

# Belmont Public Library

*Belmont, Massachusetts*



## Historic Objects Conservation Plan

October 2022



BUILDING CONSERVATION ASSOCIATES INC

# Belmont Public Library

*Belmont, Massachusetts*

## HISTORIC OBJECTS CONSERVATION PLAN

Prepared For

Kathy Keohane

Belmont Public Library Trustees

Belmont, MA

Prepared By

Building Conservation Associates, Inc.

10 Langley Road, Suite 202

Newton Centre, MA 02459

BCA Team

Lisa Howe

Laura Lacombe

October 2022



BUILDING CONSERVATION ASSOCIATES INC

## CONTENTS

CONTENTS .....	1
1.0 INTRODUCTION.....	1
2.0 BACKGROUND.....	2
<i>Stained Glass Windows</i> .....	2
<i>Bronze Relief Plaques</i> .....	3
<i>Framed Mural</i> .....	4
<i>Relief Map</i> .....	5
<i>Veterans' Memorial Plaques</i> .....	5
3.0 EXISTING CONDITIONS SURVEY .....	6
<i>Stained Glass Windows</i> .....	6
<i>Bronze Relief Plaques</i> .....	7
<i>Framed Mural</i> .....	8
<i>Relief Map</i> .....	9
<i>Veterans' Memorial Plaques</i> .....	10
4.0 TREATMENT RECOMMENDATIONS .....	11
<i>Stained Glass Windows</i> .....	11
<i>Bronze Relief Plaques</i> .....	11
<i>Framed Mural</i> .....	11
<i>Relief Map</i> .....	11
<i>Veterans' Memorial Plaques</i> .....	11
5.0 PROBABLE COSTS.....	12

## 1.0 INTRODUCTION

At the request of the Belmont Public Library Trustees, Building Conservation Associates, Inc. (BCA) prepared a conservation plan for the stained-glass windows and other commemorative objects in the Belmont Public Library prior to their removal, storage, restoration, and reuse in the new library Belmont is planning on constructing. The Belmont Public Library is currently located at 336 Concord Avenue, in a building designed by Kilham, Hopkins, Greeley and Brodie that was completed in 1965. The building is not considered significant and is slated for demolition in order to design a new library on the current site. Several memorial objects have been selected for their significance to the community, and will be removed, restored, placed in storage and put back on display in the new library. These objects include nine stained glass windows, two bronze relief plaques, a large topographical map of Belmont, a large framed mural, and two marble plaques honoring veterans of Belmont. This report consists of the following sections:

- I. Existing Conditions Survey: Determine the current condition of the identified objects, document their current condition, note damage (e.g. cracks, spalls, staining, paint flaking, abrasion, soiling, substrate condition), record measurements, and try to determine how they were mounted or installed.
- II. Conservation Plan: Provide information for future conservation work on the objects.
- III. Removal Plan: Develop a plan for the removal and subsequent storage of the objects during the construction of the new library.

## 2.0 BACKGROUND



### *Stained Glass Windows*

The nine stained glass windows in the Children's Room of the library were gifted to the library when its current building was constructed in 1965. These windows honor three men who gave their lives in the military, as well as the Belmont High School Class of 1939, and the school children of Belmont who donated generously to the library's cause.<sup>1</sup> The five central stained-glass windows depict scenes from *Alice in Wonderland*, *The Adventures of Tom Sawyer*, *Joan of Arc*, *Robin Hood*, and *Peter Pan*. The four peripheral stained glass windows consist of pastel colored glass in geometric designs.

<sup>1</sup> "Belmont Public Library, A Brief History," <https://belmontpubliclibrary.net/about/a-brief-history/>





*Bronze Relief Plaques*

Bronze relief plaques of William J. and Esther C. Underwood flank an archway leading into the nonfiction section. Their son, Henry O. Underwood, gifted the previous public library building to the town of Belmont in 1900, in honor of his parents. It is likely that these busts originated in the 1900 library building and were relocated when the library moved to the current building in 1965.



