

HONORABLE STACEY KEMP  
COLLIN COUNTY CLERK

PRESERVATION, ARCHIVAL DIGITIZATION,  
& ARCHIVAL INDEXING OF  
CRIMINAL CASE FILES 1893-1950  
& CIVIL CASE FILES 1854-1950

MAY 4, 2023

**Kofile**



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# CONTACT INFORMATION

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KOFILE TECHNOLOGIES, INC.  
6300 CEDAR SPRINGS ROAD  
DALLAS, TX 75235  
p/ 214.442.6668  
f/ 214.442.6669

STACY CORTESANO  
ACCOUNT EXECUTIVE  
p/ 972.984.8505  
STACY.CORTESANO@KOFIL.COM

MICHAEL COBB  
EXECUTIVE SPONSOR—SENIOR VICE PRESIDENT  
MICHAEL.COBB@KOFIL.COM



# I. EXECUTIVE SUMMARY

This proposal addresses historical Criminal Case Files and Civil Case Files for the Collin County Clerk’s Office. Kofile Technologies, Inc. (Kofile) will provide the required services. All page and document counts herein are Good Faith Estimates, and revised based on review of the volumes at the Kofile Lab.

Proposed services include:

- **PRESERVATION**—Preservation services include conservation treatments, deacidification, encapsulation, and binding. With this service, Collin County has access to Kofile’s proprietary archival products developed for local archives—the *Lay-Flat Archival Polyester Pocket™*, and the *Heritage Recorder Binder*. Kofile holds the patent on two proprietary archival storage products.
- **ARCHIVAL DIGITIZATION**—All items indicated for service will receive archival digitization, including image capture, processing, and enhancements.
- **ARCHIVAL INDEXING**—Records are indexed and formatted for the appropriate County records management system.

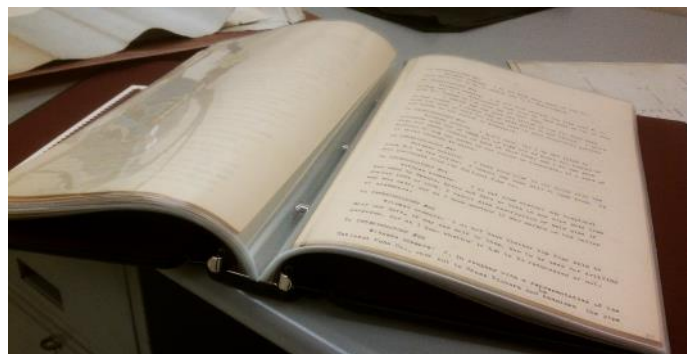
**PROJECT GOALS**

- ✓ Modernize & upgrade office systems infrastructure
- ✓ Digitization and online access reduces in-person interaction thus mitigates against COVID-19 transmission and supports broadband usage
- ✓ Provide eCommerce capabilities for the public to search and purchase land records from any location
- ✓ Eliminate or reduce manual lookups & searches
- ✓ Expedite searches with more records available for electronic retrieval
- ✓ Progress towards a paperless office
- ✓ Protect original records by reduction of daily use
- ✓ Reclaim space in the public records area

Kofile is uniquely qualified to address the long-term management, preservation, digital access, and storage of any permanent retention records and active records.



The Harris County District Clerk, Houston, TX, is the repository for Case File No. 37096, captures a glimpse of the early history of an iconic American financial empire. It documents the case of Howard R. Hughes [Sr.] vs. Peden Iron & Steele Co. from late 1905 to 1906. This Case File (above) was preserved for posterity and returned to the County.





All services are completed by Kofile are either performed or managed from its *Conservation & Digitization Lab* in Dallas, TX. The facility uses a Texas workforce. Kofile has a team of indexers already trained and experienced in indexing specifications specific to the State of Texas. Kofile does not outsource any portion of this project to any offshore workers (e.g., not based in the United States). There shall be no offshore remote access to any of Collin County's images and data.

These services may be eligible for reimbursement under the *American Rescue Plan Act of 2021 (ARPA)* in regards to Prevention in Congregate Setting in support of Social Distancing for COVID-19 and future pandemics for title researchers/attorneys by providing online access to digitized assets.

**DO IT ONCE,  
DO IT RIGHT,  
DO IT FOREVER** Archival digitization includes capture and processing (custom image enhancement and cleanup) and optimization for access. Kofile's services are not 'as-is' or 'scan it & forget it.' Kofile's basis for success is decades of experience, realistic solutions, and professional analysis. Many of Kofile's projects involve re-work for collections already imaged or indexed by low-bid vendors.



The expertise demanded to address a 1861 court document is different than the knowledge to scan a print-out from an inkjet printer. No one wants to hear, "I'm sorry, but those pages were stolen, lost, destroyed, or inaccessible."

This project will relieve dependence on paper by ensuring superior digital images are accessible for electronic retrieval. Kofile is uniquely qualified to complete Collin County's modernization goals.

Kofile's imaging standard operating procedures (SOPs) were designed and implemented with the input of professional paper conservators. Technicians are trained to handle fragile documents. Images are the highest quality and are free of distortion and loss of information due to capture failures. Kofile can address any concerns regarding the conservation treatment and handling of fragile items, superior image capture, and quality of work—*all at one facility*. Also, Kofile invests in the best hardware and software. The County is assured of the following key differentiators with Kofile's services:



#### PROVEN WORK HISTORY

Kofile has completed previous projects of similar nature for county recording offices across Texas and the nation. Kofile is a proven vendor for the Collin County Clerk's Office, having previously performed similar services for several projects.

- Annually, preserves over six million pages for Local Governments in the U.S.
- Annually, Kofile digitally captures over 25 million pages for Local Governments in the U.S.
- Annually provides archival backfile indexing for 2.8 million documents. Daily indexing captures 200,000 documents per month. In 2020, Kofile provided indexing verification for more than 1,000,000 documents.



### WARRANTIES & GUARANTEES

There is a Lifetime Guarantee on all services and workmanship. Kofile will redo any and all completed services that do not meet the SOW at no additional cost to the County.



### IMAGING QUALITY CONTROL (QC)

- Kofile does not miss pages, produce illegible images, or damage documents. Kofile will QC each image and sight verify each image (QC includes two instances of human eye verification).
- Domain specific knowledge is a necessity. Kofile will maintain data integrity, structure, order, and identification.



### IMAGE PROCESSING: ZONAL ENHANCEMENTS

Unlike low-bid scan jobs which produce low resolution or illegible images, Kofile's proprietary software provides custom clean-up such as deskew, despeckle, character repair, and zonal enhancements.



### INDEXING ACCURACY RATE

- Kofile blind re-keys each field to maintain accuracy.
- Kofile understands that quality and accuracy are mandatory in any project of this nature. Kofile can commit to a minimum accuracy rate of 99.25% for historical indexing.



### SUBJECT MATTER EXPERTISE

Second- and third-generation conservators and public records experts lead projects, including pioneers in preservation, imaging, re-creation, and data entry.

- Senior Conservator with 40+ years of experience.
- Imaging/Re-creation Manager with 29+ years of experience.
- Data Entry Manager with 30+ years of experience
- Kofile maintains highly experienced indexing groups with specialized focuses, e.g., daily, backfile, or regional emphasis (and redaction).
- Kofile has a team of indexers based from Texas which already trained and experienced in indexing specifications specific to the State of Texas.



### OWNERSHIP OF DATA

Kofile does not hijack ownership of images and data undergoing service unlike other vendors. Collin County retains ownership of all images and data.



### QUALITY ASSURANCE (QA)

- Kofile's services are conducted by trained and experience technicians with proven procedures. Kofile's services are not performed on boxstore scanners in someone's garage. Many of Kofile's projects involve re-work for collections already imaged or indexed by low-bid vendors.
- Kofile holds the industry's highest levels of insurance coverage, including Cyber Liability insurance.



### ADVANCED TECHNICAL EQUIPMENT

Kofile invests in superior technological scanning equipment, software, and large format planetary/book scanners as part of its commitment to preserving documents and ensuring the best possible image capture.



### COST TRANSPARENCY

Actual cost is not hidden by complicated and multi-layered price points (such as the addition of labor and prep charges atop of capture costs). Other vendors hide true project total costs by separating each component into à la carte services.





#### TRANSPORTATION IN KOFILE-OWNED AND OPERATED VEHICLE

Kofile personnel pick up and transport records. Kofile operates its own climate-controlled vehicles. Kofile will provide all supplies, materials, equipment, transportation, and related items.



#### PERMANENT FACILITY

Kofile's corporate facility (the location of work) maintains a superior security:

- Fire-resistant brick and concrete building (F5 Tornado Resistant). Structural steel support members, fire-rated walls, ceiling, and flooring.
- Three archival storage vaults (Media Vault and two (2) Book/Paper Vaults—Works in Progress & Long-term Storage)
- Security fence surrounds the property with restricted control access at each gate/door.
- State of the art security systems protect the entire facility and each vault.



#### ULTRASONIC HUMIDIFICATION CHAMBER

Humidification is essential for fragile documents in which manual unfolding would harm the document's structural integrity.

Kofile has revolutionized the preservation industry with patented, effective, and efficient archival products designed *specifically for county government*. Kofile's unique archival products and their exclusive U.S. Patent statuses are the results of years of research, testing, development, and expertise. Each *exclusive* product is the result of our Made-in-America ingenuity—made possible by the sacrifices and vision of the immigrants and pioneers represented in this collection. All products are constructed by a Kofile company in Missouri.



#### LAY-FLAT ARCHIVAL POLYESTER POCKET™ —US Patent No. 7,943,220 B1, issued May 2011.

Kofile utilizes SKC Films, Skyroll SH72S® for all of its encapsulation projects. Polyester or Polyethylene Terephthalate (PET) is the most inert, rigid, dimensionally stable (*dimstab*), and strong plastic film. It is crystal clear, smooth, and odorless. Also, it will not distort or melt in case of fire. Reemay® Spunbond Polyester at the pocket edge offsets the document's thickness and seals out atmospheric pollutants.

Kofile appreciates this opportunity serve the Collin County Clerk in this engagement. With Kofile, Collin County saves money, eliminate exposure of assets at Collin locations. With headquarters located in Dallas, TX, Kofile can work side-by-side with the Collin County Clerk's Office.

Stacy Cortesano, Account Executive, will handle all communication with Collin County, and ensure the project is completed on schedule and to standard.

## II. RECORDS ASSESSMENT



### RETENTION SCHEDULE

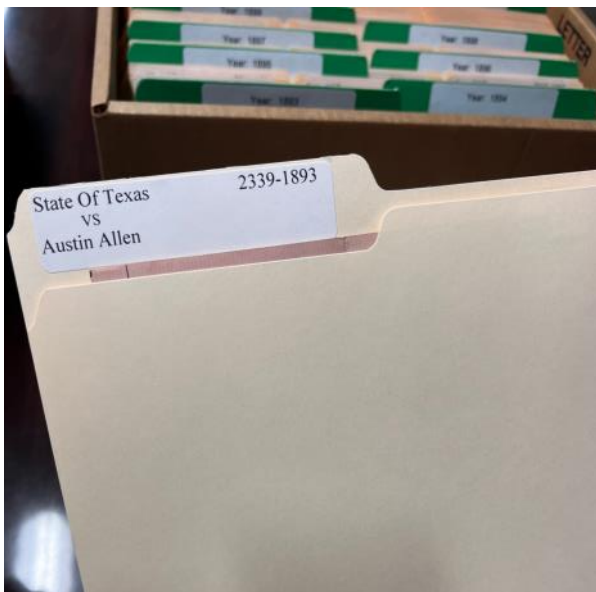
Due to the nature of these records as Probate Case Files, they maintain a PERMANENT retention period according to *Local Schedule CC*, Texas State Library & Archives Commission (TSLAC), March 2019.

