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OFFICE of the
PUBLIC RECORDS ADMINISTRATOR AND STATE ARCHIVES

GENERAL LETTER 96-2 (revised)

DATE: March 1, 1999

TO: ADMINISTRATIVE HEADS OF STATE AGENCIES; STATE AGENCY RECORDS MANAGEMENT LIAISON OFFICERS; ADMINISTRATIVE HEADS OF MUNICIPALITIES; TOWN CLERKS; ALL OTHER STATE AGENCY AND MUNICIPAL RECORDS CUSTODIANS AND RECORDS MANAGEMENT PERSONNEL

FROM: EUNICE G. DiBELLA
PUBLIC RECORDS ADMINISTRATOR

REQUIRED MINIMUM MICROFILMING STANDARDS FOR PUBLIC RECORDS; DISPOSITION OF ORIGINAL RECORDS:

POLICY STATEMENT

PART 1: INTRODUCTION

A. AUTHORITY

The Office of the Public Records Administrator and State Archives issues this Statement under authority granted it by *Sections 11-8, 11-8a and 7-109 of the Connecticut General Statutes (CGS)*. The following provides a policy on standards/quality control, storage of microfilm and proper documentation.

B. LEGAL ADMISSIBILITY

Section 52-180 (c) of the *Connecticut General Statutes* - "Admissibility of Business Entries and Photographic Copies" allows for properly certified microfilm and other photographically reproduced records to be entered as evidence in court. The statute states:

B. LEGAL ADMISSIBILITY (cont.)

“ ‘If any person in the regular course of business has kept or recorded any memorandum, writing, entry, print, representation or combination thereof, of any act, transaction, occurrence or event, and in the regular course of business has caused any or all of them to be recorded, copied or reproduced by any photographic, photostatic, microfilm, microcard, miniature photographic or other process which accurately reproduces or forms a durable medium for so reproducing the original, the original may be destroyed in the regular course of business unless its preservation is otherwise required by statute. The reproduction, when satisfactorily identified, shall be as admissible in evidence as the original in any judicial or administrative proceeding, whether the original is in existence or not . . . ’ ”

Other pertinent sections of the *Connecticut General Statutes* are as follows:

CGS 1-17 ---

“ ‘Such . . . microphotographs . . . shall for all purposes be considered the same as the original records . . . a transcript, exemplification or certified copy thereof shall for all purposes be deemed to be a transcript, exemplification or certified copy of the original.’ (Emphasis added)”

CGS 1-18 ---

“The original records, papers or documents so reproduced may be disposed of in such manner as may meet the approval of the head of the political subdivision in charge thereof . . . with the approval of the public records administrator.”

CGS 1-7 ---

“ ‘When any officer . . . department, agent or employee of the state is required or authorized by law . . . to . . . copy any document . . . paper or instrument of writing, such recording or copying may be done by any photographic process, approved by the public records administrator, which clearly and accurately copies, photographs or reproduces the original document, . . . paper or instrument of writing. Properly certified photographic copies of any record made under the provisions of this section shall be admissible in evidence in the same manner and entitled to the same weight as copies made and certified from the original. ’ (Emphasis added)”

An Attorney General’s opinion of February 9, 1983 written by Assistant Attorney General Michael J. Lombardo addresses microfilming original records and destruction of said records.

“Please note that the statutes dictate that the retention, photographic copying, and destruction of public documents must be approved by the public records administrator as provided in *Section 11-8* of the Statutes.”

C. RECORDS DISPOSITION/CERTIFICATE OF COMPLIANCE (Appendix A)

This Office of the Public Records Administrator will approve disposal authorizations for original public records that have been microfilmed in accordance with the standards outlined in this General Letter subject to the following conditions:

- * Public records to be microfilmed must first be on a current records retention/disposition schedule. Retention periods are determined by the Office of the Public Records Administrator and the State Archives. The film must be retained for the retention period prescribed on the Retention Schedule.
- * The microfilming operation must be approved by the Public Records Administrator, and must conform to the quality standards issued by this office.
- * To ensure that a microcopy of public records is an authentic copy of an original, a certificate of authenticity must appear on each roll of microfilm. Please note that there is a separate certification form for municipal land records on page 23. The certificate of authenticity must conform and contain certain information prescribed by the Office of the Public Records Administrator. See Appendix B.
- * The destruction of any public record after filming must be authorized by the Office of the Public Records Administrator and State Archives.

