June 28, 2024

Honorable Robin Woods
Montague County District Clerk

Critical Records Management

Preservation of Index Books

SUBMITTED BY:
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Dear Honorable Robin Woods,

This proposal addresses Montague County's historical records and is presented by Kofile Technologies, Inc. (Kofile). Quoted services include conservation treatments and rehousing. Archival rehousing includes encapsulation and loose-leaf binding into Archival Recorder Binders. Note that prices for the inventory herein are good for 90 days from the date of this proposal.

Kofile Technologies, Inc. (Kofile) is uniquely qualified to complete Montague County's modernization goals by taking an innovative approach to this project to ensure a successful outcome. Kofile's basis for success is decades of experience, realistic solutions, and professional analysis. Each project is unique and deserves special attention. Our team provides realistic solutions, professional analysis, and innovative archival products to equip records stewards with the information and resources needed to preserve collections.

Kofile performs all services in accordance with the Code of Ethics & Guidelines for Practice of the American Institute for Conservation (AIC).

Preservation minimizes the chemical and physical deterioration of the page which prolongs the existence and useful life of the original format. Preservation can include removal of the original from public access, creating a security copy, treatment, stabilization, preventative care, digitization - or any maintenance or repair of the existing resource.

AREAS OF CONCERN

Sound preservation ensures accessibility to these irreplaceable and permanent documents forever.

Acidic Paper

Past papermaking utilized bleach to obtain white sheets. As a result, this paper becomes increasingly acidic as evidenced by embrittlement and yellowish-brown discoloring. Paper also embrittles when relative humidity drops or fluctuates.

Acidic Ink

Acidic inks can "eat" or "burn" through a sheet. Unmonitored temperature and relative humidity (RH) accelerate this process. Inks can also fade with exposure to UV light. Historically, iron gall inks were the standard. These inks contain sulfuric acid - which fades with time. With proper treatments, chemical breakdowns (such as acid hydrolysis) are remedied.

Mechanical Damage (Use & Abuse)

Everyday use greatly affects collections. Sheets bear signs of grime and the natural oils of hands. Exposed sheets are susceptible to damage and loss. Dirt and other pollutants can serve as ignition sources and weaken exposed paper. Exposed fragments become abused even with careful use.

Binding Margin

The binding margins of many volumes are compromised due to guillotining. In order to rebind and protect these sheets, encapsulation is the only solution. If a volume were rebound as is, without encapsulation, vital information would be lost in the binding margin.

Always question vendors if they recommend power cutters (guillotining) to dismantle sewn books. Kofile never attempts any procedure that could result in a loss of text or weaken the integrity of the paper. A sheet's binding margin should never be compromised.

Broken Book Block
Once a binding fails, damage escalates. Sheets are free to drift from the protection of the book block. With exposure, fragments become abused and susceptible to loss.

Failing Index Stacks
Index Books sustain the most use. Thus, they suffer greater risks of text loss and sheet deterioration. Paper strength is completely depleted from continuous use. Eventually, tabs and sheet fragments are lost. Immediate attention is required.

Tape & Non-Archival Adhesives
The Library of Congress warns about the culprits of "pressure sensitive tapes—such as scotch, masking, 'invisible,' quick-release, cellophane, and even so-called 'archival' tapes"— all are unstable. These tapes and adhesives "will stain the paper and may cause inks and colors to 'bleed.' Many lose their adhesive properties and fall off with age, leaving behind a residue that is unsightly, damaging to the item and difficult to remove."

Adhesive stains lead to issues during imaging. Awarding a low-bid imaging and microfilm project may result in illegible images. To enhance image quality, conservation is essential. A conservator can remove water-based, synthetic, and pressure sensitive adhesives.

Page extenders are an inappropriate "quick fix" to a prevailing problem. To save this collection, the underlying issues causing the deterioration of the sheets' margins need correcting. The acid content of the sheet extenders only adds to the chemical breakdown of the paper's fibers.