### CONDITION STATEMENT

These items are in good condition. These Criminal Case Files date 1893-1925. The records contain both typescript (typed) and manuscript (handwritten) data (including notes, signatures, and documents). The shuck envelopes are handwritten. There were instances of negative Photostat sheets. Sheet measurements average Legal or Letter size. Currently, the records are unassembled and stored flat in new folders.

**Please see herein for photographic documentation of a representative sampling of this collection.**

Many factors threaten the permanence of these assets. Deterioration is often the result of natural aging, a history of use, lack of environmental controls, and UV light exposure.





Other areas of concern for archival government records are documented following:

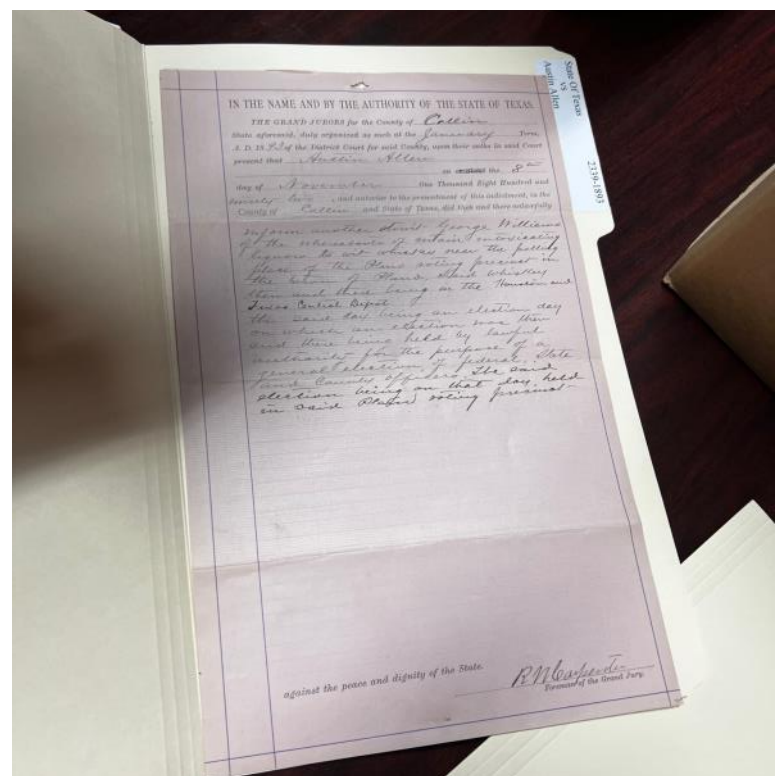
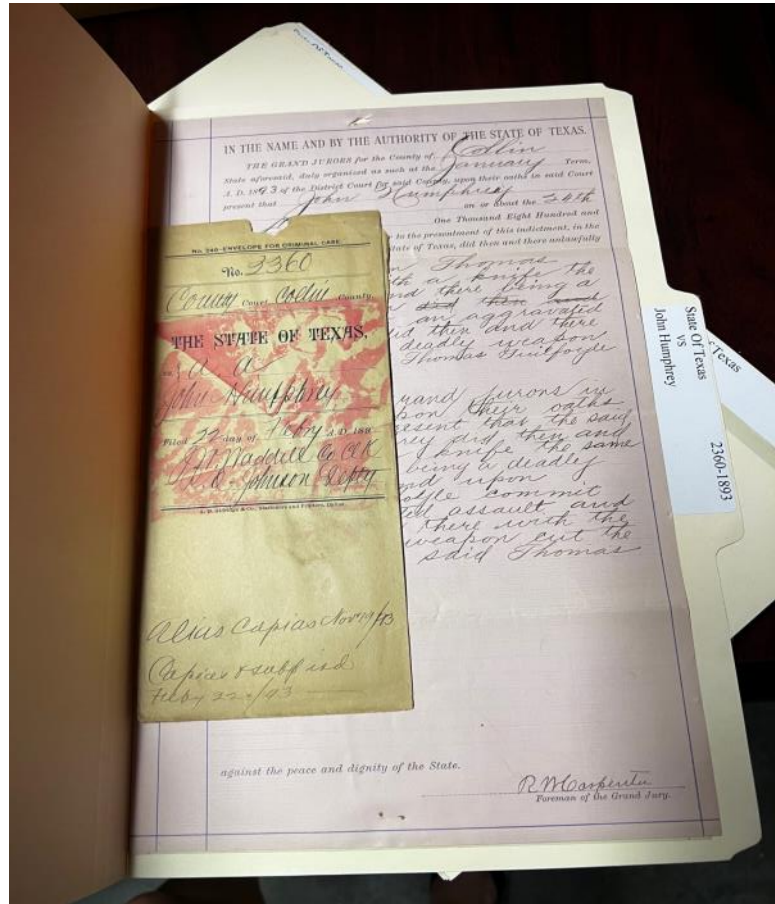
**Tri-Folded Storage**—Even though these files are currently, flattened, the lasting effect of years of tri-folded storage is visible. Even with careful handling, exposed fragments became fragile and worn.

With careful testing and observation, archivists have concluded that many formerly acceptable practices cause more damage than realized. Anyone stepping into a courthouse can see the effects of antiquated filing and storage methods.

Pigeon files or shuck cabinets (colloquial names) require records to be tri-folded. This storage method was judged destructive over 75 years ago. Drawers or “cans” pull out for access to the instruments. This sliding function shreds documents, while the tri-folded state weakens paper strength.

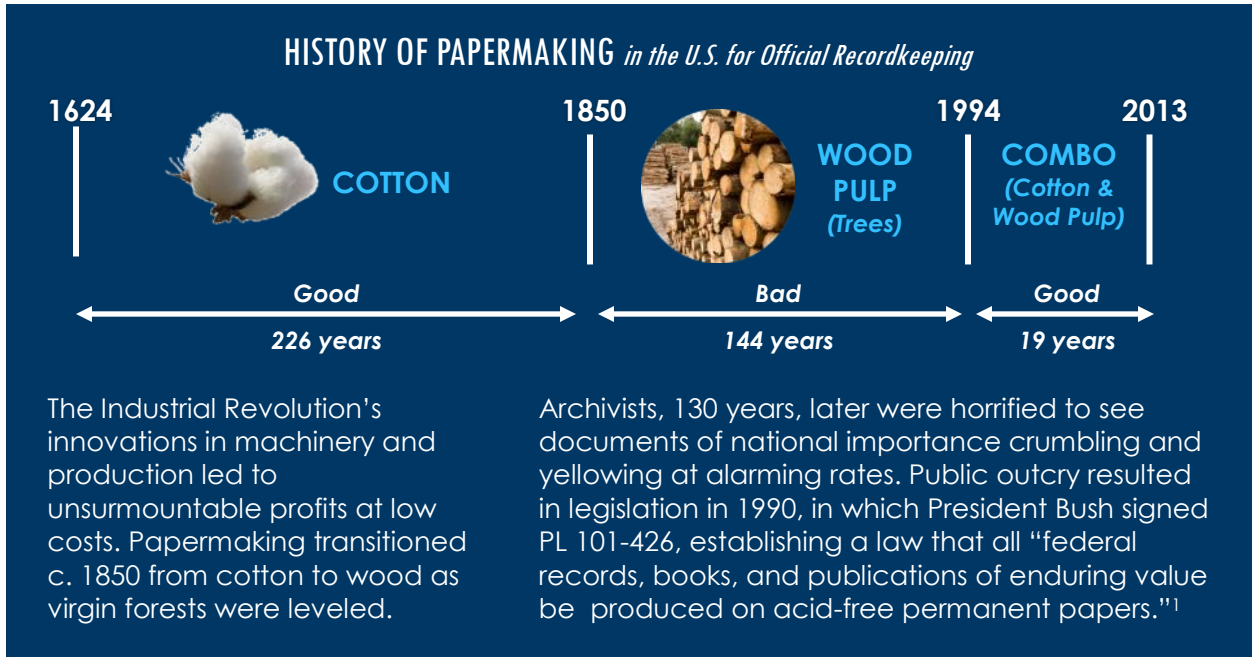
**Mechanical Damage (Use & Abuse)**

—A history of use greatly effects collections. Sheets bare signs of grime and the natural oils of human hands. Exposed sheets are susceptible to damage and loss.



**Acidic Ink**—Acidic inks “eat” or “burn” through a sheet. Unmonitored temperature and relative humidity (RH) accelerate this process. Inks also fade with exposure to UV light. Historically, clerks used iron gall inks—these contain sulfuric acid which fades with time. With proper treatments, chemical breakdowns (e.g., acid hydrolysis) are remedied.

**Acidic Paper**—In the past, papermaking processes utilized bleach to whiten. In time, this paper becomes increasingly acidic—evident by brittle and discolored paper (yellowing or browning). Paper also brittles when relative humidity (RH) drops too low or fluctuates and/or exposure to UV light.

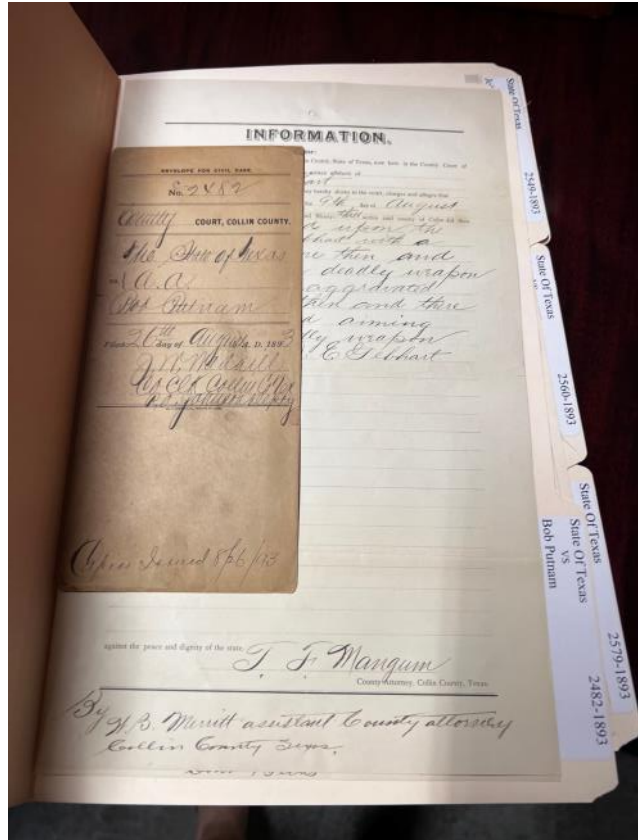


<sup>1</sup> Final Report to Congress on the Joint Resolution to Establish a National Policy on Permanent Papers. Appendix 4: NARA Bulletin No. 5-7. National Archives and Records Administration, Washington D.C. (September 8, 1995) Accessed Online October 10, 2022. <[https://www.loc.gov/preservation/resources/rt/perm/pp\\_x4.html](https://www.loc.gov/preservation/resources/rt/perm/pp_x4.html)>.

Image Sources: <<http://comfies.com.au/about-comfies.php?mode=cotton>>, <<http://www.arcticpaper.com/en/Home/Arctic-Paper1/Our-Mills/Arctic-Paper-Mochenwagen/Environment/>>, <<http://greatnorthernpaperhistory.com/photo-album/1930-sitting-atop-a-paper.html>>.

**Non-Archival Materials**—The off gasses of deteriorating materials contribute to paper’s chemical breakdown. Major culprits include the surrounding physical environment and non-archival fasteners (e.g., binder clips, paper clips, rubber bands, and staples). Off gasses eventually destroy the page’s structural integrity. Another symptom of metal oxidation is *foxing* (foxlike, reddish and brown stains or blotches on the paper).

