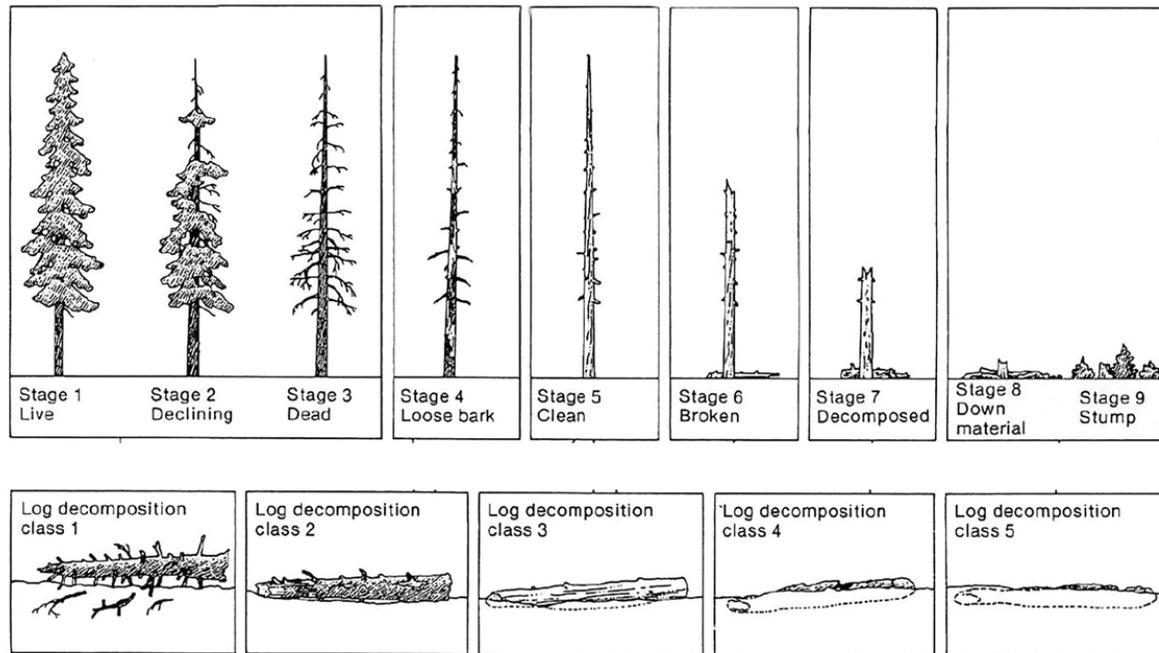
*Standing Dead and Sapling Source: Author*

soundness as well as deficiencies. An old building can be a teacher for the generations whom care for and maintain it.

To understand a tree, we must first understand its forest - and similarly with a building and its city. The exploration of the potential of forest ecology ideology within the context of urban architecture, where the cycle of transformations can gracefully decompose rather than abruptly destroyed. In earlier sections of they thesis, we begin to understand the economic, political and industrial factors of Saint John which influence its architectural and development culture. This culture, unfortunately, tends to demolish the opportunity to learn from the aged buildings through possible renewal.

The proposed adaptive reuse approach for the Gothic Arches involves deconstruction, salvage and ruination, and ultimately transformation, which is inspired by the ecological processes of the 'standing dead' of the forest. The notion of allowing the building to 'die' but remain standing comes from the ideology of healthy old-growth forest restoration where standing dead

*Snag Stages of trees and  
Decomposition Classes of  
fallen logs*  
(Management of wildlife  
and fish habitats in  
forests of western Oregon  
and Washington. p. 182)



are a main character and beneficial component to the forest. Standing dead, also called snags, are trees which reach a natural mortality but continue to participate in the forest cycle,

“Large logs provide wildlife habitat in the form of travel routes as well as sites for feeding, resting, and reproduction. This material also serves as sites for nitrogen fixation, nutrient



*Downed tree Source: Author*

cycling, and in many areas provides favourable moisture regimes for the establishment of tree seedlings and mycorrhizal fungi.”<sup>5</sup>

The only death or ending in the case of this proposal is the death of its former status as an inhabitable church building. With this death and transformation comes a mutually beneficial exchange between the material, the organisms of the forest, called nutrient cycling<sup>6</sup>. This symbiotic relationship occurs within this proposal whereby the Gothic Arches building is, figuratively, the mature tree of the old-growth city turned to a standing dead, surrendering its material and value to the wildlife - the people - now able to inhabit the space, as well as the organisms and nutrients - the craftspeople - and the knowledge, skill and expertise that is gained through the material exchange. The purpose of this exchange between building and builder is to foster learning opportunity through the deconstruction, or un-building, of the materials. Since Heritage

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5 Brown, E. Reade. *Management of wildlife and fish habitats in forests of western Oregon and Washington*. p.182

6 Simpson, p. 26

Preservation is a cyclical practice, routine maintenance and monitoring of the Gothic Arches provides opportunity for further understanding and interaction with the historic fabric. There is a significant generational gap between the era of Saint John's post-fire architecture and the inadequate contemporary practices and material treatments. Like the standing dead provides for the greater wellbeing of the forest ecology, the ruin of the Gothic Arches will benefit the network of genetically similar buildings in the city through the craftspeople and knowledge gained through the transformational work on the building.



OLD GROWTH OF SAINT JOHN

PART THREE

*Testament*

PART THREE - TESTAMENT

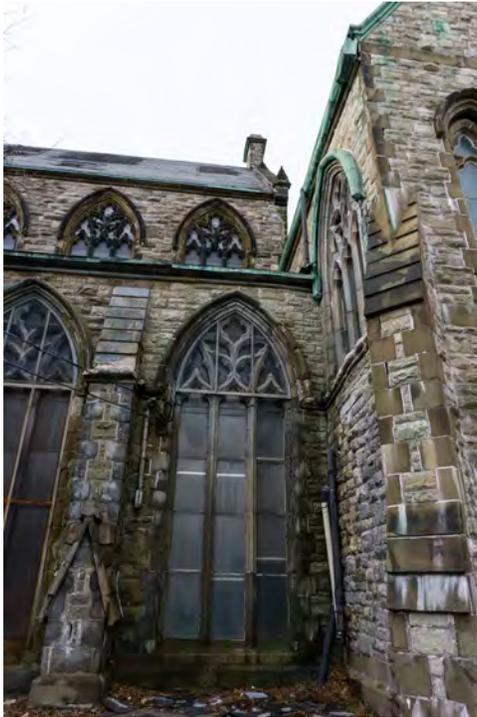
CONDITION ASSESSMENT  
*FALL 2019*



Locals walked past the massive church building without raising an eye to its awe-inspiring facades, as if it were a familiar and forgotten mass of sleeping stone. Lifeless, the mass sat quietly amongst the hum of the historic neighbourhood unable to participate in any of the daily or even weekly activities. Abandonment effects more than the singular building - it looms around the property, into the neighbouring yards, down the street until the cloud of silence dissipates with the energy of the next city block. Despite its scale and impressive forms, the Gothic Arches was largely disregarded as a functioning asset of the city due to its poor condition and vacant status. Emptiness and apathy left the building incapacitated.

From a distance, the building's prominent pointed gables peaked the city scape. Approaching the site from any direction of the gridded streets, the building presented itself as an enticing and impressive architecture of the past with its rhythmic arched windows and massive carved stone buttressing soaring into the sky, almost defying gravity and logic. Shadows and light animated its walls - it was a stunning Gothic building. Moving closer towards it, one becomes aware of the toll that time and the coastal environment has taken on it. The weeds of the yard hide its base, the leeching mortar traces down the limestone, there is dark staining on the surfaces of the sandstone, and the eroded edges of the carvings tell its story of neglect. The soaring vertical stones appear distorted and out of alignment and the roof-line sags - it was also a melancholic building.

The public perception of the Gothic Arches was that it deserved to be 'saved'. It was an exemplary piece of Saint John's architecture and history. However, twenty years of deferred maintenance had lead to an advanced state of disrepair and it was no longer an attractive option for redevelopment. The building was in



extremely poor condition, despite its distinguished appearance. The masonry was the simultaneously the best and the worst part of the building.

The limestone and sandstone of the building was undermined by the good intentions of past generations with the “rebuilding” of the facades in the 1960s with the inappropriate use of hard (cementitious) mortars. This fundamental change in material compromised the entire structural system of the mass masonry construction, which was originally designed and built with flexible lime mortar. Years of natural movement in the walls fractured the brittle contemporary mortar which resulted in significant water infiltration. Unmanaged moisture is the achilles heel of mass masonry.

(See APPENDIX p. 141: Condition Assessment South Sandstone)

The interior condition was in an unhealthy state as a result of the moisture in the walls and basement. As expected, the vacant building was left unheated for years, and the basement



reportedly filled with water due to undrained frozen pipes<sup>1</sup>. Rot had taken hold of the plaster and decorative wood work throughout the church. Deterioration of the building advanced exponentially during its final years.

The precariousness of the building's condition, as well as general anxiety surrounding its dilapidated status deterred the interest of potential investors. Even the real estate 'for sale' sign was deteriorated. It would have required an intense investment to revive the structure, not only financial - estimated in the 7,000,000 dollar range for repairs to the envelope alone<sup>2</sup> - but also specialized skill and knowledge of sensitive conservation of historic structures. It would have also required creativity and forward-looking objectives specific to Saint John to secure these investments as long term viability. These missing resources as well as a lack of willingness by multiple levels of stakeholders impaired the conventional redevelopment of the site. The subsequent chapter will reveal the outcome of this unwillingness

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1 Conversation with Architect, Bob Boyce regarding building condition during the time of vacancy.

2 Conversation with Historian, Harold E. Wright at a site visit in December 2019.

to look for alternative strategy to save the building.

Condition Assessment:

This thesis study of proposing ruination for the Gothic Arches calls for an analysis of just ‘*how bad was it?*’ And in the same sense, just ‘*how good was it?*’ in terms of the architectural and heritage value. For these two inquiries, observations of the building were recorded in the Fall of 2019 and two exercises in measuring its condition were undertaken. A Heritage Evaluation (page 75) based on guidelines from Parks Canada, *The Evaluation of Historic Buildings*, 1980, (a dated, yet baseline summary and tool used in Canada) provides an objective judgment of the potential Heritage value of a given site, and an architectural condition assessment of the exterior masonry outlines general physical condition.

Methodology: I made several site visits between August and December of 2019 and conducted fieldwork as part of this thesis design project. Visits in August provided evidence of dry conditions, as well as overgrown vegetation on the premises. Through the late

fall, bare trees opened broader views of the site, as well as lower temperatures and wet weather began to demonstrate its water-shedding issues and masonry movement. Photographic documentation of the building gathered in the fall has provided evidence of the building's defects and material condition. The primary means of recording during the site visits was photography, using smart phone camera, DSLR zoom lens camera, as well as UAV (Drone) photography. Successive photos were taken of select elevations and used for photogrammetry and the creation of orthographic photos. Visual assessments were conducted from the ground level only. No samples of mortar or stone were collected during the visits.

Objective: By mapping the building's exterior condition I gain an understanding of past repairs, areas of environmental defects, structural movement, damage, as well as physical integrity, and generally where some level intervention would be required. The Condition Mapping depicts areas of critical condition which must be addressed as well as areas that are stable. This information guides my planning and design for the architectural proposal.

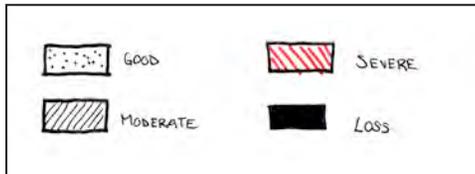
The varying conditions clarify where intervention is needed and at what sequence of time. The mapping also indicates patterns of deterioration as well as construction and design failures that is apparent after many years of neglect.

For each Elevation drawing [South, East, and North] I have created a Condition Mapping overlay that describe the masonry walls of the church, tower base, and Sunday School annex. Three categories are used to delineate the range of physical conditions:

**Good** - the integrity of the material or element remains high; requires little intervention

**Moderate** - the material or element is in a broad state of disrepair; requires intervention by means of repair or replacement

**Severe** - the material or element is in a critical state of deterioration; requires immediate and/or significant intervention



THE EVALUATION OF HISTORIC BUILDINGS  
 GUIDELINES FROM: PARKS CANADA PUBLICATION, 1980

**The Gothic Arches, 95 Wentworth Street, Saint John NB**

**A ARCHITECTURE**

- 1 Style - VG - Excellent example of Gothic Revival style churches in area; most common style for churches, many surviving examples.
- 2 Construction - E - Notable example of 'Ashburn' limestone and sandstone mass masonry construction; few examples survive.
- 3 Age - G - Built after the Great Fire of 1877 with a vast majority of the structures in the urban center.
- 4 Architect - VG - Architect commissioned from Brooklyn NY; designed three Methodist churches for Saint John during the rebuilding period.
- 5 Design - E - Particularly attractive composition and complexity of its design; excellent integration of the church sanctuary structure with the Sunday School Hall.
- 6 Interior - E - Excellent example of 'meeting-house' style sanctuary of Gothic revival style; Its arrangement, interior volume, and artistic quality of wood and glass work is of notable caliber; The Sunday School hall interior wood structure is of particular importance.

**B HISTORY**

- 7 Person - E - The early ministry of Methodism from the Loyalist community is associated with this church, which precedes its construction; the congregation of Centenary Methodist, later Centenary - Queen Square United Church, worshiped for generations in this building until 1999.
- 8 Event - The Centenary Methodist Church was constructed during the rebuilding period after the Great Fire, 1877.
- 9 Context - This building signifies a society of Christian faith and an economy to support such grand symbols of religion.

**C ENVIRONMENT**

- 10 Continuity - VG - An excellent example of Gothic Revival ecclesiastic architecture within a city of Victorian era structures.
- 11 Setting - G - Compatible with the historic residential area.
- 12 Landmark - VG - Prominent and familiar structure in the context of Saint John.

**D USABILITY**

- 13 Compatibility - E - Present use is consistent with the zoning of the lot [Neighbourhood Institutional]; it is surrounded by Multiple Residential land use.
- 14 Adaptability - G - Adaptive use may require rezoning and may alter significant architectural character.
- 15 Public - G - Proposed public use is critically needed but would require significant alterations.
- 16 Services - E - meets all current standards [fire, police, utilities, parking]
- 17 Cost - G - Cost of conservation would be comparable to new construction.

**E INTEGRITY**

- 16 Site - E - Occupies its original site.
- 17 Alterations - G - Some design and material changes but character retained.
- 20 Condition - F/P - Building fabric is in poor structural condition.

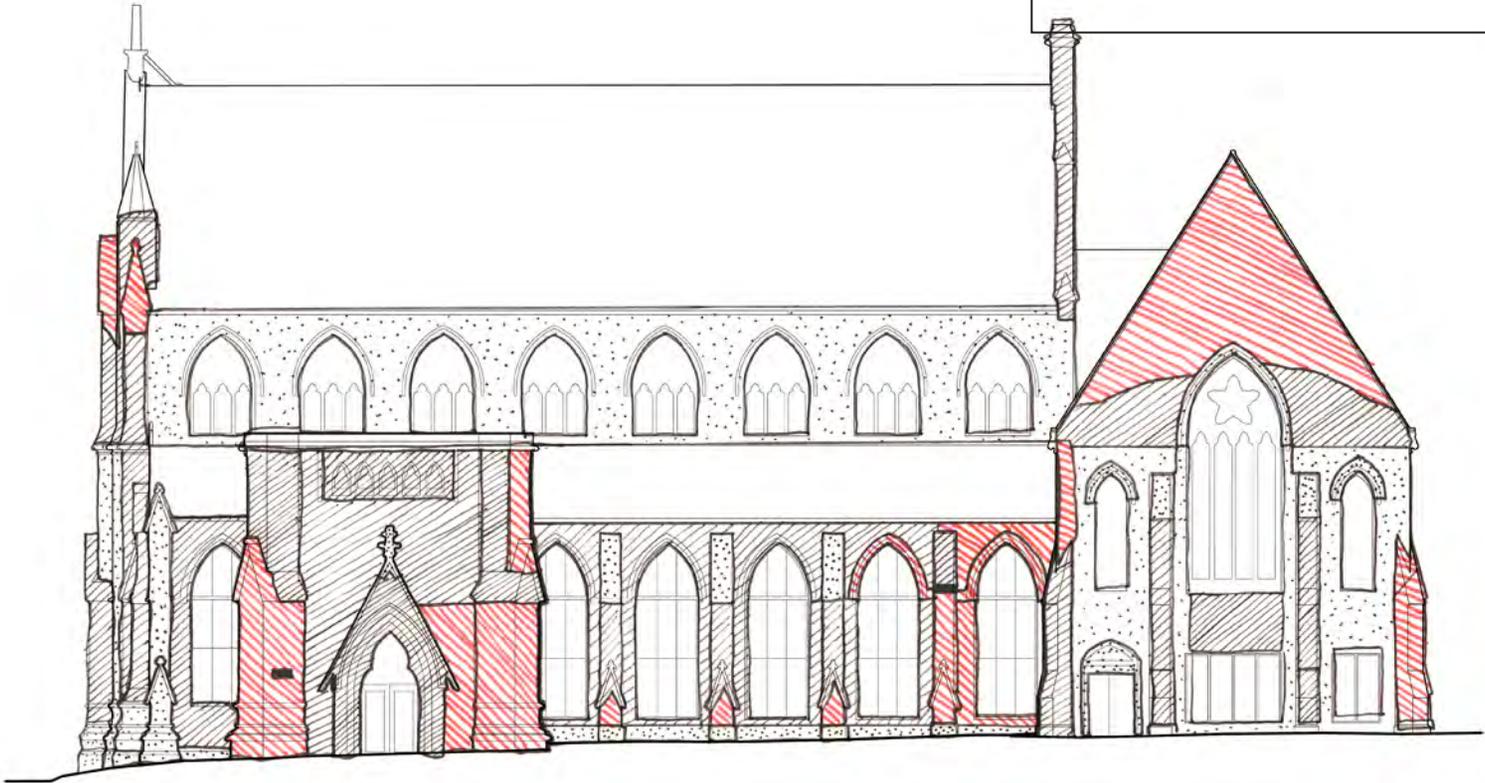
Grades: E: Excellent | VG: Very Good | G: Good | F/P: Fair/Poor

SOUTH ELEVATION  
CONDITION ASSESSMENT MAPPING



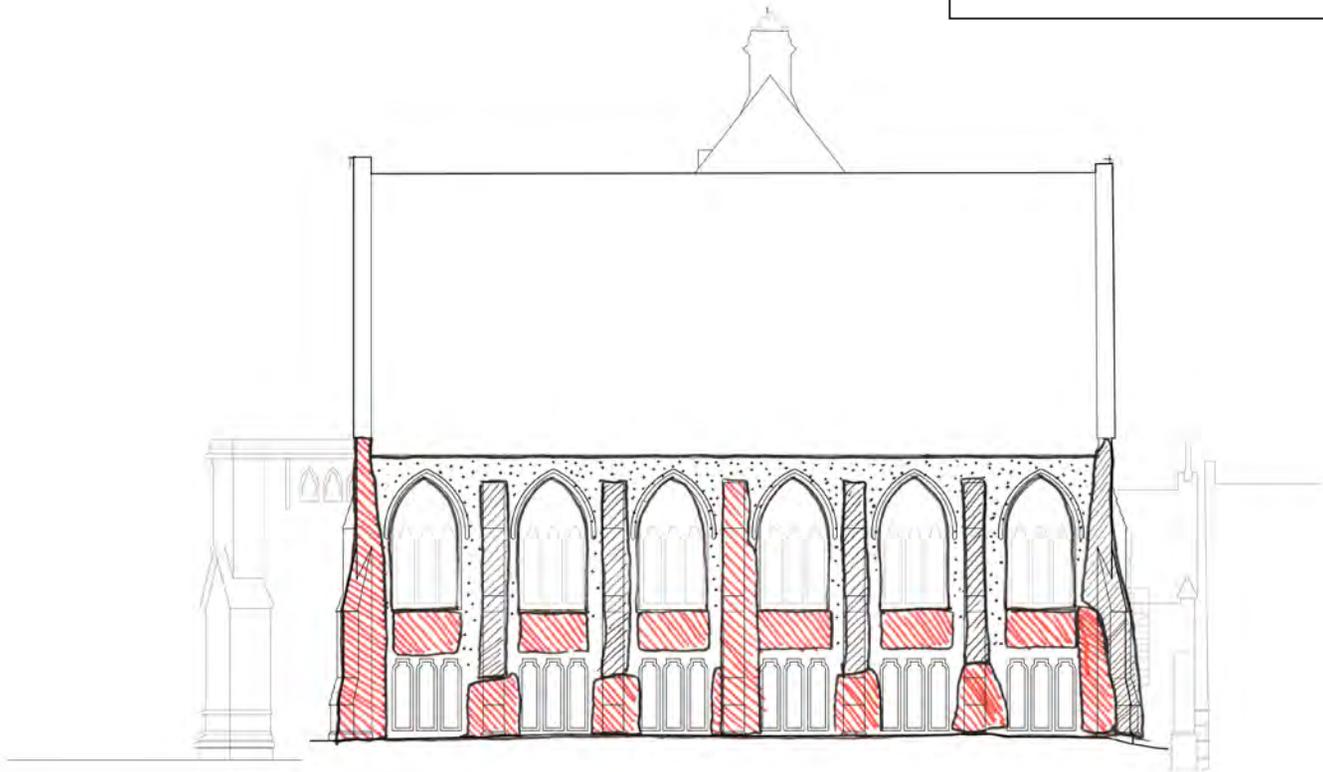
- |  |  |
|--|--|
|  GOOD     |  SEVERE |
|  MODERATE |  LOSS   |

EAST ELEVATION  
CONDITION ASSESSMENT MAPPING



- |  |  |
|--|--|
|  GOOD     |  SEVERE |
|  MODERATE |  LOSS   |

NORTH ELEVATION  
CONDITION ASSESSMENT MAPPING



- |  |  |
|--|--|
|  GOOD     |  SEVERE |
|  MODERATE |  LOSS   |

DEMOLITION JOURNAL  
*WINTER 2019-2020*

I was brought to stillness the moment when I discovered that excavators had assembled on the site and the demolition had begun. A video clip (through social media) of the first acts of destruction by machine confirmed the unfortunate reality. I hurried to the city the following day to witness the demolition of the Gothic Arches with my own eyes and ears. With this thesis proposal in mind, I watched the walls being opened up revealing an unnatural view of many material and spatial layers of the building. It was both devastating and fascinating. From the street I could see the exterior stone walls - the former boundaries which separated secular from spiritual - opened like an aperture into the sacred space, exposing its delicately lit interior to the winter sunlight. The church nave had likely never

experienced so much light since the final days of closing in its roof, around 140 years ago. The demolition provided intermediate phases of unearthing unseen aspects of the building's materiality and spatial qualities.

I created a Timeline of Erasure, which journals the course of action and transformation that occurred from December through the winter until February. The demolition took an excruciating long time. At times, it appeared that the operators of the heavy machinery were at a loss with how-on-earth this building would come down. The time originally expected for the entire demolition was five days to a week; the demolition actually took over three months to execute. The difficulty of the machine's efforts to force the stone walls to the ground was a testament to the structure's resiliency.

Hand drawn vignettes are overlaid the east elevation expression of. The drawings are disorienting in the sense that it may not be clear whether the church is in construction or destruction.



Photos from the duration of the demolition process after December (when I returned to Ottawa) were provided with permission from citizens with a curious (and talented) eye for capturing moments of both action and pause. The photo essay and sketches is a memoir of the building's end.



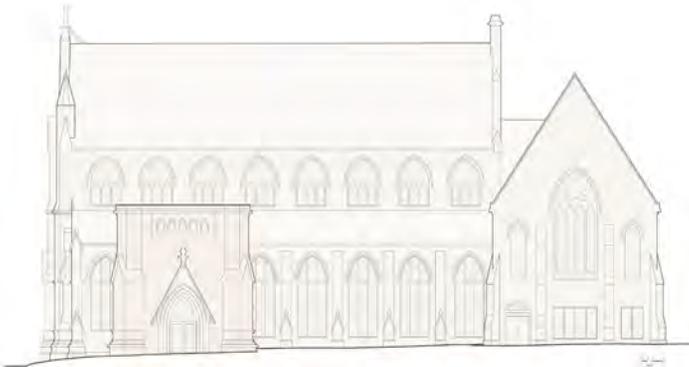
*Demolition Begins: December 11, 2019*



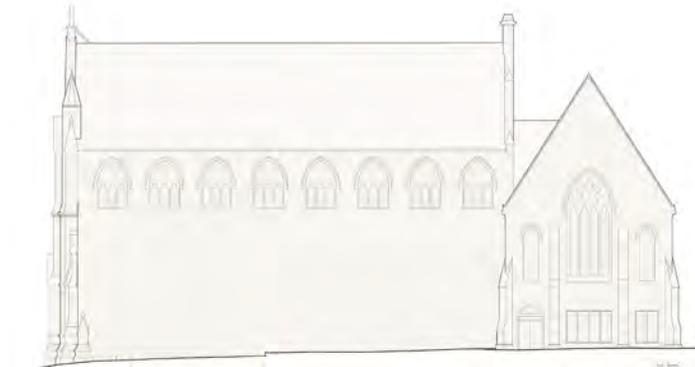
DECEMBER 11 2019



DECEMBER 13 2019



TIMELINE OF ERASURE A  
95 WENTWORTH STREET, SJ



TIMELINE OF ERASURE B  
95 WENTWORTH STREET, SJ



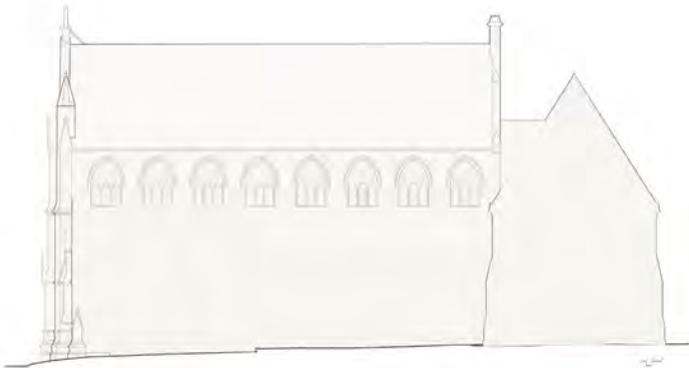
*Demolition Process: December 22, 2019*

JANUARY 1 2020

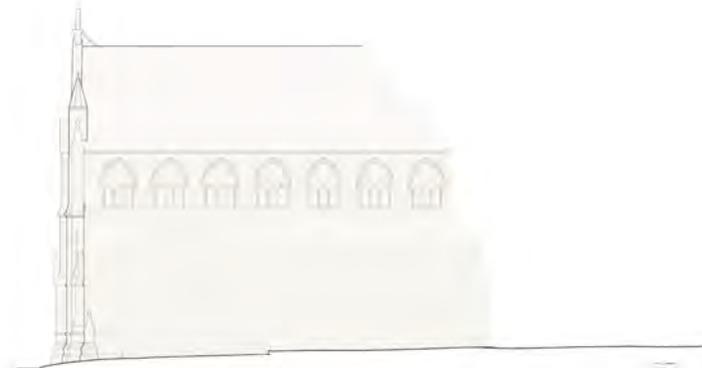


*Demolition Process: January 14, 2020*

JANUARY 16 2020



TIMELINE OF ERASURE C  
95 MENTWORTH STREET, SJ



TIMELINE OF ERASURE D  
95 MENTWORTH STREET, SJ



JANUARY 18 2020



TIMELINE OF ERASURE E  
95 WENTWORTH STREET, SJ

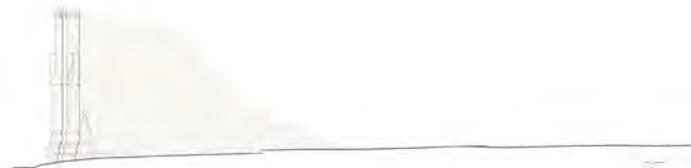


*Demolition Process January 23, 2020*

The demolition activity began the morning of December 11th, 2019 with the first pass of the excavator carving onto the tower on Wentworth Street. Over the following days the pieces of the building were gradually removed from the whole. It stood in silence as the stone, brick and wood structure was reduced to an aggregation of building material. The grand building transformed into large mounds for the machine to climb to reach the heights of the roof apex. Each phase of demolition revealed new perspectives into the interior spaces as well as the layers of material construction within the walls and space hidden by surface finishes. Many truths were revealed through each act of destruction.

