# CITY OF MELROSE

**APPROPRIATIONS & OVERSIGHT COMMITTEE**

**AGENDA● MARCH 3, 2022**

| | | |
|---|---|---|
| **Web-based remote meeting , Melrose, MA 02176** | **Remote meeting** | **7:00 PM** |

## I. CALL TO ORDER

| | |
|---|---|
| Jen Grigoraitis | Chair |
| Leila Migliorelli | Vice Chair |
| Shawn M. MacMaster | |
| Jack Eccles | |
| Mark Garipay | |
| Maya Jamaleddine | |
| Robb Stewart | |
| Manjula Karamcheti | |
| John Obremski | |
| Ryan Williams | |
| Christopher Cinella | President, ex oficio |

**Motion:** statement of remote meeting information

Pursuant to An Act Extending Certain COVID-19 Measures signed by Governor Baker on June 16, 2021 that extended the remote meeting provisions of his March 12th Executive Order Suspending Certain Provisions of the Open-Meeting Law this meeting of the Appropriations and Oversight Committee will be conducted via remote participation. We will post a comprehensive record of these proceedings as soon as possible after the meeting on the City of Melrose website and on MMTV/ mmtv3.org. The public can find online access instructions to view this meeting at www.cityofmelrose.org/remote-meetings

## II. PUBLIC COMMENT

## III. ORDERS

1. **ORDER-2022-74 :** Appointment of Jennifer Champagne, 11 Faxon Street, to the Human Rights Commission for a three-year term, said term to expire the last day of February 2025

   *Offered by:* Mayor Paul Brodeur

   *From:* City Council ASSIGNED TO COMMITTEE

2. **ORDER-2022-75 :** Donation from various library trust funds totaling $2,000,000.00 toward costs related to Melrose Public Library Renovations; said funds to be deposited into Fund No. 3390

   *Offered by:* Mayor Paul Brodeur

   *From:* City Council ASSIGNED TO COMMITTEE

3. **ORDER-2022-76 :** Acceptance of Fifty Thousand Dollars ($50,000) from a FY2022 State Budget Earmark to Address Ell Pond Water Chestnut Infestation

   *Offered by:* Mayor Paul Brodeur

   *From:* City Council ASSIGNED TO COMMITTEE

4. **ORDER-2022-77 :** An Appropriation from Free Cash, account number 01-324001, in the amount of One Million Five Hundred Thousand ($1,500,000.00) Dollars to the Memorial Hall Renovation Project, account number 33864-490000.

   *Offered by:* Mayor Paul Brodeur

   *From:* City Council ASSIGNED TO COMMITTEE

# IV. ADJOURNMENT

CITY OF MELROSE

PAUL BRODEUR
*Mayor*

OFFICE OF THE MAYOR

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4440
Fax - (781) 662-2182

**MEMORANDUM**

To: Melrose City Council
From: Mayor Paul Brodeur
Re: Human Rights Commission Appointment
Date: February 22, 2022

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To the Honorable Melrose City Council.

I respectfully request the Honorable City Council confirm the appointment of Jennifer Champagne, 11 Faxon Street, to the Human Rights Commission for a three-year term, said term to expire the last day of February 2025. Ms. Champagne will replace Human Rights Commission member Josh Robbins, whose term expires on the last day of February, 2022.

Jennifer has been a Melrose resident for the past four years. Having recognized how much the Melrose community has provided her and her family during this time, she now hopes to become involved and give back to the community through her service as a Human Rights Commissioner.

I am confident that Ms. Champagne's legal training, her experience as an attorney, and her passion for human rights and advocacy will make her an exceptional candidate whose service will benefit the Melrose community. In both professional and volunteer roles, Ms. Champagne has demonstrated herself to be a civically engaged and compassionate citizen. During her time as a litigator, she represented a diverse range of clients including low-income individuals, refugees, and immigrants from around the world. Ms. Champagne has also volunteered with children with disabilities.

Ms. Champagne is exactly the caliber of individual who belongs on the City of Melrose Human Rights Commission, and I am excited to offer her appointment to you for your consideration and approval.

# JENNIFER MARIE CHAMPAGNE

[redacted] • Melrose, Massachusetts 02176 • [redacted] • [redacted]

**Mom and Wife, Legal Writer and Researcher; Litigator and Advocate; Public Speaker**

**Champion Equestrian; Instructor and Organizer; Well-Developed Leadership and Mentoring Skills**

## PROFESSIONAL EXPERIENCE

**CHAMPAGNE-BOULAY HOUSEHOLD**, Medford & Melrose, MA 11/2014 – Present

***Mother/Wife/Educator***

- Stay-at-home-mom to 4 and 6-year-old daughters.
- Since the beginning of the pandemic, I have overseen our daughters' education by developing curriculum and teaching full-time pre-school and first grade and assisted with virtual kindergarten.

**Morgan LEVINE DOLAN, PC**, New York, NY 11/2011 – 11/2014

***Associate***

Legal Writing/Research

- Drafted pleadings, discovery demands and responses, discovery and summary judgment motions, motion opposition, case evaluation memoranda, medical treatment timelines, and correspondence.
- Assisted with trial preparation, including legal research and document review, pre-trial motions, subpoenas, pre-trial memoranda, transcript digests, and drafting direct and cross examinations.

Litigation

- Trial experience to verdict as lead counsel: Bronx Supreme Court, two Summary Jury Trials.
- Staunch advocate to a diversified client base consisting of immigrants from around the world, refugees, and low-income minorities.
- Represented plaintiffs and negotiated settlements in all phases of civil litigation cases, including motor vehicle accidents, construction site accidents, premises liability, and municipal liability.
- Appeared in New York Supreme Court for oral argument and conferences at all stages of litigation, including the Counties of Bronx, Kings, Nassau, New York, Queens, and Westchester.
- Extensive experience conducting and defending depositions, and preparing clients for depositions.
- Conducted preparation of plaintiffs and expert witnesses for trial testimony.

**LAFAVE, WEIN & FRAMENT, PLLC**, Guilderland, NY 9/2010 – 10/2011

***Associate*** (3/2011-10/2011); ***Law Clerk*** (9/2010-2/2011)

Legal Writing/Research

- Drafted legal memoranda, pleadings, discovery responses, motions, opposition to motions, correspondence, and medical treatment timelines.
- Conducted document review, legal and medical research, and medical records review.

Litigation

- Represented plaintiffs in in civil litigation cases, with a focus on medical malpractice, legal malpractice, motor vehicle accident and premises liability.
- Represented defendants in criminal court, for felony assault, resisting arrest, drug possession, bail hearings, and traffic violations.
- Represented landlords in eviction proceedings.

**NEW JERSEY INSTITUTE OF TECHNOLOGY**, Newark, NJ 1/2009 – 12/2009

Legal Intellectual Property Extern/Intern

Legal Writing/Research

- Assisted attorneys in drafting provisional patent applications for university-owned inventions.
- Conducted prior art searches, conducted inventor interviews, wrote office memoranda summarizing relevant research, and attended routine intellectual property and patentability seminars.
- Assisted attorneys in patentability determinations of university-owned intellectual property.

## EDUCATION

**SETON HALL UNIVERSITY SCHOOL OF LAW**, Newark, NJ
Juris Doctor, concentration in Intellectual Property, 5/2010

Honors: **Appellate Advocacy Best Brief Author Award Recipient**
Activities: Intellectual Property Law Society
Study Abroad: Summer 2008 Intellectual Property Law Program in Leuven, Belgium & Galway, Ireland (European Union Law, Intellectual Property, and Pharmaceutical Compliance)

**HOLLINS UNIVERSITY**, Roanoke, VA
Bachelor of Arts, *magna cum laude*, Biology, minor in Philosophy, 5/2006

Honors: ***Phi Beta Kappa***; ***Phi Sigma Tau*** (International Honor Society in Philosophy); Sportswoman of the Year (2005); Old Dominion Athletic Conference Scholar Athlete of the Year (2005); Hollins University Merit Based Scholarship (all semesters); Honor Student (all semesters)
Activities: Riding Club President; Varsity Equestrian Team; Student Government Board of Appeals; Hollins Student Athlete Mentoring Program (founding member)
Study Abroad: Hollins University 2006 Cultural History January Term Program (Berlin, Germany)

## PUBLICATIONS & PUBLIC SPEAKING

### PUBLICATIONS

- Access to Essential Medicines in Developing Countries: "*The Role of International Intellectual Property Law & Policy in the Access Crisis*" 22 ALB. L.J. SCI. & TECH. 75 (2012).
- Genetic Testing and Testimony in Toxic Tort Litigation: "*Admissibility and Evaluation*" 13 N.C.J.L. & Tech. 1 (2011).

### PUBLIC SPEAKING

- Near daily court appearances in New York Supreme Court, November 2011 through November 2014.
- New York State Trial Lawyers Association Lobby Day, Albany, New York, May 2011 & May 2014.
- Fall 2014 C3: Career Connection Conference, *For Women Who Are Going Places*, Hollins University (alumni presenter).

## VOLUNTEER & INSTRUCTIONAL EXPERIENCE

**NEW YORK THERAPEAUTIC RIDING CENTER**, New York, NY 1/2012 – 3/2012

- Served as a volunteer at therapeutic horseback riding program for children with disabilities.

**HOLLY HILL FARM**, Hampton, NH & Marstons Mills, MA Summer 2002 – 2005, 6/2006 – 12/2006

- Instructed beginner through advanced equestrian lessons for ages 10 years – 40 years.
- Supervised care management of twenty competitive show horses, including training and daily care.
- Worked daily helping Spanish speaking immigrants with English as a second language.

