

Works on Paper

Conservation of Art and Archival Materials

Condition Report & Conservation Treatment Proposal

Client

Unity Historical Society & Town of Unity
c/o Jim Romer
232 Quaker City Road
Unity, NH 03603

Job number

14082C01

General collection information – see itemized list for details:

Object Type: *collection of manuscript and printed documents*

Subject: *54 19th-century voter checklists and unknown quantity of partial checklists/fragments for the Town of Unity, NH*

Author: *various residents/town officials of the Town of Unity, NH*

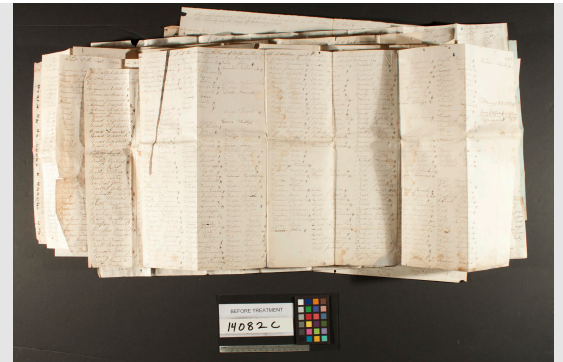
Date: *1832 - 1899*

Dimensions (h x w): *various sizes (see itemized list)*

Media: *various black, brown, red and blue manuscript inks; black printing inks; graphite*

Supports: *various off-white, beige and blue wove papers*

Housing Materials: *2 Masonite boards for open checklists;
letter-sized folders stapled together on two sides for folded checklists;
cardboard box and manila envelopes for fragments*



Condition of 54 complete 19th-century checklists before conservation

The fifty-four complete 19th-century voter checklists are executed in a variety of manuscript inks, many of which are iron gall inks, on off-white, blue or beige wove or laid papers. Several of the earlier checklists are comprised of two or more sheets adhered together with their original starch wafers. Some of these wafer joins have failed completely or partially and are in danger of becoming separated if not addressed by conservation treatment. Checklists from the later half of the 19th-century are letterpress printed with manuscript additions. The majority of the checklists have manuscript inscriptions on the reverse.

The collection of complete 19th-century voter checklists has a pronounced musty or moldy odor and should be treated for mold contamination. We strongly recommend that this collection not be handled until the mold issue has been addressed by conservation treatment. Ideally, the checklists should be stored separately from other parts of the Historical Society's collection to reduce the risk of mold contamination. Approximately ten checklists from this group have considerable amounts of black powdery mold growths and mold stains.

The majority of the complete 19th-century checklists were previously folded, usually once horizontally and then three to seven times vertically. This has resulted in the development of pronounced creases and folds, many of which are now broken and torn. Several documents have been extensively chewed upon by rodents and/or insects, resulting in varying degrees of loss. Nearly all of the checklists have a small hole in each corner where they were originally posted for inspection. Most of the checklists suffer from minor to moderate peripheral tears, often with small to mid-size associated losses to the paper. Many of the tears and breaks have been repaired with a variety of harmful pressure sensitive tapes (Scotch tapes, Filmoplast type tapes, masking tapes, etc.), usually on the reverse but occasionally on both the front and back of the checklist. This damage makes the checklists quite fragile and hazardous to handle in their current state.

The papers have all discolored to varying degrees due to the development of acidity in the paper. Many of the checklists have become quite brittle and remain susceptible to further deterioration if not addressed by conservation treatment. Scattered brown stains are present on many of the checklists and a heavy layer of surface soil covers the front and back of each sheet. Surface soil is typically heavier along the edges and/or the outer section of paper when folded.

Several documents show heavy accumulations of animal feces and urine and several show food stains, coffee rings and other unknown accretions.

In some cases the inks have smeared and this usually appears to be original to the documents (i.e. the inks smeared before they dried). Water stains are present on approximately half of the 19th-century checklists.

Condition of partial 19th-century checklists and fragments and severely mold damaged checklists (stored in separate box)

Three large manila envelopes containing complete checklists (integrated chronologically into the inventory list) and many fragments of various checklists were also sent to our studio for examination. They all appear to be from the late 19th century based on the format and materials used. These documents suffer from severe mold damage in the form of visible black powdery mold growths as well as black and pink mold stains. Many of the fragments have heavy deposits of soil as well as insect debris and casings. It is likely these items were salvaged at a later date in a different location given the extensive amounts of mold and soil present throughout this part of the collection. It is impossible to tell how many checklists may be present (or partially present) given the current condition of these items. Conservation treatment will allow the fragments to be treated for mold and surface soil, making it possible to then determine how the many fragments might be reassembled to create complete or partial checklists.