An agency or municipality must sign the attached “Certificate of Compliance” which states that all provisions of the General Letter are complied with and then must submit this agreement to the Public Records Administrator along with the appropriate records disposal authorization form (RC-075 municipality, RC-108 state agency). The microfilming procedures and specifications from the vendor must be attached for review by this office. Properly certified microfilm that accurately reproduces the original record is admissible in any judicial or administrative proceeding in lieu of the original record.

PART 2: MICROFILMING PUBLIC RECORDS

A. FEASIBILITY STUDY

Agencies or municipalities considering use of micrographic applications, as well as other technological alternatives, should conduct a feasibility study. The feasibility study would include the following:

1. A comparative cost analyses of records use, dissemination, and storage in both paper and microform. Estimating the full cost of a microfilm system is a complex task. The fault of most cost estimates is that they do not reflect the full operating cost, but overlook major cost components. The major components that should be included are:
 - a. Supply costs - camera film, copy film chemicals, microform carriers, expendables (processor chemicals, ammonia, paper stock, printing chemicals), replacement lamps (camera lamps, reader bulbs), forms (targets, control forms), and other miscellaneous supplies.
 - b. Labor costs
 - c. Equipment costs - purchase (or lease) of equipment and necessary accessories, including workstations, maintenance costs, parts, repairs, etc.;
 - d. Document preparation cost
 - e. Miscellaneous costs - darkroom, air conditioning, etc.;
 - f. Service bureau costs
 - g. Increased work load cost, inflation trends, and technological change.
2. The use of other technology such as electronic or optical disk systems should be compared to the use of microform.
3. The condition of the original records. If the originals are in poor condition, microfilming may not be cost effective. Microfilming can be an effective preservation tool, but the condition of the original records will determine whether film is readable, and therefore, whether microfilming is feasible. (See B6 on page 5).
4. A proper indexing system is essential.
5. A plan must be devised for meeting all immediate and long term plans. An agency or municipality should consider filming long-term retention data (more than 10 years), filming records that are not updatable, and filming records having a large quantity of data.

The feasibility study may disclose problems with current paper recordkeeping systems that should be corrected whether or not the agency/municipality decides to convert to a microform.

B. RECORDS MANAGEMENT BENEFITS OF THE MICROGRAPHIC FORMAT

1. **Storage Space Reduction**

Records reduced to microfilm occupy as little as 2% of space required for the original paper documents. A space savings of 98% could be realized through microfilming.

2. **File Integrity/Control**

Once a file has been filmed, its constituent records are locked in place in the order and condition in which they were sent to the camera. Alteration of the file is difficult and the retention of a master film copy at an offsite location acts as a backup ensuring that any tampering will be detected. The built-in protection against misfiling can be a standard feature of any microfilm system.

3. **Security of Information**

The most certain way to ensure the physical security of vital or archival information is to duplicate the source record and store a copy at a secure remote site. If microfilm is designed for long-term retention, the security copy or camera master must be on a polyester based film with a silver gelatin emulsion film and stored under strict security and environmental conditions to ensure preservation and continued usefulness.

4. **Ease and Speed of Retrieval**

Miniaturized information can easily be stored in the working office and can be accessed faster by microfilming than by most other methods such as accessing paper stored in filerooms or stored off-site. Digital readers allow the retrieved image to be directly faxed to an off site recipient or distributed to one or more desk tops through the organization's area network.

5. **Cost Savings**

Microfilming could yield significant savings in reduced on-site and off-site storage costs for records having a long term retention of more than ten years, or records having high retrieval activity. These considerations must be factored into the feasibility study listed in Part 2A. Other cost savings include reduced storage equipment requirements, enhanced file and record security, and increased flexibility and productivity in office arrangement and information management.

6. **More Durable than Original Document**

Prior to implementing the program, the records selected for filming need to be examined and evaluated. The questions that need to be asked are "What are the size, condition, and color of the documents, and how well will they reproduce?" Documents that are in poor condition may be

reproduced on microfilm to preserve the original documents. Two questions that need to be asked are “Do the records need to be repaired?” and “Can microfilm be considered?” These points must also be included in the feasibility study.