## BAR ADDMISSION & MEMBERSHIPS

### BAR ADMISSIONS

- New York State Bar (admitted February 2011)
- New Jersey State Bar (admitted November 2010)

### MEMBERSHIPS

- New York State Bar Association; New York State Trial Lawyers Association; ACLU

CITY OF MELROSE

OFFICE OF THE MAYOR

PAUL BRODEUR
*Mayor*

City Hall, 562 Main Street
Melrose, Massachusetts
02176
Telephone - (781) 979-4440

**MEMORANDUM**

To: Melrose City Council
From: Mayor Paul Brodeur
Re: Acceptance of State Funding for Ell Pond Water Chestnut Removal Project
Date: February 22, 2022

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As part of the Fiscal Year 2022 state budget, the City of Melrose will receive $50,000 from the Executive Office of Energy and Environmental Affairs to address the water chestnut infestation at Ell Pond. There is no match required, and the funds may be used over the next two years to complete the project. This will allow for the removal of unwanted vegetation to be repeated over multiple plant life cycles, which is necessary for the project's long-term success.

The project involves removing the plant material that produces the nuts responsible for reproduction. Together with the existing free-cash appropriation for Ell Pond, the City will use this earmark to fund the following contracted services:

- Aquatic weed harvester mobilization and demobilization
- Aquatic weed harvester service
- Hydro-rake mobilization and demobilization
- Hydro-rake removal of water chestnut growth in shallow areas not accessible to the aquatic weed harvester
- Manual hand removal and final sweep
- Fragment curtain setup at outlet and erosion control setup at designated material offload location
- Transportation of vegetation to a compost location
- A Notice of Intent (NOI) and Order of Conditions for the work within a wetland resource area

Addressing the water chestnut problem at Ell Pond will provide an immediate aesthetic return through the removal of the plant biomass that carpets the City's central water body. I respectfully request acceptance of these funds so that this project may move forward. Thank you for your consideration.

# COMMONWEALTH OF MASSACHUSETTS ~ STANDARD CONTRACT FORM

This form is jointly issued and published by the Office of the Comptroller (CTR), the Executive Office for Administration and Finance (ANF), and the Operational Services Division (OSD) as the default contract for all Commonwealth Departments when another form is not prescribed by regulation or policy. The Commonwealth deems void any changes made on or by attachment (in the form of addendum, engagement letters, contract forms or invoice terms) to the terms in this published form or to the **Standard Contract Form Instructions and Contractor Certifications,** the **Commonwealth Terms and Conditions for Human and Social Services** or the **Commonwealth IT Terms and Conditions** which are incorporated by reference herein. Additional non-conflicting terms may be added by Attachment. Contractors are required to access published forms at CTR Forms: https://www.macomptroller.org/forms. Forms are also posted at OSD Forms: https://www.mass.gov/lists/osd-forms.

| | | | |
|---|---|---|---|
| **CONTRACTOR LEGAL NAME: City of Melrose (and d/b/a):** | | **COMMONWEALTH DEPARTMENT NAME: MMARS Department Code: ENV** | |
| **Legal Address: (W-9, W-4): 562 Main St, Melrose, MA 02176** | | **Business Mailing Address: 100 Cambridge Street, Suite 900, Boston, MA** | |
| **Contract Manager: Paul Brodeur** | **Phone: (781) 979-4440** | **Billing Address (if different):** | |
| **E-Mail: pbrodeur@cityofmelrose.org** | **Fax:** | **Contract Manager: William Nichols** | **Phone: 617-626-1132** |
| **Contractor Vendor Code: VC6000192115** | | **E-Mail: William.nichol@mass.gov** | **Fax:** |
| **Vendor Code Address ID (e.g. "AD001"): AD___. (Note: The Address ID must be set up for EFT payments.)** | | **MMARS Doc ID(s): CT ENV FY22CITYOFMELROSE01A** | |
| | | **RFR/Procurement or Other ID Number: FY22 GAA (attached)** | |

**___ NEW CONTRACT**

**PROCUREMENT OR EXCEPTION TYPE: (Check one option only)**

__ **Statewide Contract** (OSD or an OSD-designated Department)
__ **Collective Purchase** (Attach OSD approval, scope, budget)
__ **Department Procurement** (includes all Grants - 815 CMR 2.00) (Solicitation Notice or RFR, and Response or other procurement supporting documentation)
__ **Emergency Contract** (Attach justification for emergency, scope, budget)
__ **Contract Employee** (Attach Employment Status Form, scope, budget)
_X_ **Other Procurement Exception** (Attach authorizing language, legislation with specific exemption or earmark, and exception justification, scope and budget)

**___ CONTRACT AMENDMENT**

Enter **Current Contract End Date *Prior*** to Amendment: _____, **20**___.
Enter **Amendment Amount**: $ _____. (or "no change")

**AMENDMENT TYPE: (Check one option only. Attach details of amendment changes.)**

__ **Amendment to Date, Scope or Budget** (Attach updated scope and budget)
__ **Interim Contract** (Attach justification for Interim Contract and updated scope/budget)
__ **Contract Employee** (Attach any updates to scope or budget)
__ **Other Procurement Exception** (Attach authorizing language/justification and updated scope and budget)

**The Standard Contract Form Instructions and Contractor Certifications and the following Commonwealth Terms and Conditions document are incorporated by reference into this Contract and are legally binding:** (Check ONE option): __ Commonwealth Terms and Conditions __ Commonwealth Terms and Conditions For Human and Social Services __ Commonwealth IT Terms and Conditions

**COMPENSATION:** (Check ONE option): The Department certifies that payments for authorized performance accepted in accordance with the terms of this Contract will be supported in the state accounting system by sufficient appropriations or other non-appropriated funds, subject to intercept for Commonwealth owed debts under 815 CMR 9.00.
__ **Rate Contract.** (No Maximum Obligation) Attach details of all rates, units, calculations, conditions or terms and any changes if rates or terms are being amended.)
**X__ Maximum Obligation Contract.** Enter total maximum obligation for total duration of this contract (or ***new*** total if Contract is being amended). $50,000.00___.

**PROMPT PAYMENT DISCOUNTS (PPD):** Commonwealth payments are issued through EFT 45 days from invoice receipt. Contractors requesting **accelerated** payments must identify a PPD as follows: Payment issued within 10 days __% PPD; Payment issued within 15 days __ % PPD; Payment issued within 20 days __ % PPD; Payment issued within 30 days __% PPD. If PPD percentages are left blank, identify reason: __agree to standard 45 day cycle __ statutory/legal or Ready Payments (M.G.L. c. 29, § 23A); __ only initial payment (subsequent payments scheduled to support standard EFT 45 day payment cycle. See Prompt Pay Discounts Policy.)

**BRIEF DESCRIPTION OF CONTRACT PERFORMANCE or REASON FOR AMENDMENT:** (Enter the Contract title, purpose, fiscal year(s) and a detailed description of the scope of performance or what is being amended for a Contract Amendment. Attach all supporting documentation and justifications.) FY22 GAA Budget: provided further that not less than $50,000 shall be expended to the city of Melrose for efforts to mitigate invasive species in public ponds

**ANTICIPATED START DATE:** (Complete ONE option only) The Department and Contractor certify for this Contract, or Contract Amendment, that Contract obligations:

**X**__ 1. may be incurred as of the Effective Date (latest signature date below) and **no** obligations have been incurred **prior** to the Effective Date.
__ 2. may be incurred as of _____, **20**___, a date **LATER** than the Effective Date below and **no** obligations have been incurred **prior** to the Effective Date.
__ 3. were incurred as of _____, **20**___ , a date **PRIOR** to the Effective Date below, and the parties agree that payments for any obligations incurred prior to the Effective Date are authorized to be made either as settlement payments or as authorized reimbursement payments, and that the details and circumstances of all obligations under this Contract are attached and incorporated into this Contract. Acceptance of payments forever releases the Commonwealth from further claims related to these obligations.

**CONTRACT END DATE**: Contract performance shall terminate as of **June 30, 2024**, with no new obligations being incurred after this date unless the Contract is properly amended, provided that the terms of this Contract and performance expectations and obligations shall survive its termination for the purpose of resolving any claim or dispute, for completing any negotiated terms and warranties, to allow any close out or transition performance, reporting, invoicing or final payments, or during any lapse between amendments.

**CERTIFICATIONS:** Notwithstanding verbal or other representations by the parties, the **"Effective Date"** of this Contract or Amendment shall be the latest date that this Contract or Amendment has been executed by an authorized signatory of the Contractor, the Department, or a later Contract or Amendment Start Date specified above, subject to any required approvals. The Contractor certifies that they have accessed and reviewed all documents incorporated by reference as electronically published and the Contractor makes all certifications required under the Standard Contract Form Instructions and Contractor Certifications under the pains and penalties of perjury, and further agrees to provide any required documentation upon request to support compliance, and agrees that all terms governing performance of this Contract and doing business in Massachusetts are attached or incorporated by reference herein according to the following hierarchy of document precedence, the applicable Commonwealth Terms and Conditions, this Standard Contract Form, the Standard Contract Form Instructions and Contractor Certifications, the Request for Response (RFR) or other solicitation, the Contractor's Response (excluding any language stricken by a Department as unacceptable, and additional negotiated terms, provided that additional negotiated terms will take precedence over the relevant terms in the RFR and the Contractor's Response only if made using the process outlined in 801 CMR 21.07, incorporated herein, provided that any amended RFR or Response terms result in best value, lower costs, or a more cost effective Contract.

**AUTHORIZING SIGNATURE FOR THE CONTRACTOR:**

**X:** _____. **Date:** _____.
**(Signature and Date Must Be Captured At Time of Signature)**
**Print Name:** _____.
**Print Title:** _____.

**AUTHORIZING SIGNATURE FOR THE COMMONWEALTH:**

**X:** _____. **Date:** _____.
**(Signature and Date Must Be Captured At Time of Signature)**
**Print Name:** Eric Rebello-Pradas.
**Print Title:** CFO.

CITY OF MELROSE

OFFICE OF PLANNING AND COMMUNITY DEVELOPMENT

DENISE M. GAFFEY
*Director & City Planner*

City Hall, 562 Main Street
Melrose, Massachusetts 02176
Telephone - (781) 979-4190
Fax - (781) 979-4290

# MEMORANDUM

**TO:** Mayor Paul Brodeur

**CC:** Patrick Dello Russo, Chief Financial Officer/Auditor

**FROM:** Denise Gaffey, Director of Planning and Community Development

**RE:** Memorial Hall Building Envelope Project: Free Cash Request

**DATE:** February 17, 2022

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Throughout the past year, the Engineering Division and the Planning Department have been working together, and in consultation with the Memorial Hall Facilities Director and the Board of Trustees, to oversee the work required to restore significant exterior features and create a weather tight condition at Memorial Hall. It is a complicated project affecting many building elements, including roofing, flashing, windows, doors, and masonry. Most of these building elements have not been addressed since the mid to late 1990s and deterioration over the years has allowed water to infiltrate and cause interior damage.