*Photography provided by D. McLean, and H. Wright of Saint John, and by author.*

FEBRUARY 2020



TIMELINE OF ERASURE F  
95 WENTWORTH STREET, SJ

POST MORTEM ANALYSIS  
WINTER 2020

*“The history of Centenary-Queen Square United Church can never be written in full. The spiritual struggles, the triumphs of faith, the exerted influence will only be known that day when the hidden things shall be revealed.*

*Our prayer for the future is - Peace Be Within Thy Walls”*

*-Milestones in Methodism*

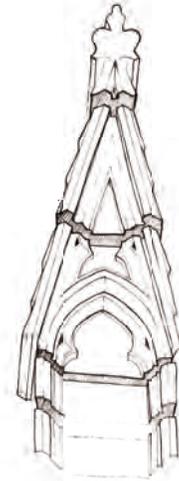
This is a passage written in 1889 from the book, Milestones in Methodism A History of Centenary-Queen Square. The words have profound meaning today, now that the walls of the church have been destroyed. Revealed through the destruction of the stone walls though, has been its innate durability and stone craft - a testament to the bygone era of construction.

For months I wrestled with the sadness of the loss of the Gothic Arches while working through this thesis. After spending time with the building in the early stages of the project, photographing, researching and getting to know it more closely in order to form my ideas for design and conservation, it was devastating to witness its complete destruction before my eyes. The ideas I was forming with regards to the condition of the site and the potential of its long term physical persistence came to a crashing halt. For the purpose of my thesis proposal, I had imagined this site as a learning opportunity for not only professionals and craftspeople but also for the public to gain a material understanding of their built environment. It was difficult to face the reality of what happened to this significant building and to come to terms with its insignificant end.

To honour my initial academic intentions of proposing a didactic design intervention for the training of traditional building crafts through the maintenance of a ruin (ultimately these intentions remain with this thesis), I have harnessed the energy put into obsessing over the demolition photos towards



*Exploded diagram of stone tracery  
components, ink on paper  
Source: Author*



*Exploded diagram of stone buttress,  
ink on paper  
Source: Author*

my own continued learning about the building. Even though the building has been erased, images of its final physical composition during demolition continue to exist. As a post-mortem analysis of the material assembly of the structure, I have engaged with the material in a two-dimensional fashion by mapping my findings with an overlay of annotations and drawings as a result of my personal learning through the photographs. This has provided catharsis and symbolizes a meager process of regeneration of the Gothic Arches.





PART FOUR

*Offering*

PART FOUR - OFFERING

## DESIGN PROPOSAL

This is a provocation which challenges the status quo of Saint John's practice of demolition and pushes the boundaries of how Heritage Conservation practices could evolve by designing a method for preserving the Gothic Arches nave as a ruin, while rehabilitating the Sunday School annex.

The proposal is for INCREMENTAL RUINATION through conscious deconstruction and preservation activity over time. The nave will slowly reduce in stature while the annex rises as a revived community space titled, "Centenary Hall".

## GUIDING PRINCIPLES AND DESIGN INTENTIONS:

- To provide recourse for the protection and reclamation of the Gothic Arches.
- To acknowledge that the values of the historic place are diverse and are not tied exclusively to its existence as a complete and functioning 'building'.
- To foster learning opportunities for traditional building craft through direct engagement with the historic fabric.
- To confront demolition and by seeking a creative course of action for negotiating the loss of heritage that takes solace in forest ecology.

FAITH IN RUINS: PROJECT GOALS + VALUES

ARCHITECTURAL CONTINUITY  
[TANGIBLE FEATURE]

Preservation of the material and form of the Gothic Arches Building, in various degrees of completeness and integrity

*Historical/Cultural Values*

*Aesthetic Values*

OUTCOMES :

Precedent setting, alternative practice for sustainable development of places of significance

Traces of built heritage contribute to the evolving narrative of Saint John , which includes difficult histories of neglect and desparity

The unique built environment enhances the spirit of place

PRESERVATION OF CRAFT  
[INTANGIBLE FEATURE]

Provide specialized training of trades and professionals through direct engagement with the historic building fabric

*Historical/Cultural Values*

*Scientific Values*

OUTCOMES :

Skilled trades build a heritage work force which is integral to a well-maintained heritage vernacular of the wider region

Nurtures cultural sustainability - reconnects with local craftsmanship of past generations

Promotes a green-economy based in conservation and sustainability, ie. deconstruction and material salvage

RECLAIMED PUBLIC SPACE  
[CONTINUED USE]

Return the architecture back to the community for continued public use, as originally intended

*Social Values*

*Spiritual Values*

OUTCOMES :

The reclaimed public space serves a wider population of diverse cultures and faiths

Accumulates new meaning and attachments to the historic place as well as renewed cultural capital

Economic value associated with land use as well as non-use value (incalculable) by establishing infrastructure for public good

HERITAGE VALUES:  
THE CANADIAN REGISTER OF  
HISTORIC PLACES

The Canadian Register of Historic Places (CRHP) defines heritage value as: *“the aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations.”* The CRHP definition is based on the definition for cultural significance (or heritage value) set out in the Burra Charter. The Burra Charter is an internationally accepted statement of principles that provides guidance for the conservation and management of places of cultural significance.

**SCIENTIFIC VALUE** refers to the capacity of a historic place to provide evidence that can advance our understanding and appreciation of a culture. The evidence is found in the form, materials, design and/or experience of the place. Scientific value can derive from various factors, such as age, quality, completeness, complexity or rarity. Scientific value may also be present when the place itself supplements other types of evidence such as written sources, such as in archaeological sites.

**AESTHETIC VALUE** refers to the sensory qualities of a historic place (seeing, hearing, touching, smelling and tasting) in the context of broader categories of design and tradition. A place may have aesthetic significance because it evokes a positive sensory response, or because it epitomizes a defined architectural style or landscape concept. Visual aesthetic value is typically expressed through form, colour, texture or materials. Historic places with aesthetic significance may reflect a particular style or period of construction or craftsmanship, or represent the work of a well-known architect, planner, engineer or builder.

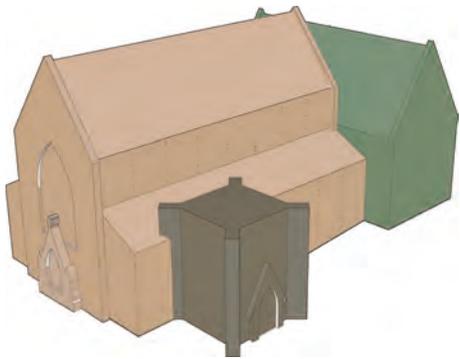
**SPIRITUAL VALUE** is ascribed to places with religious or spiritual meanings for a community or a group of people. Sacred and spiritual places could include places of mythological significance, landscape features associated with myth and legends, burial sites, rock cairns and alignments, fasting/vision quest sites etc., places representing particular belief system(s) or places associated with sacred traditions, ceremonial practices or rituals of a community/group of people. + A place can also encompass secular experiences of wonder, awe, and so on, which can be provoked by visiting a heritage place. (Mason, R. “Assessing Values in Conservation Planning: Methodological Issues and Choices”, The Getty Conservation Institute. 2002.)

**HISTORICAL OR CULTURAL VALUE** refers to the associations that a place has with past events and historical themes, as well as its capacity to evoke a way of life or a memory of the past. Historical or cultural value may lie in the age of a heritage district, its association with important events, activities, people or traditions; its role in the development of a community, region, province, territory or nation; or its patterns of use. Historical or cultural value can lie in natural or ecological features of the place, as well as in built features.

**SOCIAL VALUE** considers the meanings attached to a place by a community in the present time. It differs from historical or cultural value in that the value may not have an obvious basis in history or tradition, and relates almost entirely to the present time. Social value may be ascribed to places that perform a key role within communities, support community activities or traditions, or contribute to the community’s sense of identity. Places with social value include sites that bring the community together and create a sense of shared identity and belonging.

## DESIGN PROPOSAL:

To achieve the Project Goals and Values, the Gothic Arches will be transformed over time in the following ways:



- ‘Benign Ruination’ which involves incremental deconstruction and sensitive preservation of the church nave. Elements of the building are removed or repaired based on intervention criteria (see subsequent criteria); the un-building process happens by hand to promote learning as well as careful material salvage. [Diagram: pink]

- The church structure is gradually and consciously reduced, or ‘ruined’, to a new fragmented form: “Gothic Garden”. The vision is to allow the public to once again enter and enjoy the space reserved for gathering and reflection.

- The Sunday School annex is a viable and valuable building, therefore will undergo a heritage rehabilitation and restoration for new and continued use as “Centenary Hall”. The community of

Saint John can revive the space with events. [Diagram: green]

- The tower base will undergo structural rebuilding of the stone. As a tribute to the unrealized design of the Methodist church spire, a re-imagined tower is proposed to overlook the ruins, but also to provide a new vantage point from the site that commands a view of the harbour and city at large. [Diagram: brown]



## INTERVENTION CRITERIA

These are the various considerations when deciding on ACTION, INTERVENTION or INACTION with the Gothic Arches proposal for benign ruination [of the Church building]. These criteria are listed in order of relative importance, however, the decision-making process of whether to deconstruct or repair an element is complex and will be at the discretion of balancing the safety objectives with the overall design vision of the site. This process exemplifies the concept 'Curated Decay'.

### DECONSTRUCTION ACTION CRITERIA:

#1 - Address safety and risks to the public (the building cannot stay if it is a safety risk)

#2 - Assessment of structural assembly (how are things connected, what are the structural reactions if removed?)

#3 - Understanding of material properties (salvage opportunity; expected deterioration if left exposed)

#4 - Consideration of Cost (main point is to offer a cheaper alternative to restoration, but balanced with investment of deconstruction and preservation)

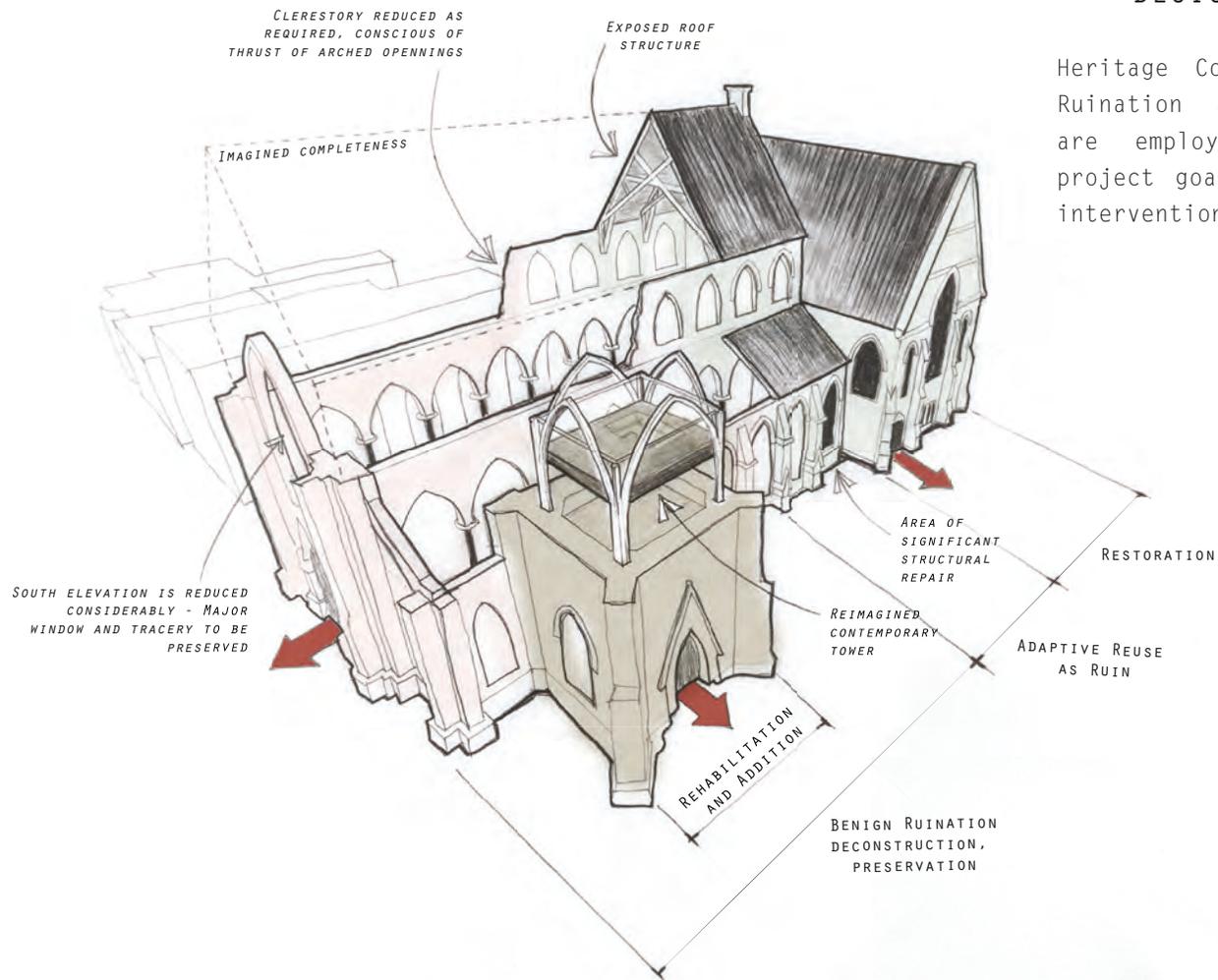
#5 - Consideration of environmental effects - wind, rain, snow (protect ruin from potential risk)

#6 - Opportunity for experience, training and learning outcomes related to the nature of the interventions

#7 - Extraction of Value - will the action contribute to long term vision plan for public good (rehabilitation, ruin design)

## DESIGN APPROACH

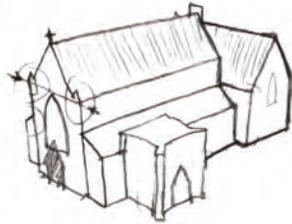
Heritage Conservation, Benign Ruination and Deconstruction are employed following the project goals and values, and intervention criteria.



BENIGN RUINATION  
 PHASES OF DECONSTRUCTION AND CONSERVATION

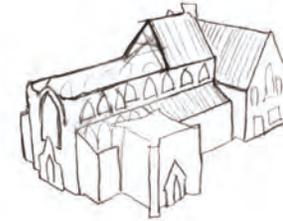
PHASE 1

Stabilize critical areas  
 Documentation and planning  
 Minor intervention



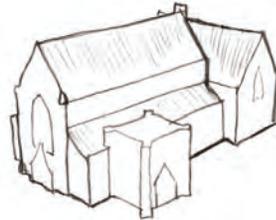
PHASE 4

Deconstruction roof section  
 Masonry preservation  
 Integration of Hall and ruin



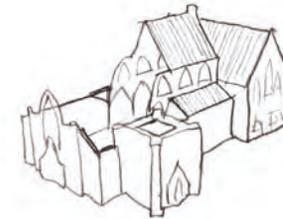
PHASE 2

Salvage interior materials  
 Rehabilitation of interior Hall  
 Preservation of Masonry  
 Minor deconstruction



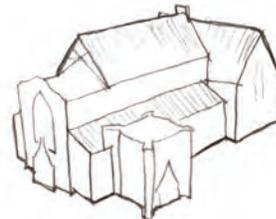
PHASE 5

Deconstruction roof section  
 Deconstruction South wall  
 Establish garden



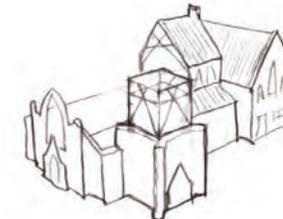
PHASE 3

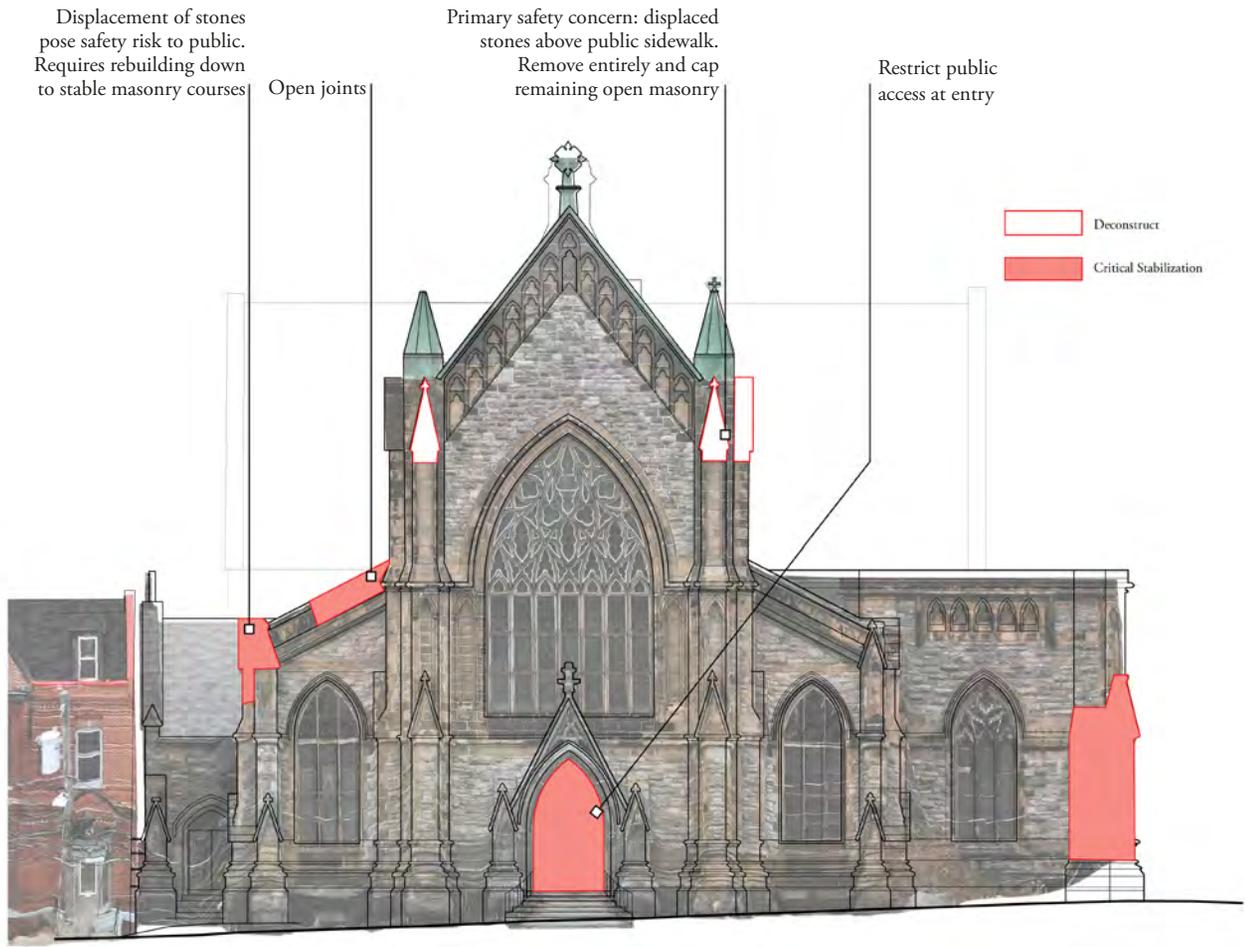
Deconstruction South gable  
 Deconstruction roof section  
 Fill basement



PHASE 6

Introduce tower look-out  
 Masonry preservation





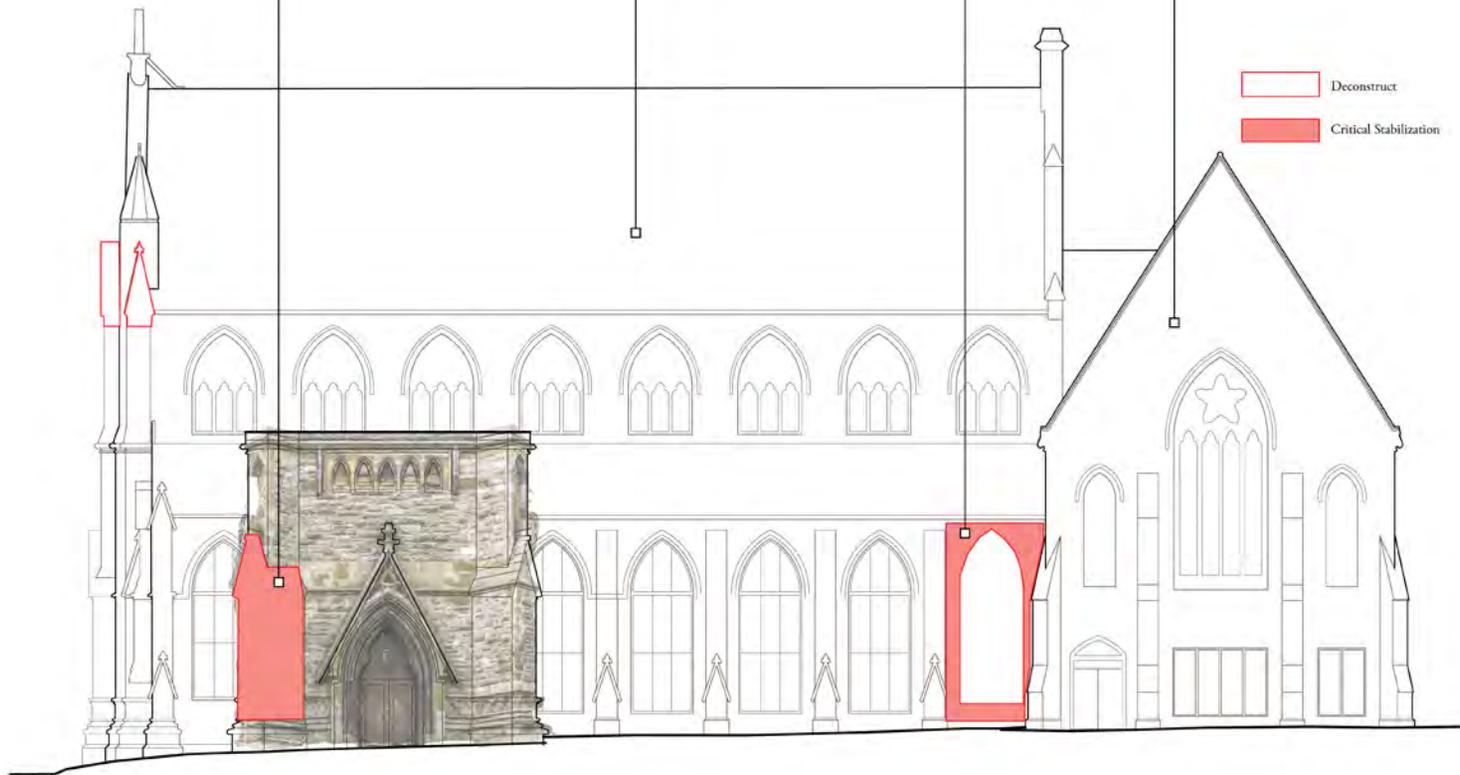
PHASE 2  
SOUTH ELEVATION DECONSTRUCTION

Major movement in buttress; may require temporary tension belt to secure from further deterioration until Tower conservation is implemented

Roof to remain as-is until later intervention phases

Severe masonry deterioration from water ingress; rebuild masonry of single bay; deconstruct damaged stone tracery

Open joints at Hall gable require repointing and rebuilding in areas. This is critical to reduce further deterioration



Deconstruct  
Critical Stabilization

PHASE 2  
EAST ELEVATION DECONSTRUCTION

Deconstruction of entire masonry gable assembly. Retain carved apex cross; salvage sandstone and limestone for reuse as replacement material in other locations of the building

All exposed walls will require masonry capping to mediate water ingress to interior wythes



PHASE 3  
SOUTH ELEVATION DECONSTRUCTION

Deconstruction of first bay of roof structure with the removal of front gable. This will require temporary protection of open roof truss system. Wood ceiling to be deconstructed and salvaged.

Continued masonry rehabilitation with replacement limestone available from deconstruction. All stone rebuilding will reestablish traditional lime mortar for joints and bedding as well as repointing where cementitious repair mortars are deteriorated.

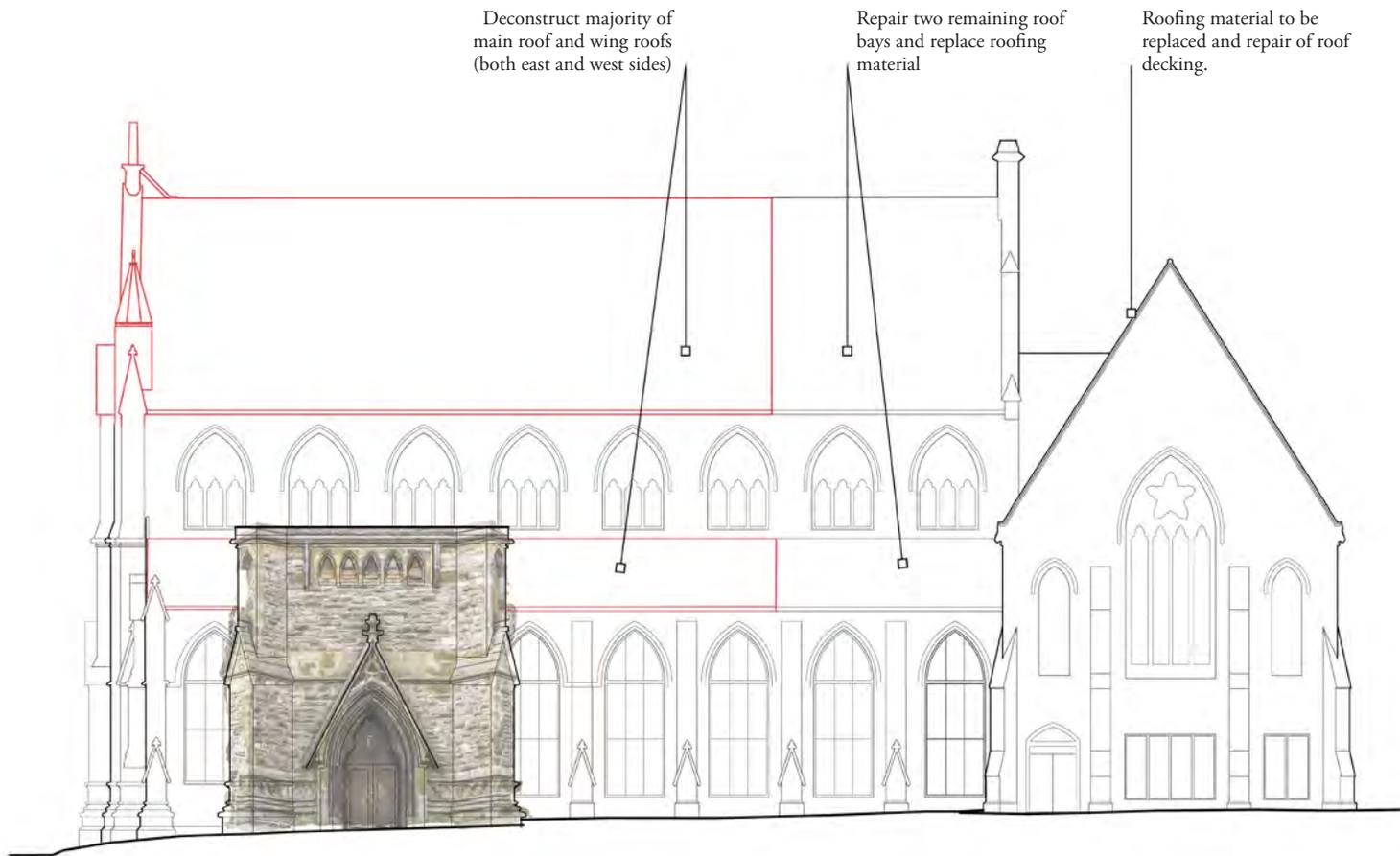


PHASE 3  
EAST ELEVATION DECONSTRUCTION

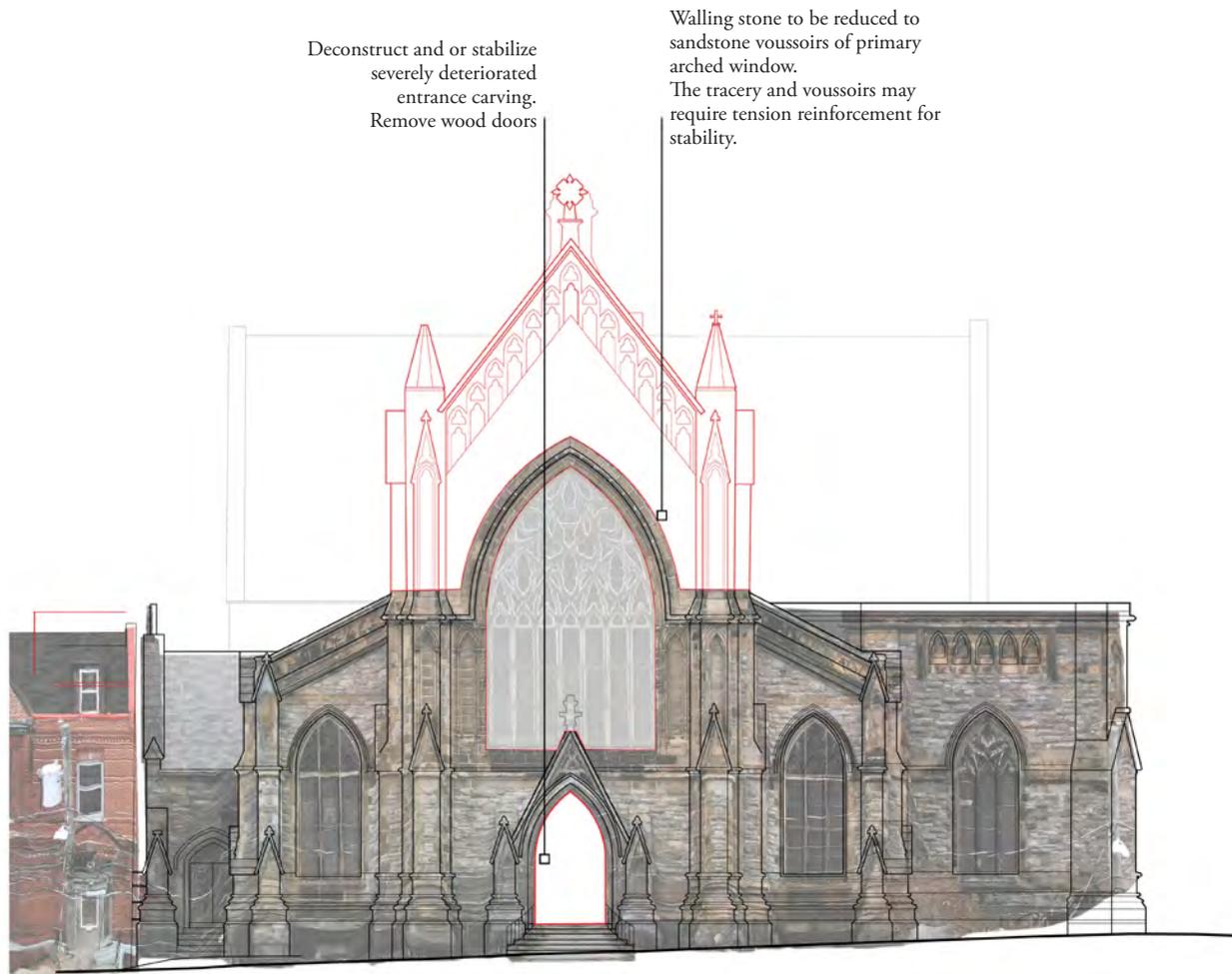
Remove all glass of primary gothic window: open air window will reduce wind load on tracery and sandstone arch. Cap open masonry.