C. **DISADVANTAGES OF MICROFILMING TO CONSIDER**

1. Microfilming can be very expensive. Labor, equipment, and supply costs must be evaluated against long term storage and retrieval costs of the original documents.
2. Once the medium is adopted, it may be difficult to change to a new system.
3. Delays and other disadvantages are inherent in the serial document-sequence of micrographics. Each microfilming application should be preceded by analysis to determine if there is good reason to film.

PART 3: MICROFILMING STANDARDS

A. **Integrity of Records**

The integrity of the original records authorized for microfilming shall be maintained by insuring that the microfilm copies are adequate substitutes for the original records and serve the purposes for which such records are created or maintained. The following measures and any other method found necessary shall be observed in any state or municipal project to insure preservation of the integrity of the records:

1. Copies shall contain all information shown on the originals.
2. Copies of the records shall be so arranged, identified, and indexed so that any individual document or component of the records can be located easily.

For microfilm to be “LE-500” (Life Expectancy 500 Years), it must meet the national standards established by the American National Standards Institute (ANSI). Density, Resolution, and Residual Thiosulfate are the three major elements that must be measured against established standards.

B. **Density**

Density is the light-absorbing or light-reflecting quality of microimages. Density readings should not deviate more than 0.15 across a frame and not more than 0.20 for the entire roll of film. If very dissimilar documents are filmed on the same reel, densities should be set for the worst case scenario. Base plus fog density of unexposed, processed films should not exceed 0.10.

Background density is the density level of the area of the microform not containing information. Where possible, background densities for images shall be between .80 and 1.5 depending on the contrast of the original material. Please refer to *ANSI/AIIM MS 23-1991 - Practice for Operational Procedures/Inspection and Quality Control of First -Generation, Silver Microfilm of Documents*, section 5.1.4 (Background density) and 8.3.5 (Density).

The inspector should be alert for density readings that vary from frame to frame, a problem caused by incorrectly exposing the document to the cameras. Varying densities are not caused by processing problems. If there is a problem in processing, the densities will either be uniformly light due to exhausted chemistry or low temperature, or uniformly high due to high temperature. Refer to Appendix C for a list of five groups of documents along with the density ranges at which the documents can be microfilmed successfully.

C. **Resolution**

Resolution is the ability of a film to record fine details. For planetary cameras, NARA micrographic regulations (*36 CFR 1230.14*) require the use of *NIST-SRM 1010a, Microcopy Resolution Test Chart (ISO Test Chart No. 2)*, which is certified by the National Institute of Standards and Technology. This is specified in ISO 3334:1991, the standard practice for using the test chart.

For rotary cameras, use the AIIM Standard Test Chart. Agencies or municipalities should also consider following the standards in *ANSI/AIIM MS17-1992, Rotary (Flow) Microfilm Camera Test Chart and Test Target-Descriptions and Use*.

The resolution charts measure the performance of the equipment and the method and quality of film processing. The reduction ratio multiplied by the number of the smallest pattern clearly distinguished equals the resolution in terms of lines per millimeter.

The standard resolution for the film produced on a planetary camera should be 100 lines per millimeter, and film produced on a rotary camera should have a resolution of 86 or more lines per millimeter. Proper resolution is a significant factor in the production of high quality film. Each time that the film is duplicated, it loses at least 12% of its clarity.

A loss of no more than one pattern on the resolution target is acceptable for each generation of preservation microfilm produced. This represents a resolution loss of 10 percent.

Resolution is measured in one of two ways, either quality index or systems resolution. Quality Index is used for printed text. Systems resolution is used for handwritten material or non-western languages where quality index cannot be

used. Refer to *ANSI/AIIM MS23-1991, Practice for Operational Procedures/ Inspection and Quality Control of First-generation, Silver Microfilm of Documents* pages 46-48, Section 8.3.7 - 8.3.7.3.4 for the method of determining quality index. A Quality Index of five is required at the third generation level. A Quality Index of 8.0 must be attained over three generations of film for preservation microfilming.

Systems resolution requires a minimum of 120 lines per mm. The minimum allowable pattern is found by dividing 120 by the reduction ratio used for filming. If the quotient falls between two patterns on the test chart use the higher number (smaller pattern).