In recognition of this situation and to address the areas of water infiltration, the City Council approved a funding authorization in the amount of $2,311,205 (Order #2020-69). With the funding in place, we assembled a Designer Selection Committee and selected Gale Associates as our Building Envelope and Restorations Specialists for this Project. Gale proceeded to perform a comprehensive evaluation of all of the exterior building elements. They performed a leak audit of the exterior and interior of the building, which included visual observations, test cuts and a geotechnical evaluation. This work is described in detail in a report dated September 24, 2021.

The in-depth testing methodology identified more extensive deterioration than originally envisioned. Consequently, Gale advised that the construction budget available to us would allow for the areas of immediate concern to be addressed, and a subsequent phase of work in approximately five years would be required to continue to maintain weather tight conditions. The future phase (phase two) would include replacing the portions of the roof that are not being replaced during phase one, repointing the brick and granite mortar joints that are not repointed during phase one, and installing brass banding to restore the original ornamentation, among other miscellaneous related items.

This "phase two" work is estimated to cost approximately $1,500,000 (including general conditions, contractor overhead and profit and construction contingency) and is identified in the memo from Gale dated October 22, 2021. The specific scope items that comprise this additional cost include most of the items indicated as Alternates in that memo and includes replacing the entire roof.[i]

Given the information now available to us and the availability of free cash which is ideally suited for one-time capital expenses, I recommend and respectfully request that the City authorize the additional $1,500,000 in funding to complete all of the building envelope work now. This is advantageous for a number of reasons, and is the most cost effective and expedient way to address the needs that have been identified and to protect this historic resource.

Waiting to do this work in a future phase will add significantly to the cost of the work. In addition to the construction escalation costs inherent in postponing this work, a subsequent project will require bringing on board a new design team, general contractor and construction manager at additional costs, along with the added disruption to the building and the commitment of a substantial amount of work by city staff, which could be spent on other important priorities.

The expanded scope will not materially affect the construction schedule for this project as indicated in the attached Milestone Schedule. Gale has indicated that they only require a few weeks to update the plans if the additional funding is approved and they are provided with an authorization to proceed. We will then be prepared to bid the project in anticipation of construction commencing in June.

Thank you for your continued support. I would be happy to discuss this with you further at your convenience.

Attachments:

- Memorial Hall Building Evaluation Report dated September 24, 2021
- Memo from Gale Associates dated October 22, 2021
- Milestone Schedule for the full scope of work

[i] The work involving the stairs is not included in the $1,500,000 estimate. That work involves a different construction trade, is not impacting the building envelope and can be done at a later time.

Gale Associates, Inc.
163 Libbey Parkway | Weymouth, MA 02189
P 781.335.6465 F 781.335.6467
www.galeassociates.com

**Background Information**

The Melrose Soldiers' and Sailors' Memorial Building (Memorial Hall), first dedicated in 1912, symbolizes a period of growth for the City of Melrose (Melrose) in the late 19th and early 20th centuries. Located in the midst of equally ornate civic structures, which include the City Hall and Central Fire Station along the Main Street, it is an essential part of the City center. The importance of this historic core and development is solidified in its designation as a Historic District in the National Register of Historic Places since 1982. As part of this historic and civic core of the City, Memorial Hall building has a multi-purpose function organized around its use for the public and plays an essential role in the life of the community. From its initial conception, the building has been intended as a central hub for gatherings, events, the performing arts, among many other uses.


*Image of the building around the time of completion in 1915*

*Image of the building today (2021)*

The building was originally designed by the architect George F. Newton for Melrose to be a memorial for Civil War soldiers and sailors. It consists primarily of granite, originally quarried in Quincy and re-purposed from its original use as part of the Old Boston Courthouse constructed in downtown Boston in 1836 and demolished in 1909. As is the nature of historic structures, it has undergone multiple periods of modification and renovation. As early as 1925, an addition to accommodate a new organ was constructed onto the rear of the building consisting of brick masonry and concrete. In the late 1990s and early 2000s, the building underwent multiple renovation and rehabilitation projects, including roof replacement, window and door restoration and accessibility upgrades. In 2008, the building underwent HVAC upgrades, including the installation of an air conditioning system and more efficient heating system. Historic images of the building catalogue its changing appearance over time with various wood trim paint colors and entrance vestibules and canopies. As such, the building functions as a living architectural historical catalogue whose preservation over time is an essential aspect of preserving the history of the City.

The internal spatial layout of the building revolves around the use of two main spaces. The auditorium occupies the bulk of the building and features a 30' x 40' stage, seating capacity of 800, and grand high ceilings and clerestory natural lighting. The rear portion of the building houses the support functions for the auditorium, including dressing rooms, offices, storage areas, and a large organ behind the stage. At the front of building towards Main Street sits the Grand Army of the Republic (GAR) Hall, which acts as a smaller event space that can support up to 100 guests and features a commercial kitchen space immediately adjacent to it. The accessible public entrance to the building is located on the South side of the building facing the fire station and provides immediate access to these two large gathering spaces.

Melrose has engaged Gale Associates, Inc. (Gale) to provide evaluation and design services to identify and address ongoing water infiltration at various locations in the building, improve daylight control within the auditorium clerestory windows, and general weathering and deterioration of various exterior building envelope components. As part of the evaluation, Gale has performed a leak audit, a visual observations of the building's exterior components and observed exploratory test cuts at roof, wall, and stair elements, performed by contractors, to better understand the general construction of the building. This evaluation report documents our observations, findings, and opinions on potential repair and replacement options.

The following documents have been utilized by Gale as part of the evaluation and research of the building:

- Portions of the original 1912 drawing set by architect George F. Newton
- Portions of the 1925 addition drawing set by engineers J.R. Worcester & Co., and architect George F. Newton
- National Register of Historic Places entry for the Melrose Town Center Historic District submitted in 1982
- Portions of the 1998 Roof Replacement drawing set by Jean Carroon Architects.
- The 1999 Façade and Window Restoration, Bathroom Buildout, and Miscellaneous Repairs by Jean Carroon Architects.
- The 2008 HVAC Renovations drawing set by Richard D. Kimball Company, Inc. engineers

**Existing Conditions and Observations**

Leak Audit/Interior Observations

As part of the building envelope evaluation, Gale performed a leak audit, or walkthrough of the interior of the building to observe any damages or defects that may possibly be related to water infiltration. For example, staining and cracking of interior finishes at ceilings and on inside surfaces of exterior walls may be indicators of active or historic moisture infiltration or other potential building movement. The building staff was also interviewed to better understand the history of leaks within the building and where repairs have been performed in the past.

Refer to the Leak Audit Plan for specific information and locations of defects found within the building. In general, the leak audit revealed the following defects within the interior of the building:

- Multiple locations of cracks within the plaster finishes, primarily in the ceilings, and at several wall locations.
- Peeling paint or blistering paint occurring on ceilings and below window locations.
- Peeling wallpaper within the GAR Hall extending from the ceiling and located below window sills. Significant deterioration was observed occurring at the wall between the kitchen and the GAR Hall (Image 1).
- Cracked, spalled, or missing plaster finishes at the trusswork above the auditorium in front of the clerestory windows. Missing plaster was reported to have been removed due to water damage.
- Reported and apparent observed locations of previous plaster ceiling repairs and patching.

- Staining on suspended acoustical ceiling tiles around the perimeter of the kitchen space, as well as a deteriorated plaster ceiling with exposed lath observed above the suspended ceiling.
- Masonry cracks occurring along a building expansion joint where the 1925 addition meets the original building.
- Loose brick, step cracking, and deteriorated mortar joints above window and door openings in the unfinished brick interior in the rear storage room adjacent to the organ.

***Image 1:*** *Significantly peeling wallpaper and paint in the GAR Hall*

***Image 2:*** *Peeling wallpaper below front window sills*

***Image 3:*** *Cracks in plaster within the basement immediately below the GAR Hall*

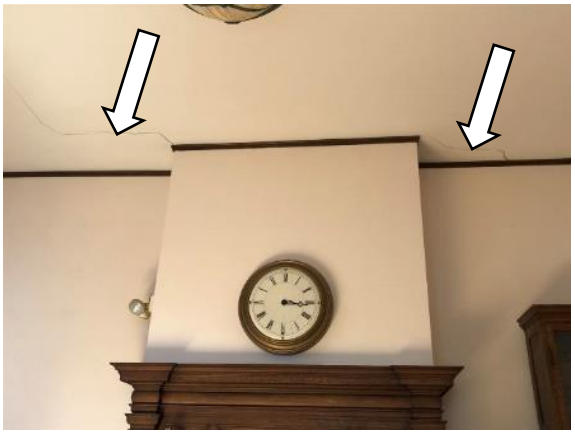

***Image 4:*** *Cracks in the ceiling at the south portion*

***Image 5:*** *Area of general plaster cracking in the GAR Hall ceiling (area is above Image 3)*

***Image 6:*** *Missing finishes on trusswork within the Auditorium*

***Image 7:*** *Peeling paint and previous plaster repairs on the Auditorium ceiling*

***Image 8:*** *Missing portions of plaster finishes at the upper clerestory windows*

***Image 9:*** *Typical water staining on the ceiling tiles within the Kitchen*

***Image 10:*** *Deteriorated plaster and lath ceiling above the suspended ceiling within the Kitchen*

***Image 11:*** *Loose brick and delaminated mortar above the window in the rear storage room*

***Image 12:*** *Step crack (arrow) above organ access door in the rear storage room*

***Image 13:*** *Staining on plaster ceiling where the roof meets the rear brick wall*

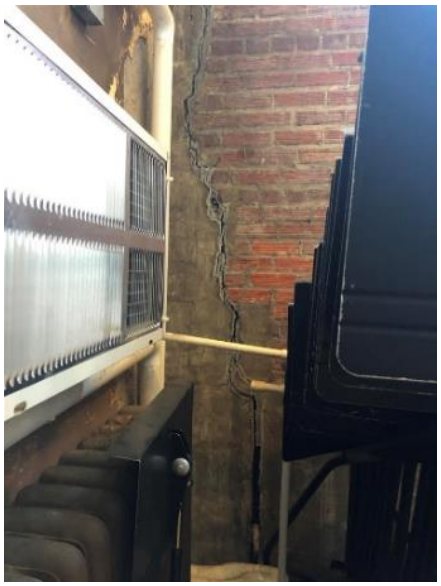

***Image 14:*** *Crack at the expansion joint at the Addition within the rear storage room*

Exterior Walls

The main, building built in 1912, is constructed of granite veneer with brick masonry back-up wall construction measuring approximately 16" thick. The addition at the rear of building, built in 1925, has exterior walls constructed of five-wythe solid brick masonry and exposed concrete foundation. The following sections discuss Gale's observations of each major façade material (granite, brick, concrete, brass and ornamentation) in depth.