PHASE 4  
SOUTH ELEVATION DECONSTRUCTION

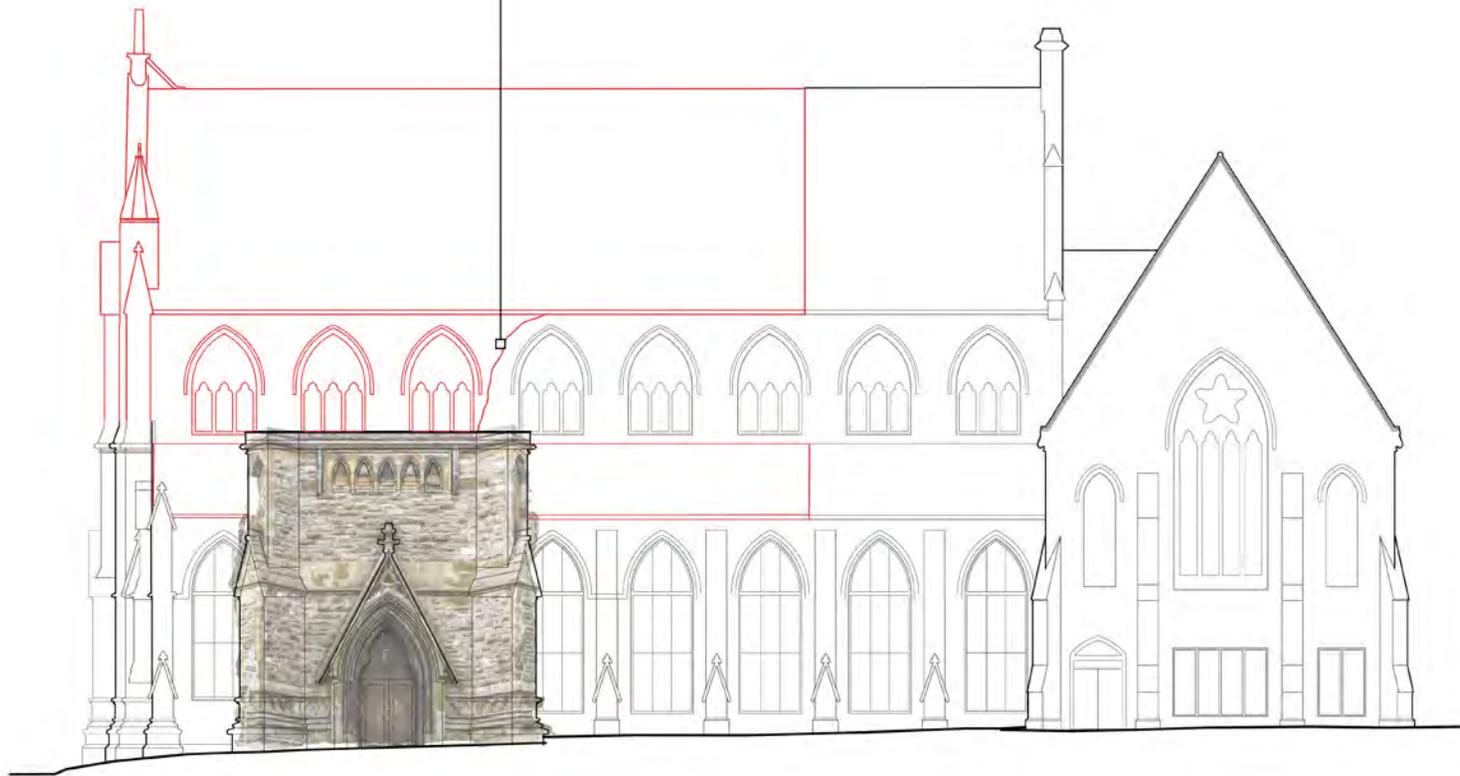


PHASE 4  
EAST ELEVATION DECONSTRUCTION

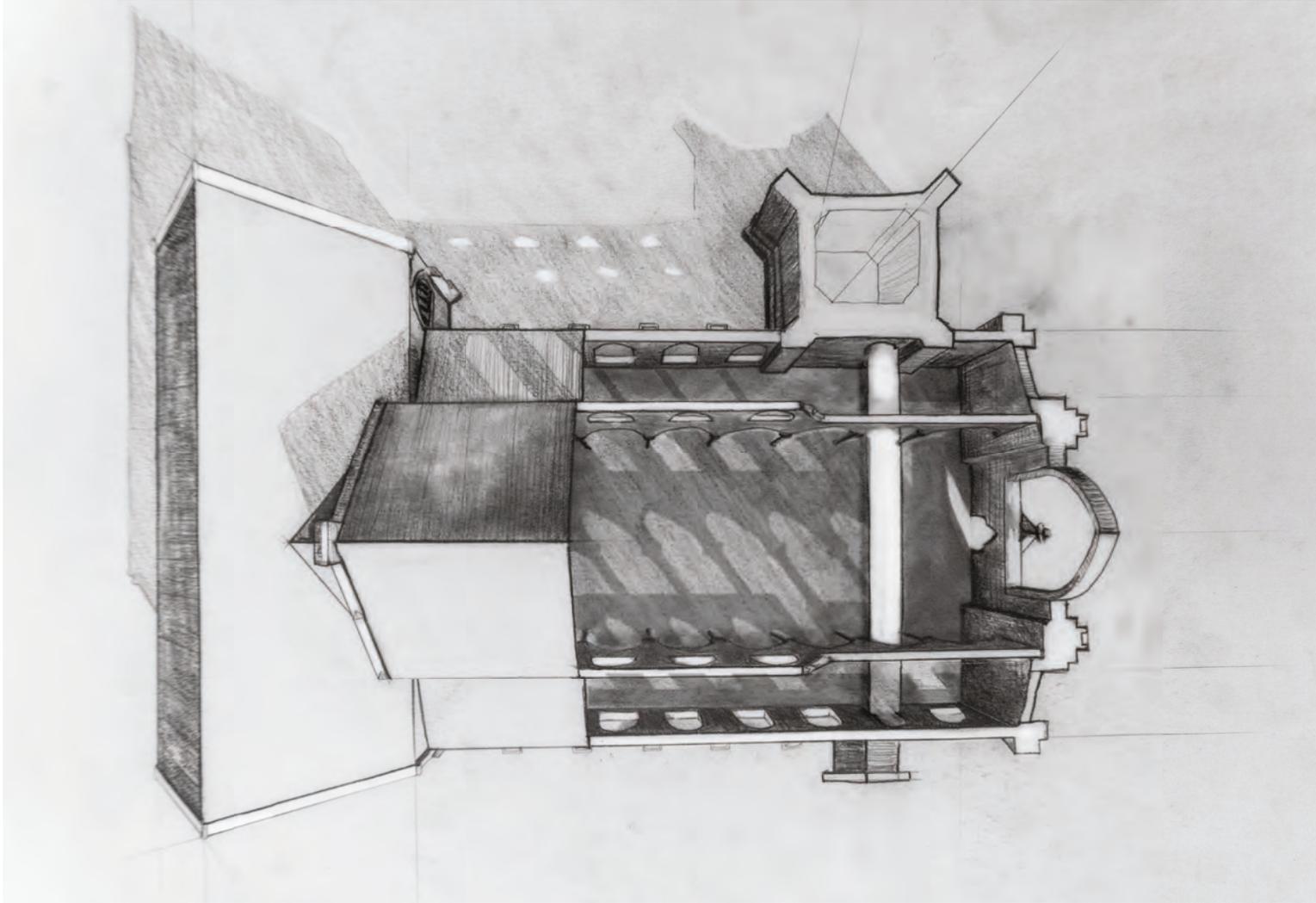


PHASE 5  
SOUTH ELEVATION DECONSTRUCTION

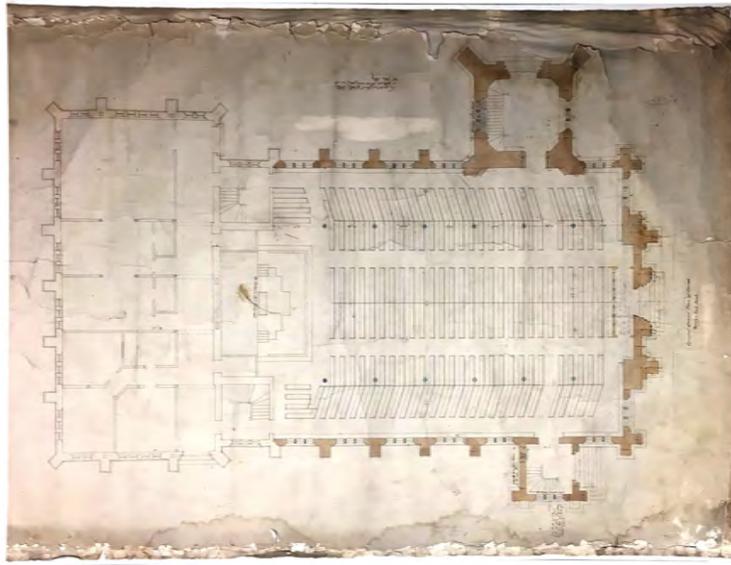
With the reduction of south elevation, the clerestory is left unsupported and will require deconstruction to a point of stability. The entire brick arcade of interior will remain to support remaining clerestory



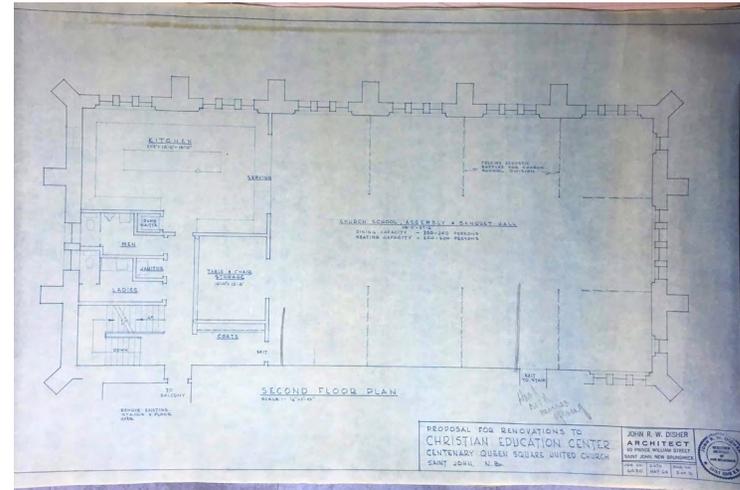
PHASE 5  
EAST ELEVATION DECONSTRUCTION



RESULTING FORM: GOTHIC ARCHES RUINS



*Original First level floor plan for Centenary Methodist, 1878, by Architect John Welch, New York.  
Source: United Church of Canada Maritime Conference Archives*



*Renovation proposal for the Sunday School wing, 1964, by John R. W. Disher Architect, Saint John.  
Source: United Church of Canada Maritime Conference Archives*

## CHANGES OVER TIME

The Gothic Arches had been adapted to suit its users many times in its life as a United Church. The 1960s brought forth many fundamental changes which included the ‘rebuilding program’ of the masonry walls, as well as renovation and interior design alterations.



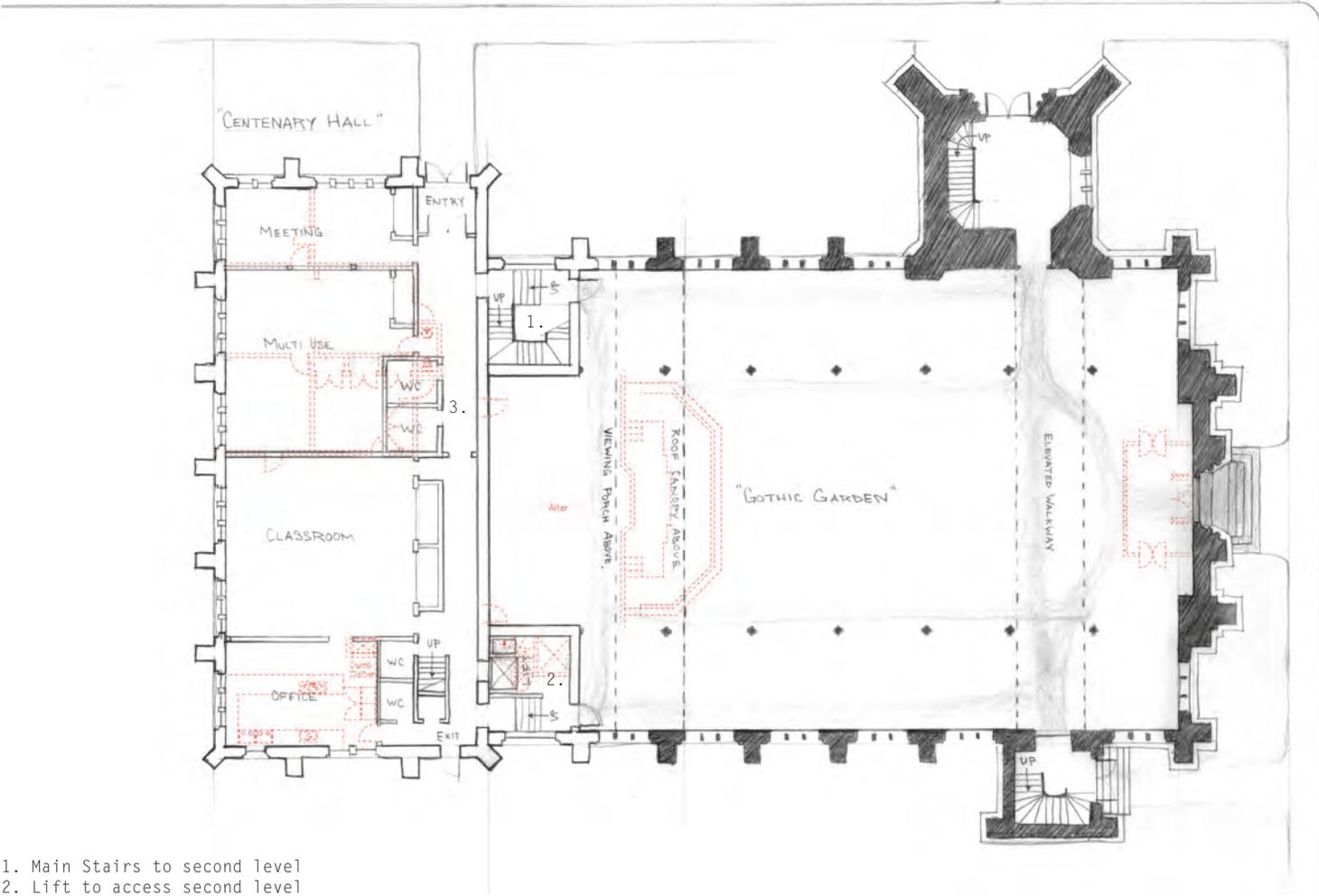
*"Sketch of roof of nave when finished"*

*Small pencil drawing at the top of an original architectural plan by the architect - an imagined finished space.  
Source: United Church of Canada Maritime Conference Archives*

## DESIGN INFLUENCE

The drawings that follow are representations of the imagined ruined church. I have created the images using a digital reference underlay (computer model) with hand-drawn pencil work on vellum. In the spirit of the architect's sketch, I chose pencil as the medium to create the atmospheric images, as well as the plans. Hand drawings allow the viewer to imagine the space more independently, as the Gothic Arches Ruins is intended to be a space of imagining and contemplation.

WENTWORTH STREET

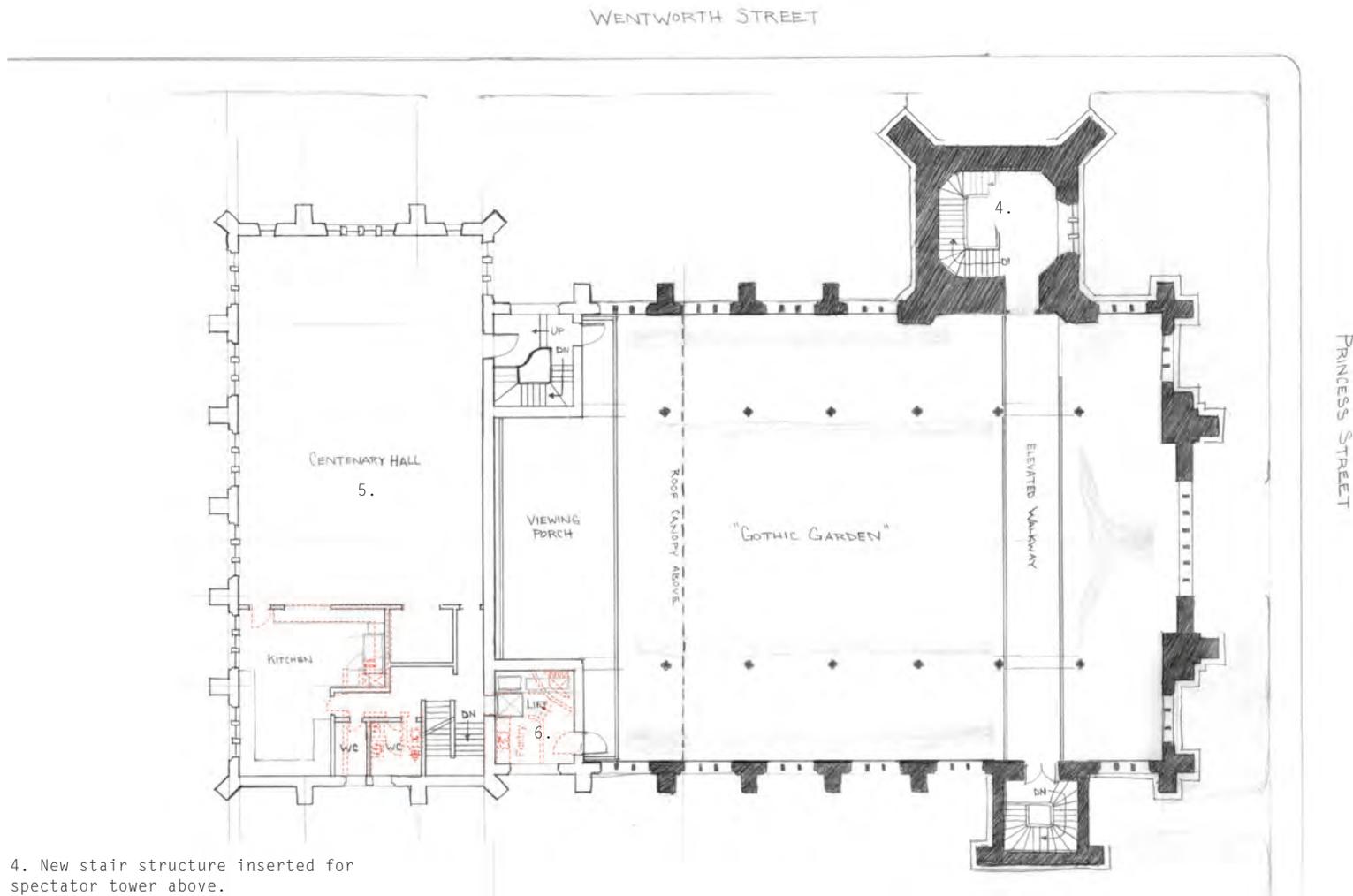


PRINCESS STREET

- 1. Main Stairs to second level
- 2. Lift to access second level
- 3. Barrier-free washrooms

PLAN - 1ST LEVEL

Dashed red line indicates deconstruction of previous plan



- 4. New stair structure inserted for spectator tower above.
- 5. Assembly room 2,247 sf
- 6. Lift from first level; access to outdoor viewing porch.

PLAN - 2ND LEVEL

Dashed red line indicates deconstruction of previous plan



RUIN GARDEN - LOOKING NORTH



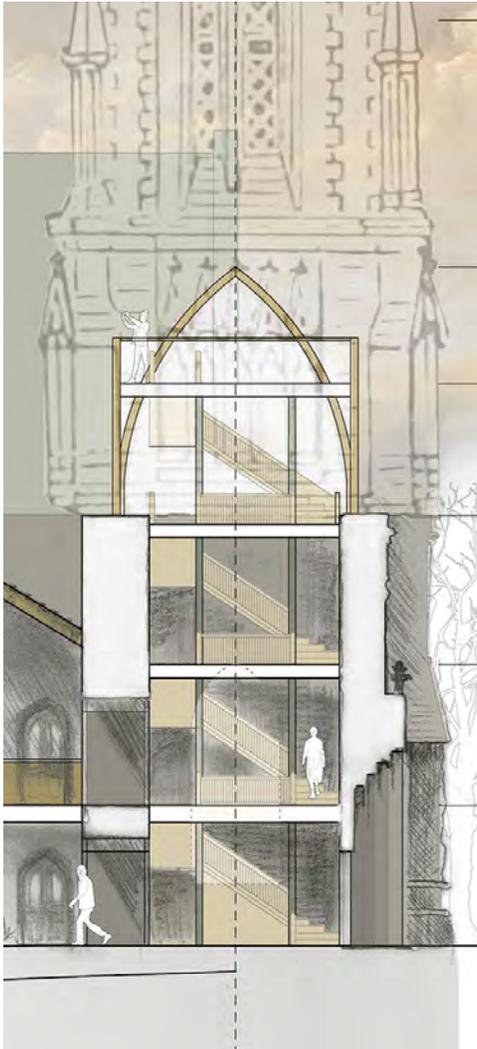
STREET VIEW - WENTWORTH

**RUIN GARDEN:** A place that is reclaimed for public use and is therefore open for citizens to enjoy. Upon entering from Princess street, through the main entrance, one is immersed in the open-air “sacred” space with a view to the remaining roof apex. There is an elevated walkway which connects the tower stairs to the west stairs for a second level view of the space. This is to be constructed of new material, steel and salvaged wood decking, to provide safe access to the site that is structurally independent of the ruin walls. From the walkway, one can look down at the garden space, which is intended to be “untamed”, which will allow for natural seeding of grasses, wildflower and even trees.



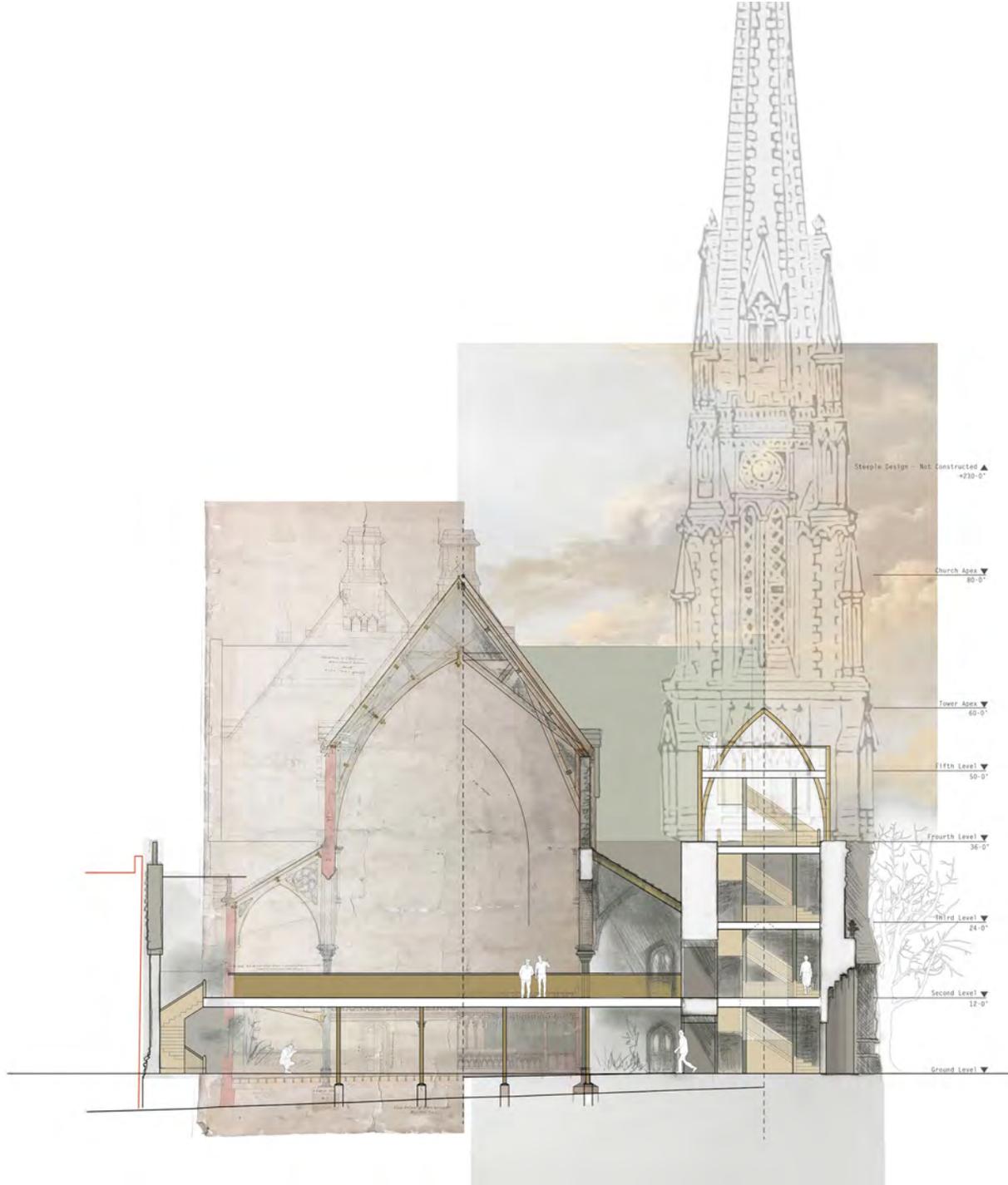
*Hall interior, December 2019*

**CENTENARY HALL:** A community space once again, the building will be rehabilitated to suit multiple purposes and provide flexibility to its users over generations. The main level is lightly renovated in plan which offers four rooms with north facing windows. The upstairs banquet hall is a grand Gothic style room that continues to impress with its hammer beam trusses and wood paneling. This second level is accessed by two stairwells which connect to the ruin. A new Viewing Porch is designed for above the former altar,

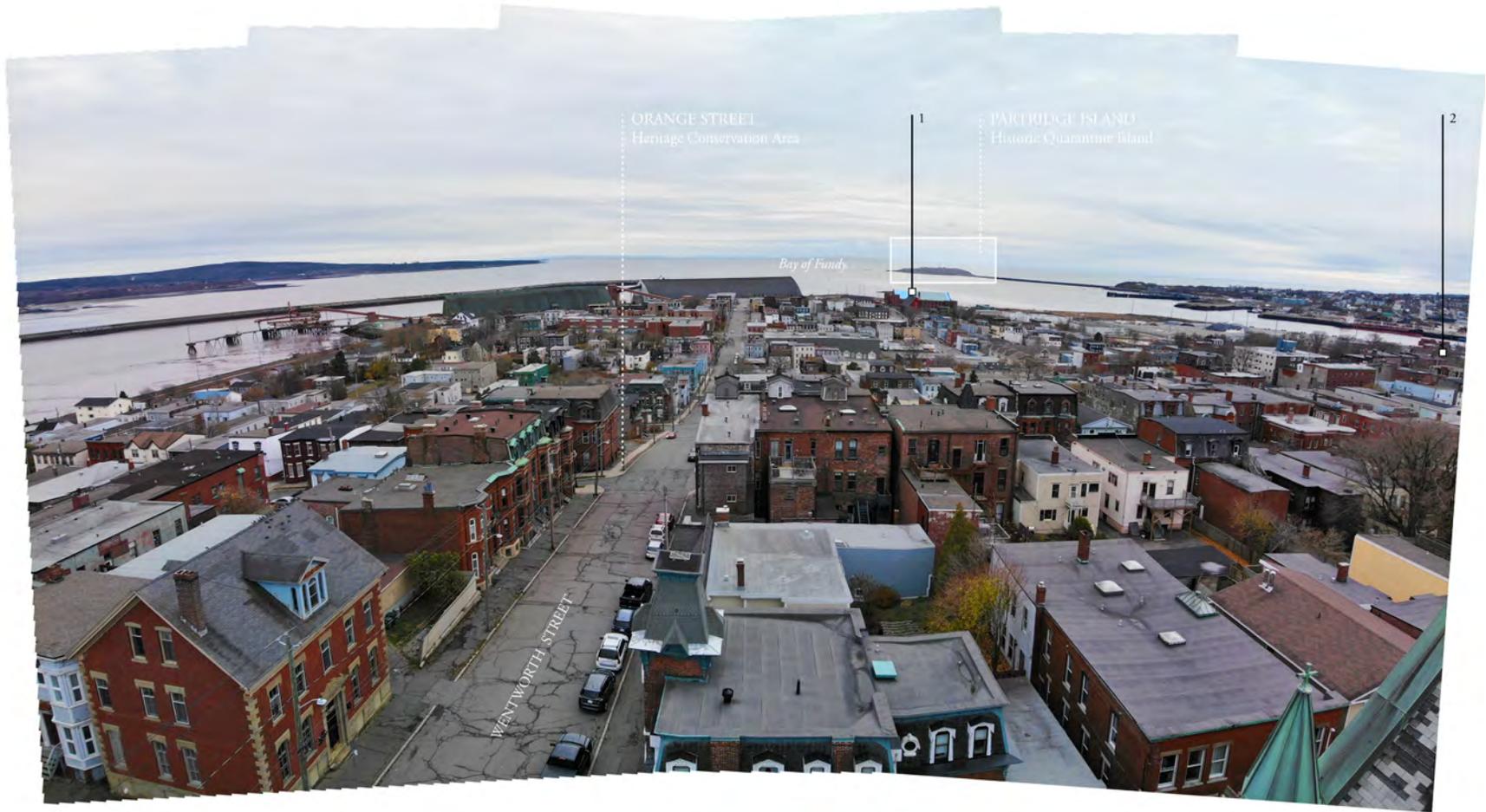


accessed by the stairwells. This provides additional outdoor space to be used by the Centenary Hall programme.