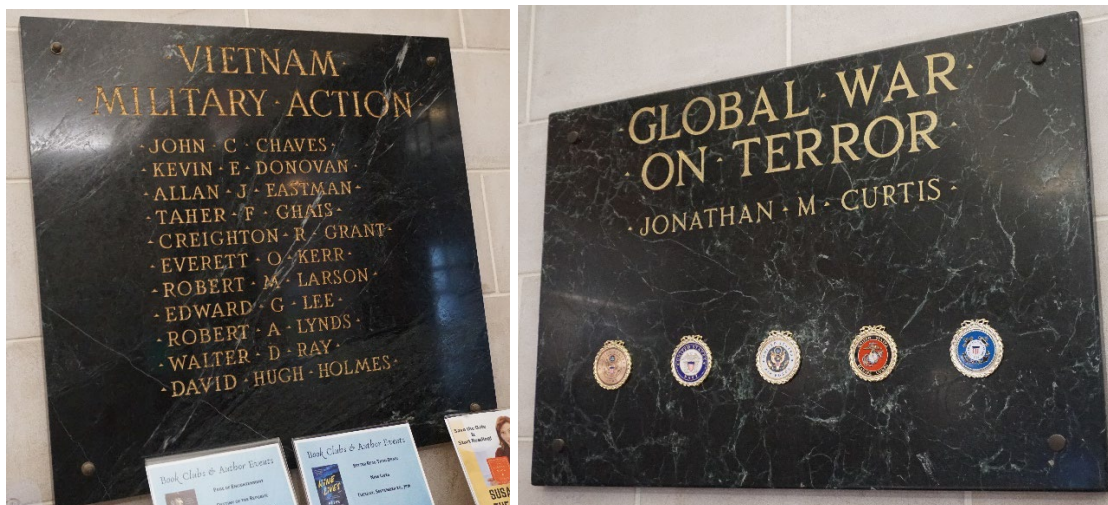
*Framed Mural*

A large mural of Waverly Square in Belmont is currently hanging in a hallway on the ground floor of the library. The mural was painted by Mark K. Swartz in 1974, and depicts the square as it would have looked around the year 1900. Based on its condition, it was exposed to the elements for some time before the Bonnano Family gifted a protective wood and glass frame for it as part of the Katherine M. Packard Memorial Fund.



### *Relief Map*

A relief map of Belmont sits on the second floor of the current library. It was assembled by Troop 77 of the Boy Scouts of Belmont in 1951, in honor of their recently deceased district commissioner Edwin Brainard. It was created from a base map of the US Geological Survey, and sponsored by the Men's Club of the Plymouth Congregational Church. The date it was donated to the library is unknown.



### *Veterans' Memorial Plaques*

Two marbled plaques flank the larger veterans' memorial in the main entrance of the current library building. The larger, central veterans' memorial, which lists soldiers from World War I, World War II, and the Vietnam Military Action, will be remade with a more accurate list of names, as the Belmont Veterans' group has requested. The two marbled plaques on either side of the central memorial, which commemorate soldiers from the Vietnam Military Action and the Global War on Terror, will be preserved and relocated.



### 3.0 EXISTING CONDITIONS SURVEY

Overall, the items surveyed are in good condition and should be relatively straightforward to move and store. For many of the items, their manner of attachment to the wall is unclear, which means they will need to be removed by experts. Each item's condition and likely attachment methods are listed below.

#### *Stained Glass Windows*

The nine stained glass windows in the Children's Room are in very good condition. They were crafted by the John Terrence O'Duggan Studio on St. Botolph Street in Boston, and consist of leaded stained-glass with additional detail applied with black paint. Each stained glass panel is set into a hardwood window sash and frame. The panel is attached to the window sash with wire ties to three horizontal saddle bars to keep it stable. The sash are held in place by a wooden bead which has been nailed to the window frame from the interior side of the window. On the exterior of the building, each window is covered by a locked storm window sash to protect it from the elements.



Figure 1. Wire ties connecting stained glass window to saddle bar. This is needed for stabilization, because the lead between each glass pane is very soft.