**Attachment and Inserts**—Many files may contain irreplaceable inserts and attachments. The information documented on these inserts is at great risk of loss and damage. Kofile preserves the attachments and encapsulates them in sequence for return with the case file. Domain specific knowledge is a necessity. Kofile maintains data integrity, structure, order, and identification of all images and metadata.



**Tape & Non-Archival Adhesives**—The Library of Congress warns “pressure sensitive tapes, such as scotch, masking, ‘invisible,’ quick-release, cellophane, and even so-called ‘archival’ tapes” are all culprits. These tapes are unstable. All tapes and adhesives of these types 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.”<sup>2</sup>

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

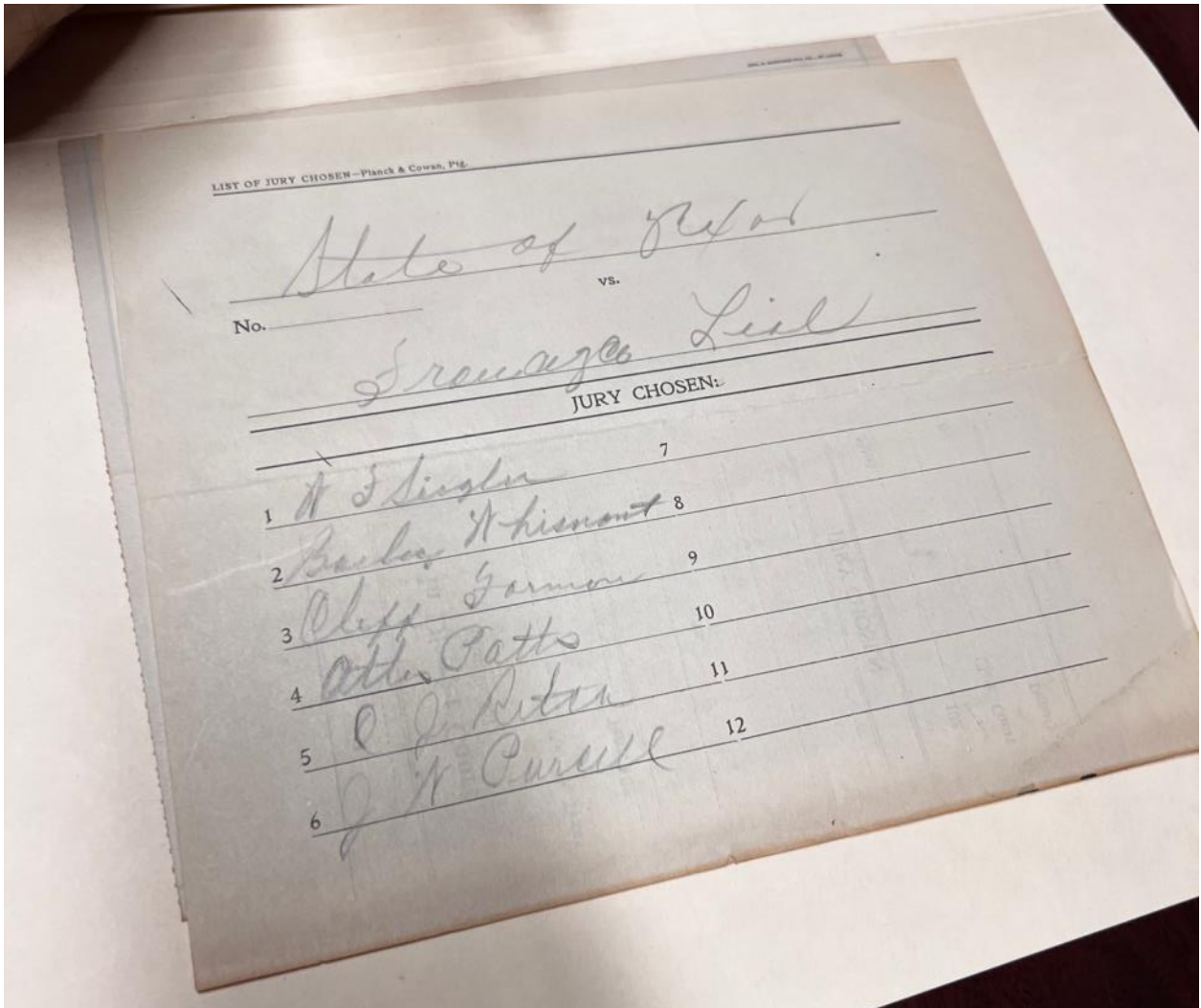
**Fading Photostats**—Negative Photostats record irreplaceable information. However, time and public use deteriorate the emulsion (*sulfiding*). Deterioration directly results from the use of exhausted ‘fixing baths’ or dirty bath water during the original silver print processing. The deterioration is also evidenced by the fading or yellowing of the sheet. Without treatment, text becomes illegible. Eventually the recorded data will disappear.

**Water Damage**—Humidity and water are the most destructive threats. After exposure, pages adhere to one another when compressed. Separation without loss of text and water soluble inks (such as ink signatures) is vital. Water damaged records are extremely fragile. Water damage can also lead to mold

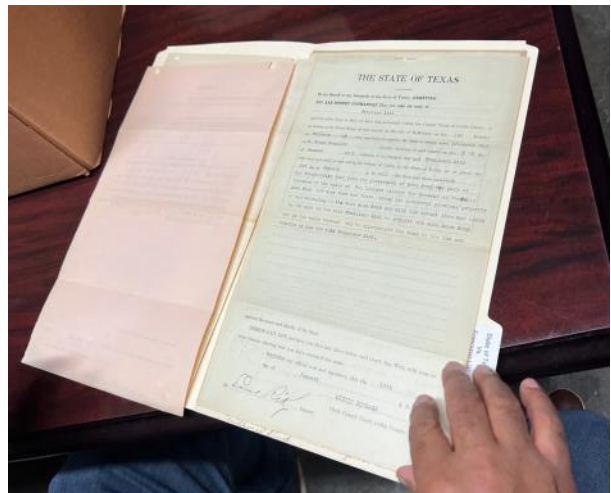
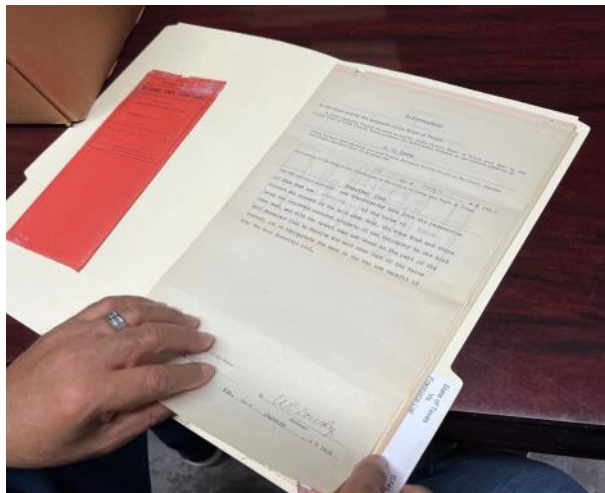
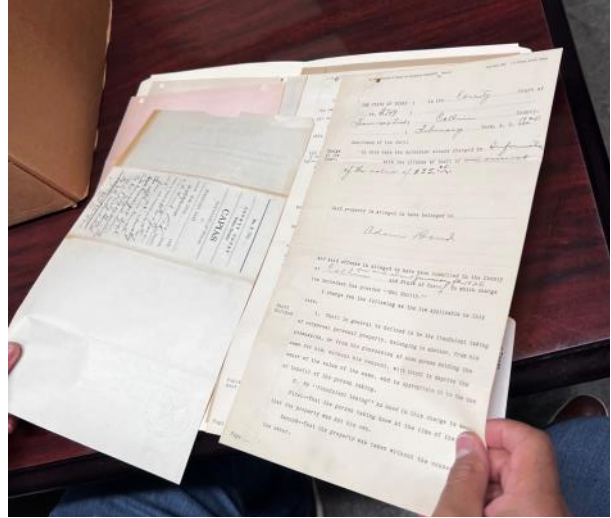
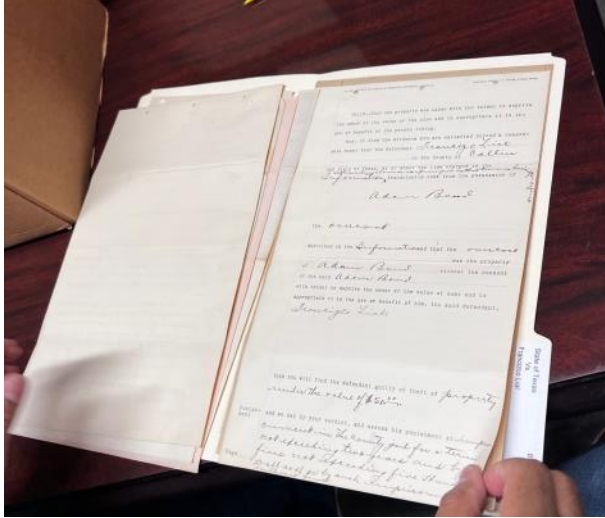
*Water can result in unmitigated damage. First, red inks smear, then blue inks, and lastly, black inks. Thus, often original signatures are often the first lost in an archives.*

<sup>2</sup>The Library of Congress. “Preservation FAQs.” <[www.loc.gov/preservation/](http://www.loc.gov/preservation/)>.









and binding failure. The necessary conservation treatments are time consuming and require a highly skilled conservator.

High moisture also compromises a binder's integrity and leads to rust (the result of oxidizing metal off-gassing). Rust, corrosion, and off-gasses spur chemical breakdowns and irrevocably damage bindings, papers, and recorded information.

**Temperature & Humidity Monitoring—**

Even slight changes in temperature can double paper's natural aging rate. In reality, temperature and Relative Humidity (RH) are not consistent in a courthouse (especially on weekends). Regulate to 68°F ± 5°F—even in the winter. Fluctuation promotes mold. If uncomfortable, forewarn staff and patrons to wear adequate clothing.

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

Relative Humidity (RH) is 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%. Archival product companies market small, inexpensive devices (Data Loggers) to assist in monitoring a public records archive.

The screenshot shows a web-based tool for preservation evaluation. On the left, there are three vertical sliders for Temperature (60), % RH (40), and Dew Point (36). Below them is a 'Temperature Scale' selector set to °F. On the right, a 'Preservation Evaluation' table shows metrics for Natural Aging (GOOD, PI 96), Mechanical Damage (OK, % EMC 7.8), Mold Risk (GOOD, Days to Mold No Risk), and Metal Corrosion (OK, % EMC 7.8). Below the table is a 'Record and Compare Values' section with a table header (T, RH, DP, PI, Days to Mold, EMC) and buttons for Save, Clear, and Export.

Type of Decay	Environment Rating	Preservation Metric
Natural Aging	GOOD	PI 96
Mechanical Damage	OK	% EMC 7.8
Mold Risk	GOOD	Days to Mold No Risk
Metal Corrosion	OK	% EMC 7.8

Visit the Image Permanence Institute (IPI) at [www.dpicalc.org](http://www.dpicalc.org) to explore the correlation of temperature and RH on natural aging, mechanical damage, mold risk, and metal corrosion (as exemplified). Images are the property of IPI.

### III. PROJECT EXECUTION

#### LOCATION OF WORK

Kofile is recognized as the market leader for records management and preservation services. Kofile facilities are strategically located throughout the U.S. If an opportunity to expedite this project becomes available, Kofile will present the option and obtain the County's agreement in writing before proceeding.

The location of work for this project is Kofile's corporate headquarters at 6300 Cedar Springs Road in Dallas, TX, see pictured. Kofile possesses a history of responsibility, and it has invested in facilities with superior security to mitigate loss and destruction before they occur.



Collin County is welcome to inspect any Kofile facility.