**SPECTATOR TOWER:** A contemporary interpretation of the un-realized steeple of the architect's original design. This is of course not intended to mimic a steeple, rather to activate the massive tower base with a new function. Its construction will be of wood, potentially of salvaged pine from the roof trusses. It will allow the public an elevated view of the ruined site, but also prospect to the Saint John Harbour and the panoramic view of the city. From here one can connect visually with other church steeples in the distance, associating the ruined site to the city's remaining religious built heritage.



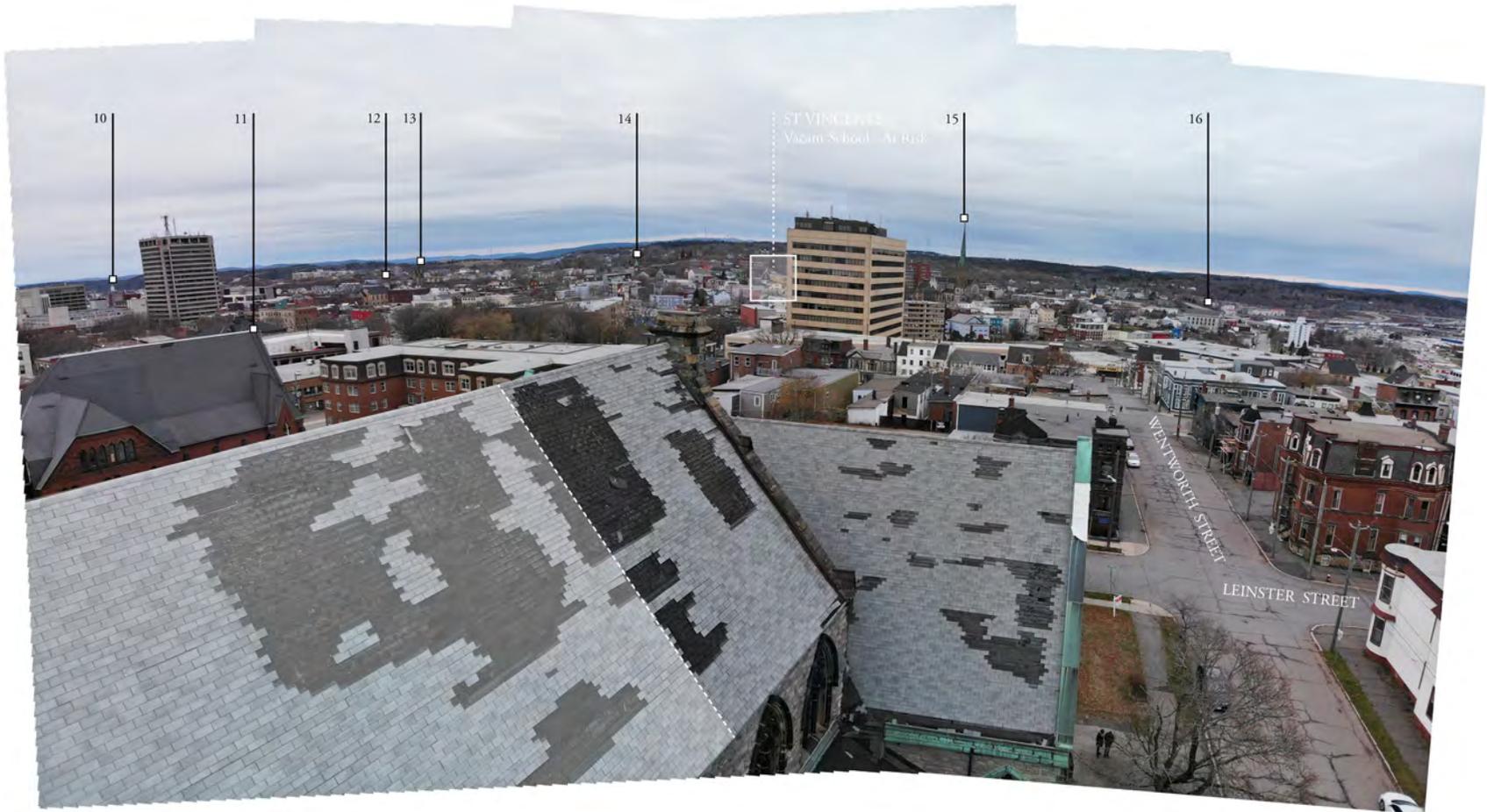
*Section through building,  
imagination and time.*



TOWER PROSPECT: SOUTH  
*View of south-central peninsula and the Bay of Fundy*



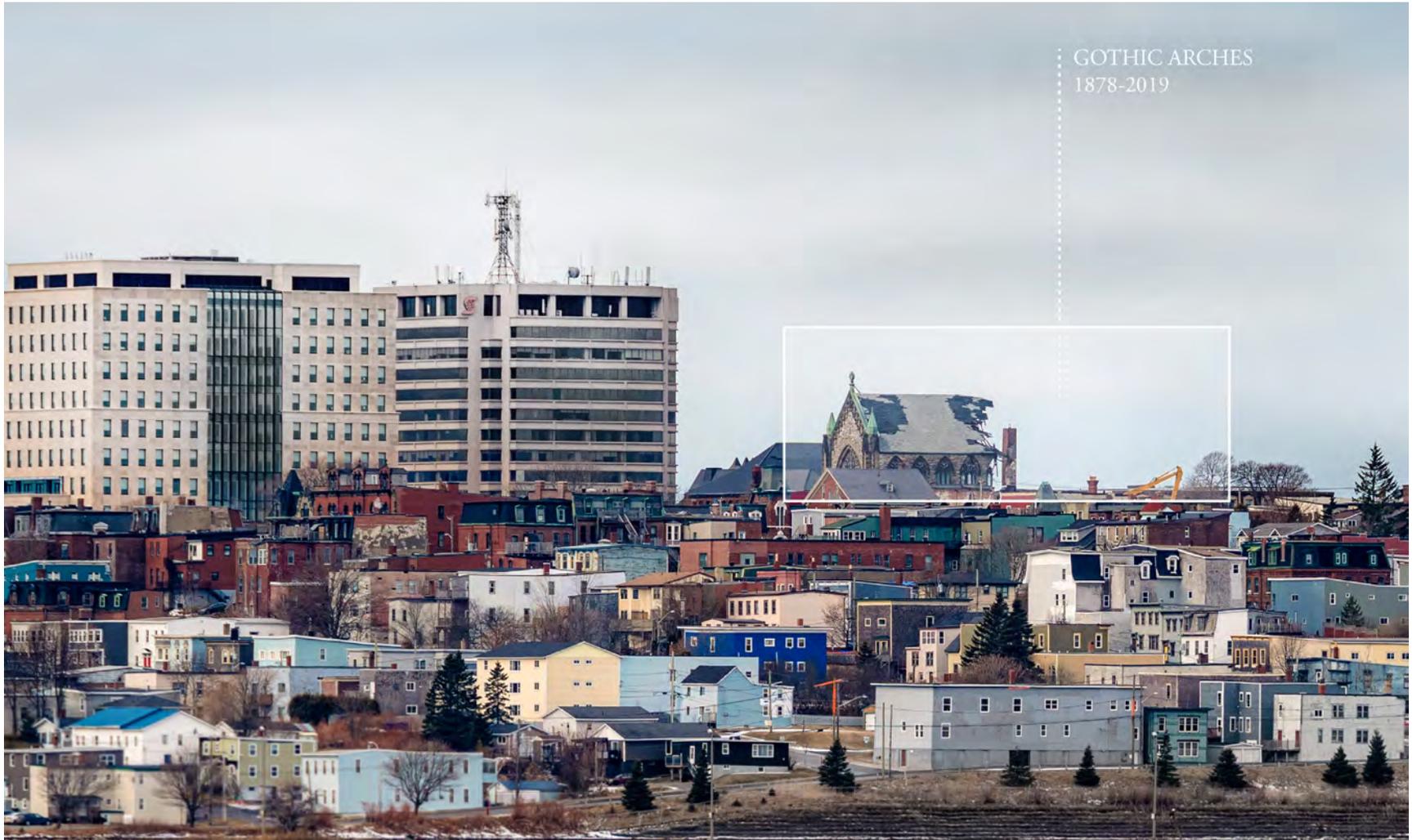
TOWER PROSPECT: WEST  
*View of the West-side and the Saint John Port*



TOWER PROSPECT: NORTH  
*View toward the North-end and Waterloo Village*



TOWER PROSPECT: EAST  
*View of East-side and the Courtenay Bay*



GOTHIC ARCHES  
1878-2019

*Photo Source: Doug MacLean 2020*

## SAINT JOHN, NB

*View from East of Urban Heritage Erasure*

PART FIVE

*Invocation*

PART FIVE - INVOCATION

## RUIN PRECEDENTS

This project has been influenced by theory on heritage conservation and ruins, as well as practical examples of places that have held faith in ruins and either incorporated the material into a new function or have maintained the material as a valuable cultural resource.

Sites of preserved ruins are not common in Canada, however internationally, ruins hold their ground as monuments and historical sites, as well as incorporated into a new architectural use. The following projects have provided practical frameworks for this thesis study.



### *Neues Museum*

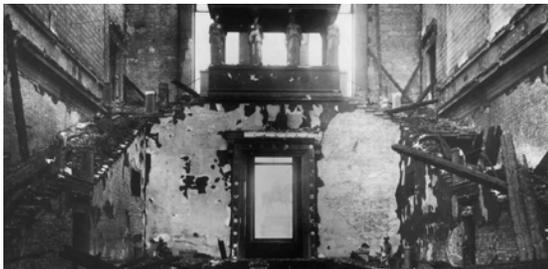
Berlin, Germany

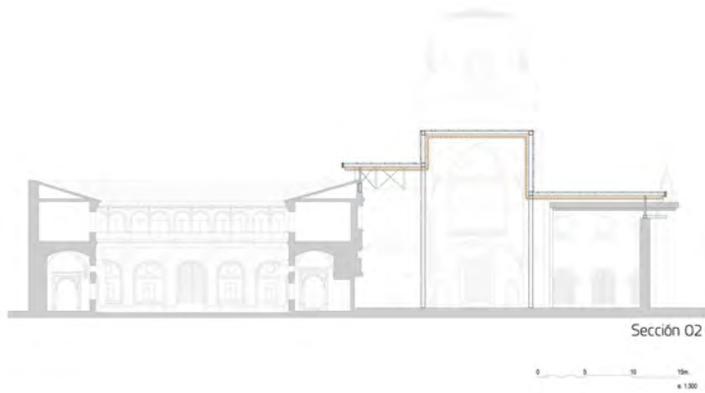
Architect: David Chipperfield Architects and Julian Harrap, consultant

Construction Date: 1843 - 1855

Project Year: 2009

This building remained a spoil of war for over 60 years post World War II until its iconic rehabilitation and recreation in 2009 that combines many different approaches to heritage conservation.





### *Monastery of San Juan Cover*

Burgos, Spain

Architects: BSA,

Project Year: 2015

Construction Date: 11th Century

A contemporary addition to the historic fabric of the ruined monastery that provides shade and shelter for the interior enabling its continued and broadened use as a public space. The cover is distinctively separate from the ruin but also unifies it spatially.





### ***St. Raphael's Ruins***

Glengarry, Ontario

Construction Date: 1815-21

Fire: 1970

This Canadian precedent involved significant masonry preservation of the structural shell after a devastating fire. The site received designation as a National Historic Site in 1999, after its status as a ruin. As a monument to the former church and early Catholicism in Canada, it is a peaceful place, yet architecturally and culturally static.





***City Methodist Church*** - Abandoned

Gary, Indiana

Construction Date: 1926

Church Closure: 1975

Currently under evaluation by the Municipality of Gary as a heritage site to be developed into a public ruin garden. Vacant and decaying for nearly 50 years, this church has recently received new attention from community heritage advocacy and may evolve into a new precedent as curated decay for an urban site.



## EPILOGUE

### **Summary of Findings:**

The objective of this thesis is to investigate the possibility of saving the Gothic Arches through a process of Benign Ruination. This initiated several processes of evaluation in order to provide grounds for this type of proposed intervention, such as analyzing the building's Heritage Values, assessing the building's condition, and in this specific case, cataloguing the process of the building's demolition. The Gothic Arches building was a magnificent piece of Gothic Revival architecture that contributed to the cultural identity and historic narrative of Saint John. The Heritage Evaluation exercise revealed that this building was a valuable heritage asset and my judgement of the site is that its heritage values should have been recognized and preserved. The architectural condition assessment described the building's defects as well as its integrity. Overall, the building was severely neglected and required moderate to critical levels of intervention for its restoration or even stabilization. Balancing the Heritage value with the condition of the building, as well as the economic climate and urban heritage of Saint John, ruination presents as a relevant strategy for the site's continuity. After

explorations of deconstruction phases and specific design goals, the possibility for a meaningful yet unorthodox adaptive reuse project can be envisioned for the Gothic Arches. Of course this vision is beyond feasibility since the building and its value has been completely erased. This study as a dialogue of difficult heritage topics however, is not in vain considering the number of under-utilized religious buildings in Saint John, and in Canada.

**Further Exploration:**

There are many areas of further exploration that would strengthen this thesis proposal as a viable option for preventing the erasure of buildings which present little commercial value yet significant heritage value. An analysis of the economics of this process, specifically careful deconstruction, compared to costs and logistics of mechanized demolition. Furthermore, looking at the disposal of material versus the salvage and reuse would be important to factor into this option. I had many thoughts on different types of costs and benefits that surround a project like this - financial, legal, political, and labour cost weighed against social, historical, and cultural benefits. It is all a

balance of values-based decision making.

One of area of interest with this study that will be of continued inquiry for me is the link between craft and conservation. The thesis proposes a nurturing of traditional building trades and craft through the engagement with the ruin. The process of analyzing, deconstructing and repairing this site could offer unique training opportunities for the heritage work force of the region. This proposal was initially phrased as a “quarry for traditional building knowledge” - a worth-while theme for further exploration that will appear elsewhere in my future work.

**Ideas to Consider:**

During the defence of this thesis, both pragmatic and conceptual matters regarding the practice of building disassembly and material salvage were discussed. Questions such as, what is the possibility of using the salvaged material from the Gothic Arches to restore other churches of the same era? Could the these materials be mapped throughout the city and tracked in their second architectural life? Is is plausible to develop a

craft of disassembly? Material reuse is a valuable practice in sustainability, in terms of the environment as well as culturally in the sense of building traditions.

In relation to this thesis proposal of Benign Ruination, the concern surrounding when to initiate such an approach was brought to my attention. This presents an interesting dilemma regarding human nature (to resist loss), optimism, and economics - when does the ruining begin? In this thesis, I based my interventions primarily on the building condition which in this case was nearly a ruin after it persisted years of abandonment. But perhaps there was an earlier time for this proposal - maybe when the church congregation out of disparity divested the building; or maybe at times of new ownership. Is it possible for any type of building to transform into ruin, or is there a certain architecture that is most suited? I have many ideas to consider beyond this text.

**Learning Experience:**

One of the fundamental aspects of this proposed “heritage infrastructure” was to provide a didactic space for learning

about the material heritage of Saint John. Through the process of this self-directed study, I immersed myself in the investigation of this building. This of course included the demolition which, although challenging to accept during my thesis work, the destruction offered so much information that I could not gather from solely exterior observations. I witnessed the building's inner assembly and spatial anatomy in a remarkably unique way through its opened walls and roof. Photography of this sequence provided me with still moments of the building's felling. By way of the "post-mortem" analysis sketching, I was the apprentice who benefited from the building's wisdom. Loss is among the difficult topics to confront in Heritage Conservation, and I am grateful for this academic platform to explore this sensitivity. Through this work, I am provided insight and contemplation of architectural endings as a designer.

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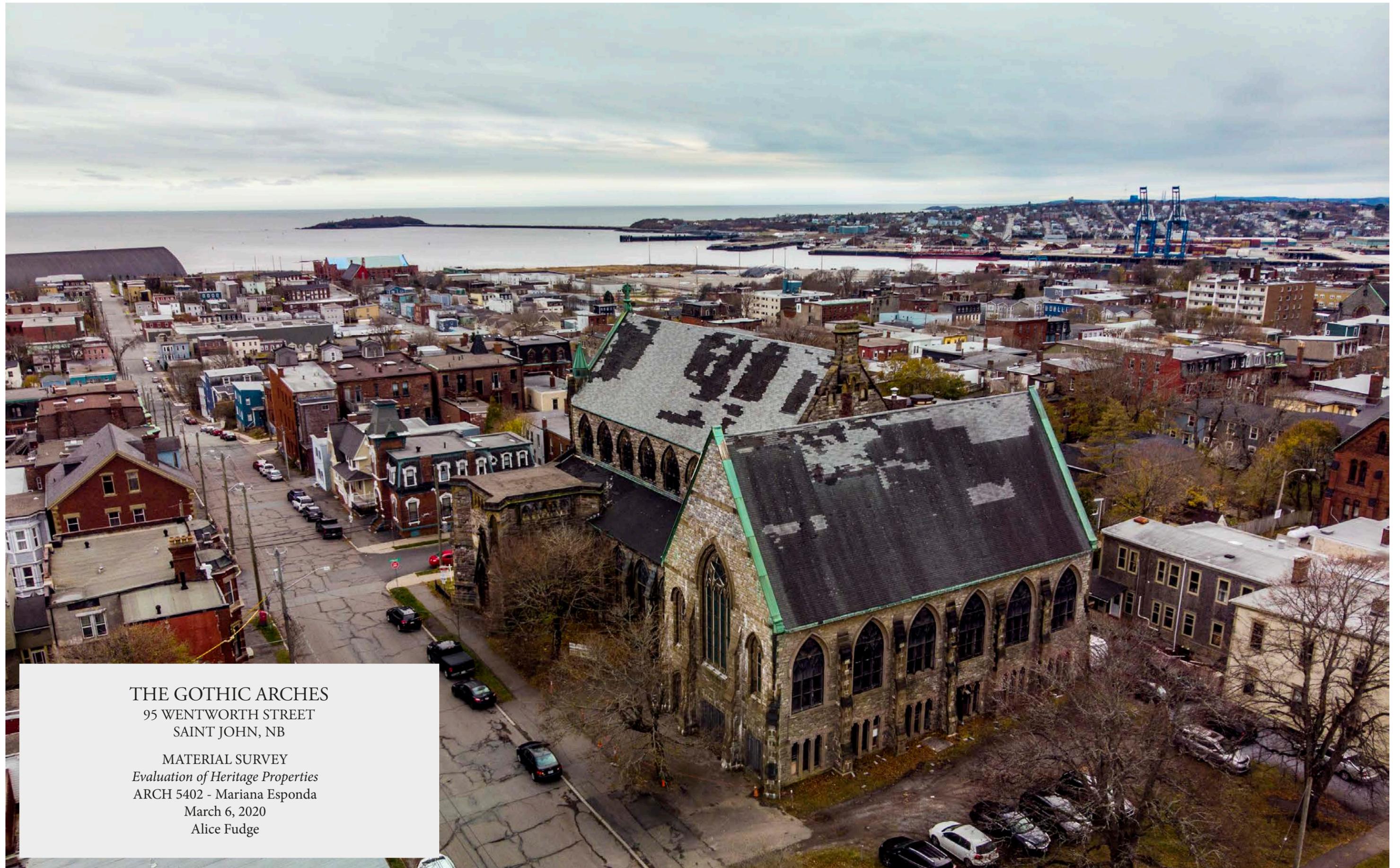
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*Ruins: the Conservation and Repair of Masonry Ruins*. Dublin: Stationery Office, 2010.

## APPENDIX

1 Material Study - South Sandstone [Assignment for ARCH 5402 Evaluation of Heritage Properties, M, Esponda, Winter 2020]

2 Condition Assessment - South Sandstone [Assignment for ARCH 5402 Evaluation of Heritage Properties, M, Esponda, Winter 2020]



THE GOTHIC ARCHES

95 WENTWORTH STREET  
SAINT JOHN, NB

MATERIAL SURVEY

*Evaluation of Heritage Properties*

ARCH 5402 - Mariana Esponda

March 6, 2020

Alice Fudge

THE GOTHIC ARCHES  
95 WENTWORTH STREET  
SAINT JOHN, NB

BUILT: 1878-82

LOCATION: SAINT JOHN, NEW BRUNSWICK

ORIGINAL USE: METHODIST CHURCH

ARCHITECT: JOHN WELCH, BROOKLYN NEW YORK, US

STYLE: GOTHIC REVIVAL

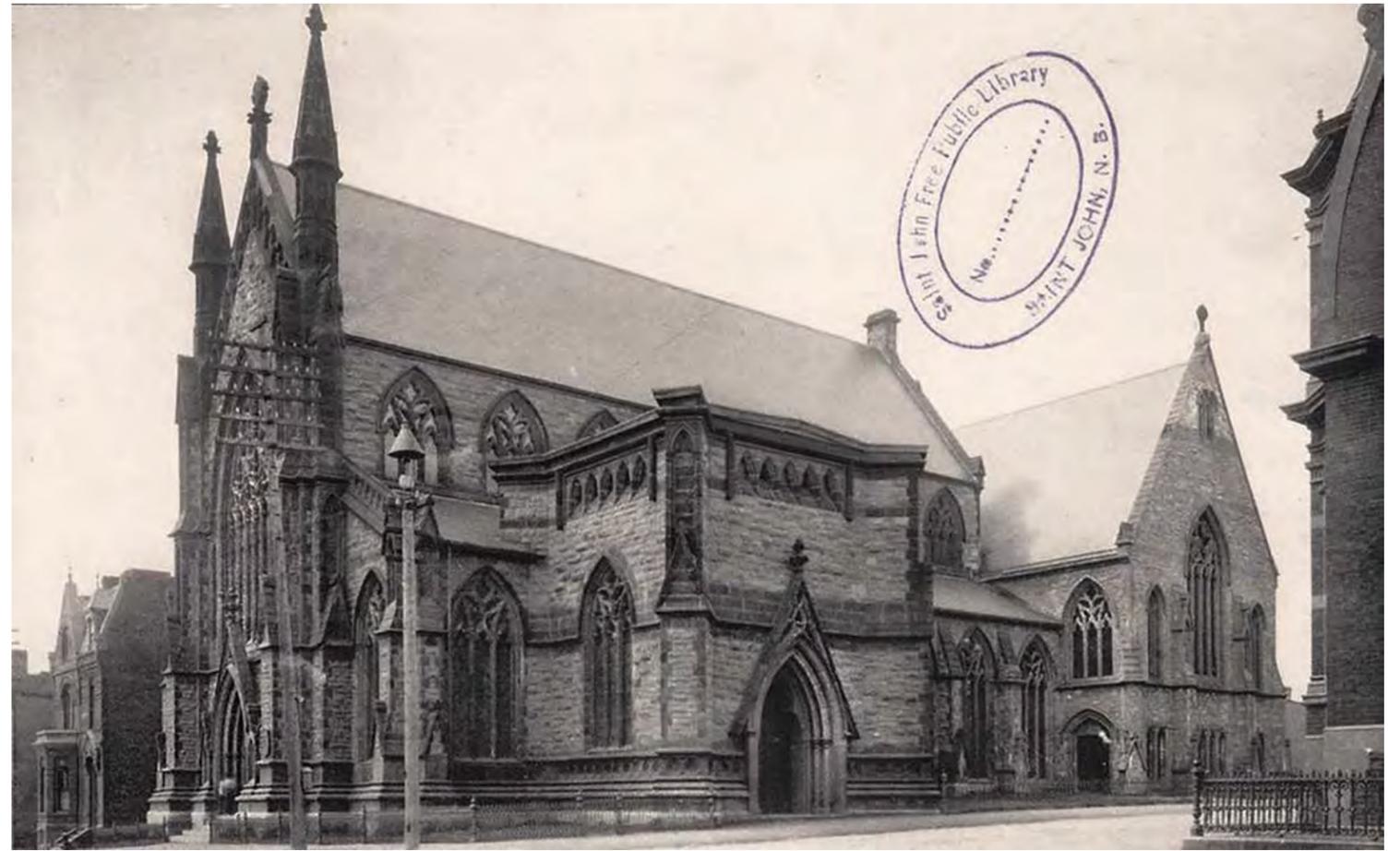
MODE OF CONSTRUCTION: MASS MASONRY

DEMOLITION: JANUARY 2020

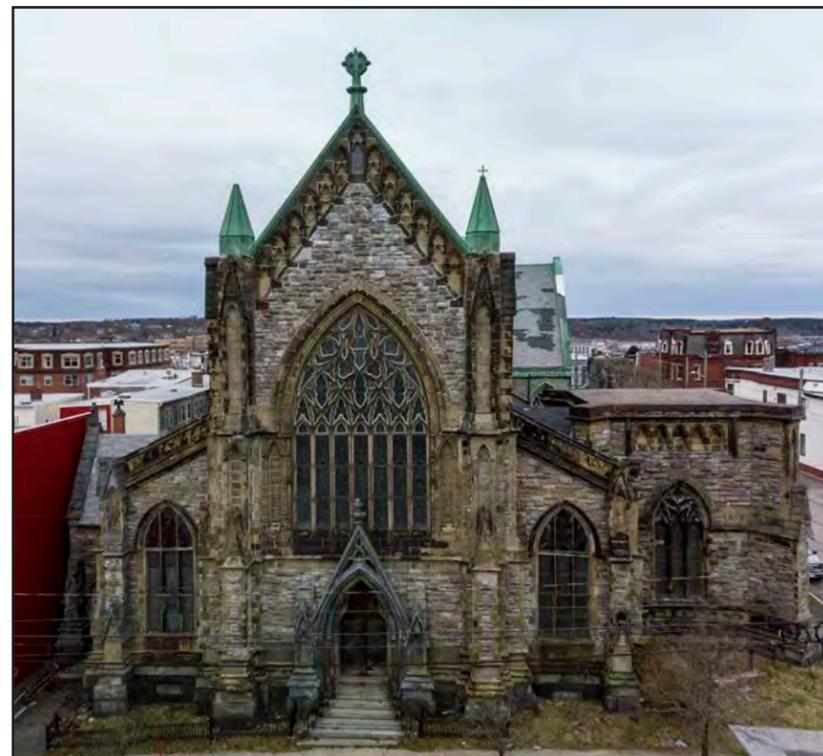
This Gothic Revival style church began construction in 1878, completed and dedicated in 1882 as the Centenary Methodist Church in Saint John, New Brunswick. The church was built for a growing methodist congregation just following the devastating 'Great Fire' of 1877 which burned the majority of the southern peninsula, city's commercial and residential core. During the ten years following the fire, the city was rebuilt in a Victorian fashion using masonry construction, to resist the spread of flame. The Centenary Methodist Church is located on the site of the previous church building, built by the Loyalists, on the highest crest of the southern peninsula of the city. It overlooks the Saint John harbour and surrounding waterways, as well as the historic residential neighbourhood where it served the community as a magnificent place of worship until 1999. With declining congregation numbers (then the Centenary-Queen Square United Church), the church was no longer able to support the massive heritage site and was sold to a private owner. Since then, the church building has remained under-utilized and uncared for. In recent years, it has sat vacant and unheated in a rapidly declining condition - all while listed as real estate for condominium redevelopment.