The interior wood sash appear to have been stained, but not finished. They are in good condition, with very occasional scratches. The bottom component of the Tom Sawyer window sash exhibits some minimal signs of moisture damage – raised graining and one crack running along the grain of the wood. The stained glass itself is in excellent condition, as are the lead comes and solder joints. Each window measures 24” wide by 38” high.



Figure 2. Crack in Tom Sawyer window sash.

### *Bronze Relief Plaques*

The cast bronze relief plaques of William and Esther Underwood are in good condition, especially considering they are likely 120 years old. There is a stray dab of white paint on the William Underwood bust, and the Esther Underwood bust has some hard, clear spots on the surface that are likely left over from a protective coating. The bust of William Underwood is also covered with slightly darker spots of discoloration. They are firmly affixed to the wall, likely by metal fasteners. Each plaque measures approximately 15” wide, 15” high, and 2” deep.



Figure 3. Hard, clear deposits on the surface of the Esther Underwood plaque.



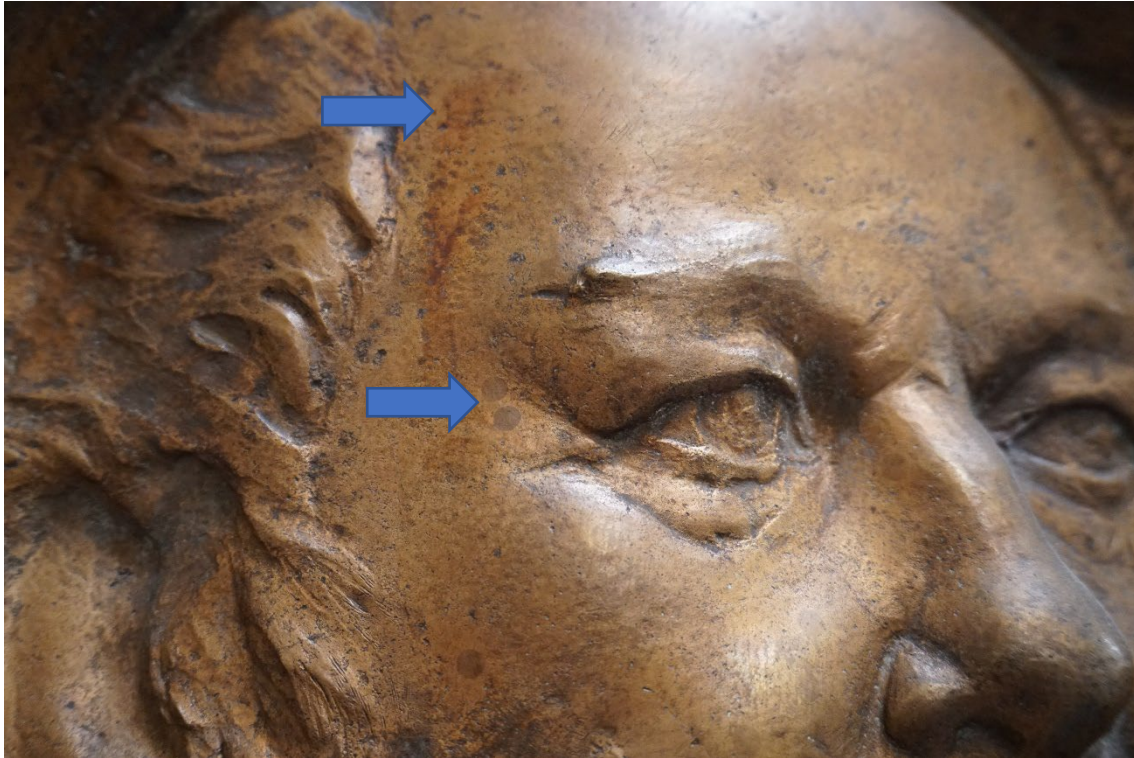


Figure 4. Dark discolored spots on William Underwood plaque.

#### *Framed Mural*

The large mural of Waverly Square c. 1900 was originally painted onto a single square canvas when it was created in 1974, but has since been glued to lightweight foam board and cut into six pieces, likely for ease of transport and framing. The painting is in fair condition. It was clearly exposed for some time before it was framed, because reddish brown stains can be found on the surface. It has torn in a few places along the edges, and some attempts have been made to glue down these torn edges and inpaint over the damage. Where the canvas was cut into six pieces, these edges are bunched and torn where the canvas caught on the blade, and the bottom left corner of the canvas was cut off and is missing.