*Granite*

Granite is the primary façade material of the building and fulfills a variety of roles, acting as both a structural and decorative element for the building. The walls consist of rectangular cut blocks of various dimensions with decorative ledges, water tables, and banding built into the granite wall construction. The granite blocks are set in thin beds of mortar, with only an 1/8" to 3/16" joint between the granite. The joints widen at the face of the granite to about 1/4".

In general, the granite itself was found to be in good condition, though isolated instances of spalled and cracked stone elements could be observed at various locations. Additionally, a number of granite blocks appeared to be slightly displaced out of plane of the wall, potentially due to settlement of the building overtime.

The granite mortar joints generally vary from fair to poor condition. Previous mortar repair attempts appear to have been performed throughout the history of the building as a minimum of (3) different types of mortar joints were observed in various locations, and vary in their color, texture, and profile. The original mortar joint appears to have a raised, beaded profile that has been replicated with newer mortar in various locations giving a crisper joint appearance, however, the original mortar joints appear more eroded and smoother with a sandy texture. The variety of mortar joint appearances lend the building a patchwork aesthetic, as repointed joints of varying ages and mortar types and color appear in random locations throughout the building.

Granite ledges wrap the front of the building and extend onto the sides and the wings of the building. The ledges feature exposed horizontal granite surfaces that exhibit a high degree of weathering and deterioration. A variety of previous mortar and sealant repairs have been performed along the ledge joints. Dark mastic material was observed installed along the joint between the ledge and the wall and are generally in a failed state. Other locations exhibit debonded, cracked, and missing mortar joint installed between granite pieces.

Samples of the mortar were taken and sent to a laboratory for Petrographic and chemical analysis to determine the original mortar composition. Additional information will be provided.

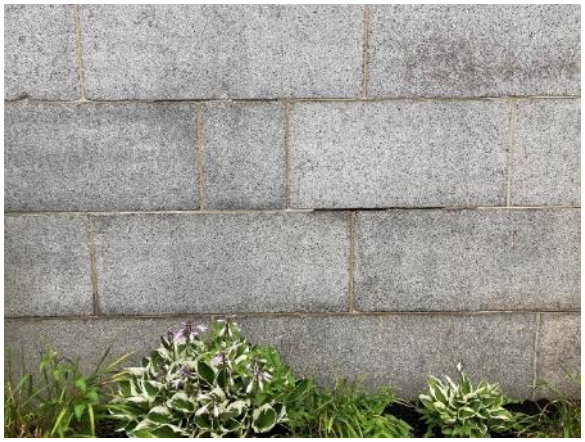

***Image 15:*** *Typical mortar condition within the granite; patchwork of missing mortar and mortar repairs*

***Image 16:*** *Typical staining and deteriorated mortar within the granite at the front elevation*

***Image 17:*** *Crack within a granite block at the front elevation near the foundation*

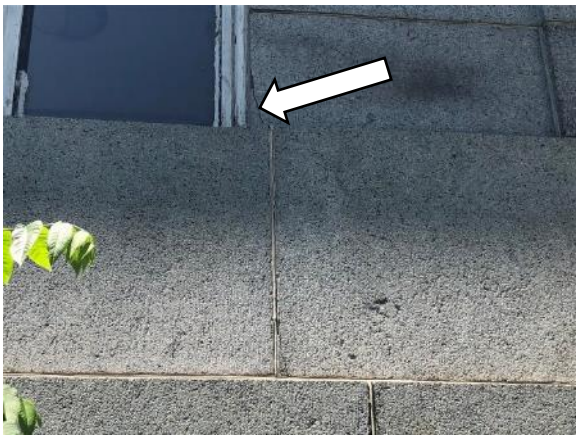

***Image 18:*** *Step crack (arrow) originating from a window in the front elevation*

***Image 19:*** *Failed sealant around the perimeter of a recess in the granite facade*

***Image 20:*** *Sealant repairs at the granite ledge on the west side of the North Wing*

***Image 21:*** *Typical deteriorated sealant at the termination of the ledge at the rising walls*

***Image 22:*** *Spalled ledge stone (arrow), as well as staining on the ledges and previous sealant repairs at the mortar joints*

*Brick*

The use of brick masonry within the Memorial Hall façade is confined to the 1925 rear addition and panel infill areas on the original building on the North and South Elevations. In general, the brick and mortar were found to be in fair condition. The brick walls generally have a weathered appearance with dark staining and discoloration occurring in various locations. A number of cracked and spalled brick units were found throughout the addition portion of the building, and approximately 25% of brick mortar joints were found to be deteriorated with loose particles and exposed aggregate.

Similar to the granite walls, a number of previous repair attempts have been performed in the brick masonry. Approximately 20% to 30% of the brick walls having been previously repointed. A number of these repairs appear to be poor quality consisting of "buttered" joints, failed mortar bond, and delaminating repair mortar. The previous mortar repair areas lend the brick masonry areas a patchwork appearance, with the newer repair mortar not matching the color or texture of what appears to be the original mortar.

The addition also features a brick quoins which project from the surface of the wall about 1.5". The top surfaces of the quoins have been coated in a mortar wash that protects the top surface and is sloped to shed water away from the wall. A number of these mortar washes were found to be delaminated and were loose.

The original building features a series of rectangular brick infill areas on the North and South Elevations. While no cracked or spalled brick units were observed in these locations, the mortar joints appeared heavily deteriorated. In general, the mortar at these areas have been eroded approximately 3/8" from the face of the brick. Multiple head joints were found to be completely missing. Unlike the brick masonry at the Addition, no previous repointing efforts appear to have occurred in these areas.

Since the addition is constructed of solid brick masonry walls at the back storage room consist of unfinished brick masonry. The masonry openings for the windows and door in this room are constructed with brick segmented arches, as opposed to the granite and cast stone lintels found at other window locations. Two of these arches were observed to have delaminated with loose brick units and step cracks in the brick mortar emanating away from the loose brick locations. Refer to the images within the Leak Audit portion of this report above for more information.

***Image 23:*** *Typical mortar condition within the brick masonry at the Addition*

***Image 24:*** *Cracked brick and deteriorated mortar the brick parapet rising walls*

***Image 25:*** *Typical brick inset area at the original building*

***Image 26:*** *Typical deteriorated and missing mortar joints at the brick inset areas at the original building*

***Image 27:*** *Deterioration of mortar wash above the brick quoins*

***Image 28:*** *Staining on brick masonry appearing to originate from the roof flashing*

*Concrete*

At the 1925 Addition, the exposed concrete foundation forms part of the exterior wall at the basement level. Similar to the Addition's brick masonry, the concrete has a weathered appearance with areas of dark staining, discolorations, and vegetative growth appearing at various locations. The concrete was generally found to be in fair condition, but isolated areas of concrete cracks and concrete spalls were observed. A number of these cracks and spalls were found to be about 1" deep with large chunks becoming dislodged. The majority of the cracks appear to relate to openings in the concrete walls, such as at louver and door locations. A number of previous repairs and patches could be found at locations where ongoing cracking is still occurring, and some of the patches appear to be failing.

Additional concrete defects were noted at the rear stair structure at the basement door. Refer to the Basement Door (Door 001) Existing Conditions section for more information.

***Image 29:*** *Spalling and cracking in the concrete at the Addition*

***Image 30:*** *Large crack above a louver at the Addition*

***Image 31:*** *Network of small cracks above the basement door at the Addition*

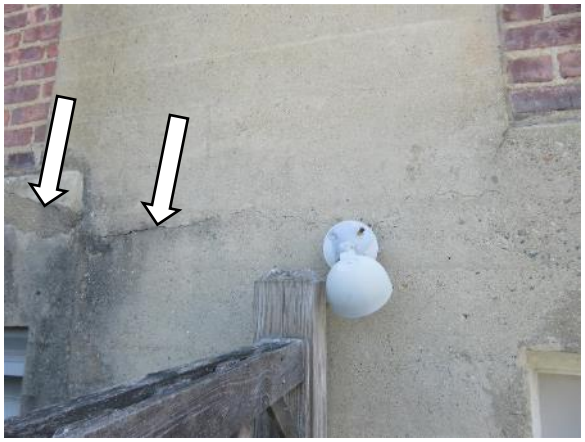

***Image 32:*** *Patched spall and cracking (arrows) occurring between portions of brick*

*Brass Ornamentation*

At the front of the building and on portions of the North and South Elevations, the building features a number of brass elements that function as ornamental flourishes to the building, consisting of horizontal banding that runs on top of the upper granite ledges, wreath-like elements mounted to the walls at the center of the flagpole towers, and garlands that are inset into a recessed portion of the granite on the truncated tower walls. Historic photographs of the building and the original drawing set indicate that these garlands were also located on the front of the building and the North Elevation, but are now missing in their entirety at these locations. Brass is also utilized for decorative grilles that are set in the masonry openings at the two small windows found on either side of the front entrance.