#### IDENTIFICATION OF MATERIALS

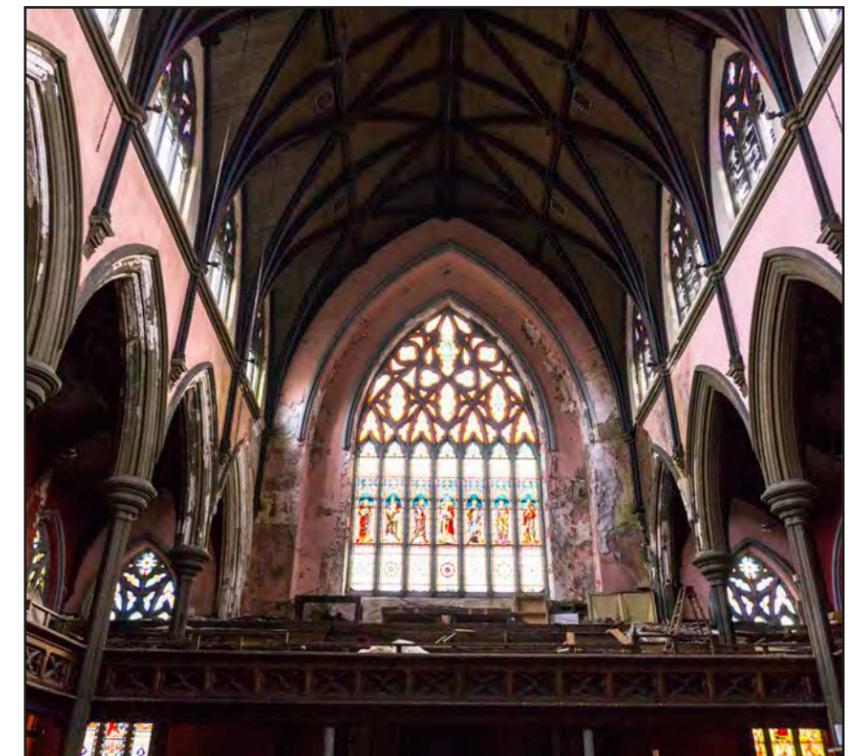
An evaluation of this heritage building is an appropriate exercise to record the materials used in its original construction as well as the cultural characteristics and environmental effects over its lifespan. The selection of building materials which are identified in this report are related to the visible exterior envelope, the major structural elements or are character-defining elements.



Centenary Methodist Church  
Photo by: Archival, 1920



South Facade  
Photo by: A. Fudge, November 2019



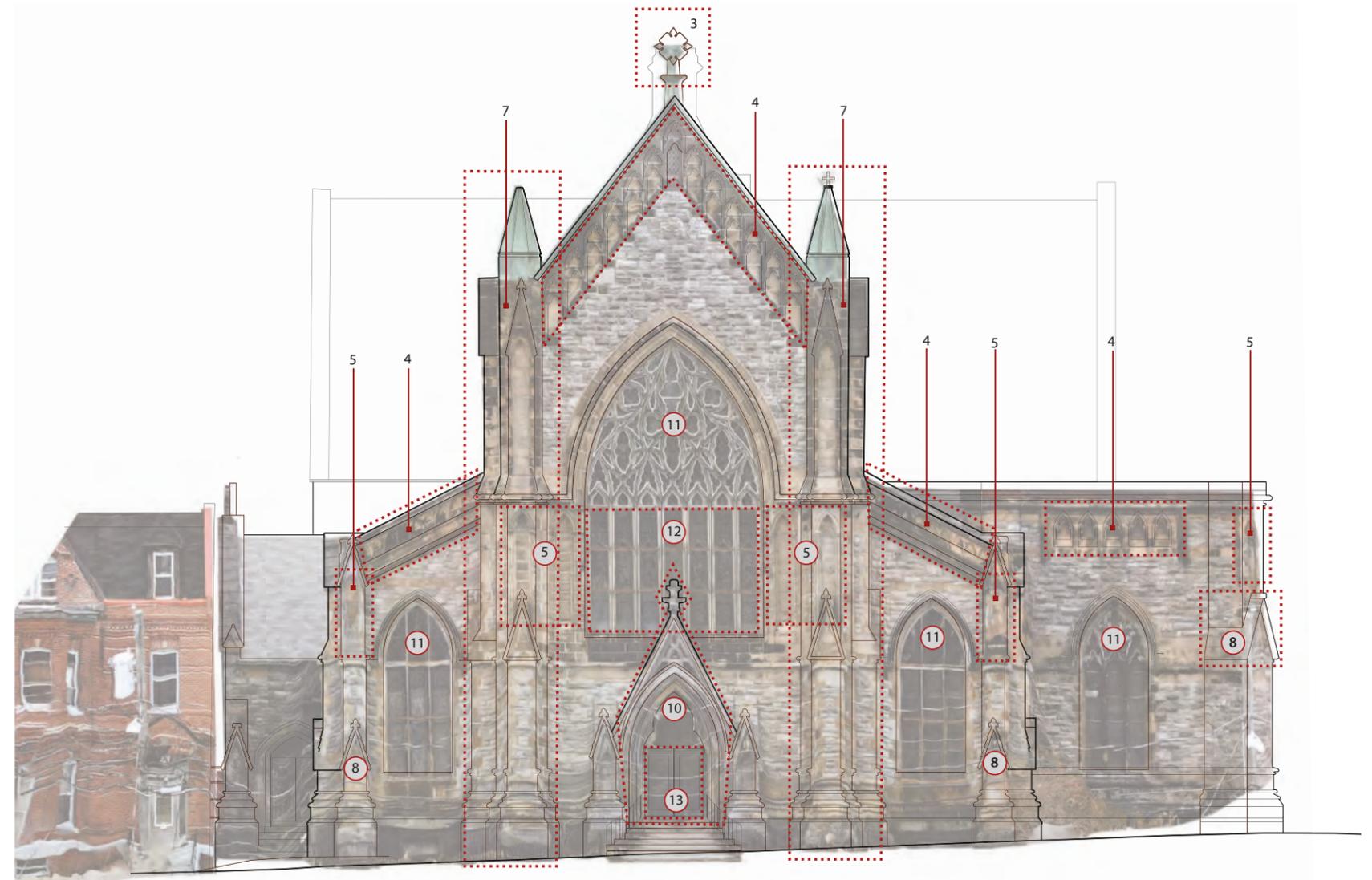
Nave interior, south window  
Photo by: A. Fudge, December 2019

## CHARACTER-DEFINING ELEMENTS

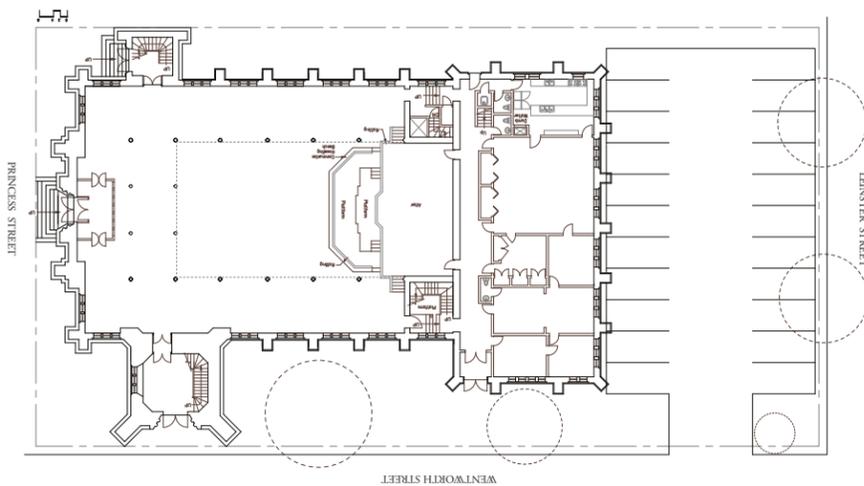
**Designation:** Local Historic Places Program, 2008/08/18  
Listed on The Canadian Register of Historic Places

### Exterior

- 1 Mass masonry construction of limestone and sandstone sourced locally;
- 2 Steeply-pitched roof of Sunday School Hall made to appear internally known as the “hammer-beam” mode of construction, all the massive timber work being wrought out of hard pine;
- 3 Carved stone cross on the apex of the church roof;
- 4 Trefoil pattern along the eaves and copings;
- 5 Lancet patterns throughout the exterior;
- 6 Lancet windows;
- 7 Heavy stone buttresses supporting the corners and the sides of the building, surmounted by massive pinnacles;
- 8 Gablets (buttress caps) of Early English style on stepped buttresses;
- 9 Large Gothic arches of all window and entrance openings;
- 10 Gothic doorway flanked by stone columns;
- 11 Windows with elaborate stone tracery;
- 12 Memorial stained glass windows with biblical etchings by J. C. Spence;
- 13 Diagonal wainscoting of wood doors;



SOUTH ELEVATION



MAIN FLOOR PLAN



EAST ELEVATION

NORTH ELEVATION

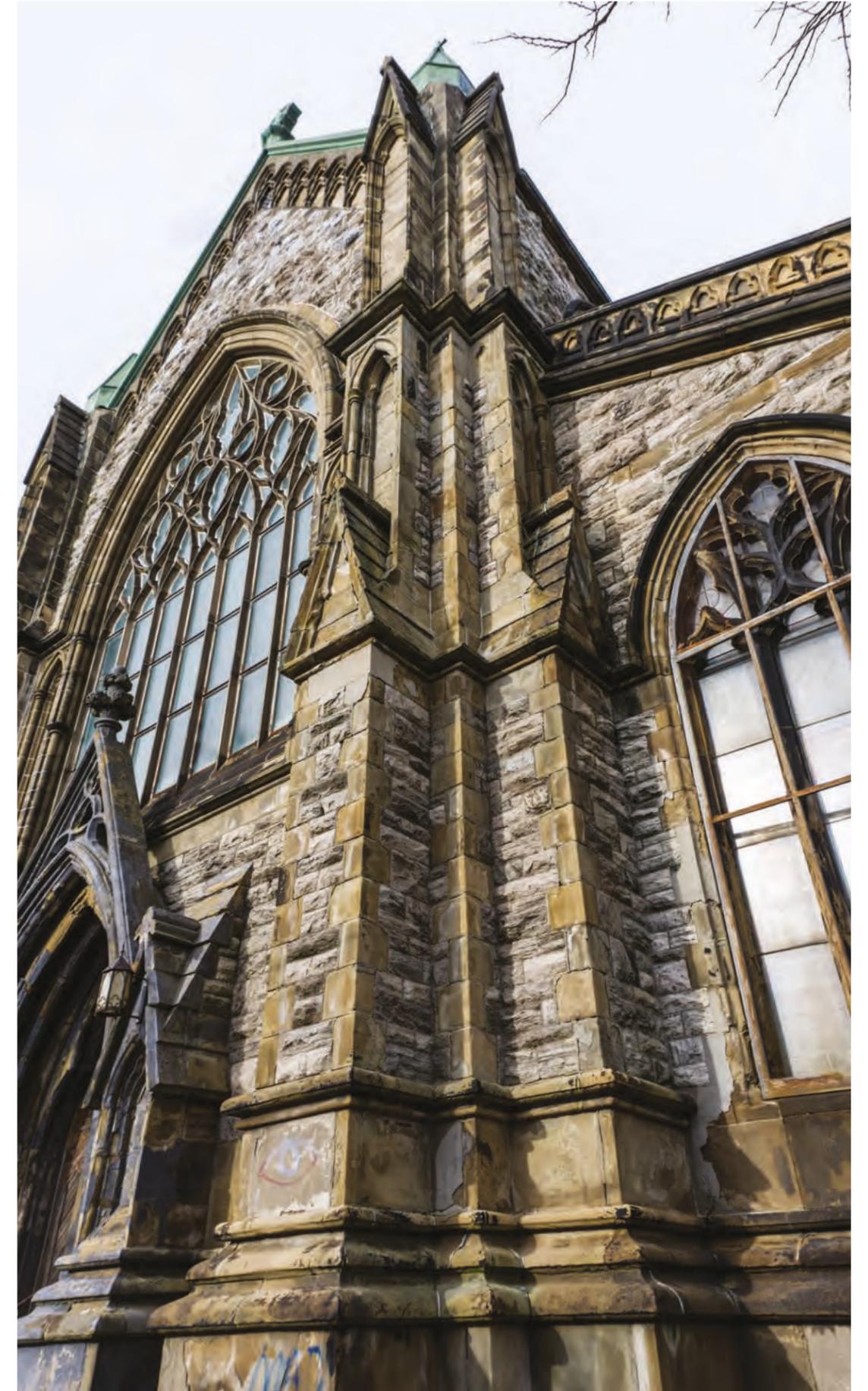
## SANDSTONE

**Primary location/use:** carved stone at the windows, tracery, front pilasters, quoins of all buttresses, voussoirs, kneeler, copings, band course, buttress bases, ornamental carvings (finial, pinnacles); arched front entry carved surrounds.

### Description

Sandstone is a sedimentary rock, sourced from Westmorland County, New Brunswick. The probable source of this stone is the Budreau quarry, which was very active in supplying fine-grain olive colour sandstone throughout NB as well as the Eastern seaboard of USA. This stone has been identified as being used for other high-gothic churches of Saint John at the same time of construction as the Centenary Methodist Church. Its appearance description is initially an olive colour from the quarry, but as the stone has aged in place, it has turned to a yellowish-buff colour. This is a high quality dimension stone, characterized as such by its lack of impurities, fine sediment grain size and large scale quarry stone.

Right: Edited photo which isolates the sandstone within its larger structural context



## SANDSTONE

**Design Value:** Sandstone is a material within European architectural tradition which was widely adapted in North America. Sandstone transcends historical styles of architecture as it is a versatile and stable material for the creation of both ornament and structure. The material characteristics of sandstone, such as grain size, colour, and sedimentary variation, are diverse depending on its geological formation, and is commonly found and used across Canada. However, the sandstone of New Brunswick and Nova Scotia has been favoured as a high quality building stone and was exported for construction use in Ontario and the United States. The most common of the area is the fine grained olive colour sandstone, while the red and brown sandstone sources were of particular architectural interest.

Sandstone is a primary building material of the Gothic Arches, along with the limestone rubble walling stone, and forms many of the building's character-defining elements, such as: the carvings atop the roof and entrances, the carved pilasters of the gothic entryways, the elaborate tracery of the lancet windows, as well as all quoins and carvings of the buttresses and south facade.

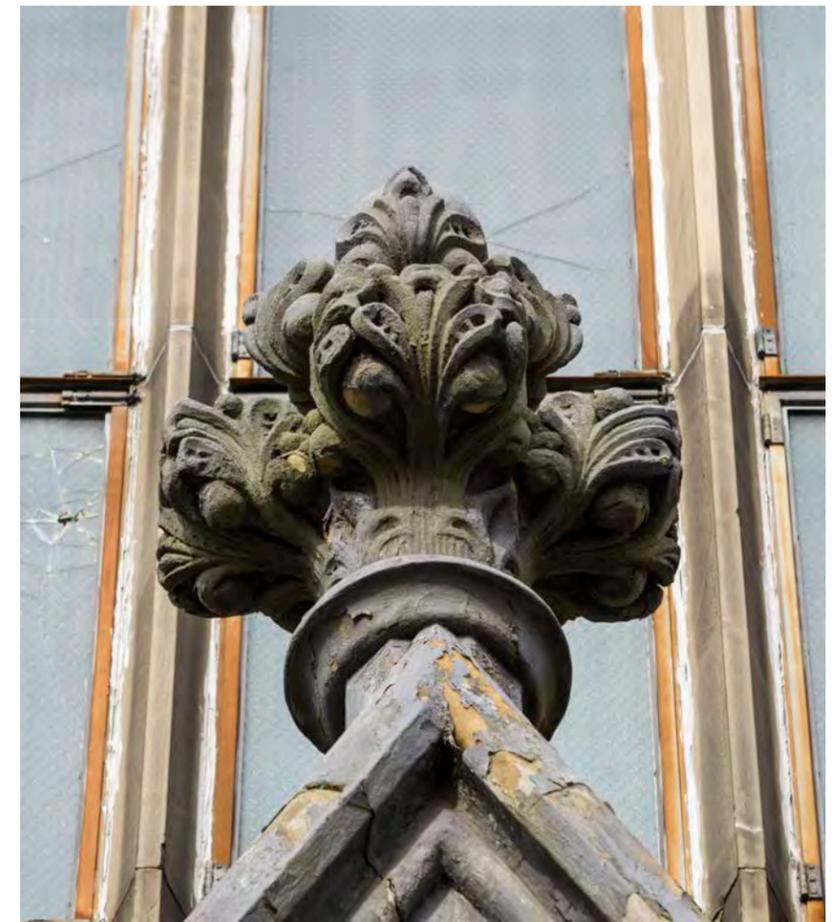
**Historic Value:** Quarrying sandstone was one of New Brunswick's major economic and industrial resources during the late 19th century, primarily in Westmorland County located on the Chignecto Bay, an inlet of the Bay of Fundy. There were roughly twelve quarries in this area which became large-scale operations of sandstone production, supplying building stone for development in New Brunswick and the maritime provinces, as well as the American market in New England and New York.

**Contextual Value:** The use of sandstone was especially common in Saint John during the city's rebuilding period following the Great Fire of 1877 which razed one third of the buildings in the city's commercial and residential core. Many prominent heritage buildings of the 'uptown' are built with facades of olive-tone sandstone and display the magnificent expression and texture of Victorian architectural stone carving.

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## LIMESTONE

**Primary location/use:** Exterior walling stone, throughout

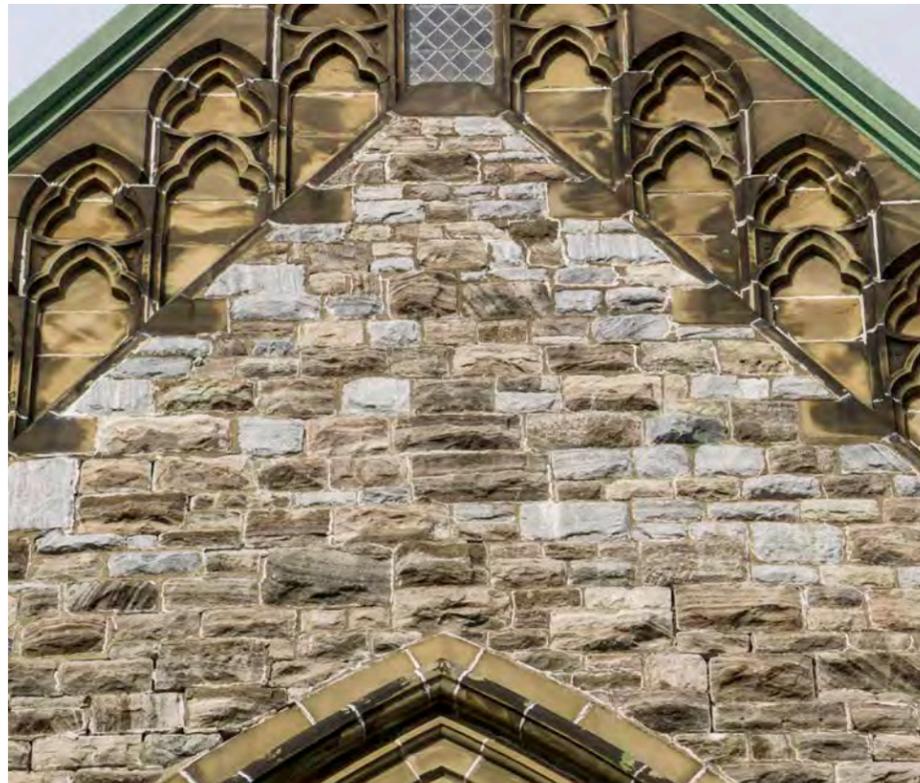
The major exterior and structural material of the church is Limestone, a locally sourced building material. The stone is of the 'Precambrian Ashburn formation', a vein of limestone located in the city which was also the main resource of the Greenhead quarry for lime (kiln-burned limestone). This limestone was not commonly used in Saint John for construction with the exception of church architecture; the stone was primarily used for the production of lime.

The stone's appearance is grey-blue in colour with green striations. The walling stone was fabricated, possibly on site, into squared rubble stones of rectangular dimensions, rock-faced, laid in a sneck bond pattern.

photos by author.

Martin, Gwen L. *For Love of Stone Vol.1 The Story of New Brunswick's Building Stone Industry*. Fredericton, N. B. : Department of Natural Resources and Energy, Mineral Resources Division. 1990.

Martin, Gwen L. *For Love of Stone Vol.2 An Overview of Stone Buildings in New Brunswick*. Fredericton, N. B. : Department of Natural Resources and Energy, Mineral Resources Division. 1990.



## WOOD

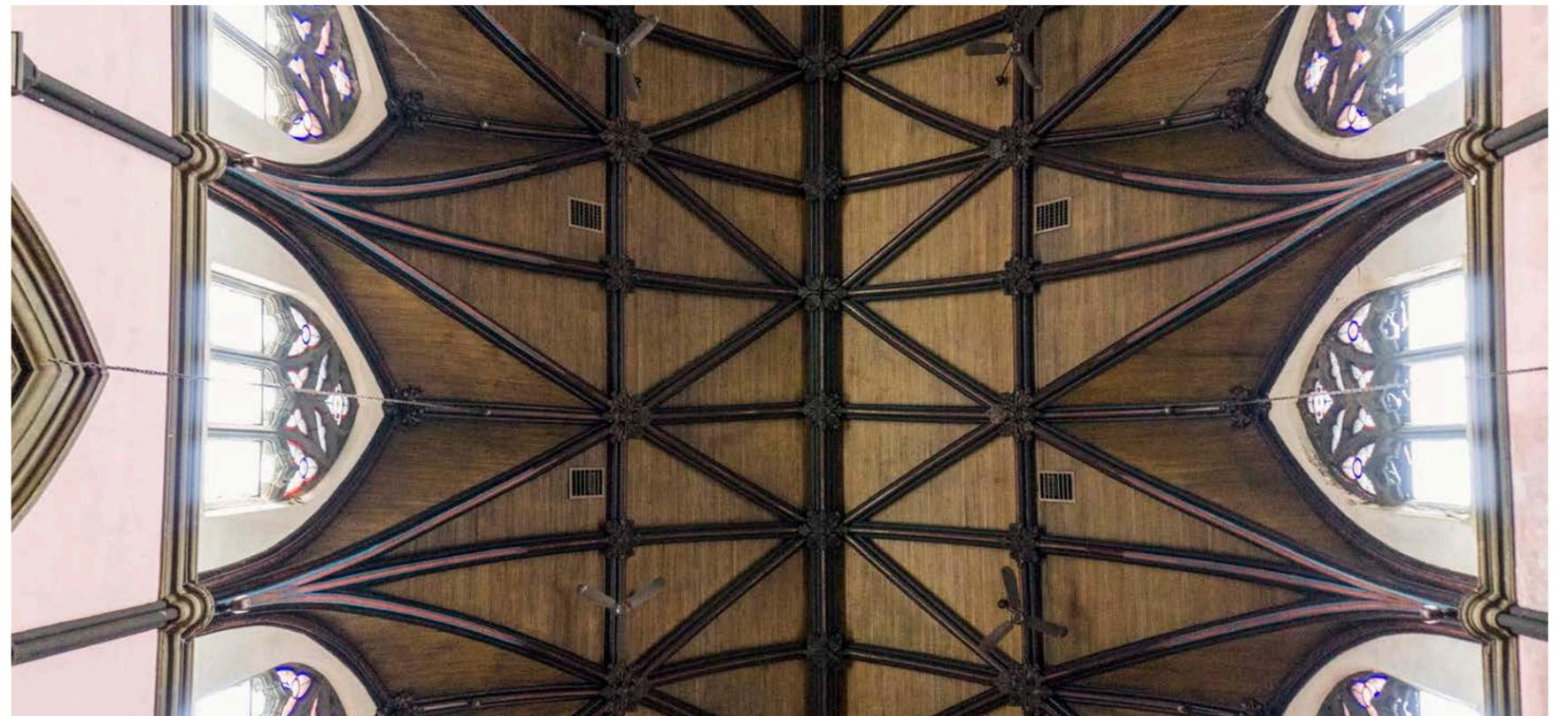
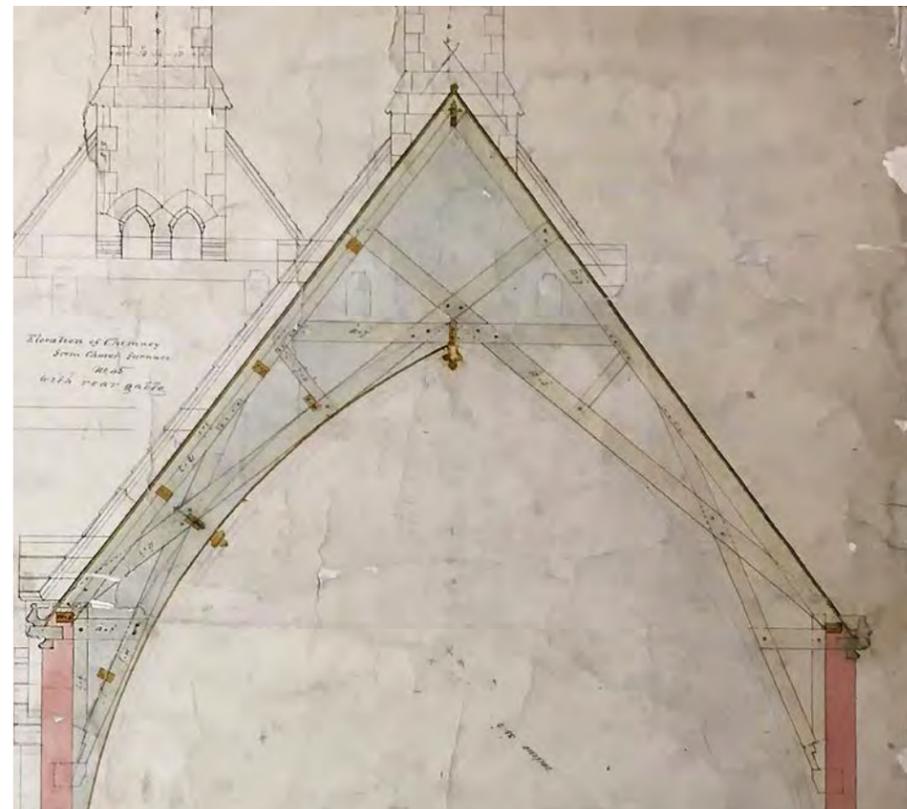
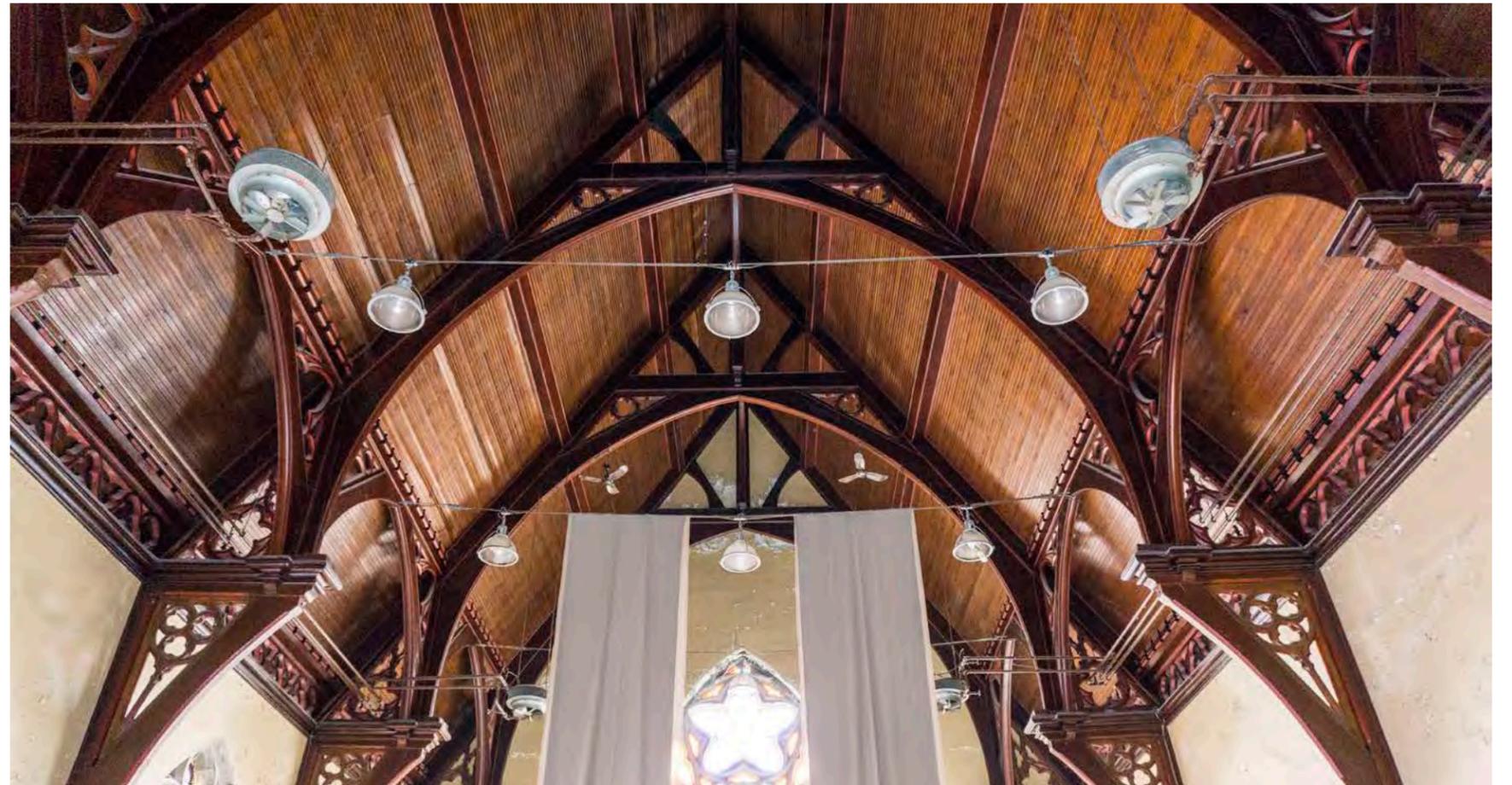
**Primary location/use:** Roof structure, ceiling treatment, interior finishes and ornamentation, exterior doors.