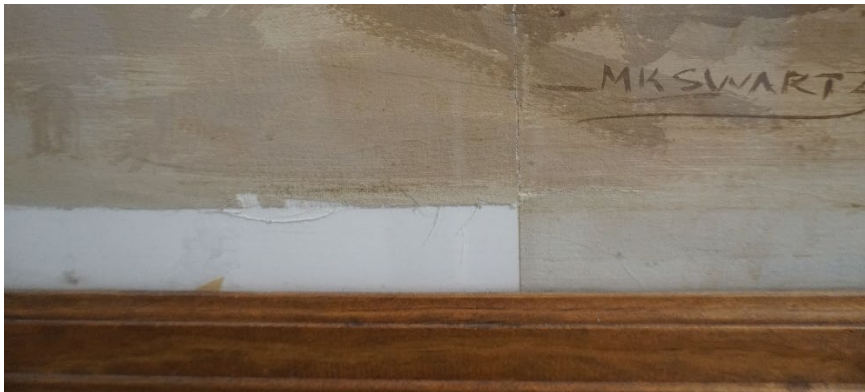


Figure 5. Missing bottom corner of mural canvas.



Figure 6. Torn canvas where panel lines were cut (left); Reddish brown soiling (right).

The frame that currently encases the mural is quite substantial and is clearly giving the painting much protection. It consists of a solid wood backing and a solid wood frame, with a single piece of glass encasing the mural. The frame is firmly affixed to the wall, likely with metal fasteners. The frame measures 125.5" wide, 63.5" tall, and 2" thick.

### *Relief Map*

The relief map of Belmont was created by enlarging a U.S. Geological Survey map of Belmont, gluing it to hard cardboard boards, and stacking it to resemble the topography of the land. The topographical map itself is in fair condition. The glue has discolored and is quite yellow where it was applied thickly, and some of the paper has peeled at the edges.

The topographical map has been encased in a freestanding solid oak frame with glass sides and a glass top. The wooden frame is in good condition with some light scratches, and the glass components have cracked in some places. The frame measures 51.5" wide, 34.5" deep, and 7.5" tall.



Figure 7. Break in glass siding and light scratching on oak frame.





Figure 8. Yellowed, failing adhesive on the relief map.

#### *Veterans' Memorial Plaques*

The two small side plaques for the Veterans' Memorial are solid, roughly one-inch-thick pieces of green marble that have been engraved and bolted to the library wall. They are in good condition with no visible scratches or marks. The bolts have been inserted through each plaque via four holes, one at each corner, and are secured to the wall with metal bolts. The left plaque commemorating a soldier from the Global War on Terror measures 31" wide, 21.5" high, and 1" thick. The right plaque commemorating soldiers from the Vietnam Military Action measures 31" wide, 29" high, and 1.5" thick.



Figure 9. Bolts holding plaques to wall.

## 4.0 TREATMENT RECOMMENDATIONS

### *Stained Glass Windows*

- Stained glass professional to remove sash to the interior by removing wooden bead holding each sash in its frame and transport to studio to complete work
- General cleaning to carefully remove surface soiling
- Refinish wood sash where finish is worn or missing
- Crate sash in plywood box, install padding between sash to prevent wood to wood contact
- Move crate to climate-controlled storage for duration of construction

### *Bronze Relief Plaques*

- Conservator to remove plaque from wall and transport to studio to complete work
- General cleaning to carefully remove surface soiling
- Rework patina to replicate original dark bronze appearance, similar to Esther Underwood plaque
- Apply protective wax coating
- Pack carefully in sturdy box with adequate padding between plaques
- Move plaques to climate-controlled storage for duration of construction