The brass utilized for the ornamentation appears to be original to the building and has a heavy green patina. These elements appear to be in fair condition and intact, but with a darkened and discolored appearance related to the heavy patina. In addition, the horizontal banding features a series of rounded elements that extend up from the banding; a number of these rounded elements are folded forward away from the building. Rusting was also observed in the banding at fastener locations where brass panels are secured to each other. Melrose reported that several brass ornamental metal components have been salvaged and are in storage but is undetermined if the stored material is salvageable.

***Image 33:*** *Horizontal brass banding at Roof Area A parapet ledge on the North Elevation.*

***Image 34:*** *Typical horizontal banding attachment straps.*

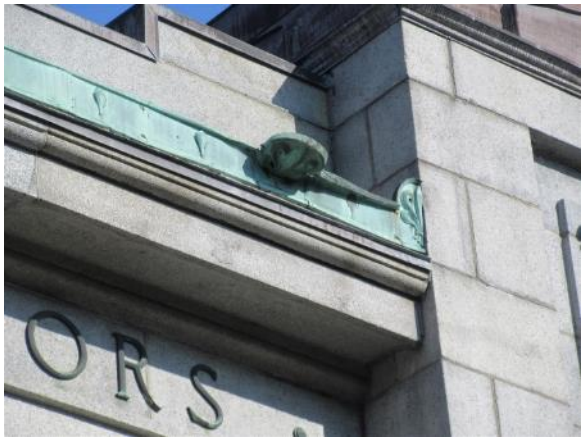


***Image 35:*** *Deflected pendant on the banding on the Front (East) Elevation*

***Image 36:*** *Remaining brass garland ornament on the South Elevation. Similar ornament was installed on the Front (East) and North Elevations.*

***Image 37:*** *Typical brass wreath on the Front (East) Elevation. Brass garlands were historically installed within the recess band around the wreath.*

***Image 38:*** *Typical brass grille installed over small windows on the Front (East) Elevation.*

***Image 39:*** *Detail of a typical pendant in the horizontal banding. Rust was noted around fastener locations. Pitting and staining on the brass was observed throughout the banding.*

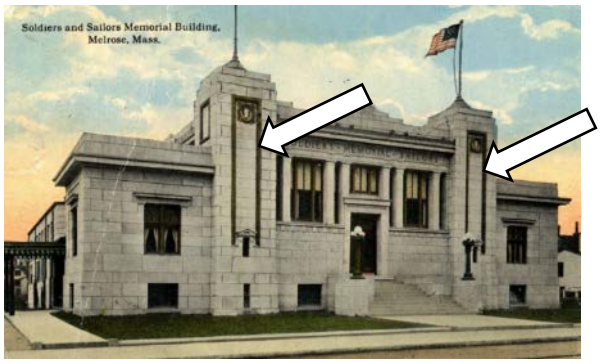


***Image 40:*** *Image of the building around the time of its construction showing the original appearance and locations (arrows) of the brass garland ornamentation.*

Windows

All of the windows at the Memorial Building appear to be original to the building, consisting of wood sashes set into site-built wood frames. The wood sashes are constructed in true-divided light fashion with single-pane glass set with glazing putty between wood muntins. The windows are set into openings in the mass-masonry and stone openings. Lintels over the masonry or stone opening include long-span granite block, cast stone lintels or brick masonry segmented arches. At the addition, the windows are installed over a cast stone sill set into the brick masonry. Sealant has been installed around the perimeter of window opening where the wood window molding meets the masonry. Bulb style weatherstripping was observed to be installed on the bottom face and at the meeting rails of the window sashes and on the window sash track. Plastic strip weatherstripping has been installed onto the sash tracks.

*Exterior Conditions*

On the exterior, the windows feature varying degrees of elaborate ornamentation, with the larger windows near the front of the building featuring neo-classical wood trim elements. The windows typically have a painted exterior finish, with the sashes painted a dark charcoal gray/black, and the brick molding, surrounding wood trim, and wood sills painted white. Historic photos appear to show all trim elements were painted in charcoal grey.

In general, the exterior window components range from fair to poor condition, with isolated areas of deterioration and missing wood components. All windows feature some degree of paint failure on the sashes, molding, and sills, with flaking paint common. The glazing putty used to seal the glass panes to the window frame is also generally deteriorated with portions at certain locations entirely missing. Windows on the South Elevation of the building appear to have the greatest degree of deterioration of wood elements as compared to other locations. Severely weathered wood sills and sash components and deteriorated or missing glazing putty were observed at multiple locations on the South elevation with similar deterioration found more sporadically on the other elevations.

***Image 41:*** *Detail of a column capital as part of the window framing for Window Type D. Flaking paint is typical for all windows.*

***Image 42:*** *Typical deteriorated glazing putty between the glass and the sash frame.*

***Image 43:*** *Heavily deteriorated sills were noted at the windows with the 2nd story changing room on the south side of the building.*

***Image 44:*** *Heavily deteriorated sill and window components at a rear basement window.*

*Interior Conditions*

On the interior, the windows feature a wide variety of finishes depending on the public visibility and use of the interior space. In the GAR Hall and parlor, the large windows have translucent stained wood trim with visible wood grain. In most other locations, the windows have dark brown or white painted interior finish. Interior wall surfaces primarily consist of plaster at the original building and gypsum board at the Addition. The more elaborate auditorium space and GAR Hall also feature wood wainscoting and chair rails stained to match the windows.

Interior window components and trim were found to be good condition. Some minor paint wearing could be observed at a few locations, particularly on window sashes and stools. Interior wood components appeared sound and intact. Due to modification and renovation of spaces within the building over time, many of the windows, particularly those at the basement level at the front of the building, have become inaccessible from the interior. During the bathroom renovation project, it appears that black painted plywood was installed on the interior of the windows and abandoned behind interior finishes. The windows do not appear to be accessible from the interior and will require all repairs to be performed from the exterior. Within the kitchen, a metal vent hood assembly has been installed in front of the north-facing window reducing access to observe its condition on the interior.

The hood is visible from the exterior as the window was not framed in. The vent will need to be disconnected to access the windows for repairs.


***Image 45:*** *Typical interior conditions for windows at the front of the building; this image taken at front entrance within the GAR Hall.*

***Image 46:*** *View of the auditorium space with the bands of upper and lower clerestory windows.*

***Image 47:*** *Degraded interior paint and finishes on the windows and sills were noted at some locations.*

***Image 48:*** *The vent hood blocks access to a window within the kitchen; the hood is visible from the exterior.*

***Image 49:*** *Typical installation of a plywood blank-off panel on the interior; this image taken within the basement storage room at the northeast corner of the building.*

***Image 50:*** *Window concealed behind newer bathroom wall construction, also blanked-off on the interior with a plywood panel.*

*Glass*

As mentioned above, all the windows feature single-pane glass; however, the glass comes in several varieties of shapes, sizes, colors, and textures. Aside from the clerestory window overlooking the auditorium space, the majority of windows feature clear, smooth, vision glass. The clerestory windows at the auditorium utilize a yellow/orange tinted, textured glass that produces a softer, more indirect light into the space. Windows within bathrooms and a few of the storage spaces feature a clear, similarly textured glass to obscure views from the exterior into the interior. The more clerestory windows at the auditorium and transom windows at the front elevation include sashes with diagonal muntins in an "X" shape that produce triangular glass.

The majority of the glazing throughout the building was found to be fair condition, but with three instances of cracked or broken glass observed at the time of the evaluation. Reports from the building staff indicated ongoing problems with broken glazing, particularly within the upper clerestory windows above the auditorium, where two of the broken panes were observed during this evaluation. The poor condition of the glazing compound and areas of missing glazing compound appears to contribute to the reported broken glass. Without proper glazing compound the glass is free to move and fall out of place onto the roof surface below. Other instance of broken glazing was observed at the front of the building on the North Elevation within a basement window, which had been sealed with tape at the time of the evaluation. Additionally, differences are the yellow/orange tint between different panes of glass suggest that glass replacement has occurred at different times in the past, with some panes appearing lighter orange and some with a green tint. Enough different hues and shades were observed that it is difficult to ascertain what the original color is, and the glass appears as a subtle mosaic of colors throughout.

***Image 51:*** *Broken glazing covered with tape (arrow) at the basement window on the North Elevation*

***Image 52:*** *Different coloration of tinted glass panes in the auditorium space*

***Image 53:*** *Broken glass observed in the upper clerestory windows at the time of the evaluation.*

***Image 54:*** *Typical obscured glazing within bathrooms and storage closets on the first floor.*

*Operability/Hardware*

The windows at the Memorial Building have a variety of operating mechanisms and orientations. The majority of the windows have a double-hung orientation with separate upper and lower sashes installed along a track and slide up and down. The sashes are counterbalanced with weights hidden within the jambs of the windows, hung by a chain on a pulley.

Several windows appear to have had the upper sashes fixed in place with fasteners during previous renovation projects.

Casement windows are locked along the front of the building and operate on hinges at the jambs and swing in. Hopper or project-in windows are located at the basement level windows at the front of the building. Awning or project-out windows ae located at the upper clerestory windows. While most clerestory windows are fixed, four windows on each side of the hall are operated by a crank shaft located to the rear of the stage opening. Facility staff reported that the window hardware is in working condition but used infrequently depending on the events being hosted. While the North side hardware is easily accessible, the east side is only accessible from the stage catwalk.

The location of many of the windows high above the floor are difficult to reach to operate by hand. Some windows that are accessible have sashes that are difficult to raise including the Window Type D at the front of the building, which has sashes that are intended to slide up through a pocket at the transom window.

Window hardware such as locking mechanisms, hinges, pulleys, and handles consist of brass and generally appear to be in good condition, albeit weathered. Several double-hung windows were found to be missing their balance chain. At certain locations brass pulleys had been replaced with plastic covers. Multiple double-hung windows sashes do not have handle hardware to help raise the sash.