The Lumber industry of New Brunswick was abundant in the 19th century. Saint John was a major port for its export to Europe and the United States. The use of wood was reserved for the interior finishes and roof structure of the Centenary Methodist Church, both which exemplify the gothic style in the expression of the material.

The steeply pitched volumes of the two roofs are supported by pine timber trusses but of two different structural systems:

The Church roof is an elaborate system of scissor trusses and collar ties which is enclosed behind ribbed vaulted wood ceiling of the nave.

The Sunday School hall roof is comprised of the hammer beam truss system with large pine beams and braces which use mortice and tenon joinery. This exposed wood structure is ornamented with trefoil motifs and creates an open span volume within the hall.

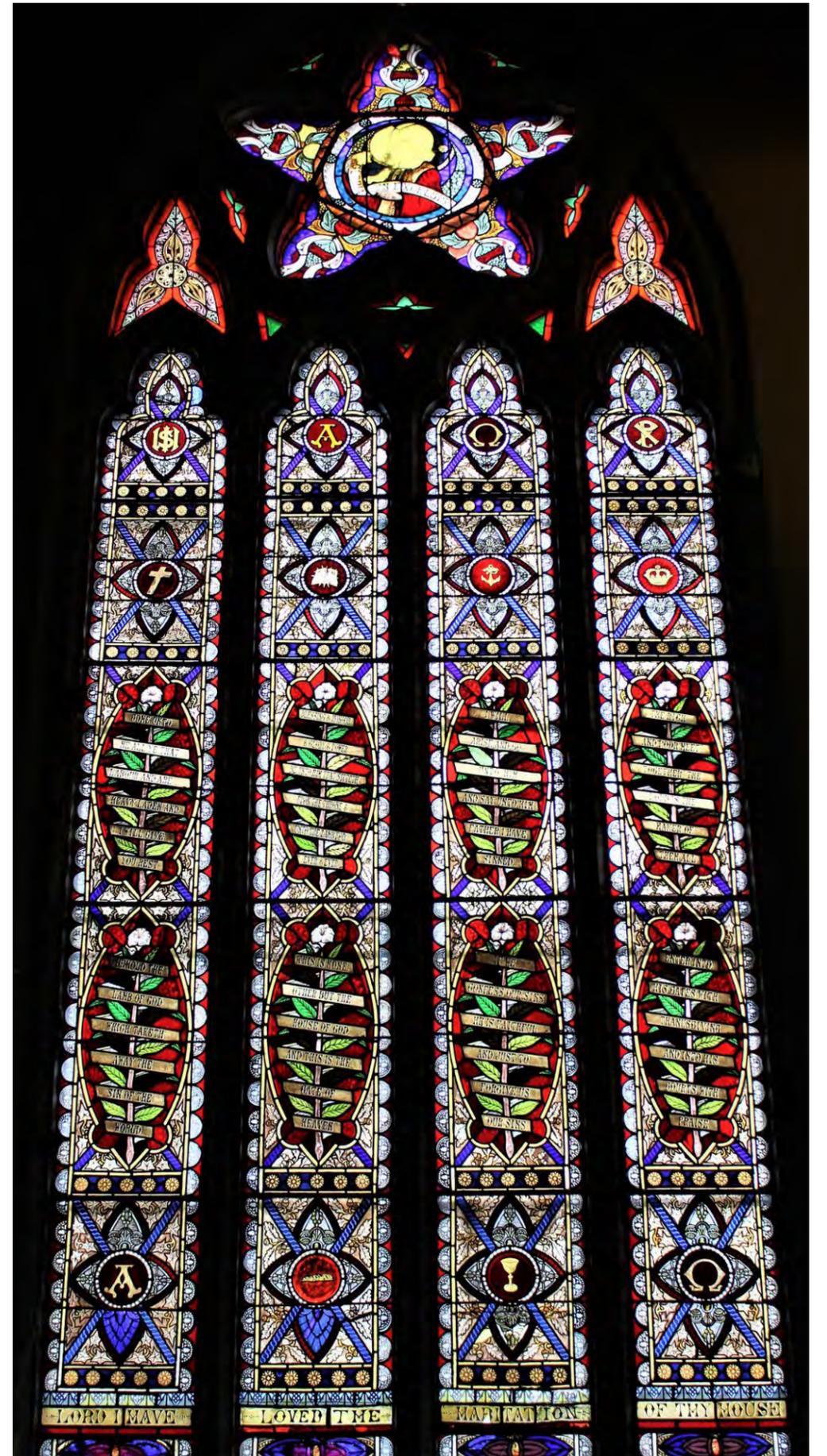
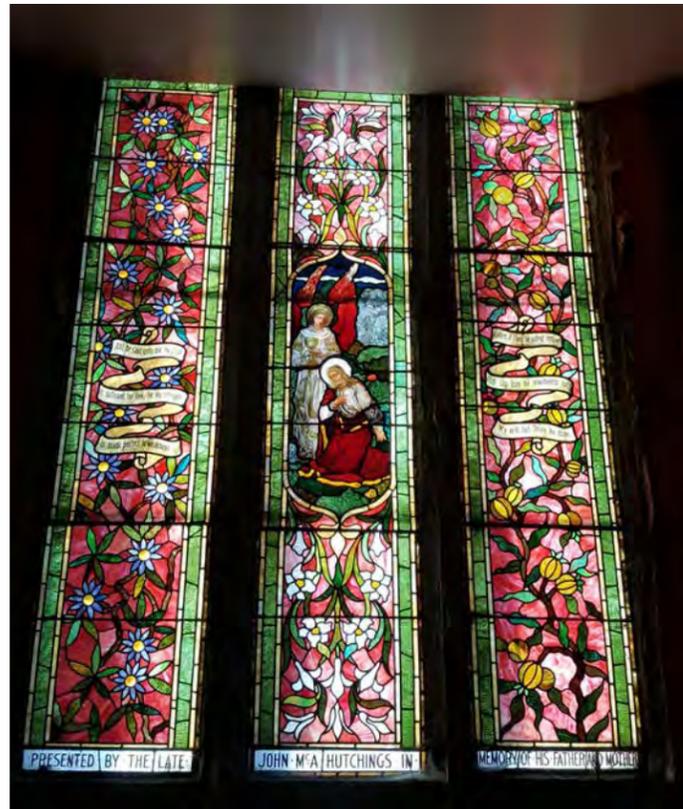
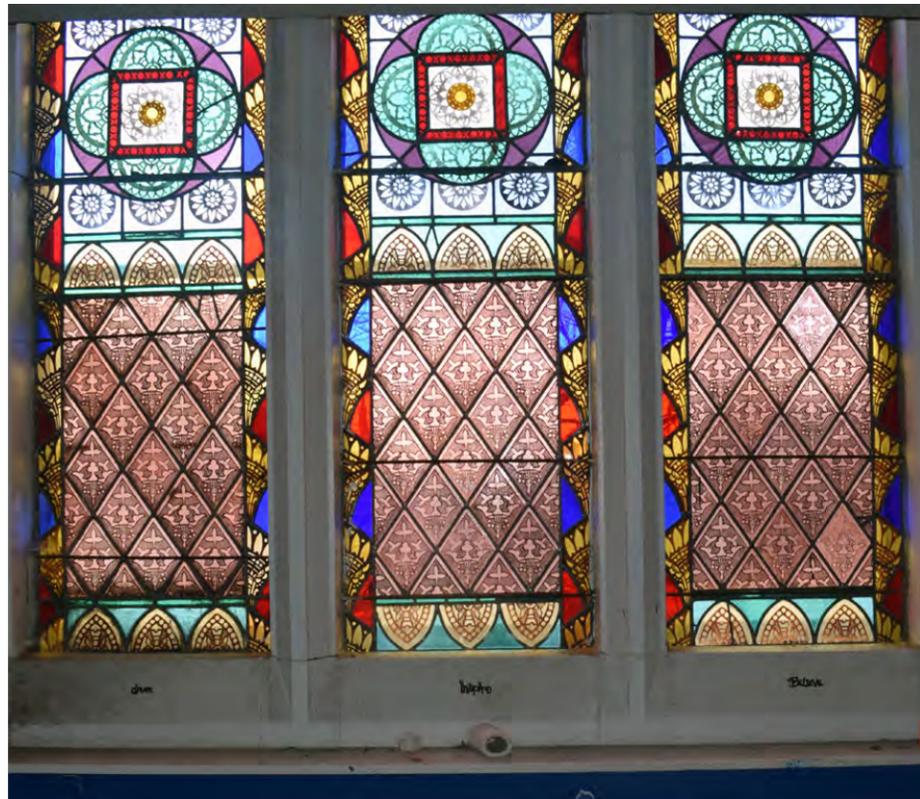


## GLASS - STAINED AND ETCHED GLASS

Primary location/use: Stained glass windows within stone tracery.

All tracery contains stained glass with geometric patterning and religious scenes etched onto glass. Stained glass produced by Canadian renowned company J. C. Spence & Sons of Montreal, QC.

The Canadian Register of Historic Places. *Old Centenary Methodist Church*.  
URL, <https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=14564>



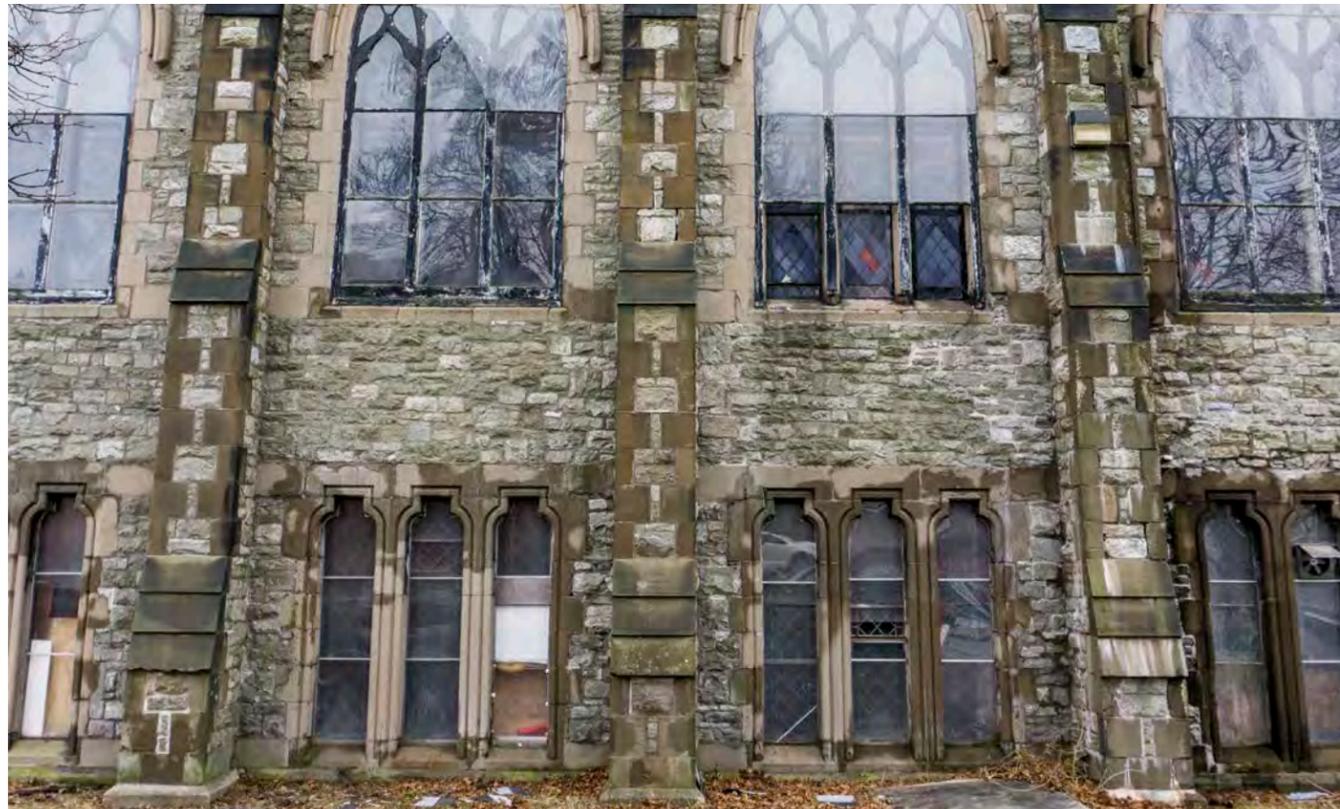
## PRE-CAST CONCRETE UNITS

**Primary location/use:** Sunday School Hall, window surrounds of each level.

'Cast stone', or pre-cast concrete units was a modern technique at this time, possibly experimental. The material is comprised of a portland cement, lime and sand mix. Window surrounds of the Sunday School Hall are cast stone material, not sandstone as the rest of the church. The manufactured by masonry company, D.H. Wheeler of Saint John.

This technique may have been used to expedite the construction of the Sunday School in order to provide a place of worship before the rest of the church was completed. It also may have been a supply and demand issue with sandstone availability since the entire city was being rebuilt at the same time.

Martin, Gwen L. *For Love of Stone Vol.2 An Overview of Stone Buildings in New Brunswick*. Fredericton, N. B. : Department of Natural Resources and Energy, Mineral Resources Division. 1990.

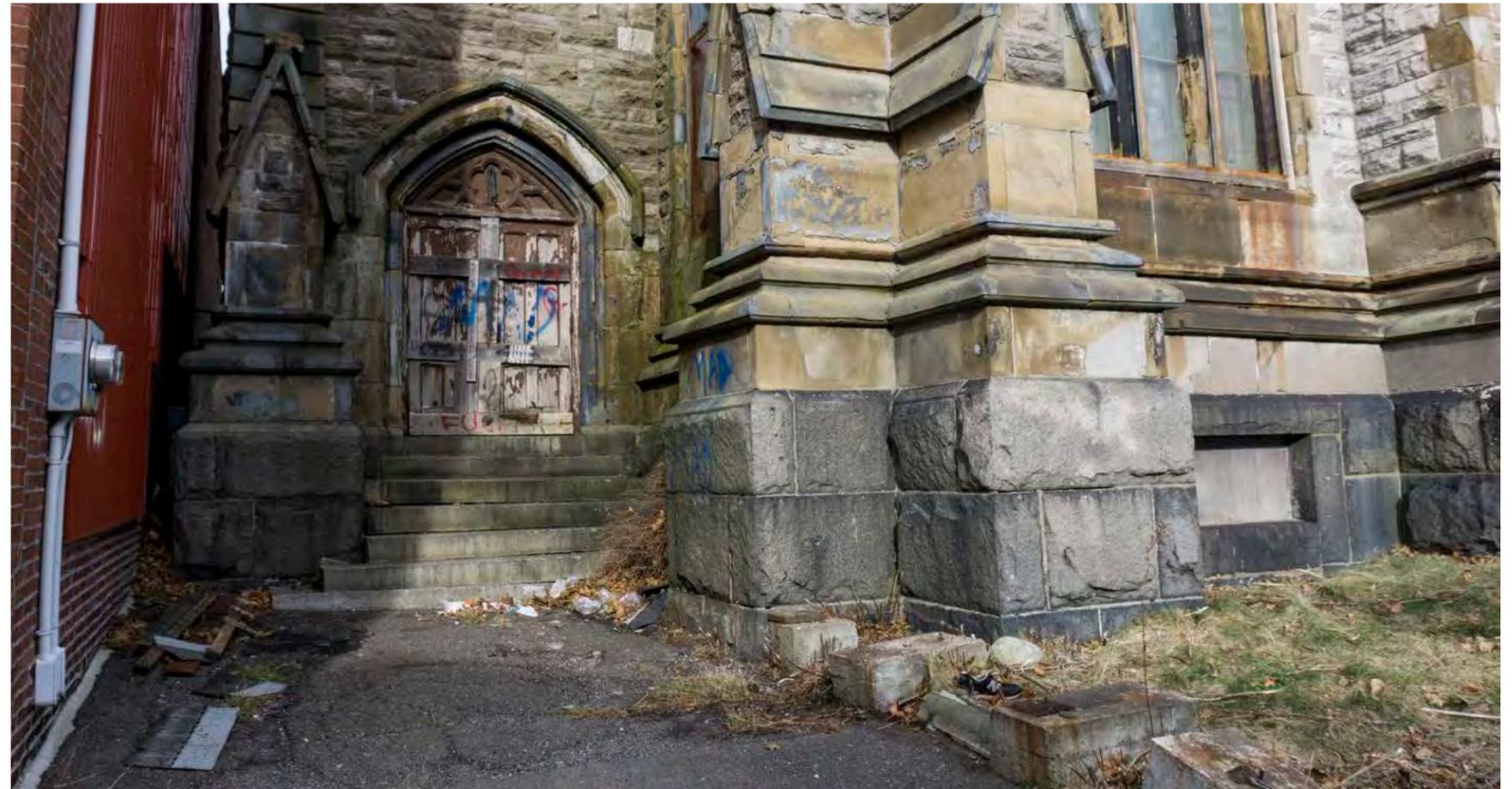


## GRANITE

**Primary location/use:** Foundation stone, stairs, visible at princess street facade.

“Evandale Granodiorite” Hampstead Granite, Hampstead, NB. - light grey to pink, medium-grained;

*‘Industrial Minerals Summary Data’* Department of Natural Resources and Energy Development, 2016.



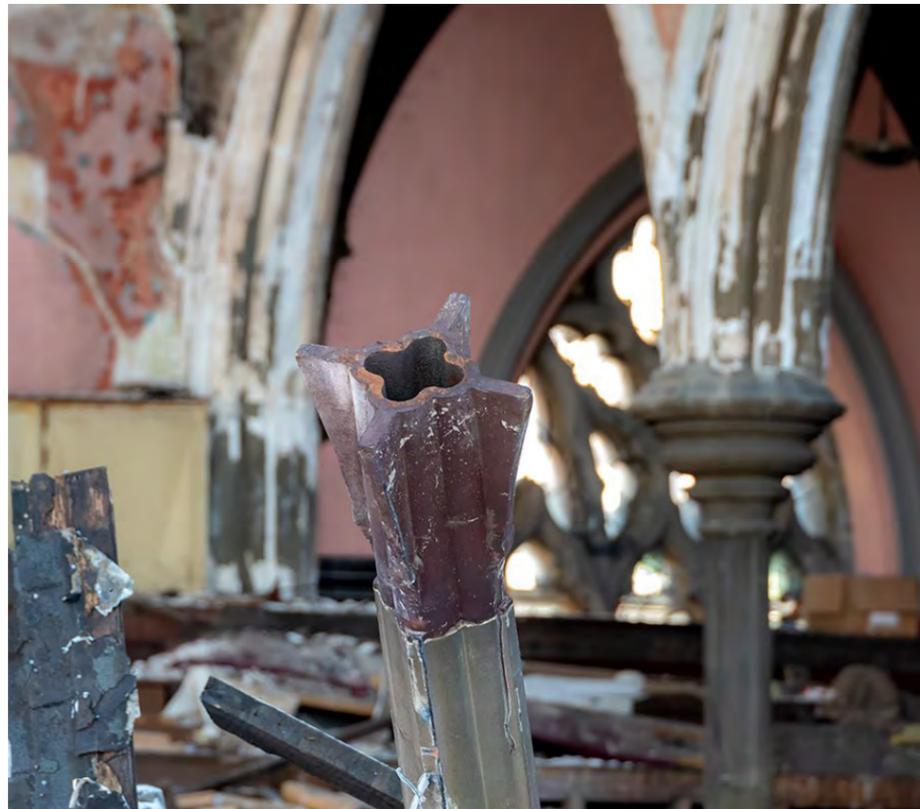
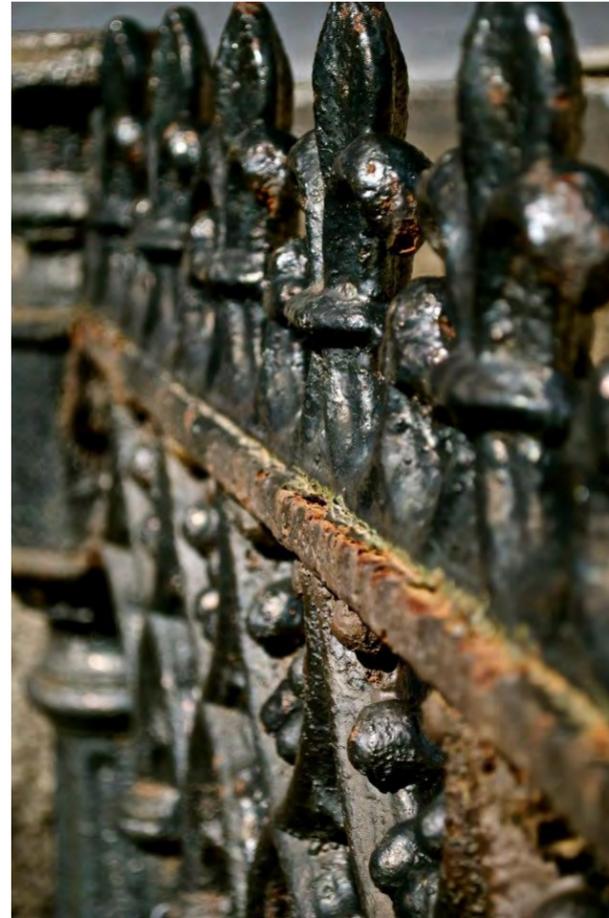
## METALS - CAST IRON + COPPER

**Primary location/use:** Exterior ornament, Interior structure

**Copper:** Flashing, later addition - oxidization (green) throughout capping application on copings, pinnacles, eaves and some window hoods.

**Iron:** Cast iron ornamental fencing - Visible in early photographs of the church (after 1896), the decorative iron fence sits at the front perimeter of the property on Princess street and corner of Wentworth. Supported by iron posts, the fencing has a repeating vertical pattern with arches and geometry of gothic character.

The narrow interior columns of the church nave, which support the upper clerestory, the balcony wings and entire load of the roof appear to be stone, but are in fact cast iron. The column is a hollow cast iron member (quatrefoil cross-sectional profile) said to weigh 5000 pounds each. The exterior appearance has a uniform surface texture achieved with a thinly built-up coating of a lime-cement render. The use of steel or cast iron for structure was not yet common practice in Saint John in 1880.