The condition of these checklists and fragments are otherwise similar to the later 19th-century checklists described above.

Objectives of conservation treatment

The Town of Unity voter checklists are currently unsafe to handle or display due to the presence of mold and the often severe physical and chemical weaknesses of the papers found throughout the collection. They also represent a likely mold contamination threat to the rest of the collection and the building in which they are stored.

The primary objectives of conservation treatment for the Unity Voter Checklists are:

- a) address the mold presence, making them safe to handle and safe to reintegrate into the rest of the collection
- b) physically and chemically stabilize the documents through the conservation treatment steps listed below, including rejoining of partial checklists and fragments to the extent possible
- c) provide conservation-quality housing for long-term storage and safe accessibility
- d) provide storage, handling and exhibit guidelines for the voter checklists

Objectives of digital imaging of each checklist/partial checklist/groups of fragments

a) create high-resolution digital facsimiles of each checklist (or part thereof) after conservation treatment to improve access to the collection and ensure greater protection for the original documents. *A separate option for creating digital facsimiles of the collection of voter checklists is provided below.*

Conservation treatment proposal for 19th-century voter checklists and partial checklists/fragments

1. Document conservation treatment with representative before and after digital photography and with a detailed written report. Provide the client with high-resolution digital images on a disk and archival-quality reference prints of these representative treatment documentation photographs as well as copies of all written reports.
2. Collate each checklist (or part thereof) by applying the date in soft graphite pencil in the verso lower left corner. These numbers will coincide with the dates found on the itemized inventory list. The treatment performed on each checklist will be recorded using this list and will be part of the conservation treatment report.
3. Vacuum the recto and verso of each checklist (or part thereof) with a HEPA-filtered vacuum and soft brush attachment to remove mold spores and fungal structures. Place checklists and fragments in a closed chamber suspended over an odor-absorbing material for 4 to 6 weeks to reduce the musty odor.
4. Test all media for solubility in a solution of 70% ethanol:30% water and in pure water. Test with the appropriate organic solvent(s) if its use is necessary for tape removal treatment.
5. Remove all old tape repairs and related adhesives from the checklists using locally applied organic solvent and/or locally applied controlled heat and mechanical manipulation.
6. If the media tests as stable in the 70% alcohol solution, immerse the checklist (or part thereof) in a 70% alcohol solution to deactivate any remaining mold spores. Follow with immersion in a series of water baths to remove soluble acids and reduce discoloration from the paper. *Please note that the washing treatments will most likely cause most of the stains to lighten somewhat in appearance, but is not expected to eliminate them entirely. We do not recommend additional stain-reducing treatments for this type of collection.*
7. If the media tests as soluble in the alcohol solution but as stable in water, then the checklist (or part thereof) will be washed in a series of water baths.
8. For checklists (and parts thereof) that can be immersed, provide a final alkalizing bath (i.e. deacidification) in a solution of calcium hydroxide with pH of 8.5 to further stabilize the paper and provide an alkaline buffer.
9. If the media tests as soluble in both the alcohol solution and water, then no wet treatment will be performed. A non-aqueous solution of magnesium bicarbonate (Bookkeeper) will be applied to the recto and verso of the checklist (or part thereof) when appropriate.
10. Mend tears, support weak areas and fill losses with an appropriate weight Japanese *kozo* paper using wheat starch paste to apply the mend on the verso of the checklist. Checklists with great numbers of tears, losses and/or overall weakness may be lined with a lightweight Japanese *kozo* paper (to ensure inscription on the verso remain visible) if this will provide greater support to the document. Partial checklists and fragments will be rejoined to the extent possible by lining.
11. Humidify and press each checklist (and part thereof) between spunbond polyester and blotters under pressure for several weeks to flatten the paper.
12. Rehouse each complete and partial checklist in a Melinex L-sleeve. The checklists from each year will be placed in a corresponding acid- and lignin-free buffered folder. The collation number will be written on the outside of each folder with a soft graphite pencil. The majority of the rehoused checklists will fit into an empty metal flat file owned by the client. The checklists that are too large will be rehoused in an oversized acid- and lignin-free buffered drop-front storage box. Fragments will be grouped as appropriate and stored in Melinex sleeves and folders and then placed in a separate acid- and lignin-free buffered drop-front storage box.
13. Pack the collection for return to the client.