### *Framed Mural*

- Conservator to remove mural from wall and transport to studio to complete work
- Assess the mural to determine the extent of work required to restore
- Provide estimate to Town prior to starting conservation work
- If the Town approves conservation, work will include general surface cleaning, removal from foam backing, repair of tears, in-painting, cleaning of reddish stains, stabilization and re-mounting on acid-free backing
- Move mural to climate-controlled storage for duration of construction

### *Relief Map*

- Conservator to remove relief map from wall and transport to studio to complete work
- Lightly sand and refinish oak frame
- Replace cracked glass component
- Clean yellowed glue from elements using appropriate solvents
- Move mural to climate-controlled storage for duration of construction

### *Veterans' Memorial Plaques*

- Careful removal from the wall by unscrewing bolts
- Pack carefully in sturdy box with adequate padding between plaques
- Move plaques to climate-controlled storage for duration of construction

## 5.0 PROBABLE COSTS

These costs are presented to provide scale of magnitude of cost for budget purposes. The cost may vary depending on whether there are qualified contractors to perform the work who are in located in the geographic area. If so, the costs could be lower. If qualified contractors are located out of state, the costs could be higher to include the cost of travel and lodging while in Massachusetts.

Two years of commercial climate-controlled storage would be a significant budget increase, therefore BCA recommends seeking climate-controlled storage in a Belmont municipal building to save on costs.

OPINION OF PROBABLE COST			
STAINED GLASS WINDOWS			
	Stained glass professional to remove sash to the interior by removing wooden bead holding each sash in its frame and transport to studio to complete work	\$2,000.00	
	General cleaning to carefully remove surface soiling	\$5,000.00	
	Refinish wood sash where finish is worn or missing	\$1,000.00	
	Crate sash in plywood box, install padding between sash to protect wood	\$1,000.00	
	Move crate to climate controlled storage for 2 years	\$500.00	
	Reinstall windows in library	\$25,000.00	
			\$34,500.00
BRONZE RELIEF PLAQUES			
	Conservator to remove plaques from wall and transport to studio to complete work	\$1,000.00	
	General cleaning to carefully remove surface soiling	\$1,250.00	
	Rework patina to replicate original dark bronze appearance	\$1,000.00	
	Apply protective wax coating	\$1,000.00	
	Pack carefully in sturdy box with adequate padding between plaques	\$500.00	
	Move plaques to climate controlled storage for 2 years	\$250.00	
	Reinstall plaques	\$1,250.00	
			\$6,250.00

<b>FRAMED MURAL</b>			
	Conservator to remove mural from wall and transport to studio to complete work	\$2,000.00	
	Full conservation work - high range estimate carried	\$15,000.00	
	Move mural to climate controlled storage for 2 years	\$1,000.00	
	Reinstall mural	\$4,000.00	
			\$22,000.00
<b>RELIEF MAP</b>			
	Conservator to remove relief map and transport to studio to complete work	\$500.00	
	Lightly sand and refinish oak frame	\$1,500.00	
	Replace cracked glass component	\$600.00	
	Clean yellowed glue from elements using appropriate solvents	\$5,000.00	
	Move map to climate controlled storage for 2 years	\$250.00	
	Reinstall relief map	\$3,000.00	
			\$10,850.00
<b>VETERANS' MEMORIAL PLAQUES</b>			
	Carefully removal from the wall by unscrewing bolts	\$500.00	
	Lightly clean plaques prior to storage	\$500.00	
	Pack carefully in sturdy box with adequate padding between plaques	\$500.00	
	Move plaques to climate controlled storage for 2 years	\$250.00	
	Reinstall plaques	\$1,250.00	
			\$3,000.00
<b>STORAGE</b>			
	Store objects for two years during construction		\$7,500.00
<b>CONSTRUCTION MANAGEMENT OF ALL PHASES</b>			
	BCA to oversee all aspects of removal, restoration and reinstallation		\$15,000.00
<b>Subtotal</b>			<b>\$99,100.00</b>
General Conditions 10%			\$9,910.00
General Requirements 6%			\$5,946.00
Overhead & Profit 5%			\$4,955.00
Construction Contingency 10%			\$9,910.00
<b>TOTAL CONSTRUCTION BUDGET</b>			<b>\$129,821.00</b>