The Dallas facility is a fire-resistant brick and concrete building with structural steel support members and fire-rated walls, ceiling, and flooring. It is situated above flood plains, and the location is unlikely to suffer hurricane, tornado, or other cataclysmic natural disaster. The Kofile facility is F5 Tornado Resistant according to an architectural assessment performed by Tanner Consulting, January 2010.

Due to the sensitive nature of the information recorded in local public records, Kofile provides multiple security measures. Kofile also follows rigorous end-of-day closing and lock-down inspection protocol. A Motion Detector Security System protects the entire building, with installation of more than 50 internal and external security cameras. The entire building is equipped with a fire suppression system.

The building is a "locked down" facility. No one is allowed in unless employed or are escorted by management. All access points are monitored, and a security fence limits facility access. The primary gate is open during business hours, but the premises are locked and gates only accessible after hours with a security card.

Visitors are buzzed in after confirmation of identity via a video and voice system. Staff are positioned at department access points for an extra level of security.

#### *Regulated Facility Environment*

Kofile has 24-hour temperature and Relative Humidity (RH) controls. All work areas for original documents meet archival climate control standards. Kofile has four independent HVAC systems with programmable thermostats. Each vault has a separate and independent HVAC system. The HVAC for the work and storage areas are constantly set at 70°F. The level of relative humidity (RH) is maintained.



The laboratories are windowless and centrally located to eliminate exposure to ultraviolet (UV) light. Kofile does not have any issues with pest control. The building is regularly maintained. Food and drinks are not permitted in the conservation areas by anyone, for any reason. Garbage is removed daily. Records being treated for mold or pests are quarantined in standard polyethylene bags, separate from other records, until remedial treatment is complete.

## VAULTS

The Dallas facility has three vaults. Each vault is secured with Level 5 vault doors with a 4-Hour UL Rating of at least 350°F. Each vault has its own independent HVAC system, monitors for humidity and temperature, and controls for airborne particulates (monitored by analog methods). Kofile actively monitors for micro-organic growth.

Daily protocol requires that records removed from the vault for work are in the custody of a technician at all times. When not undergoing treatment, they immediately return to the vault area.

### *Media Vault*

Kofile provides storage services for microfilm, microfiche, and other types of data in its Media Vault. Kofile randomly performs spot tests to safeguard against certain contaminations, such as Vinegar Syndrome, mold, mildew, and/or Redox on microfilm. Acetate Base Film is separated from Polyester Base Film and is stored in separate storage boxes to help eliminate film contamination, as Eastman Park Micrographics, Inc. (EPM) recommends.



The Level 5 door of the Long-Term Storage Vault (same model used for each vault).



'Works in Progress' Vault.



Kofile's largest vault for long-term storage.



Kofile can retrieve any part of the microfilm/data and transmit the requested microfilm/data to a customer electronically or through other means. The client owns all of the stored microfilm/data, and Kofile will not sell or distribute the microfilm/data in any way.

This vault is regulated by an independent HVAC system that monitors humidity, temperature, and controls airborne particulate (monitored by analog methods).

## SYSTEM SECURITY

Due to the data's confidentiality and security, Kofile implements multiple security measures. The Kofile facilities are designed to ensure the safety of its clients' data.

Kofile has taken substantial safeguards to protect clients from release of information through "social engineering" exploits. Kofile has sensitivity policies that are enforced and circulated to classify the sensitivity of data within its possession, however short its stay.



The Digitization Lab.

Operator terminals are configured to ensure data cannot leave any facility. Any technician assigned to the project is issued a username and password to access images. Kofile works in a secured, directory-based environment. Rights are assigned to individual images as "read only." Only approved staff have the passwords to change image permissions. No one can delete or modify images without authorization. All activity of this nature is logged.

### *Back-Ups*

Kofile delivers a true native cloud security for its images and data. All Labs save images and data to a local server. Each night this server synchronizes with the cloud. Each day, a snapshot of all data occurs. All data is accessible in realtime via the cloud. Within the cloud are multiple levels of redundancy and failover to various datacenters regionally situated across the U.S.

Servers are locked and managed in a secure environment with temperature and moisture monitoring with badge access limited to only key personnel. *All digital data in the possession of Kofile and used for production purposes is as follows:*

All data is kept in secure locations with controlled and limited access both physically and electronically. Only such personnel that require access to the data for either production-related purposes or Information Technology (IT) - related maintenance is allowed.

- All production data (with the exception of specific projects) is copied to the primary site daily (nightly).
- All data at rest is encrypted.

- All data is restricted to a “need to access” basis.
- All data is nightly backed-up (with encryption).
  - ◊ A secondary copy of this backup is copied offsite to a secure co-location over VPN tunnel.
- All data is both weekly and monthly backed-up to a tape archive.
  - ◊ A copy of this archive is stored in the Media Vault on the Dallas primary site.

Kofile follows the industry standard backup and archive principle of 3->2->1:

- 3 copies of the data (and generally more); 2 Different media formats; 1 Copy offsite

### *Chain of Custody Control*

An integral part of project management relates to the cataloguing of tracking incoming items (physical or digital). Kofile uses NetSuite as its enterprise resource planning system (ERP) to produce unique IDs via barcodes for each physical control unit. Each workstation has a tablet device that technicians use to check in and out work as it moves through production. This ERP provides the tools necessary to establish positive control of the project and continuously manage inventory (e.g., book, document, image, microfilm). Kofile can track the individual status of each item traveling through its system. ERP is also used for audit tracking purposes for each employee.

### INFORMATION REQUESTS

Records held at Kofile are viewed as private and confidential and treated as such. Collin County Clerk is guaranteed access to records via email or toll-free fax at Kofile's expense. Upon receipt of a records request, Kofile flags the requested record and verifies inventory control, pulls supporting paperwork, and emails/faxes a response to the approved requester or alternate. The turnaround time will meet or exceed Collin County's requirements.

Requests for plats or oversized documents are handled accordingly. If Collin County has a plat printer, Kofile can email a working copy image for immediate printing. If not, with a reasonable number of hard copies, Kofile prints and ships directly to Collin County.

Kofile has never charged for fulfillment of ad-hoc requests for copies of records in its possession by the County. This is a standard level of service for any project.

### DELIVERY OF IMAGES

Final images are delivered via SFTP (or CD/DVD/thumb drive/external hard drive). Kofile recommends the use of a Secure File Transmission Process (SFTP). SFTP is a point-to-point delivery. There is no cost to the County for this service. There are two methods to use SFTP:

- Kofile FTP into the County system and upload files (push)
- County FTP into the Kofile system and downloads files (pull)

Kofile partners with County resources to establish and test an SFTP connection. Kofile documents (whitelists) County-provided IP address(es), and assigns the County with a unique username and secure password. County access is restricted to the data directory specifically created for the County/project. Kofile's FTP server is equipped with two independent internet connections allowing for automatic failover and redundancy.

Kofile's FTP server only allows connections from explicitly defined source IP addresses. Kofile assigns each client unique credentials and access is restricted to the data directory specifically created for the project.

### OWNERSHIP OF DATA

All County records (including volumes, document, digital images, metadata, and microfilm) serviced by Kofile shall remain the property of Collin County. This policy is applicable to any agreement, verbal or written, between Collin 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 Collin County.
- The records are not commercially exploited by or on behalf of Kofile, its employees, officers, agents, invitees, or assigns, in any respect.

### SERVICE DELIVERY

Kofile takes pride in being a prompt and efficient company. Kofile provides an 'off the shelf and on the shelf' service. The Kofile team is experienced working with public records. Records are picked up directly by dedicated Kofile personnel.

Kofile's personnel monitor the packing and/or palletization of items for transportation, and inventory and receipt records at the time of pickup and delivery.

Kofile differs from other vendors because it has invested in its own transport vehicles and do not have to rely on third-party transportation services. This capability enables Kofile to expedite projects that would otherwise lag due to dependence on third party freight limitations and costs. Kofile transport personnel maintain a Class B CDL with an air brake endorsement.

Collin County records can be transported in a secure Kofile vehicle. The cargo is transferred in a climate-controlled environment that is regulated to prescribed archival standards. The Kofile vehicle boasts a 4000 lb. lift gate, air suspension, and air brakes. This truck is also equipped with several extra security features, including back-up cameras and an anti-lock braking system.



Documents are unloaded directly into the Kofile building through a dock. They are never left in a vulnerable location or accessible to unauthorized persons. A coordinated staff effort at all levels maintains security and chain of custody for the documents.



The project inventory can be addressed batches in which pickup and delivery are staggered.

- Kofile's largest vehicle can pick up a batch of 400 12" boxes or 500-700 volumes per trip. The quantity of records addressed are dependent of the storage space available in the transport vehicle.
- If the size of the collection is substantial, Kofile personnel can operate a rented 53' tractor trailer to transport up to 1,250 boxes in one trip.

## WORKPLAN/SCHEDULE

Kofile is available to start upon award of contract and Agreement. In the case of preservation projects, the work determines the schedule, response times, and completion date. Each job is individual and unique. Kofile can address the project materials at a high volume of materials. The condition of the record determines how quickly it moves through the imaging process. Usually, older records suffer from extreme deterioration and require more attention. As the collection is processed in controlled batches, and the age of the records decreases, production rate increases.

Kofile begins every project with an assessment of the records (either on-site or at Kofile's facility) to give an accurate portrayal of the scope of work required and the project budget. All initial quotes are estimates of page and image counts—and final billing occurs on actuals. Even counting each page by hand does not also give an exact count for pricing—one must factor in human error, attachments, and image splitting. However, Kofile pricing proposals are always close to the final billing.

Kofile works on projects in batches of work. The quantity of records addressed are dependent of the storage space available in the transport vehicle. Each batch will require 20-22 weeks to complete upon entering the work queue. This accounts for the time required to order the binders, gain approval for titling, construction of each binder, binder delivery, binder stuffing, and quality control. Kofile does its best to present realistic project timelines and its vast experience helps us head off any issues or problems. Should Collin County require an expedited turnaround, the Project Manager is available to discuss possibilities.

Batch pick-up and delivery can overlap, so that Kofile will deliver completed work each month. The quantity of records addressed are dependent of the storage space available in the transport vehicle.

Preservation requires the standard 20-22 weeks for turnaround. Creation of a binder, following approval of stamping, is a minimum of 12 weeks.

Imaging requires 12-16 weeks for turnaround, and Kofile typically delivers the images at the same time as the preserved records.

Indexing averages three volumes completed per day per active project, and only commences upon the finalization of any formatting of the digital images. Indexing of case files is a more lengthy process.



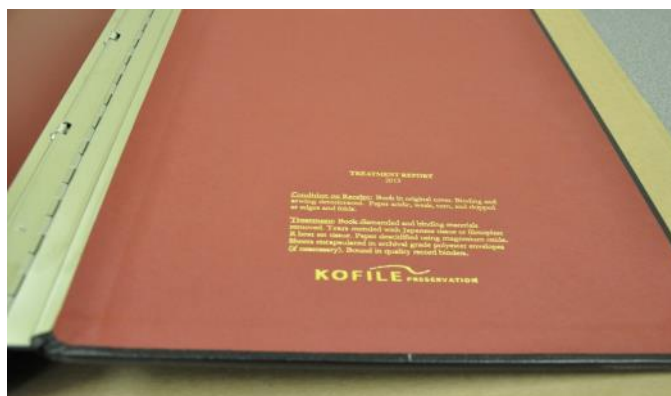


## IV. PRESERVATION METHODOLOGY

### DOCUMENTATION OF TREATMENT

Upon receipt, items are assessed to document condition prior to service. A preservation technician inspects each sheet to ensure that it receives the appropriate level of treatment. A written record of pre-condition is retained and included in the final Treatment Report (Information Log). Information recorded includes:

- Date(s) of treatment
- Condition of document upon receipt
- Presence of acidic glues
- Presence of previous repairs
- Special characteristics
- Page count, pagination, and blank pages
- Loose pages or attachments
- Presence of pressure sensitive material
- Presence of staples, paper clips, brads, etc.
- Identity of certificates/records (manuscript, Photostat, typed, etc.)
- Notation of original lettering on spine and covers
- Any other information pertinent to the identification of the volume
- Name(s) of the conservator who worked on the item or held a supervisory position
- Name(s) of the preservation technicians who worked on the item



The work order and individual documentation logs accompany the item throughout the entire preservation process. Each project's information is entered on a color-coded production and control board. Storage areas are likewise color-coded to correspond to each batch or group of records. Records are housed in the same location throughout the project so that any given record is quickly located.