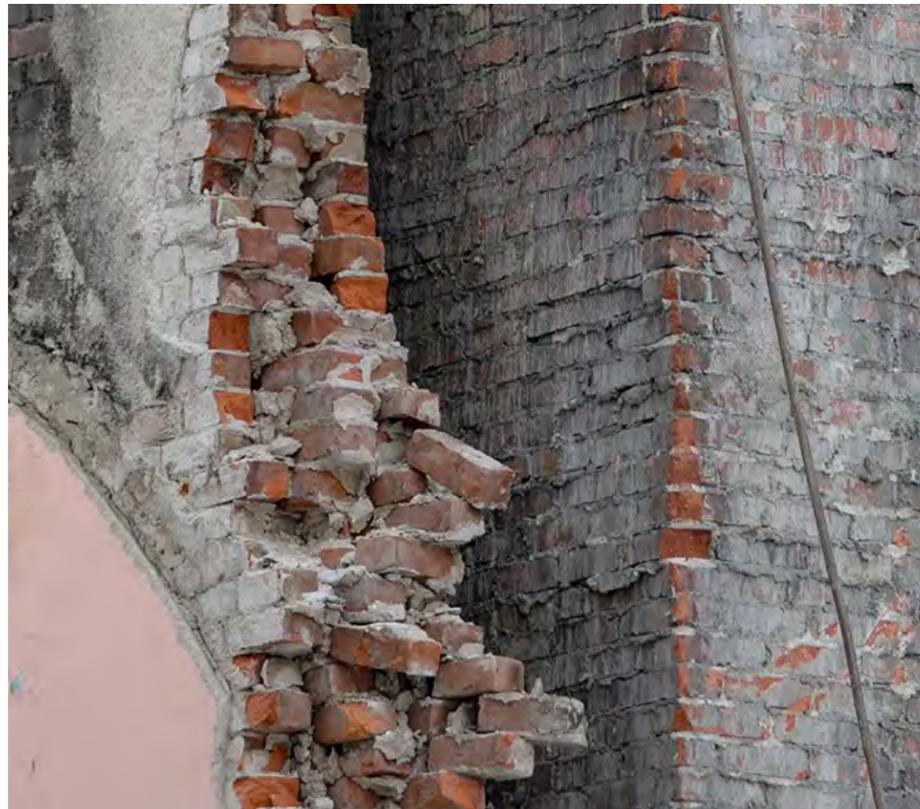
## CLAY BRICK

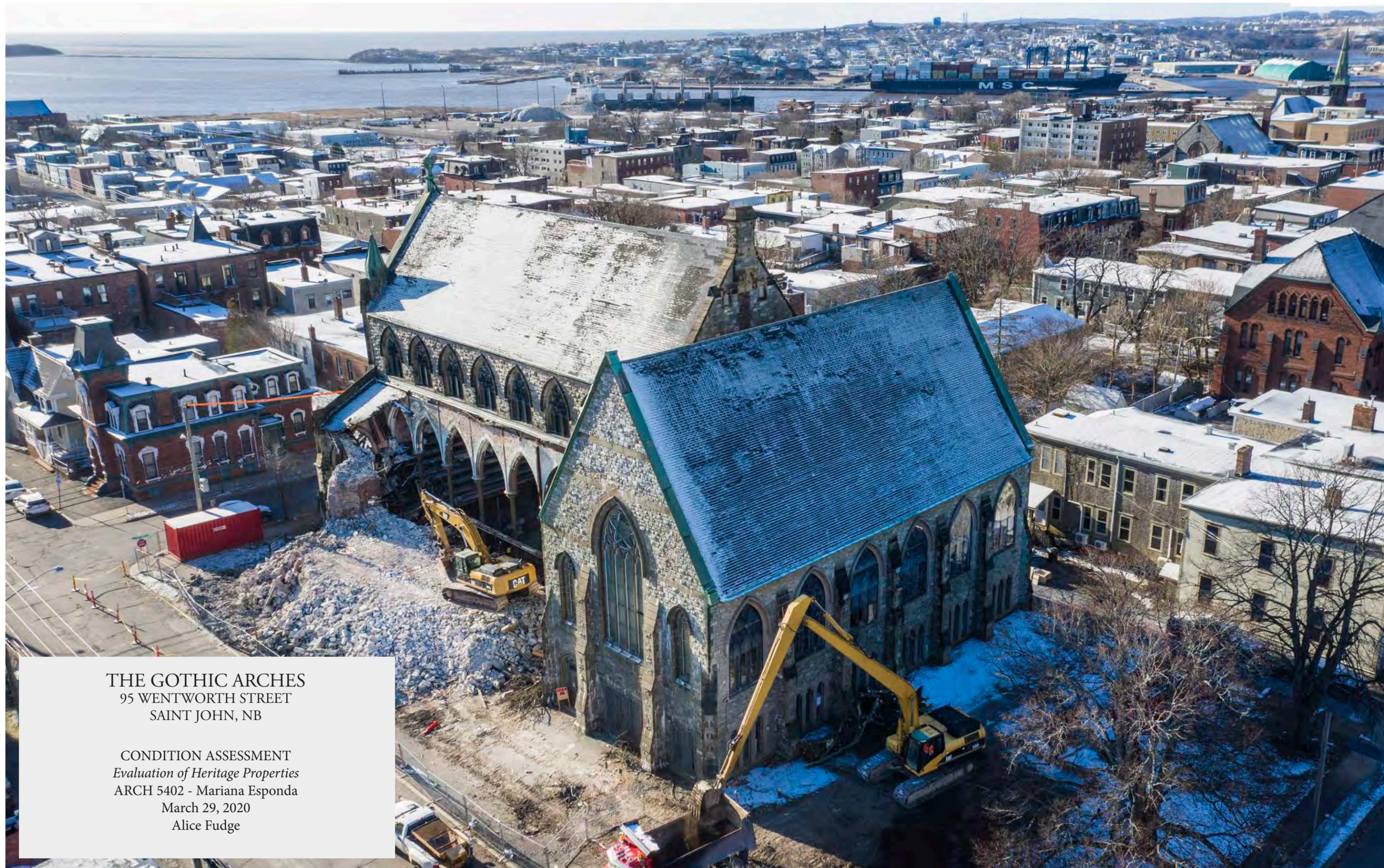
**Primary location/use:** Interior wythes

Interior structural walls of arcade support the upper clerestory (stone rubble construction). Pointed arches in a row of seven on each side of the nave are constructed of five wythe mass masonry walls of clay brick in lime mortar. The interior wythe of the stone masonry walls are clay brick, as well as the masonry openings of the arched windows and doorways.

The use of clay brick was extremely common practice at this period, where many of commercial and residential buildings were constructed with structural brick methods. The main reason for using brick on the interior wythes of the structure is likely related to economic savings. Also, the laying of brick simpler and took less time than laying stone, in particular, at the arched openings. And finally, the interior finishes (lath and plaster) can be applied to brick wall surface with ease.

photos by: Doug Mclean, demolition, January 2020.





THE GOTHIC ARCHES  
95 WENTWORTH STREET  
SAINT JOHN, NB

CONDITION ASSESSMENT  
*Evaluation of Heritage Properties*  
ARCH 5402 - Mariana Esponda  
March 29, 2020  
Alice Fudge

THE GOTHIC ARCHES  
95 WENTWORTH STREET  
SAINT JOHN, NB

CONDITION ASSESSMENT  
OF  
SOUTH ELEVATION SANDSTONE

BUILDING + SITE OVERVIEW  
FIELD WORK  
SANDSTONE LOCATIONS  
MANUFACTURE + SUPPLY  
INSTALLATION + ASSEMBLY  
STONE CONDITIONS GLOSSARY  
CONDITION ASSESSMENT: SOUTH  
ASSESSMENT DETAIL  
FINDINGS  
EVALUATION OF HISTORIC BUILDING



## BUILDING + SITE OVERVIEW

### SITE OBSERVATIONS

There are three distinct masses or volumes of the Gothic Arches site:

- A. the Church nave,
- B. the Sunday School Hall, and
- C. the tower base.

Each of these exhibit varying conditions as well as design and construction; all three are considered in this assessment of the sandstone, however the south elevation of the Church will be the primary focus.

The building has sat vacant for roughly 10 years and has been treated with apathy by its owner and community. Garbage, vegetation and minor vandalism are present on the site, as well as fallen asphalt roof shingles and stone debris. All of the windows of the main level have protective storm windows, wood frame with plexiglass or wire mesh; the storm windows obstruct the main element and are in disrepair.

### LOCATIONS

Sandstone is one of the two primary building materials and constitute a significant proportion of the Character-defining elements of this historic site. The sandstone elements are shaped or carved stones which are assembled together, often with the limestone walling stone. Typical use of sandstone is indicate in the following locations:

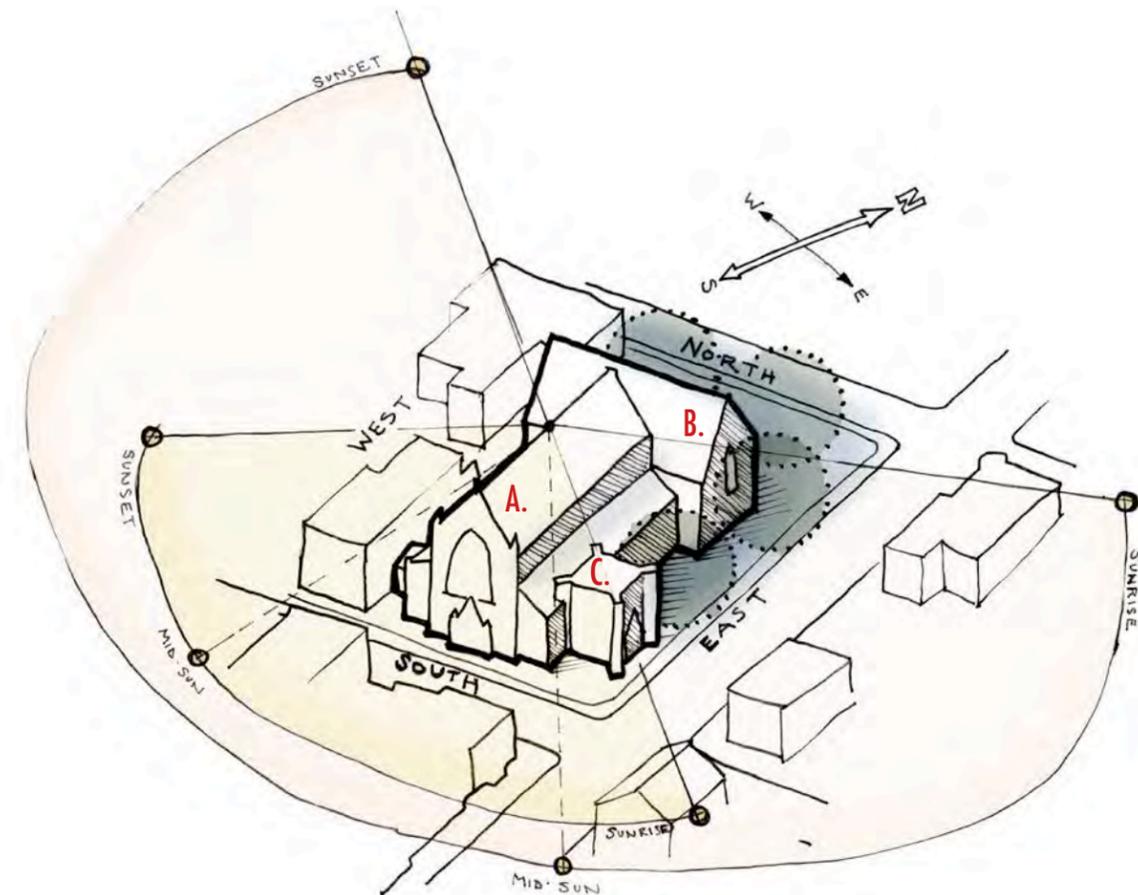
**Buttresses + Quoins:** All buttresses of the structure are shaped with sandstone quoins, gables, and copings; all corners of the structure include sandstone quoins.

**Ornamentation:** All carved ornamentation of the building, including the finials, niches and pilasters.

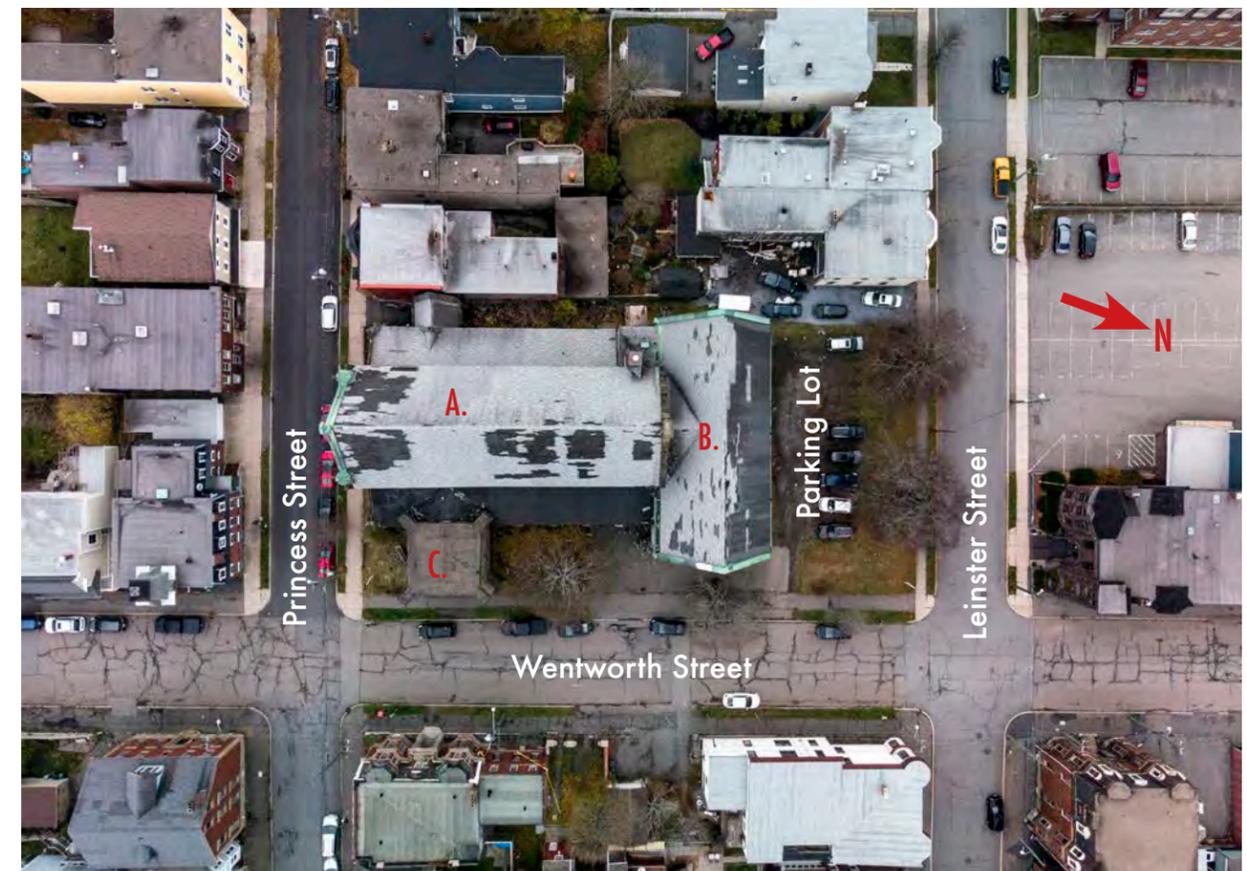
**Tracery + Arches:** All pointed arch windows with elaborate gothic tracery

**Copings:** Trefoil pattern repeating at coping stones of church gable, wing copings, and tower carvings.

**Band course + base:** sandstone band courses throughout the gable ends of the church, hall and tower; sandstone at the plinth and base course, visible primarily on the south.



- A. Church nave
- B. Sunday School Hall
- C. Tower base



BUILDING + SITE OVERVIEW

CONDITIONS AND ENVIRONMENT

**SOUTH**

- This elevation receives full sun throughout the mid-day and is unobstructed by trees or buildings.
- Ideal drying conditions.
- The main entrance from Princess Street into the church is centrally located through a gothic arched doorway. A second recessed side entrance is to the left.

**EAST**

- This elevation receives eastern sun exposure early in the day and is primarily shaded after noon by the building's own height.
- Two mature deciduous trees located along Wentworth Street provide additional shade and wet conditions for the soil and building.
- Street facing elevation with unobstructed access from public sidewalk.
- Two building entrances; an ancillary entrance into the Sunday School Hall, and an ornate gothic arched entrance into the tower.
- Low-rise residences facing Wentworth street.

**WEST**

- This elevation borders the property line of the interior block, which is directly adjacent to the neighbouring residential buildings.
  - Inaccessible from Princess Street, but through narrow passage off Leinster Street (north).
- This side has overgrown vegetation and moist soils.
- Little maintenance has occurred on this side.
- The Sunday School Hall has a rear door as well as a non-original steel fire escape.

**NORTH**

- This elevation does not receive direct sunlight and is primarily shaded from height of Sunday School Hall. Commonly wet conditions.
- There are no entrances to the building.
- The open yard is an unpaved vehicle parking lot with a small driveway from Wentworth Street.
- Two mature deciduous trees which line Leinster Street and provide additional shade.



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION



NORTH ELEVATION

## FIELD WORK

### SITE VISITS

The Gothic Arches is a historic landmark of the city, and is a familiar building. The field work conducted was part of a thesis design project and was visited frequently in 2019 for observation and assessment leading up to its demolition in mid December of the same year. Visits in August provided evidence of dry conditions, as well as overgrown vegetation on the premises. Through the late fall, bare trees opened broader views of the site, as well as lower temperatures and wet weather began to demonstrate its water-shedding issues and masonry movement.

### METHODS OF RECORDING

The primary means of recording during the site visits was photography, using smart phone camera, DSLR zoom lens camera, as well as UAV (Drone) photography. Photos were taken for the use of photogrammetry. Visual assessments were conducted from the ground level. No samples of mortar or stone were collected during the visits.

### LIMITATIONS

The Gothic Arches was a secured (locked) vacant building, yet the property was within the public realm and could be approached at street level. Considering the building's height, the upper regions were not plainly visible or reachable from the ground, and no staging or lifts were used to perform inspections.

### SCOPE

This Condition assesment of the sandstone currently encompasses only the South facade, which is the primary location of the material.



NOVEMBER 27, 2019

*Saint John Historian, Harold Wright with author Alice Fudge during a site visit to the Gothic Arches. Mr. Wright was integral with coordinating much of the documentation and salvage of interior elements of the church prior to its demolition.*

### DEMOLITION

In the fall, the building was sold and it was decided by the new owner to demolish the building in its entirety. At this point, more frequent visits to the exterior occurred to document its current (final) condition. In December, limited access to the interior was allowed just days prior to the demolition activity. Throughout the demolition, which took place beginning December 11 until February 2020, photographic documentation continued which provided a new, bitter-sweet perspective of the building that displayed its structure and components. The photos taken prior to the demolition were for the purpose of heritage conservation of its overall condition. The documentation was not comprehensive of all features (i.e. individual stone condition assessment) in great detail, however the photos and field work has provided enough grounds for a post-mortem record and assessment of the sandstone of the building.

January 6, 2020

*Demolition activity of the Gothic Arches persisted for over eight weeks - which many citizens and experts claim that its resilience to the excavator was a testament to its durable construction.*



MANUFACTURE + SUPPLY

**Quarry Activity**

The sandstone quarry industry in late 1800s, around the time of construction of The Gothic Arches building, was a relatively 'low-tech' process of extracting stone from the earth by means of hand tools and saws as well as exploiting the natural cracks and/or sedimentary bedding planes to release the stone from the mass. The bedding planes of the sandstone is integral in all aspects of the process of quarrying, but also in aspects of shaping, carving, and installing the stone in construction. The general operations of stone supply and manufacture are as follows:

- 1 stone extraction, in which rough blocks of stone are removed from the quarry face.*
- 2 stone splitting, in which blocks are reduced to a manageable size.*
- 3 stone hoisting and/or conveying out of the quarry.*
- 4 stone fabrication into dimension stone (for building)*
- 5 delivery to construction site or larger markets.*
- 6 carving and shaping specific stones for assembly of architectural elements.*

**Building Stone Fabrication**

Stones of manageable size were then ready to be carved with specific detail and dimension to be used in a particular application. This process sometimes happened at the quarry, to reduce costs of transport, or at the building site or stone fabrication shop.

**Delivery by Bay of Fundy**

Costs of transportation was a significant portion of the value of the stone, therefore the quarries of Westmorland in New Brunswick were advantageously located within proximity to waterways. Transport by water was the earliest method for delivering stone to larger markets such as Saint John and the New England and later by rail to upper Canada and inland regions. Quarried stone would be hauled by teams of horse-drawn wagons to the coastline and loaded by hoists on to ships docked at a breakwater extending into the Bay. Ships of sail and later steam would deliver the material to ports along the Bay of Fundy, which was a major waterway for industry and commercial trade.

Martin, Gwen L. *For Love of Stone* Vol.1 The Story of New Brunswick's Building Stone Industry. Fredericton, N. B. : Department of Natural Resources and Energy, Mineral Resources Division. 1990.

Parks, W. A. *Report on the Building and Ornamental Stones of Canada*. Vol.II Maritime Provinces. Government Printing Bureau, 1912.



*Stone Extraction from quarry.*



*Building Stone Fabrication.*



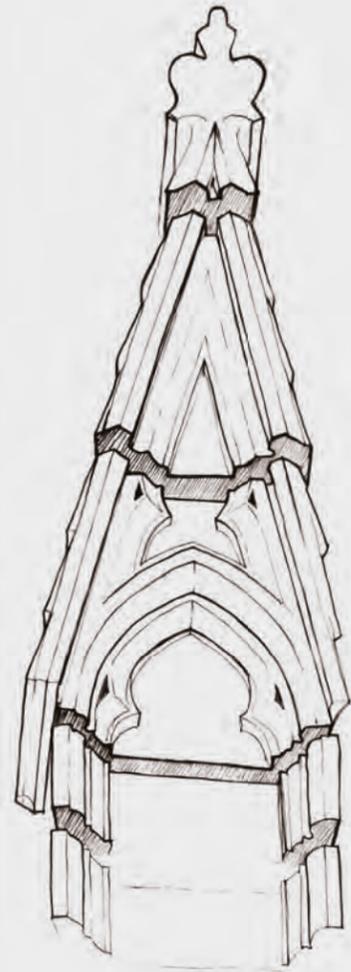
*Delivery by waterways.*

INSTALLATION + ASSEMBLY

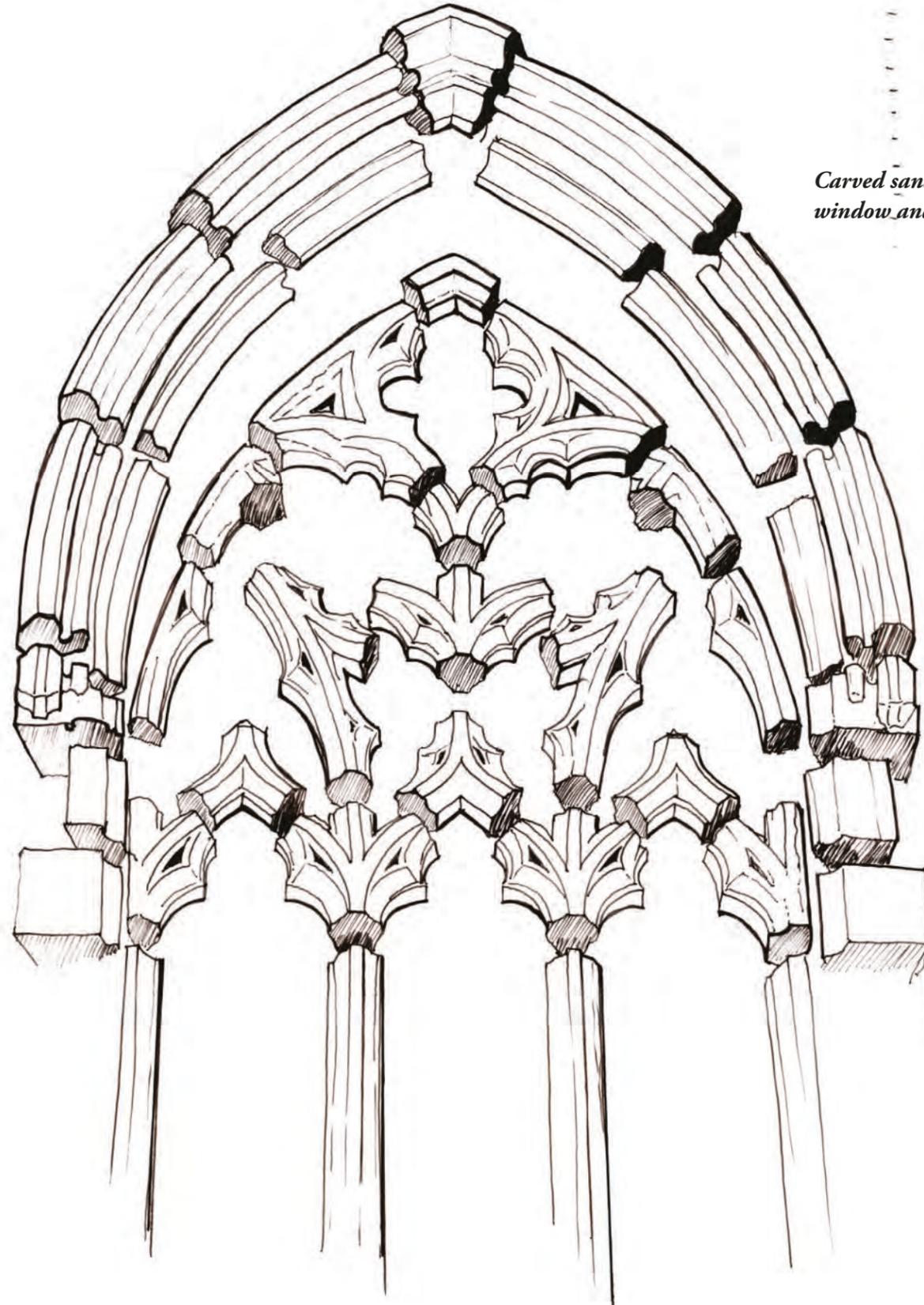
**Multi part assembly**

The architectural effect of a grand stone structure, such as this church, is that it stands as a monolithic phenomenon above the street and its users. Yet this is far from the reality of its construction. Mass masonry construction is comprised of many parts which make a whole; the construction is an assembly of multiple individual elements which all act together as one, visually and structurally.

Each stone of this building was born from many hands - through drawing and design, through the process of material extraction from the earth, from the masons's chisel and those who raise it into its unique placement. Each piece of sandstone was fabricated with skill however they are held together by craft.



*Assembly of typical pilaster gablet*



*Carved sandstone assembly of lancet window and ornate tracery*

## STONE CONDITIONS: GLOSSARY

### TYPICAL DEFECTS

#### Surface

##### Efflorescence – **EF**

The formation of white powdery salts on the exposed surface of the masonry. The cause is water-soluble salts being absorbed into the masonry, and then as the masonry dries the salts crystallize. The salts may originate from sources including atmospheric pollutants, ground soil, decaying organic matter, or from the masonry materials themselves. Its presence may indicate an underlying moisture problem.

##### Soiling – **SO**

A firmly-adhered skin formation on the exposed, washed surface of the masonry. Acid rain, containing a weak sulphuric acid and atmospheric pollutants, etches the surface of the sandstone providing a strong key for the soiling to attach. Thick deposits of sulphate soiling can inhibit the permeability of the sandstone.

##### Copper Stain – **CU**

An irregular green stain on the exposed, washed surface of the masonry. Copper oxides from copper or bronze surfaces are dissolved by precipitation and deposited when in contact with masonry surfaces below. The depth of the staining depends on the porosity of the masonry.

##### Biological Growth – **BG**

Any presence of living matter attached to the surface of the masonry or growing from mortar joints or cracks including lichens, algae, moss, ivy, or small plants. Biological growth may be occurring due to a specific microclimate and the presence of minerals that are inherent within the geology of the masonry, that are present within accretions on the masonry (soiling, crusts, paints), or that are present within the deteriorated masonry and mortar.

##### Friable Surface – **FS**

The outermost surface material is soft, granular, and shedding from the substrate. Also known as disaggregation, this occurs when the integrity of the binder has been compromised by exposure to the elements. Specific causes are crypto-fluorescence (salt crystallation within the pores), freeze-thaw, and wetting/drying cycles.

##### Surface Reduction – **SU**

The loss of the surface of sculpted or ashlar masonry where the underlying exposed surface remains firm. This condition is also described as coving or erosion. Water shedding over the surface plays a significant role in causing it.

#### Previous Repairs

##### Surface Repair – **SR**

A lime-based or cementitious mortar repair to a masonry unit where surface loss had occurred.

##### Coating – **PC**

A thin surface film that has been applied to the exposed surface of the masonry (e.g. paint, sealer, limewash).

#### Unit Deterioration

##### Crack – **CR**

A separation of two portions of a masonry unit, though the relevant portions may still be locked together within the unit bonding of the wall. A crack may originate from numerous sources including natural flaws, oxide jacking at embedded ferrous fasteners, ice-jacking, or other structural stresses.

##### Spall – **SP**

Surface loss in the form of a fragment or segment of a masonry unit. Causes include point loading, thermal movement, ferric oxide expansion of fasteners, and naturally occurring fissures and cracks.

##### Delamination – **DL**

Planar surface loss due to separation that occurs along weakened bedding planes of natural building stone. It often occurs within a few millimeters of the face, but can occur anywhere within the stone. A compromised bedding plane may be more soluble than adjacent ones, and salt crystallization or ice-lensing force the layers apart.

#### Movement

##### Displacement – **DI**

Evidence of non-specific movement of a masonry unit from its originally bonded position. While it normally refers to a single isolated unit, several masonry units within a wall may display this condition.

##### Twist – **TW**

Specific eccentric movement of a masonry unit from its originally bonded position, typically located at exterior corners. The movement is out of plane, and suggestive of internal forces (eg. ice-jacking) having pushed the unit with greater ease at one end more than the other.

#### Joints

##### Caulking in Joint – **CA**

Synthetic caulking compound within joint, used in place of masonry pointing mortar.