***Image 55:*** *Typical brass handles installed at Window Type D.*

***Image 56:*** *Typical brass lock hardware at hung windows.*

***Image 57:*** *Typical chain and pulley hardware at hung windows.*

***Image 58:*** *Typical hand and lock hardware at swinging casement windows.*

***Image 59:*** *Operating hardware for the awning windows at the upper clerestory windows, utilizing a crankshaft (arrow) operated from behind the stage*

***Image 60:*** *Chain (arrow) for the operation of the basement hopper windows; arrow indicates a broken chain.*

Doors

The Memorial Hall includes six door locations. Three of locations include decorative wood doors and wood frames, the other three consist of hollow metal doors in wood frames. The observations related to the doors are as follows (refer to the Drawing Set for door numbering):

*Front Entrance (Door 101)*

The front entrance door consists of wood frame and (1) set of wood double doors with a fixed wood panel transom above. This entrance appears to be primarily ceremonial, as the doors can only be operated from the interior with push bar hardware. The door frame and door leaves feature more elaborate ornamentation than other door locations, with egg and dart moulding, inset paneling, and spiral patterned astragal. Interior surfaces of the frames have a stained finish while the exterior surfaces are painted dark charcoal gray. The door handles and hinges consist of brass and appear to be in good condition. In general, the door frame and leaves appear to be in good condition, however, the exterior bottom portion of the door leaves are weathered, and one door sweep is missing. Minor paint defects could also be observed the exterior finish, related to the deterioration of some of the wood components.

***Image 61:*** *Exterior of the front entrance door*


***Image 62:*** *Interior of the front entrance door*

***Image 63:*** *Missing door sweep at one of the door leaves*

***Image 64:*** *Deteriorated wood elements noted at the base of the door leaves*

*North Lobby Entrance (Door 102)*

The North Lobby entrance doors appear to be original. These doors function primarily as egress doors, as most of the doors are only operable from the interior with panic hardware. These doors consist of (3) 5'-0" wide double door openings with project-in (hopper) transom glazing above. The door leaves each contain square single pane vision lites with a cross and diagonal muntins creating (8) triangles. The door framing and trim exhibit crazing and flaking of paint, but otherwise appear sound. The door leaves were found to be in poor condition with multiple loose wood muntins, wood deterioration and decay of rails and stiles. Gale observed evidence of multiple failed repair attempts, including flaking paint. During the evaluation, ponding water was observed on the interior of the doorway on a morning after an overnight rain event, indicating the doors are allowing moisture infiltration.

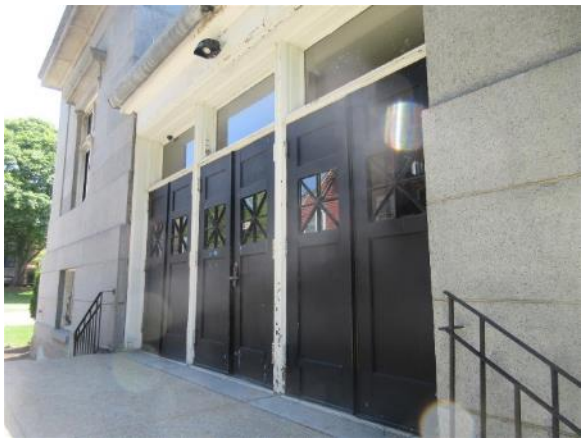

***Image 65:*** *Exterior of the south lobby entrance doors*

***Image 66:*** *Interior of the south lobby entrance doors*

***Image 67:*** *Typical condition of the wood frame and trim with flaking and crazing paint observed throughout.*

***Image 68:*** *Displaced and loose door handle was noted at one of the door leaves*

***Image 69:*** *Loose muntins and deteriorated glazing putty was noted throughout all of the doors.*

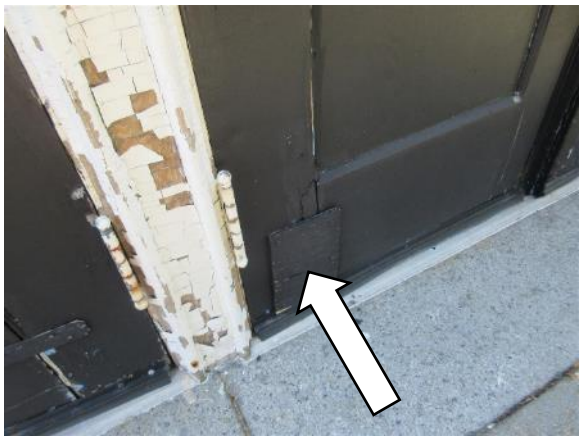

***Image 70:*** *Previous repairs (arrow) to the door leaves have become loose, and gaps were observed at multiple door leaves.*

*Auditorium Side Doors (Doors 103 and 105)*

The side egress doors each consist of a pair of double hollow metal doors set in wood frames and are located on either side of the stage. These doors function primarily as egress doors with panic hardware installed on the interior but can also be operated on the exterior. The doorway on the South Elevation is used as an entrance by the Memorial Hall staff. The hollow metal doors and wood frames appeared to be good condition. Weatherstripping and door sweeps were observed to be installed and in good condition. Rust was observed on the door hinges that are exposed on the exterior. Minor paint defects and scratches were observed on the interior of the door leaves.

***Image 71:*** *Typical exterior of the auditorium side doors (Door 103)*

***Image 72:*** *Typical interior of the auditorium side doors (Door 103)*

***Image 73:*** *Hinges at the doors were exposed to the exterior and were found to be rusted.*

***Image 74:*** *Scratches in the paint were observed on the door leaves.*

*Organ Access Door (Door 104)*

The rear of the building features a tall access door, reportedly utilized for replacing pipes for the organ located behind the stage. The door consists of a wood frame and wood panels set into the frame with no apparent operating mechanism or hinges. The wood paneling appears to consist of two separate panels with a meeting rail installed between them. The paneling is heavily deteriorated with large gaps appearing in the woodwork with daylight observed through the door from the interior. Large chunks of wood have split off from various rails in the paneling on the exterior. The wood door moulding on the exterior appears to consist of fibrous wood material, possibly medium density fiberboard (MDF), that is also heavily deteriorated with fibrous material exposed.

***Image 75:*** *Exterior of the organ access door.*

***Image 76:*** *Interior of the organ access door.*

***Image 77:*** *Large chunks of the wood in the panels were found to be loose; the exterior brick moulding was found to be fraying and opening up.*

***Image 78:*** *Wood in the door panels was found to heavily deteriorated throughout, and gaps were observed in the door panels.*

*Main Entrance Doors (South Lobby) (Door 106)*

The main entrance doors were reported to have been replaced in a previous project reportedly in the late 1990s. These doors function as the primary public entrance to the building. They consist of (2) 6'-0" wide double door openings with wood paneling on either side and fixed transom glazing above. The doors and framing are in good condition and utilize insulated glazing units within vision lites in the door leaves and transom. Daylight could be observed coming through the interior beneath one of the door leaves, indicating the door sweep is not engaging with the floor.


***Image 79:*** *Exterior of the main entrance doors.*

***Image 80:*** *Interior of the main entrance doors; daylight was observed coming from beneath one of the doors (arrow).*

*Basement Door (Door 001)*

The rear of the building features a basement access door leading to the boiler room. The doorway consists of a hollow metal door set into a wood frame. The door leaf was found to be in good condition, similar to the hollow metal doors located at the sides of the auditorium. The wood trim around the door is exhibiting signs of minor deterioration and cracked and flaking paint throughout. The concrete door head appears to be slightly bowed, potentially related to the cracking occurring in the concrete above the door.

A small concrete stair with wing walls sits in front of the door also exhibiting signs of deterioration, with vegetative growth occurring at the landing in front of the door. The stair appears to be cracking and separating potentially due to erosion of the soil below the walkway and stair. In addition, the area drain at the bottom of the stair appears to be clogged and possibly non-functional.


***Image 81:*** *Exterior of the basement door.*

***Image 82:*** *Detail of the door trim and leaf exhibiting flaking and crazing paint and scratches in the paint on the door leaf.*

***Image 83:*** *Condition of the stair in front of the door; the concrete path leading to the stair is beginning to separate from the stair structure; erosion of the fill beneath stair was noted*

***Image 84:*** *Vegetative growth was observed on the landing in front of the door; a pipe possibly serving as a drain appeared to be clogged and non-functional*

Roof

*General Description*

The existing roofing system consists of an adhered, single-ply, ethylene propylene diene monomer (EPDM) rubber roof membrane adhered over mechanically fastened 3" thick rigid insulation and a polyethylene (poly) sheet vapor retarder. The roof deck consists of 1" thick wood planks fastened to wood joists or rafters. A black, asphaltic coating that may have been part of the original roofing system was found on the inside surfaces of parapets, rising walls, and on the roof deck at roof edge conditions. Flashing at roof edge conditions consists of EPDM flashing membranes terminated under lead-coated or red copper sheet metal flashing. The sheet metal flashing terminates behind standing-seam vertical wall panels, parapet coping caps, or at brick masonry reglet flashings. The primary drainage system for the roof consists of lead-coated copper gutters and downspouts that drain into sub-grade leaders. Roof Areas D and E drain into through-wall scuppers through the parapet wall onto the Roof Areas F and G, respectively.

***Image 85:*** *Overall image of Roof Area A*

***Image 86:*** *Overall image of Roof Area B*

***Image 87:*** *Overall image of Roof Area C*

***Image 88:*** *Overall image of Roof Areas E, G, and H*

*Visual Evaluation - Roofing*

Based on a visual analysis, the roofing appears to be in fair to poor condition. The roof membrane appears to be intact, although deterioration of sealant at field seams was observed. Numerous patches were observed throughout the roof; the stripped-in seams at the patches were also observed to be moderately deteriorated. Rain diverters have been installed on Roof Area F, indicating possible drainage control issues. Defects related to gutters, downspouts, and sheet metal flashing are discussed in the following sections.