Please note that this is not a conservation treatment report disclaimer—this is provided in every finalized re-bound volume (see pictured).

### CONSERVATION TREATMENTS

Kofile regularly addresses historical and permanent documents. Document integrity is essential. Kofile addresses each sheet individually. All materials used in the construction of products that contact records, including cover boards, are acid free and lignin free.

Kofile's extensive experience covers a wide range of permanent retention media—documents, volumes, tri-folds, plats, maps, negative Photostats, micrographics (film and fiche), digital images, etc. Projects range from one volume to thousands of volumes. Each problem is unique and deserves special attention.

Testing procedures measure the following: paper's pH, reaction to solutions and methods for reduction of adhesives, ink solubility in water or solvent, and free Iron II and III ions.

**The following is an overview of treatments and services available at the Kofile lab. Services will be applied and equipment utilized as needed for individual pages.**

### *Dismantling*

Kofile does not attempt any procedure that results in a loss of text or weakens the paper's integrity.

During dismantling, a technician carefully removes original binding materials, such as threads and adhesive residues by hand; likewise, case files are removed from shucks.



This compromised binding allowed the loose sheets to drift from the protection of the book block. Dismantling required careful removal by hand of original adhesives and threads.

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 materials, which are otherwise difficult to remove.

### *Surface Dry Cleaning*

Surface cleaning is a generic term for the removal of materials deposited on pages—including dust, soot, airborne particulate, sedimentation from water damage, mold/mildew residue, active micro-organic growth, insect detritus, or even biological or mineral contaminants. All have serious consequences during long-term storage.

Reduction methods vary in degree of simplicity. More elaborate systems require isolation, filtration, and personal protection. Less frequently, conservators use more elaborate systems of isolation and filtration with HEPA vacuums.

### *Removal of Fasteners*

Kofile removes fasteners, page markers, and metal mechanisms. Fasteners (e.g., binder clips, staples, paper clips, string ties, rubber bands, brads, straight pins) can cause damage in short periods. This includes physical damage (decreased paper strength due to punctures or distortion) and chemical damage (rust). As metal disintegrates, the resulting rust "eats" the surrounding paper fibers.

### *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.

If mechanical tape removal is unsuccessful, the next alternative is chemical. Adhesive reduction begins with the most benign process. Chemical removal is the last resort. 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. Previous repairs that cannot be removed safely will remain. 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. Therefore, extensive testing is required.

### *Flattening & Humidification*

Improperly stored, papers become inflexible and retain a memory of the storage position. Flattening occurs in the Kofile lab with the strictest archival environmental control standards. 'Flattening' is accomplished by a variety of methods and tools. Tacking irons are one such tool and have adjustable temperature controls to alleviate damage. Another method uses moderate pressure drying between acid-free blotters. Monitoring eliminates bleeds and mold/fungus.



**Ultrasonic Humidification Chamber.**



**A Kofile conservator carefully coaxes adhesives and tape by application of heat and pressure with specialized conservation tools.**

Items are humidified after testing the image solubility. The Ultrasonic Humidification Chamber can correct the most fragile document's folds and bends. This machine is



enhanced with a cross flow and features a humidity dome and ultrasonic humidifier. Private labs are rarely equipped with this device, and this investment represents Kofile's foresight and commitment to offering the best available technology.

### *Repair and Restore Paper*

Mending paper is an art form. It is accomplished with 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. Materials utilized for mending are acid free and reversible. Japanese paper and ethyl cellulose paste or Crompton tissue are used most often. Kozo paper, in natural and white finish, is commonly used because of its strength and transparent nature. While visible to the trained eye, it does not distract.

Mending strips are water cut so the edge of the Japanese paper visually integrates with the Document.



An 1848 Probate Record before (L) and after (R) treatment and mending with Japanese tissue. Above, a Kofile conservator pieces the document together after the tape was reduced.

Kofile also uses a low-temperature acrylic adhesive to mend sheets which bonds to Japanese Kozo paper. Kofile also constructs its own version of this material with acid-free tissue paper and Rhoplex liquid acrylic adhesive. Fragmented edges, folds, tears, cracks, voids, and losses are all mended in this fashion.

### DEACIDIFICATION

Deacidification is only performed after careful spot pH and compatibility testing. If the paper tests acidic, and the medium is suitable for deacidification, then this process is professionally recommended. Negative Photostats, blueprints, and blue line maps are generally not suitable for deacidification.

A commercially-prepared buffer solution is applied to **both sides** of the sheet with compressed air sprayer equipment. The solution is non-flammable and non-toxic.



Non-aqueous deacidification with a fine mist on each side of the sheet.



The active ingredient, magnesium oxide, neutralizes acid, and provides an alkaline reserve. This chemical is inert, safe, and does not degrade the sheet.

Kofile is equipped with multiple custom-built spray exhaust booths. All are routed through an HVAC system for optimum performance.

The buffer, once applied, alters the paper's pH slowly. After deacidification, random testing ensures an 8.5 pH with a deviation of no more than  $\pm .5$ .



A deacidification spray booth.

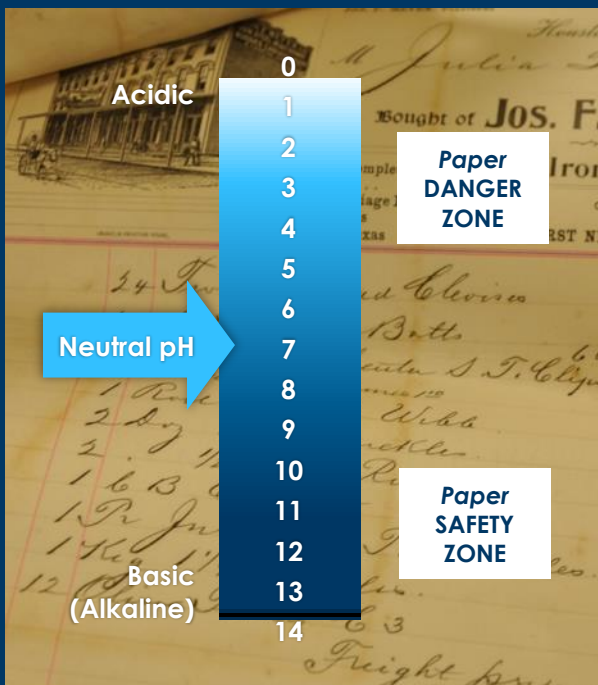
### DEACIDIFICATION (*Alkalization*)

The addition of a finely divided alkaline material to paper fibers. The addition of an alkaline buffer is approved for use on papers that would otherwise deteriorate because of their tendency to produce acid, or for acidic papers that cannot be washed.

*AIC Definitions of Conservation Terminology, Directory of the American Institute for Conservation of Historic and Artistic Works.*

### *What this means to COLLIN COUNTY*

Without acid-free components, the chemicals deteriorating within the paper fibers and materials cause deterioration of bindings and pages. With time, papers become increasingly acidic. This breakdown is evident in yellowing or browning. In addition, the paper becomes brittle and loses its fold resistance. Deacidification will halt this process.



Most are familiar with the experience of handling of an old book—the binding is worn; the pages are brittle and yellowed; and it emits a slight odor. Unlike the aging of the readers, the aging of a book can be stopped through conservation. With simple treatments, books and their contents can be saved for countless generations.

While a fraction of damage to the books is due to handling, the major culprit is the acid in the paper fibers. Imagine your grandchildren reading the same book that you favored as a child, but the pages are just as stark white and crisp. This is accomplished through deacidification.

### *Negative Photostat Stabilizer*

Time deteriorates Photostat emulsion (*sulfiding*). Exhausted or dirty 'fixing baths' during the silver print processing exacerbate damage, as seen through fading images, flaking, and browning sheets. Eventually, text becomes illegible.

Kofile's Archival Polyester Stabilizer preserves Photostats for long-term use and storage. A thin application stabilizes both sides of the sheet.

Kofile is the only vendor who has the customized apparatus and sealant solution for treating negative Photostats.

This protective coating will not oxidize or cause the sheets to yellow. It contains ultraviolet (UV) absorbers that block 99% of ultraviolet light and Hindered Amine Light Stabilizers (HALS). It also contains water resistant properties. After application, negative Photostats better resist abrasion and humidity, and the image resists fading better than untreated images. These properties are vital to protecting archival negative Photostat records during public use.



**This is the only existing version of a volume recording Texas history. It is now the original source. It is fading due to poor quality control during the Photostat's original development.**

## ENCAPSULATION

In archival encapsulation, the document is free floating. It is not adhered or heat set. The inherent static cling of polyester provides physical support and protection from use.

Weak and fragile paper is an obvious candidate for encapsulation. Compromised binding margin or guillotining volumes necessitates encapsulation. Another factor is the presence of acid burn due to Iron Gall inks. An additional benefit of Mylar® encapsulation is to prevent direct handling of any and all documents after preservation to prevent particulates or soil and oils present on fingers to re-contaminate the paper.

An additional benefit is the incorporation of an UV filter present in Mylar®, which helps filter damaging light. As a result, Kofile encapsulates most documents that go into public circulation.

Kofile uses SKC SH725 PET polyester. Polyester or Polyethylene Terephthalate (PET) 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, and odorless. It does not distort or melt in case of fire.

Each sheet is encapsulated in a 3 mil patented polyester pocket: *Lay Flat Archival Polyester Pocket™*, US Patent #7,943,220 B1, 5/17/2011. This pocket welded closed on three sides, and the binding process seals the fourth side statically. Pocket dimensions match the 'book block' dimensions with a 1½" or 1¼" binding margin.

A Reemay® strip or spunbond polyester at the binding edge offsets the document's thickness and seals out atmospheric pollutants while allowing off-gassing. This allows for a flat book block and reinforces the binding for added strength and service. Also, to access the original sheet, the Pocket would require cutting.



Preserved and encapsulated volumes bound in Heritage Recorder Binders.



Preserved and encapsulated volume in a DSB.

## ARCHIVAL RECORDER BINDERS

Encapsulated sheets are hand-bound in books of 250 sheets or less, punched (on the pocket's edge), and bound. This may include *splitting books with large capacities into two volumes or combining similar volumes with low page counts*. Kofile punches pockets to any hole specifications.

## WRITTEN WARRANTY

Kofile's products feature a Limited Lifetime Warranty against defects. Any product (including binders and pockets) that fails to operate properly or to maintain its original integrity is replaced at no cost to Collin County.

Kofile repairs, reinforces, or replaces index tabs as necessary. All attachments are treated with the rest of the text block or file.

Kofile can match existing books by manufacturing custom sizes, shapes, spines, colors, and lettering. Kofile manufactures binder components on a per-book basis, sized to 1/4" incremental capacities.

Binder covers are available in various colors in genuine leather, imitation leather, or canvas. Binders are available in the colors shown to the right in Imitation Leather (white is also available, but requires black lettering instead of gold foil). Spines are available in genuine or imitation leather. *For hubs, the spine must be genuine leather (which introduces a non-archival component)*.