Lamination Removal
Kofile conservators address the "Laminate" process to the fullest extent possible. Conservators reverse the process and remove the laminate using a proprietary solvent solution. The possibility of removing the "Laminate" depends on careful testing at our conservation lab. In a small percentage of cases, the adhesive is resistant to the solvent solution and cannot be removed safely. Conservators will not attempt removal if the removal process will damage either the document's paper or ink. If conservators cannot remove the laminate safely, Kofile will contact Montague County directly to discuss alternatives.

Non-Archival Quality Materials
The off gasses of deteriorating metals contribute to the chemical breakdown of paper. Major culprits include the metal content of book spines, the surrounding physical environment, and non-archival fasteners (such as binder clips, paper clips, and staples). These off gasses eventually destroy the fabric of the volume. Another symptom of metal oxidation is foxing, or foxlike (reddish and brown color) stains or blotches on paper.

TEMPERATURE & HUMIDITY MONITORING
While temperature and limited air circulation are crucial to a document's longevity, humidity and water are the most destructive threats.

Relative Humidity (RH) refers to the amount of water vapor present in the air. Maintaining a set point of 40-45% RH is optimal, but costly. The maximum acceptable total RH variation, or operating range, is 5% on either side of this set point. RH should never exceed 55% or drop below 30%.

Temperatures above 75° F and RH higher than 60% encourage mold and other bacteria growth within 48—72 hours.

Even slight changes in temperature can double the natural aging rate of paper. In reality, temperature and RH are not consistent in a local courthouse (especially on weekends).

After exposure to water, pages adhere to one another when in a compressed environment. Separation without loss of text and water soluble inks (such as signatures) is vital. These records are extremely fragile.

The mitigation of mold or micro-organics (which can result with the introduction of water or humidity fluctuations), should only be attempted by a trained professional. Water damage can also lead to other issues such as binding failure. The necessary treatments are time consuming and require a highly skilled conservator.

Visit the Image Permanence Institute (IPI) at www.dpcalc.org to explore the correlation of temperature and RH on natural aging, mechanical damage, mold risk, and metal corrosion (as exampled above). The image above is property of IPI.

TREATMENT SPECIFICATIONS

Kofile regularly addresses historical and permanent documents, including manuscripts, typescripts, negative Photostats, tri-folds, blueprints, re-creations, plats, and maps. No treatment, repair, or maintenance is used that is not 100% reversible.

Dismantle

Original binding materials, such as threads and adhesive residues, are carefully removed. Old manuscripts often have protein-based binding adhesives such as fish, bone, or rabbit skin glues. The application of steam with specialized equipment can soften the materials that are otherwise difficult to remove. Guillotine cutters are never employed. If trimming is necessary, it is accomplished with handheld scissors or specialized shears designed for trimming fragile sheets carefully and accurately. One document is cut at a time to ensure no text is lost.

Surface Cleaning

Surface cleaning sheets removes materials and deposits including dust, soot, airborne particulate, sediment from water damage, mold/mildew residue, active micro-organic growth, insect detritus, or biological or mineral contaminants. Tools include a microspatula, soft dusting brush, latex sponge, powdered vinyl eraser, or soft block eraser.

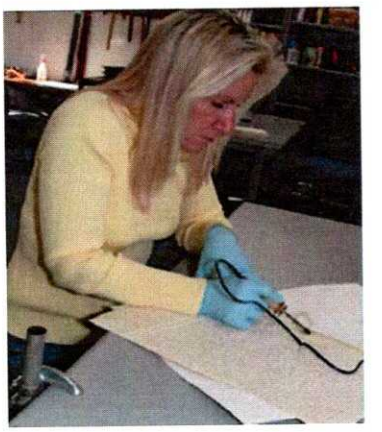
Removal of Fasteners

Kofile removes fasteners, page markers, and any metal mechanisms. Fasteners, such as binder clips, staples, paper clips, string ties, rubber bands, brads, straight pins, etc., cause damage in short periods. This includes physical damage (decreased paper strength due to punctures or distortion) and chemical damage (rust).