##### Open Joint – **OJ**

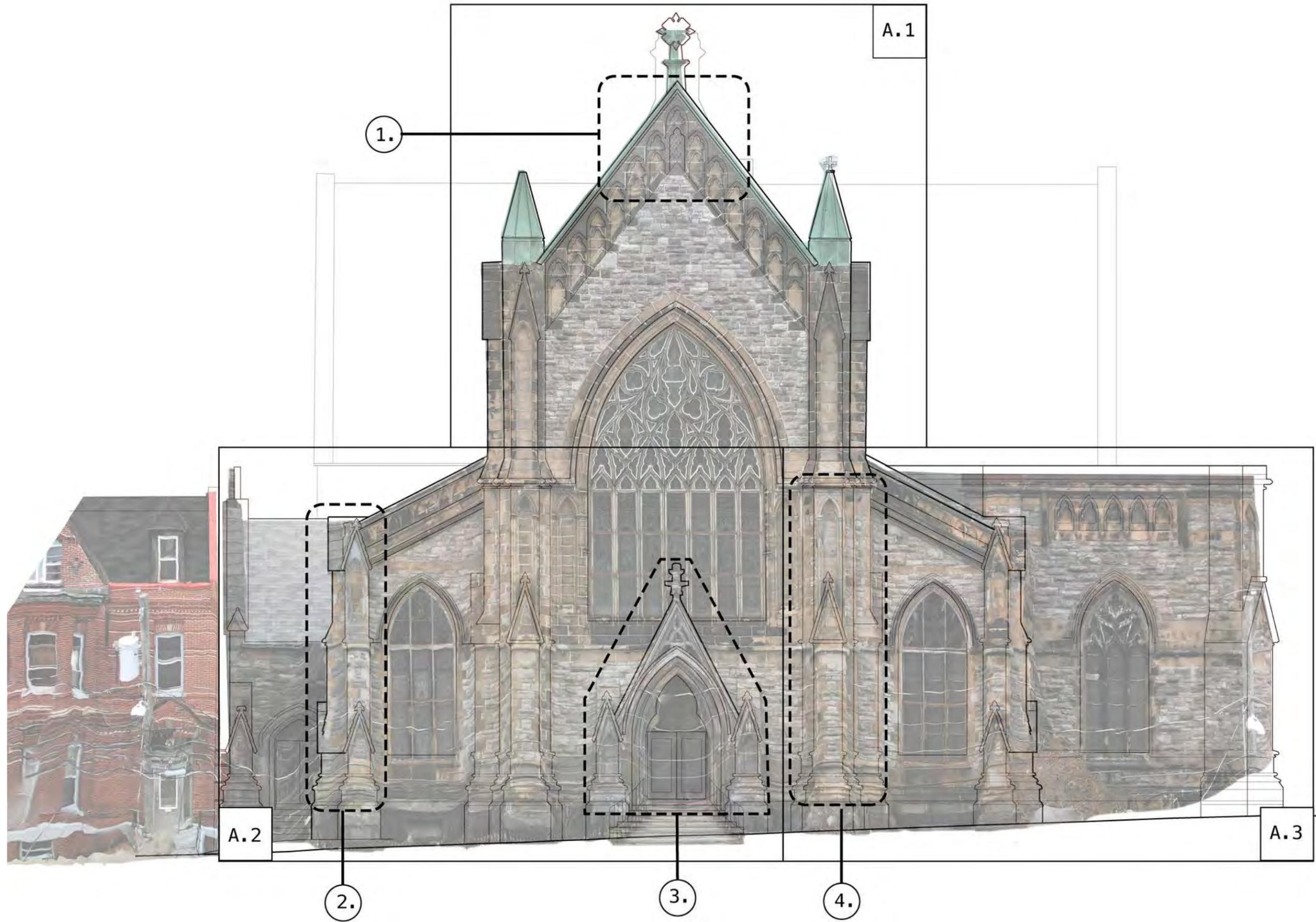
Pointing mortar missing or mostly missing from the masonry joint.

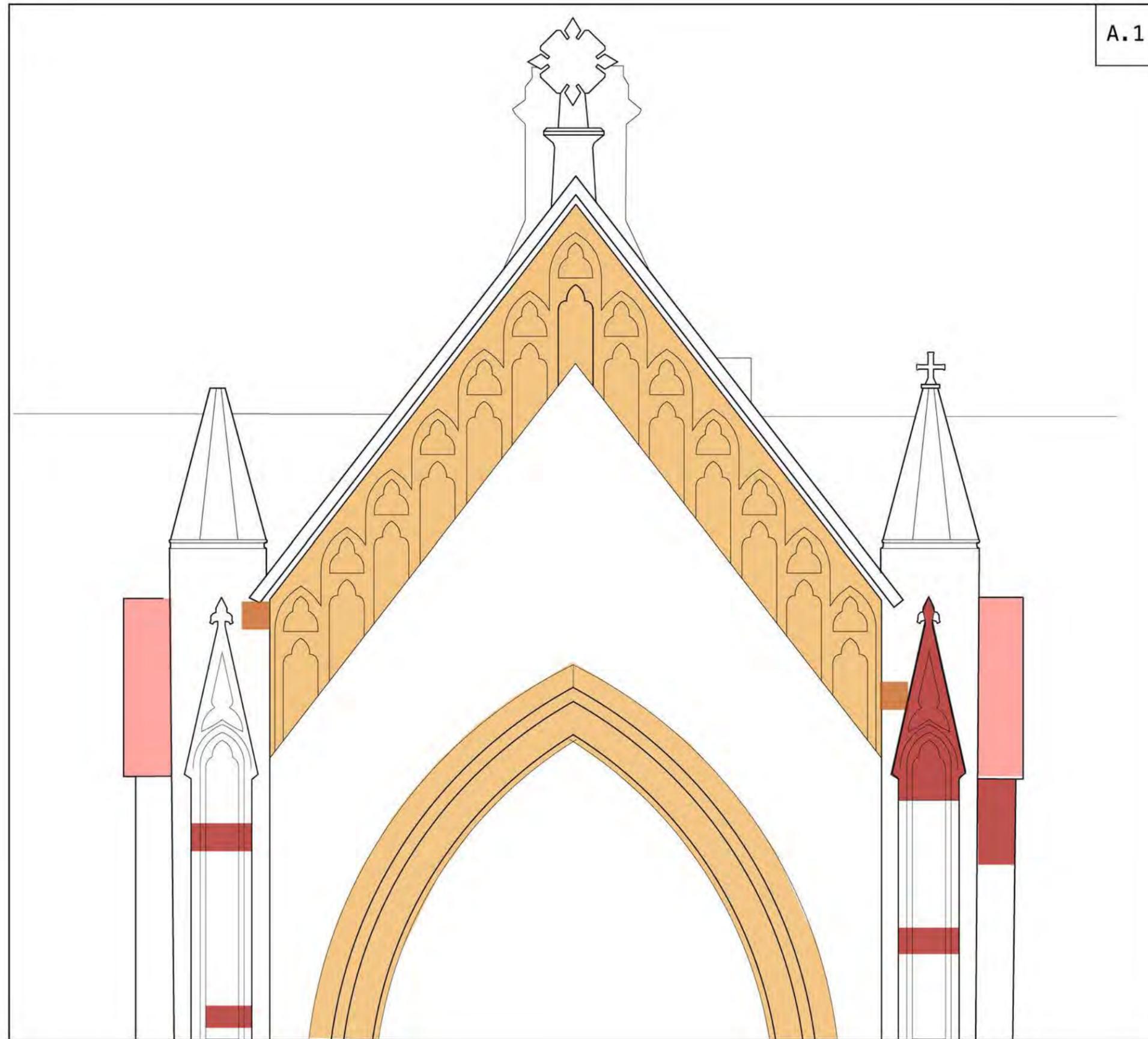
##### Feathered Joint – **FJ**

Over-pointing of the joint beyond the arrisses onto the adjacent front surfaces of the masonry units, and tapered to a thin “feathered” profile.

##### Cementitious Mortar – **CM**

Mortar based primarily on portland cement as the binder, with properties of comparatively high compressive strength and low permeability.





CONDITION MAPPING OF SANDSTONE DEFECTS

**SURFACE + DETERIORATION**

- EF Efflorescence
- SO Soiling
- CU Copper Staining
- BG Biological Growth
- FS Friable Surface

**UNIT DETERIORATION**

- CR Crack
- DL Delamination
- CS Contour Scaling
- SU Surface Reduction

**PREVIOUS INTERVENTION**

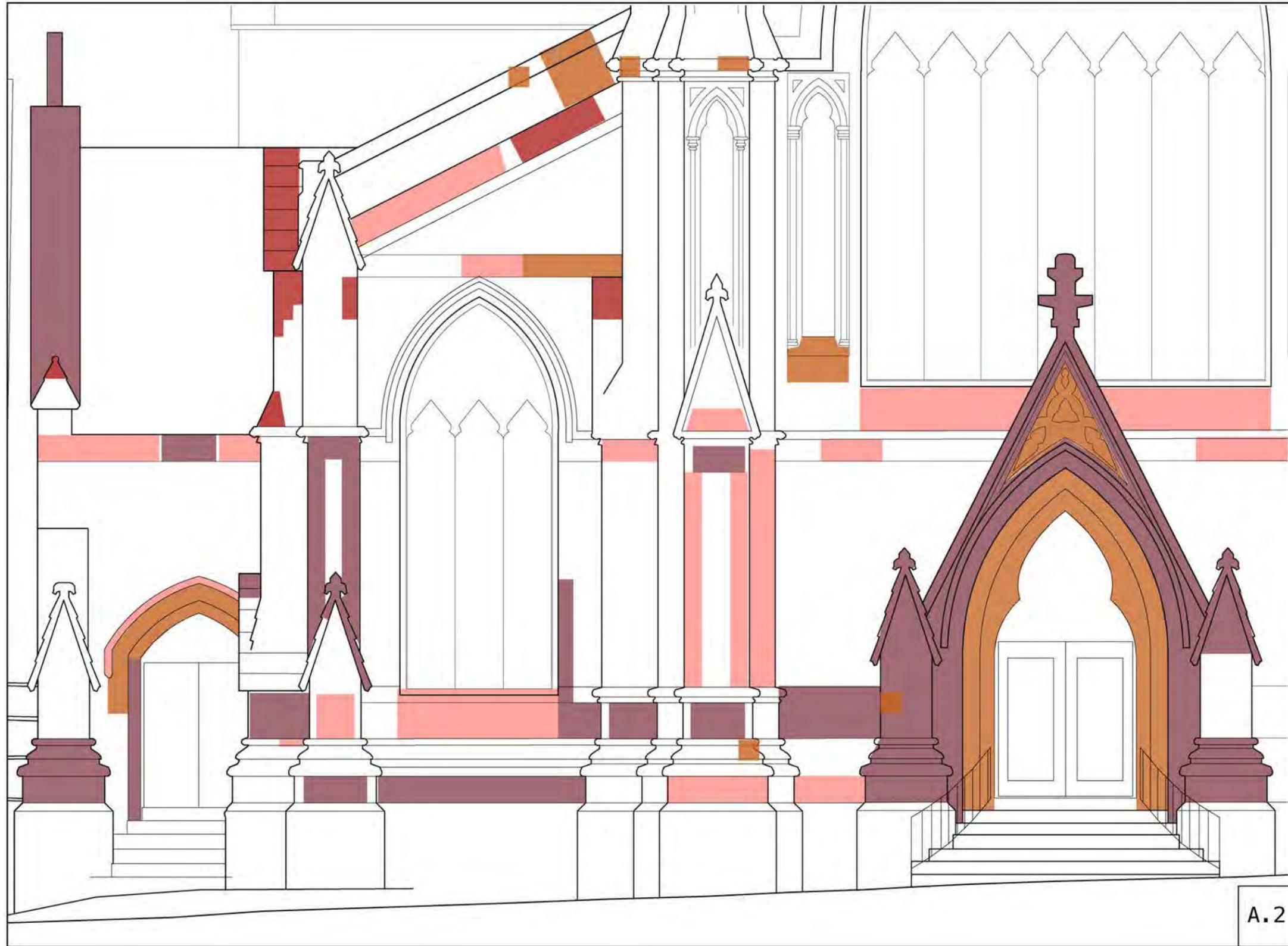
- SR Surface Repair
- PC Coating

**JOINTS**

- DB De-bonded Mortar
- OJ Open Joint
- FJ Feathered Joint
- CM Cementitious Mortar
- CA Caulking in Joint

**MOVEMENT**

- DI Displacement
- TW Twist



A.2

CONDITION MAPPING OF SANDSTONE DEFECTS

**SURFACE + DETERIORATION**

- EF Efflorescence
- SO Soiling
- CU Copper Staining
- BG Biological Growth
- FS Friable Surface

**UNIT DETERIORATION**

- CR Crack
- DL Delamination
- CS Contour Scaling
- SU Surface Reduction

**PREVIOUS INTERVENTION**

- SR Surface Repair
- PC Coating

**JOINTS**

- DB De-bonded Mortar
- OJ Open Joint
- FJ Feathered Joint
- CM Cementitious Mortar
- CA Caulking in Joint

**MOVEMENT**

- DI Displacement
- TW Twist



CONDITION MAPPING OF SANDSTONE DEFECTS

**SURFACE + DETERIORATION**

- EF Efflorescence
- SO Soiling
- CU Copper Staining
- BG Biological Growth
- FS Friable Surface

**UNIT DETERIORATION**

- CR Crack
- DL Delamination
- CS Contour Scaling
- SU Surface Reduction

**PREVIOUS INTERVENTION**

- SR Surface Repair
- PC Coating

**JOINTS**

- DB De-bonded Mortar
- OJ Open Joint
- FJ Feathered Joint
- CM Cementitious Mortar
- CA Caulking in Joint

**MOVEMENT**

- DI Displacement
- TW Twist

## 1. Sandstone Condition Coping Detail

Sandstone of the Church coping stones are in excellent condition, even though many factors are working against the stone such as the improper joints (caulking), the extreme exposure to all elements, and the effects of air / rain pollution of the urban environment. The location of the sandstone is advantageous since it is above the limestone of the walls which is causing chemical deterioration from calcite run-off. Another benefit of this high location is that it is out of reach of frequent (improper) intervention.

Caulking in joint

Caulking in joint signifies a past intervention where a “quick-fix” was implemented instead of a thorough and sensitive repair. It is likely that the mortar of the fine joints had eroded and was leading to water ingress. The caulking seals the joint however it also seals it from the necessary ability to breathe and dry the surrounding stones.



## 2. Sandstone Condition South-west Buttress Detail

**Displacement:** Significant movement of this pilaster is now a dangerous condition. This is caused by water infiltration and interior forces jacking the group of stones and separating where it is weakest. This area is built to resist lateral forces of the roof and facade; the movement may also suggest an imbalance of load toward this buttress.

**Surface Repair:** a surface treatment of a cement-based coating to cover deteriorated stones. Ironically, the initial deterioration is likely caused by the use of cement-based repointing mortars, which accelerated surface deterioration.

**Paint Coating:** Seen throughout the lower stories of sandstone, this thick coating of paint was a past intervention - behavior which was likely initiated to cover up soiled or deteriorated stone. In past philosophy, a coating was believed to protect the stone, however this is inherently unfitting of a material which breathes through its outer surface in order to remain healthy and resist environmental effects (wetting/drying and freeze/thaw cycles).

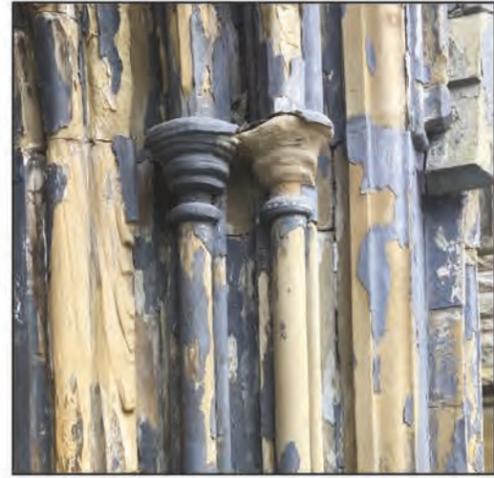
**Surface Reduction:** the surface of the sandstone has deteriorated due to the adverse effects from the paint coating.

**Soiling:** the surface below the window is stained with ferric oxides from the steel mesh of the storm windows. There is also deposits of carbon soiling, the dark stain, which is seen throughout the sandstone surfaces on the building.



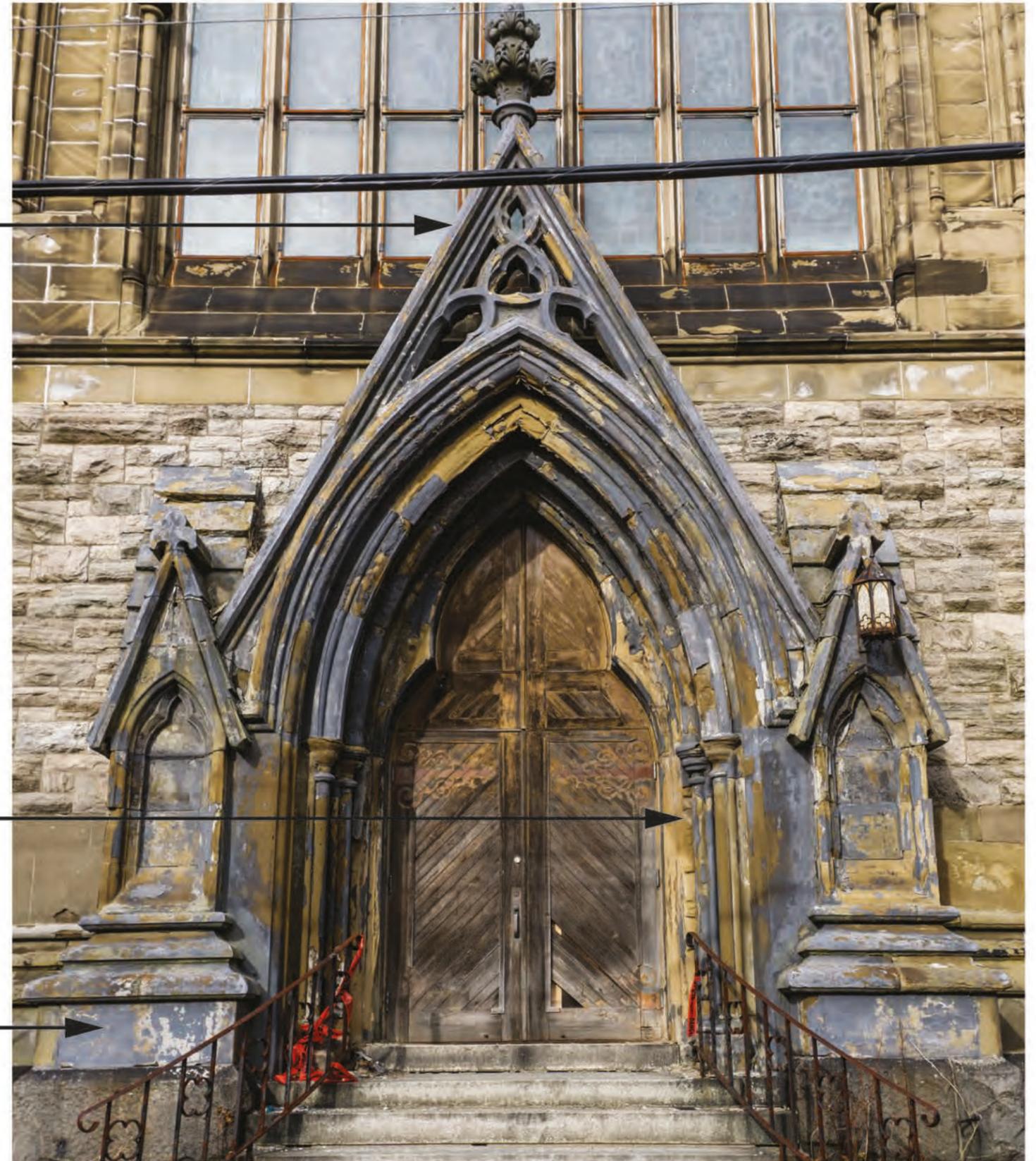
### 3. Sandstone Condition South Entrance Detail

**Paint Coating:** The entire sandstone entrance was painted with a thick coating (blue-grey colour). It is unclear when this intervention occurred, however it effected the majority of sandstone surfaces of the entire building. This coating has accelerated the surface deterioration and overall declined condition of the sandstone. As the coating itself deteriorates, it removes the surface of the stone as well, leaving it susceptible to further erosion.



**Surface Reduction:** Extensive deterioration of the sandstone pilasters. The coating has contributed to the erosion of the surface, to the extent that the form of the carving has been lost. The condition of the sandstone in this area is detrimental.

Paint Coating

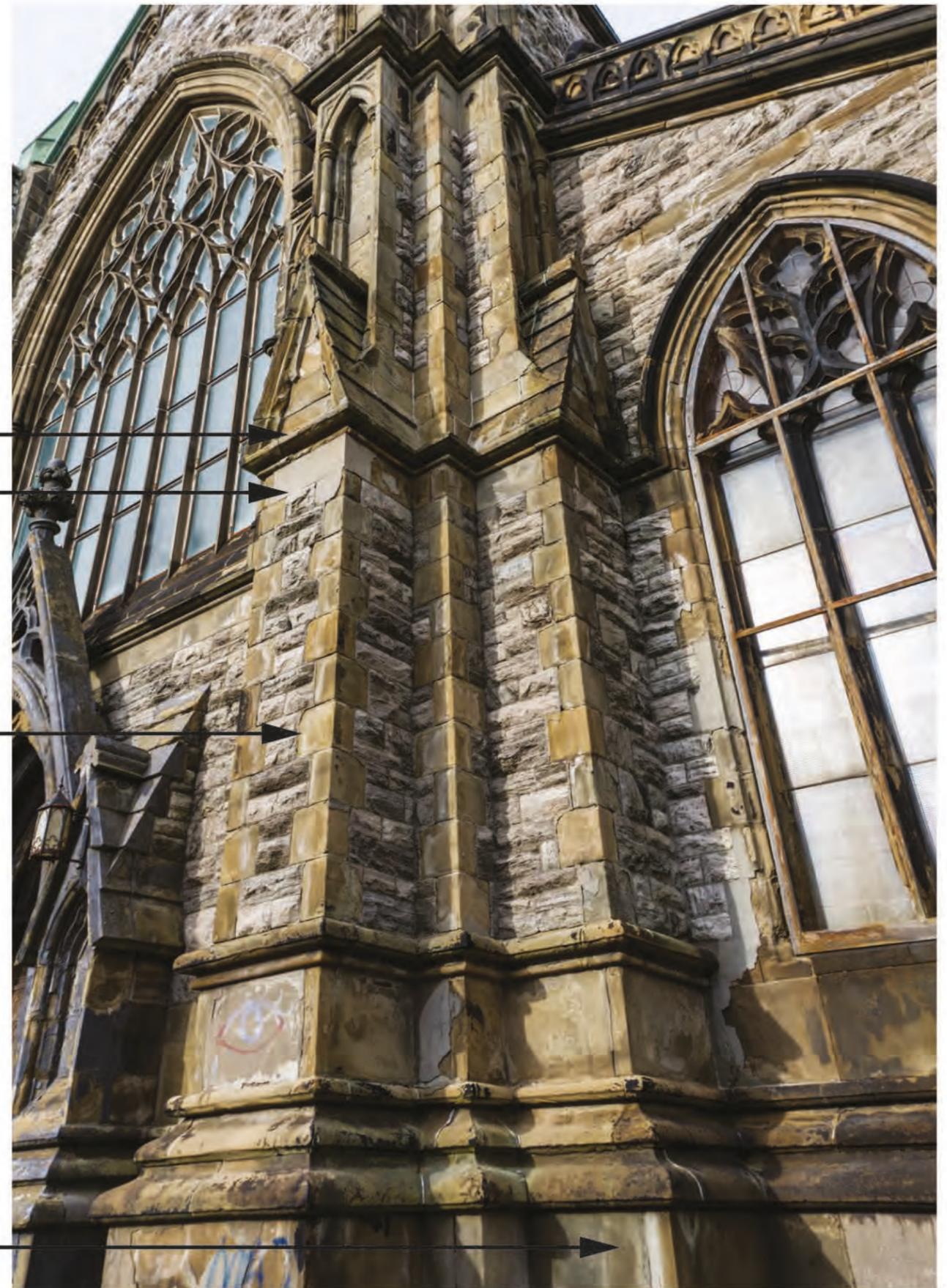


#### 4. Sandstone Condition South-east Buttress Detail

**Friable Surface:** Caused by repeated wetting and drying cycles, and essentially moisture leaving the stone while salt crystallization deteriorates the surface. This is related to efflorescence, however this is more advanced where the surface of the stone has lost its integrity or its outer crust and will continue to shed material from the surface through continued moisture issues.

**Surface Repair:** A cement-based coating was applied to the surface of this sandstone quoin of the buttress. This is an inappropriate intervention for this stone. It appears that many of the quoins had been treated with the same coating but has since failed.

**Efflorescence:** A common condition of stone where water-soluble salts move through the stone and crystallize at the surface which causes the white salty staining.



Efflorescence

## FINDINGS

The evaluation of the condition of the sandstone of the south facade has provided an assessment value of: **Moderate**.

The south facade is a large and complex facade which has varying degrees of stone defects. Much of the sandstone is in tact, yet is showing the effects of age as well as inappropriate (or absence of) maintenance. The condition assessment maps the areas which are demonstrating obvious defects. There are **three major factors** which have contributed to these defects:

**Chemical Deterioration, calcite** - The limestone rubble ashlar of the wall assembly is incompatible with the sandstone, specifically, the calcium sulphates produced by limestone and acid rain are deposited on the stone below and attack the sandstone. This incompatibility can be mitigated with healthy lime mortar joints which aid in expelling moisture and solubles from the stone.

**Cementitious Mortar** - The use of portland cement in the mix of the replacement and repointing mortars has accelerated the deterioration of both the sandstone and the limestone of this structure. It is known that the south facade was rebuilt (limestone relaid in the wall) during the 1960s with the use of portland based mortars instead of a traditional lime based mortar, in kind with the original construction. The majority of the sandstone elements have been repointed with this mortar as well, possibly at the same time. Hard, impermeable, cementitious mortar is incompatible with 'soft', porous sandstone. Mortar joints in mass masonry construction serve the primary purpose of water management - providing a route for moisture to evaporate through the joints. For this reason, the mortar must be permeable and flexible to assist with drying of the stone. Any water entrapment within the stone during the freezing and thawing cycles of the environment can cause deterioration of the stone rather than the mortar, which is traditionally designed to be the sacrificial element. The sandstone deterioration occurring on the Gothic Arches building is linked to this issue, and is apparent in the areas experiencing surface reduction, efflorescence, friable surface, and biological growth. It can also be linked to the displacement of stones where moisture is trapped deep within the wall.

**Surface Coatings** - Similar to the effects from cementitious mortar, a surface coating on sandstone creates a barrier of which moisture and vapour cannot escape from the stone. Often, a coating is applied to a section of stone in effort to repair, consolidate, or conceal existing defects. Previous repair coatings, such as paint and parging seen on this building, are an improper response to stone experiencing moisture deterring issues. The majority of the coatings have fallen off or failed which signifies the disaggregation of the stone's surface behind the coating.

Hill, P. R.. *Practical Stone Masonry*. Donhead, 1995.  
The Scottish Lime Centre. *Preparation and Use of Lime Mortars*. Historic Scotland. 2003

## CONDITION ASSESSMENT

### THE EVALUATION OF HISTORIC BUILDINGS

Guidelines from: Parks Canada Publication, 1980

The Gothic Arches, 95 Wentworth Street, Saint John NB

#### A ARCHITECTURE

1 Style - VG - Excellent example of Gothic Revival style churches in area; most common style for churches, many surviving examples.

2 Construction - E - Notable example of 'Ashburn' limestone and sandstone mass masonry construction; few examples survive.

3 Age - G - Built after the Great Fire of 1877 with a vast majority of the structures in the urban center.

4 Architect - VG - Architect commissioned from Brooklyn NY; designed three Methodist churches for Saint John during the rebuilding period.

5 Design - E - Particularly attractive composition and complexity of its design; excellent integration of the church sanctuary structure with the Sunday School Hall.

6 Interior - E - Excellent example of 'meeting-house' style sanctuary of Gothic revival style; Its arrangement, interior volume, and artistic quality of wood and glass work is of notable caliber; The Sunday School hall interior wood structure is of particular importance.

#### B HISTORY

7 Person - E - The early ministry of Methodism from the Loyalist community is associated with this church, which precedes its construction; the congregation of Centenary Methodist, later Centenary - Queen Square United Church, worshiped for generations in this building until 1999.

8 Event - The Centenary Methodist Church was constructed during the rebuilding period after the Great Fire, 1877.

9 Context - This building signifies a society of Christian faith and an economy to support such grand symbols of religion.

#### C ENVIRONMENT

10 Continuity - VG - An excellent example of Gothic Revival ecclesiastic architecture within a city of Victorian era structures.

11 Setting - G - Compatible with the historic residential area.

12 Landmark - VG - Prominent and familiar structure in the context of Saint John.

#### D USABILITY

13 Compatibility - E - Present use is consistent with the zoning of the lot [Neighbourhood Institutional]; it is surrounded by Multiple Residential land use.

14 Adaptability - G - Adaptive use may require rezoning and may alter significant architectural character.

15 Public - G - Proposed public use is critically needed but would require significant alterations.

16 Services - E - meets all current standards [fire, police, utilities, parking]

17 Cost - G - Cost of conservation would be comparable to new construction.

#### E Integrity

16 Site - E - Occupies its original site.

17 Alterations - VG - Changed but character retained.

20 Condition - F/P - Main building fabric is in poor structural condition.