D. **Residual Thiosulfate**

Residual thiosulfate, referred to as “hypo”, is the principal residual chemical from film processing which can impair image permanence. A salt is used as a fixing agent, which makes the developed image stable. When dissolved in water, it removes the silver halide remaining in film after development. Refer to *ANSI/NAPM IT9.1-1996 and ANSI/AIIM MS23-1991* for processing standards.

The methylene blue test is used to check for residual thiosulfate which may impair the permanence of silver halide films. This test should be performed in accordance with *ANSI/NAPM IT9.1-1996* and *ANSI/NAPM IT9.17-1993*. For preservation microfilming, the test should be performed whenever the chemicals are changed, no less than weekly, and if more than five reels of microfilm are processed per day, then daily testing is required. Microforms should be processed so that the residual thiosulfate concentration does not exceed one microgram of sodium thiosulfate per square centimeter. ***The methylene blue test must be performed within two weeks of processing, or the film cannot qualify as an archival microform.***

Municipalities or state agencies conducting their own microfilming program may determine whether their processed film meets this requirement by performing the tests specified in *ANSI/NAPM IT9.17-1993: Determination of Residual Thiosulfate and Other Related Chemicals in Processed Photographic Materials*.

Documentation of these test results should be requested in writing when contracting with outside vendors.

PART 4: ASSURING INTEGRITY AND AUTHENTICITY OF THE ORIGINAL RECORDS

A. PROPER DOCUMENTATION

Targets are part of the technical and bibliographic control. They are simple pieces of paper with information concerning either the material filmed, or the method of filming. Targets should be produced on a computer and printed with a laser printer or high quality ink jet printer for best legibility. Targets should be replaced on a routine basis because they become soiled. The following list identifies commonly used targets:

1. Roll Number - Identifies the roll.
2. Start, End and Defect targets - Should be eye-legible on the film without magnification.
3. Credit - Should have the name and address of the state and local agency producing or sponsoring the film.
4. Title page - Should identify the record series being filmed. A record series is a grouping of records physically because they relate to a particular function, such as case files, vouchers, or employee personnel files.
5. Resolution target - Is important in measuring the quality of the system used to produce the film. It consists of five 1010A resolution charts mounted on a large support in accordance with *ANSI/AIIM MS111-1994*. Prepared targets are also available from several suppliers. Photocopies of the technical target must never be used.
6. Uniform density target - Required in preservation microfilming. It is a clean, uncreased, white bond paper or posterboard large enough to fill the frame for whichever reduction is being used. It is used to ensure that the density is uniform across a frame.
7. Certificate of Authenticity - Should state that the records contained on the roll of films are exact copies of the original records and are complete. A signature of the appropriate authority must be included. This documentation is necessary for legal verification. See Appendix B for municipal or state agency certificate of authenticity target. There is a separate target for municipal land records.
8. Flash - Allows the viewer to scan the film and easily locate a specific file by alerting that the next target will contain the specific file title.
9. Secondary title - Should identify the specific file, volume, or data span that is to be filmed. In the case of personnel files an example would be the "File of Jones, John."
10. Documents - Should be followed by a flash and a secondary title for each new file or volume filmed within the roll.

To ease roll identification, it is recommended that the title target be refilmed at the end of the roll of film. Each roll of film should also have a minimum of eighteen inches of blank leader and trailer for convenience in duplicating and threading the microfilm reader.

B. INSPECTION

The final step in assuring the integrity of a film is to perform a frame by frame inspection for visual defects and missing targets. It is important to determine that each document is legible and nothing is missing prior to destroying the original documents. For large volume applications, frame by frame inspections may not be possible. A sampling strategy must be developed, i.e. inspect every ten frames for non permanent records and conduct a frame by frame inspection for permanent records.

C. RETAKES AND SPLICING

1. When retakes are required, a certification target must be filmed before the records that are to be taken and must be eye-legible on the film. There should be a target at the beginning and end of the retakes.
2. Splicing must also meet stringent standards to insure the legal status of the microfilm as an official copy of the original records. There should be no more than eight splices or four spliced segments on a roll of film. Refer to *ANSI/AIIM MS18-1992 (R1998) Micrographics - Splices for Imaged Microfilm-Dimensions and Operational Constraints*.