Removal of Tape, Adhesives, Varnish, or Old Repairs

Varnish, tape, and adhesive residue are reduced as much as possible without further degrading the original. When possible, peelers and tape are removed with two primary mechanical techniques: Heat Removal or Peeling. Heat removal is used when adhesive is loose, old, or brittle. Peeling is used when removal by heat is unnecessary. Solvents are a last resort, and local application occurs only after testing.

A microspatula (sometimes heated) coaxes threads, tape, and glue from the paper. A Hot Tools remover can soften adhesive for removal. Dial-Temp controls the transfer of heat and guards against scorching. Remaining adhesive is treated with a gum compound eraser.



Adhesive reduction begins with the most benign process. If mechanical tape removal is unsuccessful, the next alternative is chemical. This is either a local or spot treatment or immersion in a solvent bath. Kofile ensures that its laboratories are equipped to process chemical treatments correctly and safely. Previous repairs that cannot be removed safely will remain.

If possible, water-soluble repairs are removed with water or steam. Only fully-trained, experienced, and supervised staff attempt removal of water-soluble repairs. While iron gall ink is safe for aqueous treatment, many inks may fade and compromise legibility. Extensive testing is required.

Flattening and Humidification

Improperly stored paper becomes inflexible and retains a memory of the storage position. Kofile's technicians are experienced with all methods and tools to "flatten" paper including the use of tacking irons, heat presses, and an Ultrasonic Humidification Chamber.

After careful testing, the Ultrasonic Humidification Chamber is used to correct the most fragile documents folds and bends. This significant investment, with which other private labs are rarely equipped, represents Kofile's foresight and commitment to offering the best available technology.

Mending torn paper is an art form and requires a variety of materials depending on the paper's color, tone, condition, and weight. The length of the tear(s) and the degree of embrittlement or fragmentation are also concerns. Kofile generally mends tears greater than 1/2" if the document is going to be encapsulated.

A specialized paper and paste is commonly used and all mending materials are acid free and reversible. Mending strips are cut so the edge of the paper visually integrates with the page without clashing aesthetically or historically. Fragmented edges, folds, tears, cracks, voids, and losses are all mended in this fashion. The mending paper used is strong and is transparent after application and while visible to the trained eye, it does not distract from the document.

A low-temperature, acrylic adhesive that bonds to the paper may also be used for reinforcement of damaged sheets. Kofile also constructs its own version with acid-free tissue paper and liquid acrylic adhesive. An 1848 Probate Record before and after treatment. The image to the right shows the page after deacidification, tape removal, and mending with archival tissue.

Deacidification

Deacidification is only performed after careful pH and compatibility testing. Kofile is equipped with multiple custom-built spray exhaust booths. All are routed through a HVAC system for optimum performance.

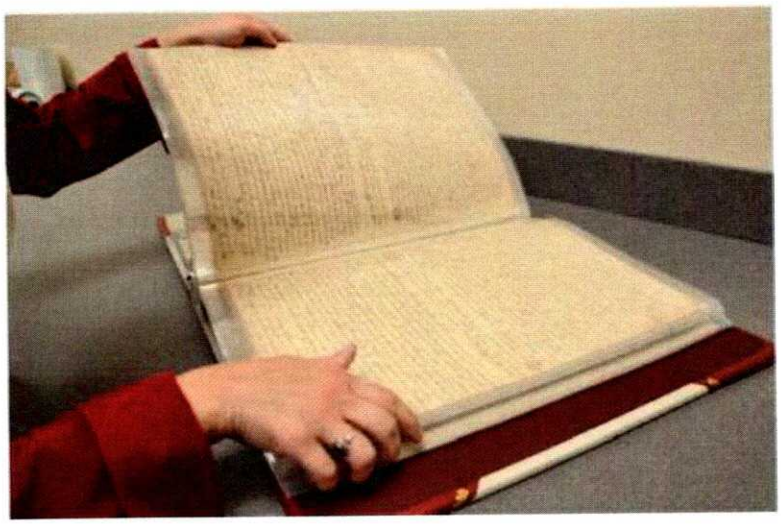
A commercially-prepared buffer solution is applied to both sides of the sheet with compressed air sprayer equipment (see right picture). The solution is non-flammable and non-toxic. The active ingredient, magnesium oxide, neutralizes acid and provides an alkaline reserve. This chemical is inert, safe, and does not degrade the sheet.