***Image 89:*** *Deteriorated seams were noted throughout the roof membranes on all roofs*

***Image 90:*** *Numerous patches were noted throughout the roof membranes on all roofs; this location on Roof Area E contained a particularly high number.*

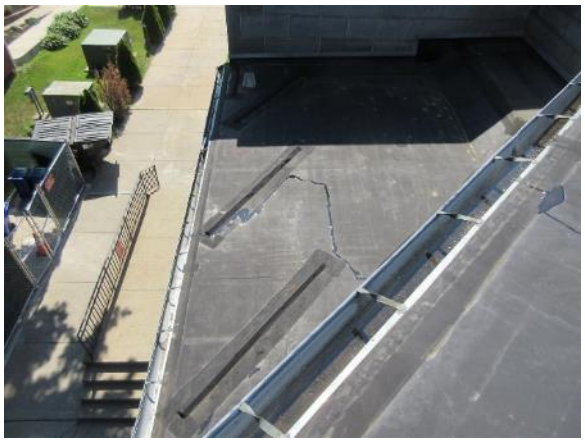

***Image 91:*** *Rain diverters installed on Roof Area F*

***Image 92:*** *Large patches with deteriorated seams were noted in numerous locations.*

*Roof Test Cuts - Defects within the Roofing System*

As part of the evaluation, Gale engaged Corconwood Roofing Services, roofing contractor, to perform exploratory test cuts, whereby a small portion of the roof is removed in order to better understand the underlying conditions. Refer to the Roof Plan within the Drawing Set for roof area designations and test cut locations. Test cut locations were limited to Roof Areas A, B, D, and F. Refer to the attached drawing set and roof plan for all test cut locations.

Many of the roof test cuts indicated the presence of moisture within the roofing system. Moisture presence ranged from dark staining on the upper portion of the rigid insulation, to staining found on the wood roof deck, to wet insulation and substrates. A summary of moisture conditions found within the roof are as follows:

| Test Cut | Roof Area | Location | Staining on Insulation | Water staining on roof deck | Wet Insulation |
|---|---|---|---|---|---|
| **1** | A | Parapet | X | | |
| **2** | A | Parapet | X | | X |
| **3** | A | Chimney | X | | |
| **4** | A | Gutter | Minor | | |
| **5** | B | Gutter | X | X | |
| **6** | B | Below Clerestory windows | | | |
| **7** | B | Parapet | X | | |
| **8** | F | Window Sill | | | |
| **9** | D | Rising Wall | | | |
| **10** | D | Parapet | X | | |
| **11** | A | Field | X | | |
| **12** | B | Field | X | | |
| **13** | B | Corner | | | |
| **14** | D | Rising wall at Flagpole tower | X | X | X |
| **15** | D | Parapet Corner | N/A | | N/A |

Aside from Test Cut 14, all test cuts revealed the presence of a vapor retarder. However, the vapor retarder was observed to be found to be unsealed and untaped, and in most instances the vapor retarder stopped short of the roof edge or did not extend up the full height of the roof thickness. In some cases, the vapor retarder was folded in on itself or crumpled at the test cut location.

***Image 93:*** *The plastic vapor retarder was not terminated at all perimeter test cut locations.*

***Image 94:*** *Wet insulation observed at Test Cut #2.*

***Image 95:*** *Crumpled and unterminated vapor retarder at Test Cut #3.*

***Image 96:*** *Water staining observed on the roof deck at Test Cut #5.*

***Image 97:*** *Test Cut #8 performed at the sill of Window Type H. The roof membrane was found to be terminated on the window sill with a termination bar.*

***Image 98:*** *Staining was observed in the top portion of the insulation at most test cut locations*

***Image 99:*** *A gap in the granite wall was observed at Test Cut #13.*

***Image 100:*** *Very wet plywood decking and corroded steel observed at Test Cut #14; refer to the Structural observations for more information.*

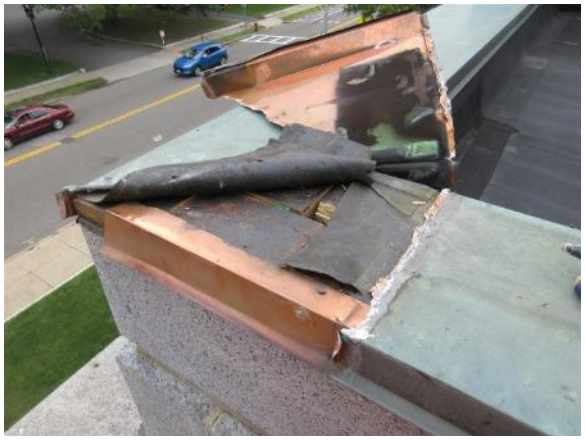

***Image 101:*** *Test Cut #15 was performed at the corner of Roof Area D to open the parapet cap*

***Image 102:*** *A portion of the sheet metal siding was lifted open to reveal a wood back-up wall, which appeared to be in good condition.*

While observing Test Cut #14, wet plywood decking as well as deteriorated steel members supporting the granite blocks above was identified at the base of the flagpole tower on Roof Area D. Further exploration revealed a steel member and a diagonal steel member exhibited significant rusting and scaling of the steel. Similar exploratory work was performed at the opposite (south) wing of the building on Roof Area E, revealing similar conditions though the steel appeared more intact on the south side. The steel appeared to have been originally cast in a cementitious material. The cementitious material was wet and deteriorating. In both instances the diagonal beam is enclosed by a raised curb. At the south wing the curb was found to be clad with copper sheet metal under the EPDM membrane roofing.

***Image 11:*** *Location of steel exploration at Roof Area D at the base of the flagpole rising wall*

***Image 12:*** *The steel immediately below the masonry wall exhibited heavy rusting and portions flaking away*

***Image 11:*** *View underneath the raised curb looking down along the diagonal member towards its embedment.*

***Image 12:*** *The steel member was observed to be embedded in the parapet wall at the front of the building.*

***Image 11:*** *Location of steel exploration at Roof Area E*

***Image 12:*** *Detail of the test cut showing the copper cladding and cementitious material (arrow) that coats the steel at this location*

***Image 11:*** *The steel exposed at this location was found to be heavily rusted.*

***Image 12:*** *The steel member was found to be supported on a diagonal steel member similar to Roof Area D.*

*Sheet Metal and Flashing Defects*

While the sheet metal flashing itself appeared to be in good condition, many flashing configurations were found to be insufficient or deficient. The sheet metal flashings at the granite rising walls have exposed fasteners and are sealed at their upper limits with a sealant that has failed. At other flashing locations, such as at the ends of parapet walls or stone ledges, the roof is terminated with a termination bar. The termination bar sealant has failed.

***Image 103:*** *Sealant-dependent flashing configurations at the upper clerestory rising wall to granite wall transitions.*

***Image 104:*** *Membrane terminated with an exposed termination bar at the transition to the granite ledges on Roof Area A.*

***Image 105:*** *Deficient termination of the parapet cap flashing on Roof Area C that is sealant-dependent*

***Image 106:*** *Exposed ledge at inset area above Roof Area C without flashing or protection; roof-to-wall flashing detail utilizes a surface-mounted reglet flashing whose sealant was found to be deteriorated.*

*Gutters and Downspouts*

In general, gutters and downspouts were found to be in fair to poor condition. Many of the gutters feature open seams and failed gutter solder. Water was observed actively dripping from the gutter at joint locations. On the south side of Roof Area A, an existing roof access ladder mounted to the wood fascia has pulled away from the wall, displacing both the wood fascia and the attached gutter. Multiple downspouts have become detached from the gutter, and the gutter displacement prevents the water from draining properly towards the downspouts. Several downspouts at grade were observed to be dented or damaged resulting in misalignment of the downspout from their subgrade PVC leader, as well as detachment from their wall-mounted straps. Metal downspout strainers were generally found to be heavily deflected or displaced entirely from the downspout outlet.

***Image 107:*** *Standing water observed in the gutter on the south side of Roof Area A at the time of the evaluation*

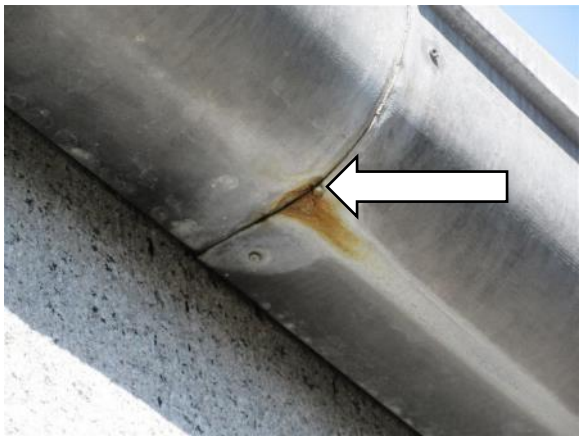

***Image 108:*** *Open seams in the gutters with active dripping water (arrow) were observed at multiple locations*

***Image 109:*** *Additional active gutter leak locations that have been attempted to be sealed with duct tape (arrows)*

***Image 110:*** *The majority of the downspouts were found to be deflected at their lower portion near grade*

***Image 111:*** *Downspout strainers were found to be deflected and, in some cases, displaced from the downspout opening.*

***Image 112:*** *Drainage from Roof Areas D and E are provided by scuppers that drain onto Roof Areas F and G; no downspouts are installed at these locations*

*Chimney*

A brick masonry chimney is located at the rear center of the building. The chimney is capped with a wood deck cap supported by four brick piers. The wood decking is covered with flat-seam copper sheet metal roof paneling. The brick wall openings are capped with lead-coated copper coping caps. A cast iron stack extends up the middle of the chimney shaft and up through the copper-clad cover.

The condition of the chimney above the roof line is poor. While the wood deck itself appears to be sound, the brick masonry piers it rests on exhibit deteriorated mortar joints and a number of cracked brick masonry units throughout. Cracking of the mortar joints and brick units were also found in the chimney rising walls immediately above the roof. The copper cladding shows signs of heavy deterioration with deflection and pitting in the panels, exposed fastener holes, and failed sealant repairs at the seams on the top surface. The cast iron flue is rusted on all visible surfaces, with a large portion of the top section of the flue missing, appearing to originally extend up through the chimney cover. The lead-coated copper at the base of the chimney and capping the chimney walls appeared to be in good condition.