All adhesives are acid-free and reversible. These adhesives are based on internally plasticized copolymers of vinyl acetate with ethylene, deputy male ate, or other suitable monomers, with a vinyl acetate monomer content of no more than 1%, and a minimum 6 pH.

Each binder features durable cover boards and a spine to support the pages' weight. All materials, including the cover boards and adhesives, are acid free. New binders stabilize documents and impede deterioration. *This will save Collin County valuable storage space and will require little or no maintenance for decades.*

### *Title Stamping*

Title stamping can follow the same format/style of the originals. A stamping sheet is printed and sent to the County for approval.

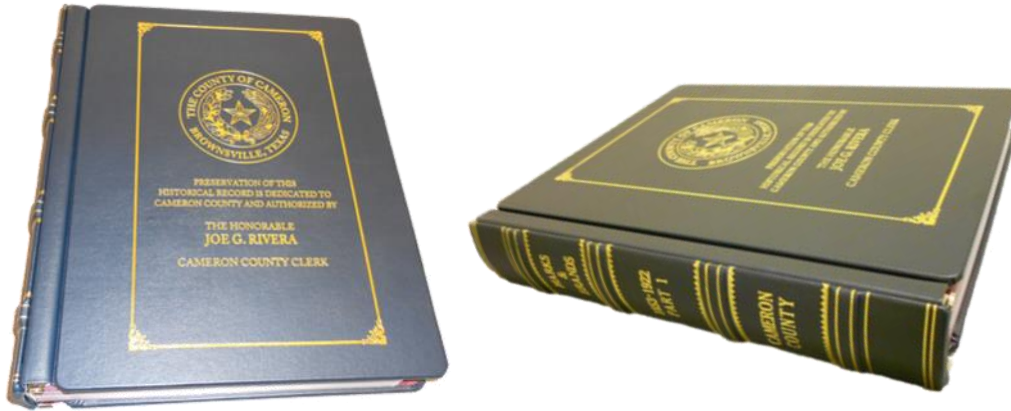
Tooling is performed with 23-karat gold foil, guaranteed to resist fading. It will follow the same format/style of the originals or can incorporate custom seals and dedications. If any titling, dates, or other information from an original volume is noted in error, the County Official is notified to determine if correction is appropriate.

### *Heritage Recorder Binder*

The *Heritage Recorder Binder* 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.







### FINAL QUALITY CHECK

Each volume is checked by a preservation technician before it is designated for return. Using the work order log (which accompanies the volume throughout the conservation process), this final quality check verifies page order. This check also ensures that all repairs are complete, edges of the Mylar envelopes are sealed, and the Treatment Report is accurate.

Finished books undergo extensive quality control inspections before being returned to Collin County. A Treatment Report—detailing materials and methodology—is included with each completed binder.

## V. ARCHIVAL DIGITIZATION & INDEXING METHODOLOGY

Imaging a document and digitizing a collection creates an electronic representation of the original archival record. This process is not meant to replace the archival record, but to aid in its preservation. The image serves as a reference tool and is a back-up if the original is damaged or destroyed.

Kofile understands the need for access to public records and ease of rapid, digital retrieval. Services differ because materials are addressed according to their condition and fold endurance without blind, automatic scanner feeds. Technicians are trained to handle fragile and historical documents. Kofile invests in the best hardware and software available on the market.

If requested, Kofile stores an electronic security back up of all images in case of loss, damage, or destruction by fire or natural disaster. All data is solely the property of the County, and Kofile does not sell or grant unauthorized access to the County's records or data.

Kofile always defaults to U.S. National Archives and Records Administration (NARA) technical guidelines for digitization. Upon request, Kofile stores an electronic security back up of all images in case of loss, damage, or destruction by fire or natural disaster.

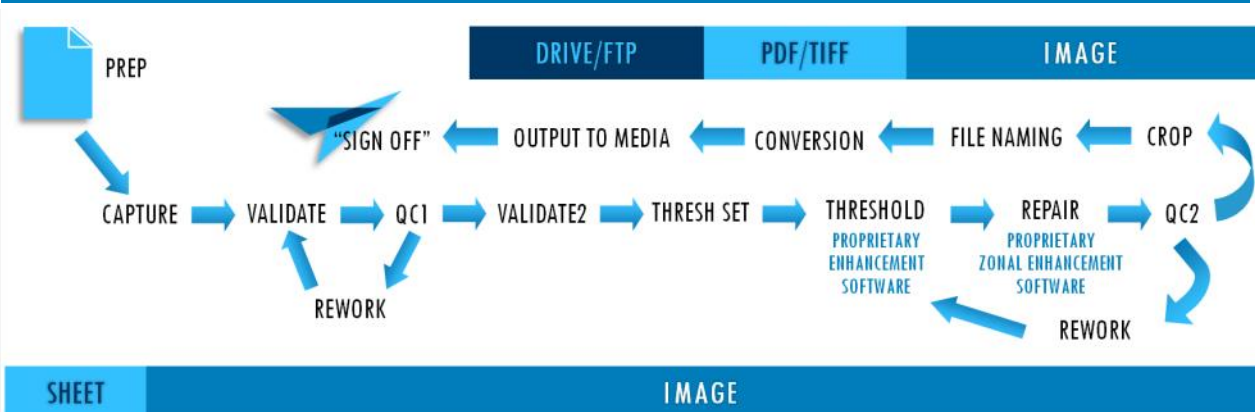
### IMAGING OVERVIEW

Images are captured at a minimum of 300 dpi at 256 bi-tonal or gray levels. This ensures the highest image quality for documents with poor contrast and difficult-to-read information. Images accumulate as Group IV bi-tonal images in a standard TIFF or PDF format. Images are optimized and scaled for system output. Kofile uses gray-scale scanning techniques to ensure the optimum resolution of each page.

Effectiveness and minimum legibility of the scanning process is verified through rigorous and systematic quality control. Final images are delivered via SFTP (or CD/DVD/thumb drive/external hard drive).

Collin County will sign off on a pilot run for the closed case files prior to the commencement of full scale scanning.

### SAMPLE PHASE DELINEATION



## TYPICAL CONVERSION PLAN FOR CASE FILES

NO.	TASK	ASSIGN	START /END	STATUS	COM- MENT
<b>1.0</b>	<b>SCOPE OF WORK &amp; QUOTE</b>				
1.1	Develop scope of project i.e. budget, date ranges, case range.	County & Kofile			
1.2	Sign, edit, & return executed quote or contract to Kofile.	County			
1.3	Issue Purchase Order.	County			
<b>2.0</b>	<b>PICK UP FROM STORAGE SITE</b>				
2.1	Export database of Case Files in a pipe delimited format, if applicable.	County IT			
2.2	Create manifest for Pick Up (a listing of case files per box).	Kofile			
2.3	Pick up from Client site(s).	Kofile			
2.4	Repeat Items 2.2 - 2.4 until scope of project (Item 1.1 pick up).	County & Kofile			
<b>3.0</b>	<b>KOFILE PRODUCTION TASKS</b>				
3.1	Inventory receivables and verify receipt.	Kofile			
3.2	Document Prep ( <i>e.g. remove clips &amp; staples, tape receipts to black pages, position envelopes for scan. May require copying case file folder for inclusion.</i> )	Kofile			
3.3	Scan at 300 dpi at 256 gray levels with image enhancement to include deskew, despeckle, character repair, & zonal processing.	Kofile			
3.4	Quality Assurance (QA) Tasks include a visual examination of each image & comparison of image to paper. Compare Index data to database (Item 2.1) to match data.	Kofile			
<b>4.0</b>	<b>DELIVERY OF IMAGES FOR IMPORT</b>				
4.1	Provide media (ftp, thumb drive, CD, DVD, hard drive) for image & metadata delivery—includes case count, multi-page PDF files (or TIFF), & metadata.	Kofile			
4.2	Import images & metadata, if applicable. Verify that case count & other information matches quantity provided by Kofile.	County IT			
4.3	For imports with exceptions, provide Kofile with a list of exceptions for reimport.	County IT			
4.4	Verify users can access newly imported images & metadata.	County IT			
4.5	Back up Document Repository with newly imported images & other databases that may require a backup.	County IT			
<b>5.0</b>	<b>COUNTY QUALITY ASSURANCE (QA) REVIEW</b>				
5.1	County to complete a QA delivered Files.	County			
5.2	County to provide Kofile with an exception list of any issues.	County			
<b>6.0</b>	<b>RETURN OF DOCUMENTS</b>				
6.1	Documents return for storage.	Kofile			
<b>7.0</b>	<b>MISCELLANEOUS</b>				
7.1	Invoice monthly for images delivered to the County.	Kofile			



## PREP

Domain specific knowledge is necessary for this project. A vendor that does not understand permanent asset collections may address the Collin County records as disposable. Kofile understands that these are not disposable records. Kofile's staff have worked with permanent retention, historical, and fragile records for several decades assisting local governments across nation with preservation and archival imaging services.

Domain specific knowledge is necessary for this project. Kofile will maintain file order and identification. Sequential document order is maintained and controlled by batch or page—as determined by client. Kofile utilizes barcode separator sheets to scan case files. These are prepared and inserted during document preparation.

Files are physically prepared for scanning. If required, prep may include staple and brad removal, disassembly of binder components, orientation of documents, and unfolding.

Page order can be maintained by hand numbering with a light pencil. At this stage, fragile documents are flagged for exception handling and placement in Mylar, as necessary.

### *Confidential/Sealed Files & Physical Evidence*

Kofile will cooperate with the County to process such files as mutually agreed upon. Kofile's standard procedure (SOP) is to scan everything as received. However, for sealed and secure documents/envelopes, Kofile's SOP is to leave unopened.

Kofile's SOP for unscannable physical evidence is to pull the evidence, insert a Proxy Indicator page into the file for imaging, create a control list, and bag/box with labels correlating to the specific case number accordingly for return to the County.



**The article implies that partial document destruction is normal. This is unacceptable and contrary to any preservation standard. Kofile has the experience and expertise to handle fragile documents and address the physical preservation of the source document.**

*Source: Higgins, Jessie. "Recorder's Office Preserving Oldest County Records by Digitizing Them: Some Century-Old Pages Crumble When Touched." Evansville Courier & Press, August 21, 2013.*

## IMAGE CAPTURE

Operators observe each page during capture. Kofile's high-speed scanners utilize large wall-mounted monitors for observation.

Kofile's Image Certification team reviews each page against the scanned image to certify each page is scanned and that each image is the best copy.

For faint or illegible pages, the operator marks the page, readjusts the scanner, and employs contrast tools until the best copy of the image is captured. If unsuccessful, the operator indicates and inserts a review form for the quality assurance team to assess. The page is treated with a "Best Possible Image Indicator" or further enhancements. The image processing team can apply zonal enhancements for further enhancements as necessary.



A Kofile Imaging Technician captures a historical document on a flatbed scanner.

## IMAGE PROCESSING & ENHANCEMENT

*IMAGE PERFECT*, Kofile's proprietary software, ensures optimum image quality. When sheets vary in size and density, this custom programming ensures image uniformity. It provides proprietary algorithms to achieve superior image quality. Utilization of algorithms is critical to address the varying densities and quality levels in any local public records collection.

This proprietary software is a digital SLR-based system. Kofile utilizes the Microsoft® SQL database as the underpinning for production. Operators can interactively build and edit image processing scripts. The image processing scripts can be saved for batch processing. It also boasts progress tracking capabilities and exceptions identification. Supervisors quickly and efficiently manage and correct problems.