Once the buffer is applied, the paper's pH alters slowly. After de-acidification, random testing ensures an 8 pH with a deviation of no more than 2-4%.

Encapsulation

In archival encapsulation, the document floats freely and is not taped or glued to the pocket. Kofile uses SKC SH725 polyester (Polyethylene Terephthalate - PET) which is the most inert, rigid, dimensionally stable (dimstab), and strongest plastic film. Otherwise known as Mylar® Type D or Melinex® 516, it is crystal clear, smooth, odorless, and is resistant to distorting or melting in case of fire.

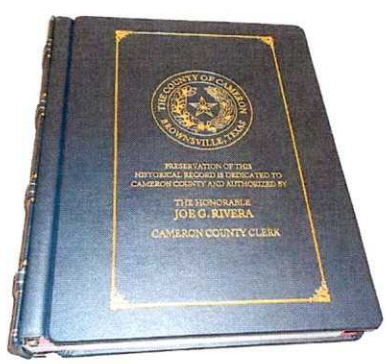
Each sheet is encapsulated in a 2 mil patented polyester pocket: Lay Flat Archival Polyester Pocket™ , US Patent #7,943,220 B1, 5/17/2011. This pocket is welded closed on three sides, and a Reemay® strip, or spunbond polyester, statically seals out atmospheric pollutants while allowing off-gassing on the fourth side. This provides easy access to the original document without cutting the pocket (some companies weld all four sides).



This construction allows for a flat book block and reinforces the binding edge for added strength and years of service. Available in custom sizes, the Pocket dimensions will match the 'book block' dimensions with a 1½" or 1¼" binding margin.

Stamping

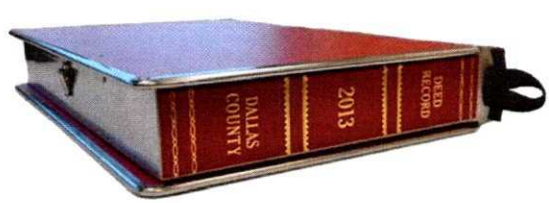
Title stamping can follow the same format/style of the originals. A stamping sheet is sent for approval. If any titling, dates, or other information from an original volume is noted in error, Montague County is notified. Any changes are approved by Montague County. Tooling is performed with 23-karat gold foil.



Heritage Recorder Binder

The Heritage Recorder Binder (pictured right) is a post binder, but the binding can also be sewn. This binder is available in various colors in genuine or imitation leather, or canvas. Cover printing is foil on the leathers and hot stamp printing on the canvas.

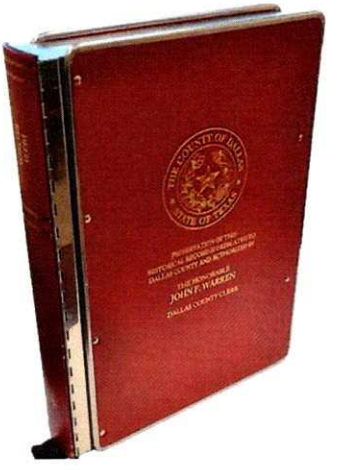
Disaster Safe Binder™ (DSB)



The DSB provides unparalleled protection and storage. Developed after Hurricane Katrina to address the devastation of the Orleans Parish archives, it protects sheets from water, fire, and physical disruption. The primary problem in 2005 was 100% relative humidity. With weeks of no power, mold was rampant. A hard lesson, the DSB addresses what went wrong in that disaster.