***Image 113:*** *Overall view of the chimney*

***Image 114:*** *Flat-seam copper panels were found to be pitted and deflected with seams repaired with sealant.*

***Image 115:*** *The tops of brick walls below the cap are flashed with lead-coated copper flashing that appeared in fair condition.*

***Image 116:*** *Opening in the wood deck for the cast iron stack; the stack was found to be heavily rusted with portions missing.*

Front Entrance Stair

The front entrance is a prominent feature of the building and includes a large exterior grand staircase extending from the front entrance doorway down to the meet the entrance walkway. The staircase consists of a granite masonry construction, including granite stair treads and landings flanked by granite wing walls above grade, which rest on brick masonry infill and concrete foundation walls and piers below grade. According to original drawings, concrete beams rest on concrete piles and pile caps. At the front end of each wing wall sit decorative metal lampposts.

***Image 117:*** *Overall view of the front entrance stairs*

***Image 118:*** *Detail view of the front entrance stairs.*

As part of the evaluation Gale engage The Waterproofing Company (TWC), masonry contractor, to perform exploratory work at the entrance stairs to better understand its construction. Exploratory work included:

- One stair tread (4th from the bottom) was removed at the front left (facing the building) of the stairs.
- Excavated a 2'-0" deep hole dug at the north wing wall to determine foundation material.
- Portion of a grout patch was removed at the top landing joint where it meets the building.

The exploratory work revealed that the interior of the stairs consists of a hollow cavity over nine feet deep. The bottom of the cavity is filled with masonry rubble and debris. Ground water was visible within the cavity at about 9'-4" depth from the removed stair tread. The center stair treads of the bottom four stairs are supported on brick piers. Several bricks were found to be loose upon removal of the stair tread. The brick mortar joints within the piers appeared to be loose and delaminated and were easily removed by hand.

***Image 119:*** *Location of stair removal*

***Image 120:*** *Removal of the stair revealed an open cavity below that is filled with rubble and debris.*

***Image 121:*** *View within the cavity looking towards the front of the stair. The foundation was found to be a combination of concrete stem walls, brick masonry, granite slabs, and rubble.*

***Image 122:*** *View within the cavity looking towards a brick pier that supports the larger middle stair treads. Brick and mortar at this location was found to be loose and crumbled.*

***Image 123:*** *A portion of grout was also removed at the large joint between the stair structure and the building.*

***Image 124:*** *The grout material was found to crumble upon sounding. A wood element was observed at this location and appeared to be displaced from its original position.*

The front entrance stair was generally found to be in poor condition. While the majority of granite elements of the stair appeared to be in good condition, the top stair tread was found to have a crack running down the middle, and a majority of mortar joints are open, delaminated, or failed. Vegetation can be observed growing at isolated mortar joints on the wing walls. Portions of mortar joints between the stair treads are entirely missing. The wing walls appear to be out-of-plumb and leaning away from the building towards the street, as well as rotating outwards and away from the stair itself. Refer to the attached geotechnical report for more information. A large grouted joint was observed between the entrance stair and building's main elevation. The grouted joint appears to a previous repair attempt to address the stair rotation and settlement. The grouted joint runs along the wing walls and where the stair meets the building. Rust staining emanating from the base of the lampposts is visible on the granite blocks below. Dark staining and discoloration are visible at various other locations on the stair.

***Image 125:*** *Wing wall cap stones were found to be displaced with open mortar joints.*

***Image 126:*** *Vegetative growth and open mortar joints were observed on the sides of the wing walls.*

***Image 127:*** *The lamppost bases were stained and sit on a bed of deteriorated mortar.*

***Image 128:*** *The sloping of the entire stair structure can be observed below the lampposts, as the lampposts appeared to be installed plum, but sit on wedge-shaped grout bed on the sloping granite surface.*

***Image 129:*** *A crack was found in the top-most stair tread in front of the door.*

***Image 130:*** *Gaps observed in the joints between the stair structure and building.*

Geotechnical Report

As part of the evaluation, Gale engaged Nobis Group (Nobis) to provide a geotechnical report to better understand potential settlement concerns at the Memorial Hall. The site appears to consist of three (3) feet of topsoil, eleven and a half (11.5) feet of sand and gravel fill underlain by approximately twenty-four (24) feet of organic peat deposit and glacial outwash deposits. Groundwater was encountered at an approximate depth of eight (8) feet below grade. Refer to the attached Geotechnical Report for more information.

Hazardous Materials

Testing at the site has indicated the presence of hazardous materials. Reportable concentrations of asbestos were found within repair cement used at granite mortar joint repairs, asphaltic black coating at the inside surfaces of the parapet walls at the roof and on the roof deck, and in the glazing putty and perimeter sealants and caulking at the windows. Lead was found in both exterior and interior paint finishes. Refer to the attached Hazardous Material Report for more information.

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Engineers and Planners

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# MEMORANDUM

**TO:** Vonnie Reis, P.E.

**CC:** Denise Gaffey
Kathy Pigott-Brodeur

**FROM:** Samuel Wesselman

**RE:** Melrose Soldiers' and Sailors' Memorial Building
Scope of Work Clarification and Cost Estimate

**DATE:** October 22, 2021

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The following is a summary of the final scope of work and associated costs for the Building Envelope Improvement Project at the Soldiers' and Sailors' Memorial Building based upon our evaluation report dated September 24, 2021. Gale has compiled an itemized list of the scope of work items that will be included within the Base Bid, Alternates, as well as items that were initially considered but have been removed from the scope of this project and should be addressed within the next 5 to 10 years.

## Base Bid

Roofing:

1. Flashing repair around the perimeter of the roofs and membrane seam repairs to EPDM Roof Areas A, B, and C.
2. Removal and replacement of Roof Areas D, E, F, G, and H with single-ply PVC roofing.
3. Removal and replacement of all gutters and downspouts.
4. Removal of the existing chimney cap and four (4) brick piers down to the sill of the existing opening, and the installation of a new cap at that height.

Masonry:

1. Repointing of failed granite and brick masonry joints, as well as all masonry joints located above roof areas.
2. Repair of crack and spalled granite masonry.
3. Replacement of cracked and spalled brick masonry units.
4. Installation of lead tees at sky-facing joints with the granite ledges.
5. Replacement of the expansion joints between the original building and the addition with pre-cured silicone and foam expansion joints.
6. Clean all exterior masonry surfaces.

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Concrete:

1. Repair of exterior exposed cracks and spalls within the concrete foundation at the addition.

Windows:

1. Restoration and repair of all window frames and sashes. Window sashes are to be temporarily removed and repaired off-site to scrape and repaint, replace all glazing putty, and replace broken glazing. Window sills, frames, and trim are to be repaired and restored in place.
2. Installation of fixed interior storm windows at all window locations, aside from operable Type M windows at the upper clerestory.
3. Removal and replacement of the wood trim and sheet metal panels at the upper clerestory rising wall with PVC trim or fiber-cement board and batten siding.
4. Installation of exterior, remote-operated black-out roll shades at the upper clerestory Type M windows.
5. Replacement of all window perimeter sealants.

Doors:

1. Scraping, repairing, and painting the wood front entrance doors and metal side and rear doors in place.
2. Replacement of the wood North Lobby entrance doors with a pair of two (2) sets of wood-veneered, metal double doors, transom windows, and frame to match the configuration of the South Lobby entrance doors.
3. Replacement of the organ access door at the rear of the building with an operable fiber-reinforced plastic (FRP) door.

Sheet Metal/Brass Ornamentation:

1. Re-solder open seams within the existing copper cladding at the flagpole bases and parapet walls at the front of the building.

Structural Steel:

1. Replacement of deteriorated steel beams supporting masonry at the flagpole towers at the north and south wings.

**Cost for Base Bid Scope of Work: $1,899,435**

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## Alternates

Alternate 1: Replace colored glazing to provide uniform glazing at Type M and J windows.

**Cost for Alternate 1: $92,700**

Alternate 2: Install new interior manual roll shades.

**Cost for Alternate 2: $41,202**

Alternate 3: Install new/replace horizontal brass banding at the front and sides of the building.

**Cost for Alternate 3: $20,925**

Alternate 4: Install new/replace brass wreath and garland ornamentation at the front and sides of the building to match the original ornamentation.

**Cost for Alternate 4: $65,250**

Alternate 5: Provide wood storm windows in lieu of aluminum storm windows.

**Cost for Alternate 5: $44,180**

Alternate 6: Repoint granite mortar joints 100% throughout the building.

**Cost for Alternate 6: $317,700**

Alternate 7: Repoint brick mortar joints 100% throughout the building.

**Cost for Alternate 7: $201,140**

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## Scope of Work Not Included

1. Replacement in entirety of Roof Areas A, B, and C with single-ply thermoplastic roofing, particularly if roof-top solar panels are installed.

   **Estimated cost: $459,712**

2. Rebuilding of the granite front entrance stair with new piles and concrete foundation.

   **Estimated cost: $332,874**

3. Rebuilding of the concrete stair at the rear of the building. Regrade the area around the stair to improve drainage in the vicinity of the stair.

   **Estimated cost: $40,335**

4. Rebuilding of the granite step at the north egress door.

   **Estimated cost: $11,920**

We hope this information suits your needs at this time. If there are any further questions or concerns, please do not hesitate to ask.

Best regards,
GALE ASSOCIATES, INC.

Samuel Wesselman
Senior Staff Designer
Building Enclosure Design and Consulting (BEDC) Group

SWW/BHN
Enclosures

I:\838360\02 Design\letters\838360 Melrose Scope of Work and Cost Est Memorandum 2021 1020.docx

GALE

# City of Melrose – Melrose Soldiers' and Sailors' Memorial Building

## Building Enclosure Improvements Full Project

## MILESTONE SCHEDULE

| TASK | DATE |
|---|---|
| 90% Design Submission | December 9, 2021 |
| City Council Meeting | March 7, 2022 |
| Authorization to proceed with Full Scope | March 11, 2022 |
| 100% Design Submission | April 1, 2022 |
| City of Melrose Procurement Review | April 1 to April 14, 2022 |
| Initiate Bid Phase (Place Central Registry Ad) | April 14, 2022 |
| Central Registry Ad Appears / Bid Documents Available | April 20, 2022 |
| Receipt of bids General/Subs 4 weeks | May 18, 2022 |
| Contract Award, Mobilization, and Submittal Review | May / June 2022 |
| Construction Operations | Summer 2022 – Spring 2023 |

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