At capture, this software automatically addresses many common problems:

- White-on-white images
- Synchronizing images from different scanners
- Floating page cropping & segmentation
- Rotating & de-skewing images
- Tone correction
- Resolution adjustments
- Metadata Normalization

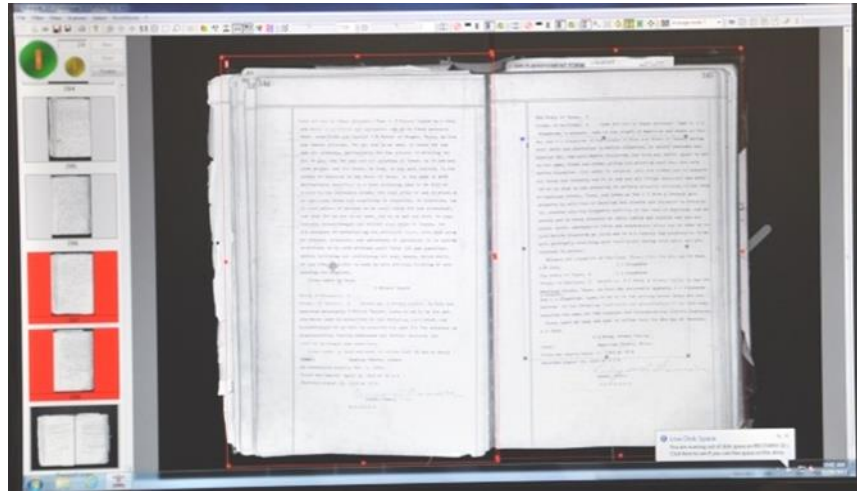
*IMAGE PERFECT* uses custom image clean up and enhancements such as deskew, despeckle, character repair, and zonal processing. Images are zonal enhanced to improve legibility.

Kofile maintains 100% document integrity and image control with exclusive Image Locking. During image repair, *IMAGE PERFECT* allows repair of the currently displayed image without rescanning additional images (which compromises image integrity). When a re-scan is required, the processing procedures does not permit information from rescanned pages to accidentally cut and paste into the incorrect page.

Quality Targets (pictured) establish the scanner's baseline digital capture quality. This permits Kofile to measure the digitization physics at capture.

Quality Target are the foundation of Kofile's quality assurance. *IMAGE PERFECT* measures each image for the following attributes:

- Target dpi
- Target Tone scale & correction
- Color Management
- Brightness/Contrast Correction
- Gamma Adjustment
- White Balancing
- Page Orientation
- Exposure uniformity
- Color reproduction data



Quality Targets permit operators to view image quality at scan. Images, even when scanned on different devices, are “normalized” as if captured from one device. Rather than using ad-hoc algorithms and tricks, this software measures image quality and propagates this data through the imaging chain.

Annotations are supported to allow the addition of Book, Name, Volume, and Page on the digital image. Image quality metadata is captured as part of the image header along with a secured digital signature that certifies the fidelity and integrity of each image.

Kofile performs Photostat polarity reversal (so all characters are black on a positive background). The document certification strip (file strip) is inverted to match the polarity of the final image.

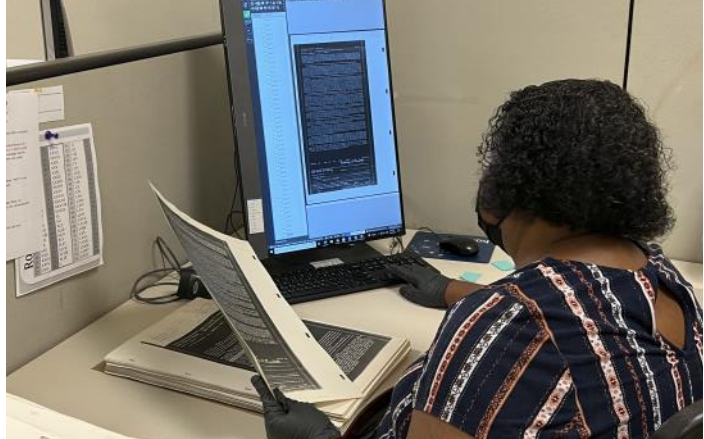


Examples of imaging before (L) and after (R) advanced levels of image cleanup and enhancements by Kofile Technicians.



## QUALITY CONTROL (QC)

Kofile's QC process ensures that each image is certified. **Each and every image is sight checked by human eye.** Each page is viewed to ensure there are no missing pages, double feeds, or "A" pages (those added to the original book or file). Each image is inspected prior to delivery to the customer. The client can receive an image log noting the steps employed.



A Kofile Imaging Technician performs a page-by-page visual review of the original page to the captured digital image.

Kofile's quality assurance involves three major thresholds for 100% review inspection: during preparation, at capture, and post-scan. Prior to delivery, all work undergoes a statistical, random, batch-based review of 8% of the inventory.

The three checkpoints for 100% review combined with the batch-based 8% review all establish the control levels for inspection of the finished product. In total, human eye verification occurs twice—first with comparison of the paper record to the captured digital image. Second, with comparison of the raw scan to the zonally enhanced image.



### BENEFITS OF TYLER ODYSSEY & KOFILE

- Faster import of images & indexes into Tyler Odyssey.
- Eliminate conversion errors due to improper formatting.
- Reduce hours & invoices for Tyler's technical assistance.
- Assistance with sign-off & acceptance testing.
- Clerks are not required to check thousands of case files alone.

## SYSTEM FORMATTING

Images are optimized and scaled for system output. Kofile has worked with several records management system vendors, including homegrown systems, for instance those managed by Kofile's own systems [Vanguard, CountyFusion™, and TownFusion™], iDocket, NetData, Deketo, COTT, Tyler Technologies, Inc., Laserfiche, Granicus Legistor, etc.

*The expertise outlined applies to both Tyler Technologies, Inc.'s (hereby Tyler) Eagle Recorder and Odyssey systems. Despite Odyssey's convenience, users struggle to maximize its potential. Few companies properly format paper case files into Odyssey and Eagle Recorder.*

Kofile has worked closely with Tyler's development and conversion teams to create a customized import experience. Kofile's specialized process and application simplifies this conversion process for Tyler personnel too.

### *Importation Process*

Kofile's process for importing case files into the Odyssey system differs depending on whether the files have an existing index. The process for importing case files that

have a pre-existing index includes the export of the existing index, matching the index with the appropriate files, importing the images, and merging images with the index.

If no index exists, Kofile indexes each case file by following Tyler's required fields. The new indexes and corresponding images are imported into Eagle Recorder and displayed as "Historical Conversion" or "Archived Images" in the "Documents" tab in this system.

### *Imaging & Individual Events*

While Kofile can load images to custom areas within Odyssey (including loading individual events into existing or new indexes), Kofile does not recommend attaching images to individual events. If done, each case's imaged document requires separation from the case and indexing by event or document type and date. Often the date and document type will not match the pre-existing index, and technicians must manually attach mis-matched indexes and images. This manual process results in additional costs that instead could be allocated to more detailed indexing or additional imaging.

Kofile's references can attest to the convenience of having an entire document imaged under a single line in the "Documents" tab. This maximizes the number of complete document files imaged. Otherwise, attaching a smaller percentage of document file images to individual events requires a constant need to reference the original documents. Eliminating the need to access and re-shelve volumes liberates the County employees to perform other tasks.

## ADVANCED TECHNICAL EQUIPMENT

Kofile employs a range of scanners to tailor imaging services to the item. Kofile's scanning capability includes mixed-sized and large-format documents. Each scanner employs page detection to adjust for varying sheet sizes and, more importantly, thicknesses (to reduce "pull-throughs" on thin papers following thick bond). Document fragility and stability determine which device is employed. This selection process also ensures a historical document is addressed by its specific density.

Scanner makes and models utilized by Kofile includes (owned and operated by Kofile at its Dallas Lab):

- Kodak i5850
- Kodak i5200
- Fujitsu® fi-5950
- Fujitsu® fi-6770C
- OPEX® Falcon
- OPEX® Gemini
- Zeutschel OS12000 A1
- Image Access BookEye® 4 Professional
- Image Access WideTEK® 36DS
- Image Access WideTEK® 60L

**Zeutschel**—This is an overhead planetary tabletop scanner for books and large format items (e.g., certificates, drawings, maps, newspaper). It is a high end scanner for maximum performance and perfect images. The Zeutschel provides correction and automatic document detection with integrated color management, contrast improvement, image rotation, de-speckle, de-skew, cropping, masking, and scanning with dynamic threshold. Other advantages include:

- Perfect Book — 3D technology for perfect book curve
- High scan speed
- ROI-scan feature (limitation of scan area)
- Superior automatic color management
- Eliminates UV/IR radiation
- Scans with low exposure to light (illumination only activates at scan)
- No reflections with high-gloss originals



**WideTEK**—This wide-format duplex scanner digitizes two-sided sheets. Kofile Labs have multiple models of WideTEK® devices to capture sheets up to 36"W and 60"W. In a single pass, this scanner captures both the front and back of a sheet in only 2.5 seconds in a single pass (even capable at a resolution of 300 dpi). The sheet no longer requires flipping over for verso capture. These scanners ensure the best possible gentle transport of a sheet without damage.



## ARCHIVAL INDEXING

Data integrity is essential. Kofile's goal is to provide consistently keyed fields. Kofile's proprietary indexing software and keying procedures provides proven 99.25% accuracy. This will improve document retrieval and build a dependable, searchable database for staff and patrons.

Prior to indexing, Kofile conducts a comprehensive assessment of the County's indexing specifications. A thorough examination of the County's particular requirements allows for accurate and consistent indexes, guaranteeing quick searches for users.

During the assessment, Kofile documents established methods of indexing specific instruments, clarifying terminology, and determining the standards used to enter names, dates, and other basic required information. This analysis produces essential information to ensure the metadata's accuracy and integrity, and identify the following:

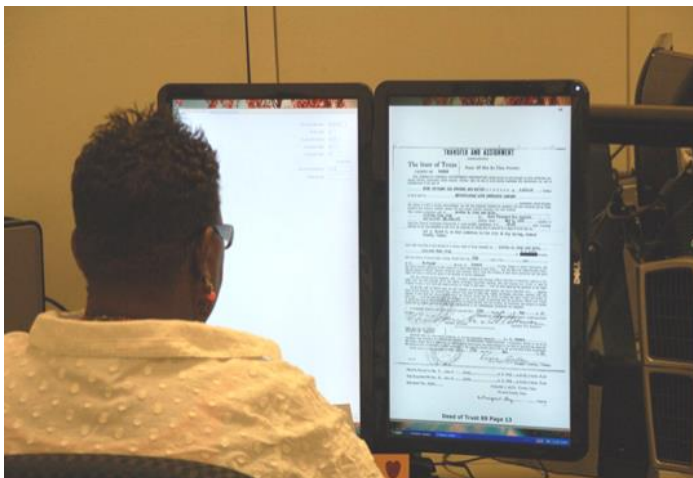
- cross-indexed documents
- differentiation between individual names & corporation names
- government departments & agencies
- alternate & alias names
- abbreviations, titles, & naming consistency (e.g., hyphens, nos., spaces, & suffixes)

During quality control (QC), managers and supervisors internally research and answer questions about any problematic process. If the Collin County Clerk is required to provide input, Kofile will directly contact the County for a clarification and/or decision. Client involvement demonstrates Kofile's pride in building successful professional relationships.

Kofile always performs key entry at least twice for every field. With Kofile's quality assurance, each field is blind-keyed three times:

- Following initial entry, the record displays to a second technician who also keys the field ("blind re-key").
- The software compares the entries. If they do not match, the record is sent to a supervisor.
- This supervisor identifies the problem with the field entry and determines if it is a one-time keying error or a prevailing issue. The supervisor decides if a new keying standard is needed.
- The record is then sent to another technician and keyed again.

Any amendments are communicated to the Collin County Clerk with an exception list for the County to match and scan the amendment and the record themselves. Exceptions are expected, as not all records contain all fields noted. Kofile will establish rules for these abnormalities once the project commences.



A Kofile Indexing Technician keys a document.