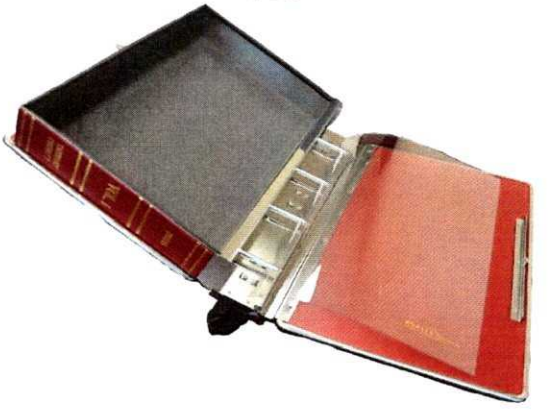
The DSB enables the encapsulated sheets to hang from the binder's posts—much like a hanging vertical plat cabinet. This feature allows collections to return in a smaller storage footprint with 4Post™ Shelving.

Any product that fails to operate properly or maintain its original integrity is replaced at no cost to Montague County. This is Kofile's commitment of value and service to its customers.



The DSB provides functionality and access ease while offering the highest rate of return on the client's investment. It is a portable vault for housing records of enduring value. It provides progressive protection from exposure to fire, water, Relative Humidity (RH), atmospheric pollutants, ultraviolet (UV) light, impact, and drops. The DSB also features a lifetime warranty against rust.

Other DSB Features Include:
Stainless Steel—The metal mechanism and book block apron are constructed of stable, corrosion-proof 316 stainless steel, which does not emit harmful gaseous pollutants like cold roll steel.



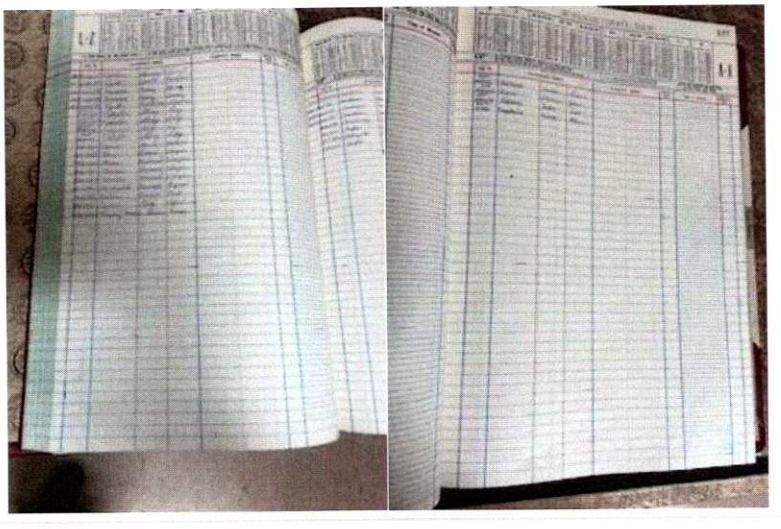
Support to the Book Block—The DSB is equipped with a Polyester Foam Insert, which ensures physical support to the book block and allows library-style storage.

Microclimate—The DSB creates a Microclimate, an independent, stable environment separating sheets from the external atmosphere.

Security Lock—A security lock hinge protects from theft.

Nonflammable & Self-Extinguishing—With nonflammable cover boards and materials, the DSB is self-extinguishing. These proprietary features protect the contained pages in extreme temperatures.

PHOTOGRAPHIC DOCUMENTATION



SCOPE OF SERVICES

General treatments and services are outlined in the following. Services are tailored to the needs of the specific item.