All conservation treatments undertaken by Works on Paper follow the American Institute of Conservation's Code of Ethics and Guidelines for Practice

Estimated cost of conservation treatment: *(optional treatments, insurance fees, shipping or other expenses not included):*

Conservation treatment time (billed at discounted non-profit rate of \$85/hour):	\$7,100.00
Materials (see itemized list for details):	\$900.00
Total:	\$8,000.00

Materials list for conservation treatment, including rehousing materials

<i>Type of Material</i>	<i>Purpose</i>	<i>Quantity</i>	<i>Manufacturer/Vendor</i>	<i>Total Cost</i>
Vulcanized Sponges	surface cleaning	½ sponge per object	Quality Rubber	\$20.00
Wheat starch paste – 5lb Zen Shofu	repair adhesive	partial bag	Talas	\$5.00
Barrett repair guard papers	tear repair	2 sheets	UICB/Talas	\$15.00
Kozo lining papers	lining and infills for losses	various	Hiromi Papers	\$20.00
Blotters – 100% cotton, 100pt	flattening	10 sheets	Talas	n/a
Hollytex – No 3257 – 1 yard roll	support material for treatments	6 yards	Talas	n/a
Calcium hydroxide	alkalizing wet treatments	1 tablespoon	Talas	n/a
Ethyl Alcohol (ACH Grade)	increased stabilization of iron gall inks during wet treatment and mold remediation	2 gallons	Pharmco-AAPER/Talas	\$120.00
4mil Melinex L-sleeves (20" x 24")	long-term storage & increased protection during handling	50	Gaylord Archival	\$240.00
4mil Melinex L-sleeves (30" x 36")	long-term storage & increased protection during handling	20	Gaylord Archival	\$140.00
Buffered, acid-and lignin-free folders (20"x 24")	long-term storage	50	Gaylord Archival	\$100.00
Buffered, acid-and lignin-free folders (24" x 36")	long-term storage	20	Gaylord Archival	\$130.00
Drop-Front Archival Print Box (24" x 36" x 3")	long-term storage for oversized checklists	1	Gaylord Archival	\$43.00
Barrier Board Deep Lid Archival Print Box (20" x 24" 1.5")	long-term storage of fragments	1	Gaylord Archival	\$25.00
Cost of Shipping & Handling		n/a	Gaylord & Talas	\$205.00
Total before 15% discount				\$1,063.00
Total				\$900.00

Digital imaging

Each of the 54 complete voter checklists, partial checklists and groups of fragmented checklists will be photographed after conservation treatment to create a high-quality digital image. Works On Paper uses a Canon EOS Rebel T1i DSLR camera and oversize copy stand for all digital photography. Each photograph will include identifying information for each checklist as well as an inch scale and an X-Rite Color Checker for color reference. Digital images will be captured in RAW and then converted to TIFF and JPEG formats using Adobe Photoshop Lightroom software. Files will be named with the checklists' identifying information in a consistent format. TIFF and JPEG files will be burned to Archival Grade DVD-Rs for the client and will be kept on permanent file at Works on Paper. The client's DVDs will be housed in PVC-free sleeves and a PVC-free binder.

Estimated cost of digitization: *(includes photographs of recto and verso of each checklist)*

Digital imaging time (billed at discounted non-profit rate of \$50/hour):	\$300.00
Materials:	\$50.00
Total:	\$350.00

Materials list for digital imaging

Type of Material	Purpose	Quantity	Manufacturer/Vendor	Total Cost
Archival Gold™ DVD-R Discs in Binder	Long-term storage of large image files	1 set (10 disks and 1 binder)	Dellkin Devices/Gaylord Archival	\$50.00 (shipping included in materials listed above); 15% discount applied

NOTE: Full payment must be made within 30 days of completion of all conservation work and prior to return of the object(s).

OWNER'S STATEMENT OF INSURANCE VALUE: maximum liability limited to \$_____. Unless the owner's insurance policy provides the standard all risk perils and the owner's insurance company sends Works on Paper a waiver of subrogation, all objects left here must be insured under our policy. If no valuation is provided by the owner, an assignment of \$500 will be placed on the above object(s) for the purpose of insurance coverage. The undersigned recognizes that conservation treatment procedures may involve a certain amount of risk. Therefore, in further consideration, and as a condition of Works on Paper undertaking the work on the above object(s), **the undersigned waives and releases Works on Paper from all claims that may arise due to damage or loss to the above object(s).** The undersigned hereby grants permission to Works on Paper to use the record of this treatment, including photographs, for educational programs, academic publications, and promotional purposes.

It is understood and agreed between the parties to this agreement that the treatment may be modified or stopped should unforeseen problems arise. After consultation with the owner or authorized agent, a revised estimate may be provided if the problems are more difficult and time-consuming than they first appeared. **The cost estimate above is valid for 12 months.**

AUTHORIZATION IS HEREBY GIVEN TO WORKS ON PAPER to treat the above object(s). It is acknowledged that the undersigned has read and understands the treatment proposal and all terms and conditions herein.

			revised 4/10/2015
Owner or Authorized Agent	Date	Works on Paper, LLC	Date