## VI. PROPOSAL PRICING

This project is presented via Kofile's TXMAS Contract No. **TXMAS-18-3602** (please reference on County P.O.). Without a signed agreement, prices for the inventory herein are good for 90 days.

COLLIN COUNTY CLERK PRESERVATION, ARCHIVAL IMAGING, & ARCHIVAL DIGITIZATION OF CRIMINAL CASE FILES 1893-1925								
RECORD SERIES	DATE	TXMAS CONTRACT NO. TXMAS-18-3602						
		PART NO.	NIGP	DESCRIPTION OF SERVICE	UNIT PRICE	QUANTITY	LINE TOTAL	SUBTOTAL BY SERIES
Criminal Case	1893-1950	PRV703	962 72	Case File Preservation by Page	\$6.42/ Page	86,605 Pages	\$556,004.10	\$623,890.98
		IMGP705	920 30	Archival Imaging of Case File / Manuscript or Tri-Fold	\$0.71/ Image	72,171 Images	\$51,241.41	
		MMC701	920 21	Digital Images to 16MM Archival Microfilm Creation by Image	\$0.07/ Image	72,171 Images	\$5,051.97	
		IND705	920 21	Backfile Archival Indexing of Case Files	\$1.50/ Doc.	7,729 Docs.	\$11,593.50	
Civil Case	1854-1950	PRV703	962 72	Case File Preservation by Page	\$6.42/ Page	146,720 Pages	\$941,942.40	\$1,044,717.48
		IMGP705	920 30	Archival Imaging of Case File / Manuscript or Tri-Fold	\$0.71/ Image	122,261 Images	\$86,805.31	
		MMC701	920 21	Digital Images to 16MM Archival Microfilm Creation by Image	\$0.07/ Image	122,261 Images	\$8,558.27	
		IND705	920 21	Backfile Archival Indexing of Case Files	\$1.50/ Doc.	4,941 Docs.	\$7,411.50	
<b>PROJECT TOTAL</b>							<b>\$1,668,608.46</b>	

### PROJECT UNDERSTANDING & ASSUMPTIONS

- All pricing is based on a Good Faith Estimate of pages and documents. Pricing is subject to change upon review at Kofile. Final billing occurs on actual counts per mutually agreed upon unit pricing; not to exceed the P.O. without authorization.
- A page is defined as one side of a sheet of paper. One sheet contains two pages. Each page is considered an image unless the page contains multiple record entries. In those instances, the documents are separated into separate images. Blank pages are not imaged, unless otherwise directed by the County Clerk. Amendments and attachments are charged as pages.



- Note, items are considered oversized if the shortest sheet edge measures >12” may incur additional charges
- Images are formatted for the appropriate records management system, however, the pricing herein does not include any associated load fees. These are the responsibility of the County.

Upon purchase, the County Reports the order via the TxSmartBuy System

<txsmartbuy.com/>. Kofile can prepare a 'cart' and 'share' it with the County to assist this process—see link:

[https://852252.secure.netsuite.com/c.852252/checkout/login.ssp?&n=2&sc=1&cartid=18883167&sender=preserve@kofile.com&datetime=2023\\_3\\_8\\_11\\_42](https://852252.secure.netsuite.com/c.852252/checkout/login.ssp?&n=2&sc=1&cartid=18883167&sender=preserve@kofile.com&datetime=2023_3_8_11_42)

STATE OF TEXAS CO-OP MEMBER LISTING FOR COLLIN COUNTY	
Link	<a href="https://www.txsmartbuy.com/membership_details?memberid=462">https://www.txsmartbuy.com/membership_details?memberid=462</a>
CO-OP#	C0430
Contact	Michelle Charnoski
Expires	17-JANUARY-2024

### PAYMENT SCHEDULE & TERMS

- This proposal is governed by the terms and conditions of TXMAS Contract No. TXMAS-18-3602 and <https://www.kofile.com/termsandconditions/>.
- Payments will be made in accordance with VTCA Section 2251.021 Time for Payment by Government Entity.
- This project can be accepted as a multi-Payment Plan in which the project total is split into equal payments. Billing is split into four scheduled quarterly invoices, with 25% due at project pickup. The final invoice is adjusted (up or down) to reflect the balance upon project completion and the final number of images and documents; not to exceed the P.O. without permission.

### PROJECT ACCEPTANCE

Collin County, Texas

Kofile Technologies, Inc.

\_\_\_\_\_  
*Signature of Authorized Representative*

\_\_\_\_\_  
*Signature of Authorized Representative*

\_\_\_\_\_  
*Printed Name*

\_\_\_\_\_  
*Printed Name*

\_\_\_\_\_  
*Title*

\_\_\_\_\_  
*Date*

\_\_\_\_\_  
*Title*

\_\_\_\_\_  
*Date*

Records receive the following services as identified. If requested, Kofile will hold a security copy of all digital images and metadata for safekeeping. Kofile does not sell, distribute, or grant unauthorized access to County records.

#### (PRV) Preservation—*Conserve, Treat, Mend & Repair, Deacidify, Encapsulate, & Bind*

- Kofile creates a permanent log (noting condition, pagination, characteristics, and treatments) for each item upon receipt. Items are inspected and control numbered as necessary. A final quality check references this log.
- Surface clean sheets to remove deposits. This includes dust, soot, airborne particulate, sedimentation, insect detritus, or even biological/mineral contaminants. Tools include a microspatula, dusting brush, latex sponge, powdered vinyl eraser, or block eraser.
- Remove non-archival repairs or fasteners, such as residual glues. All tape and previous mends to be removed to the extent possible without causing damage to paper and inks.
- Humidify and flatten as necessary to eliminate the possibility of unnecessary fractures or breaks. Tools to



- ‘flatten’ include tacking irons, heat presses, and an Ultrasonic Humidification Chamber.
- Mend tears with archival, acid free, and reversible materials. Mending is accomplished with either Japanese tissue and methyl cellulose adhesive, or an acrylic based and heat set tissue.
- Deacidify each side of each sheet after careful testing with a custom solution of magnesium oxide, which neutralizes acidic inks and paper by providing an alkaline reserve. Random testing ensures an 8.5 pH with a deviation of no more than  $\pm .5$ .
- Encapsulate each sheet in a *Lay Flat Archival Polyester Pocket*<sup>™</sup>. Each custom envelope is composed of Skyroll SH72S<sup>®</sup> Mylar and includes a patented lay flat design. Dimensions match the “book block” dimensions, with a 1¼” binding margin.
- Bind in custom-fitted *Heritage Recorder* binder. Each binder is manufactured on a per-book basis and sized to 1/4” incremental capacities. A dedication/treatment report is included

**(IM) Archival Digitization—Image Capture, Processing, & Enhancements**

- Capture images at a minimum of 300 dpi at 256 gray levels, ensuring the highest quality for poor contrast and legibility. Gray-scale ensures optimum resolution for each page.
- Images accumulate as Group IV bi-tonal images in a standard PDF or TIFF format [multi-page].
- IMAGE PERFECT, Kofile’s proprietary software, ensures the optimum image quality with custom image clean up and enhancements such as deskew, despeckle, character repair, polarity reversal, and zonal processing.
- Crop excess blank space around image. This may involve manual cropping to insure best quality image.
- Images are named (tagged for the directory file structure) by Book/Volume/Page or at case level by Court, Case, and Year (or other County-requested fields).
- Images are grouped (stapled) together to form documents.
- When multiple documents exist on a single page, images are split so that each document is viewable individually.
- If requested, annotations are supported to allow the electronic addition (Book/Volume/Page, Court/Case/Year, or Custom) on the digital image to assist in recording keeping. This service is not applicable to Vitals.
- Page Validation (automated PG. numbering for validation).
- Each image is certified and sight-checked to ensure there are no missing pages, double feeds, and to account for “A” pages (added to the original).
- The County receives a MASTER (e.g., CD, DVD, ftp, flash drive) in a medium suitable to the project size.
- Images are optimized and scaled for system output.

**(ID) Archival Indexing**

- Key and blind re-key verify all document per the fields identified herein, as appropriate.
  - ◇ Case No.
  - ◇ Plaintiff (in State of Texas)
  - ◇ File Date
  - ◇ Defendant
  - ◇ Case Type
- Formatting of metadata (indexes) per the requirements of the County’s System vendor.
- Create a pipe-delimited index file for import.



## VII. PROJECT PERSONNEL

Due to Kofile's commitment and highly trained and experienced staff, Kofile is equipped to handle multifaceted and time-relevant projects. Projects are executed efficiently and to the highest professional standards.

Second- and third-generation conservators and public records experts address records. The industry experience of Kofile's ownership and key staff dates to the 1970s. Kofile's extensive experience reaches a wide range of permanent retention media—including manuscripts, volumes, plats, maps, negative Photostats, microfilm, digital images, photographs, etc. Projects range from one map, volume, or document to thousands. Staff hold 10-40 years of experience with archival documents.

Projects often continue in multiple phases over many years and administrations. With the combination of an experienced imaging team and technology competence, and considering our status as a software developer, our capability to enhance the image processing process extends well beyond that of competitors.

Kofile's team is highly experienced, and includes:



### *Stacy Cortesano, Account Executive*

The Account Executive, Stacy Cortesano, handles all communication with Collin County. She ensures the project is completed on schedule and to the client's satisfaction. The Account Executive is responsible for project supervision and is available to meet periodically via phone or in person for project coordination and progress updates.

### *Chris Marotti, Conservator, Subject Matter Expert*

Marotti has a lifetime of experience in conservation and preservation practices. From a young age, he apprenticed in his father's conservation laboratory. His input is invaluable, and he is readily available to customers to records collection challenges. Marotti has worked as a consultant for large municipalities concerning vault equipment and preservation/conservation approaches and practices. He has an exceptional knowledge of municipal markets, business practices, and conservation/preservation practices.

### *Cindy Rountree, Operations Director-Imaging*

Rountree holds nearly 30 years of industry experience. She provides organizational direction of Dallas's Imaging Labs. She allocates resources to meet project goals.

### *Julie Hoover, Data Entry Manager*

Hoover's knowledge, reliability and pursuit of excellence make her an invaluable asset to our customers and organization. Her career in data entry began in 1981, in which she began as an operator and moved into a supervisory role. She has worked as a supervisor in the industry's leading companies in the spanning 35 years. She will work

with the county customer to ensure they received a quality product. Hoover updates Kofile's indexing standards as needed. She specializes in current and historical data.

### *Janice Casey, Indexing Supervisor*

Casey oversees keying and verification, and updates the manual for process/procedures as needed. She is available to answer questions concerning document interpretation. She oversees the transfer of new documents from Daily Indexing counties to Internal Systems, and releases indexes to the county. Casey's career in data entry began in 1980. She has worked as a Lead Data Entry Operator for 36 years.

### *Conservation Team*

A conservator supervises the conservation laboratory and daily work in the lab. Each of our locations has technicians that perform limited conservation treatments under close supervision. Kofile is a strong proponent of cross-training. Our conservation team has a strong retention rate and years of experience and practice. Less experienced workers are assigned to specific tasks, such as document prep or basic unbinding procedures. The conservators oversee the performance of the treatments. They are responsible for the examination criteria of each item, including cost estimates.

Upper management attend continuing education conferences and hold professional memberships with such organizations as the American Institute for the Conservation of Historic and Artistic Works (AIC). Kofile is an institutional member of the AIC and subscribes to their *Code of Ethics & Standards of Practice*.

### *Digitization Team*

Prior to working with confidential records, the technician must graduate a series of work-effort tiers. Employees complete intensive training with a mentor before being permitted to work on any live information. During this time, they are taught guidelines and security policies for handling protected information. All technicians start with entry level tasks. To progress to tasks with higher level of security and responsibility, each must progress a series of tiered assessments and progression points to build trust.