Preservation—Conservation Treatments, Deacidify, Encapsulate, & Bind (PRV)

- Kofile creates a permanent log (noting condition, page order, characteristics, and treatments) for each item upon receipt. Items are inspected and control numbered as necessary. A final quality check references this log.
- Dismantle volumes by hand (if applicable).
- Surface clean sheets. Tools include a microspatula, soft dusting brush, latex sponge, powdered vinyl eraser, or soft block eraser. Surface cleaning removes materials and deposits—e.g., dust, soot, airborne particulate, sediment from water damage, mold/mildew residue, active micro-organic growth, insect detritus, or biological or mineral contaminants.
- Remove any non-archival repairs, adhesives, residual glues, or fasteners to the extent possible without causing damage to paper and inks.
- Mend tears and guard burns on back side of sheets with acid free and reversible mending materials.
- Deacidify sheets (each side of each sheet) after careful testing with Bookkeepers®. This commercial solution of magnesium oxide, which neutralizes acidic inks and paper by providing an alkaline reserve (after pH and compatibility testing). Random testing ensures an 8.5 pH with a deviation of no more than ± .5.
- Encapsulate each sheet in a Lay Flat Archival Polyester Pocket™. Each custom envelope is composed of Skyroll SH72S® Mylar and includes a patented lay flat design. Dimensions match the "book block" dimensions, with a 1¼" binding margin.
- Re-bind in custom-fitted and stamped archival quality binder. Each binder is manufactured on a per-book basis and sized to 1/4" incremental capacities. This binder is available with four hubs, a gold-tooled spine, and is roller shelf-compatible. A volume may return split due to the added weight of the Mylar, depending on page count.
- A dedication/treatment report is included in each binder.

PROJECT PRICING

Without a signed agreement, prices are good for 90 days. All pricing is based on estimated page counts and condition. Final billing occurs on actual page counts and condition per mutually agreed upon pricing; not to exceed the P.O. without written authorization.

Montague District Clerk					
Project Overview					
Record Series	Date Range	Page Count	Format	Level of Service	Estimated Total
INDEX BOOK 2 A-K	2006-2016	400	Oversized	PRV	$3,080.00
INDEX BOOK 2 L-Z	2006-2016	400	Oversized	PRV	$3,080.00
				PROJECT TOTAL	NO CHARGE

This proposal shall be governed by the terms of use found at https://kofile.com/termsandconditions.
Payment Terms: Pay 50% upon inventory pick-up with the balance due upon project completion.
Check box if a customer P.O. Number will be required for Kofile to bill. ☐

CUSTOMER ACCEPTANCE	KOFILE ACCEPTANCE
Signature of Authorized Official	Michael Cobb Signature of Authorized Official
Kevin L. Benton Print Name of Authorized Official	Michael Cobb Print Name of Authorized Official
County Judge Title of Authorized Official	Central RVP Title of Authorized Official
August 12, 2024 Date	6.28,2024 Date

ACCESSIBILITY OF RECORDS

Records held at Kofile are maintained as private and confidential material. Montague County is guaranteed access to records via email or toll-free fax at our expense. Upon receipt of a records request, Kofile will flag the requested record and verify inventory control, pull supporting paperwork, and email/fax a response to the approved requester or alternate. The turnaround time for a records request will meet or exceed requirements.

Please note that all records (including volumes, documents, digital images, metadata or microfilm) serviced by Kofile shall remain the property of Montague County. This policy applies to any agreement, verbal or written, between Montague County and Kofile.

The records are not used by Kofile other than in connection with providing the services pursuant to any agreement between Kofile and Montague County. The records are not commercially exploited by or on behalf of Kofile, its employees, officers, agents, invitees or assigns, in any respect.
Please let me know if you have any questions. We look forward to serving Montague County and to working together for the preservation and access of its public and historical assets.

Sincerely,

Jack Morris
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