D. MICROFILM SYSTEMS

1. The photographic images at the beginning of each roll of microfilm shall include information identifying the agency and subordinate organizational units whose records it covers; the title of the records (with identification of contents if not evident from series title); the microfilm roll number; indication of restrictions, if any; and to the extent possible, the inclusive dates, names, or other data identifying the first and last records on the roll.
2. Any indexes, registers, or other findings aids shall be microfilmed at the beginning of the records to which they relate.
3. Microfilming systems shall be so designed and implemented so that the microfilm is an accurate representation of the original records.
4. Any indexes, registers, or other finding aids shall be microfilmed and located in a readily identifiable place within the collection of microfilmed records.

PART 5: MICROFILM STOCK

The film stock used to make photographic or microphotographic copies of permanent records shall be safety-based permanent record film as specified in American National Standards Institute *ANSI/NAPM IT9.6-1991 (R1996), Specifications for Safety Photographic Film*; *ANSI/NAPM IT9.10-1996, Imaging Materials - Photographic Film and Paper - Determination of Curl*; *ANSI/NAPM IT9.8-1994, Imaging materials Photographic Film - Determination of Folding Endurance*. Only polyester-based silver gelatin type film is acceptable for preservation filming that conforms to *ANSI/NAPM IT9.1-1996, Imaging Materials - Processed Silver-Gelatin Type Black and White Film - Specifications for Stability*. A master negative on other types of film will not be considered LE-500 (archival).

PART 6: STANDARDS FOR STORING & HANDLING MICROFILM COPIES OF PERMANENT RECORDS

This section prescribes standards required for storing and handling silver original microfilm copies, silver duplicate negative or silver master positive copies of permanent records.

1. Microfilm Copies

The camera master should not be used for reference purposes. A printing master (second negative) should be produced from the camera master for making necessary additional copies. The camera master will be stored offsite at a secure, environmentally controlled vault or other facility approved by the Public Records Administrator. Third positive or third negative shall be used for reference purposes. When an agency or municipality finds that the reference copies are deteriorating, a copy should be made from the printing master (second negative).

2. Reels and Cores

Microfilm stored in roll form shall be wound on cores or on reels of the type specified in *ANSI/AIIM MS34-1990, Dimensions for Reels Used for 16mm and 35 mm Microfilm*. The materials used for the cores and reels shall be non-corroding such as plastic compounds or non-ferrous metals. The use of steel core reels shall be permitted provided the reels are well protected by lacquer, enamel, tinning, or other corrosion-resistant finish. Plastics and lacquers that might give off reactive fumes or exhumations during storage shall not be used. The plastic materials must be free of peroxides. Paper strips or rubber bands shall not be used for fastening film on reels or cores. The materials used shall not ignite, decompose, or develop reactive fumes and vapors. Button and string ties, in accordance with *ANSI NAPM IT9.1-1996* and *ANSI IT9.11-1993*, are standards for securing film on reels in preservation microfilming.

3. **Storage Containers**

The microfilm shall be stored in a closed container made of such inert material as metal, plastic, or acid-free paper in accordance with *ANSI/NAPM IT9.2-1991* and *ANSI/NAPM IT9.11-1993*. The container shall be sealed when necessary to maintain prescribed humidity limits or to protect the film against gaseous impurities. If proper temperature and humidity controls are maintained as prescribed in item #4 and if there is good ventilation and clean air in the storage area, the containers need not be sealed. Open containers such as folding cartons may be used only if it has been established that the container material will have no adverse effect on the film over long periods of time.

Storage containers should be properly identified by agency or town, record series, date filmed, and name of producer. This will help to identify films if problems develop later. All film boxes must have noted on them the reduction ratio, resolution, density, and base fog readings of the film contained therein.

4. **Environmental Conditions**

The relative humidity of the facility or vault used to store microfilm shall not exceed 35 percent. Temperatures should not exceed 65° Fahrenheit. Rapid and wide-range cycling of humidity or temperature shall be avoided and shall in no instance exceed plus/minus three percent relative humidity or plus/minus 5° Fahrenheit in a 24-hour period.

5. **Protection against Impurities**

Adequate measures shall be taken to keep the original microfilm clean and free of scratches. The film should be free from fingerprints and other foreign materials. Gaseous impurities as sulfur dioxide and hydrogen sulfide that may cause deterioration of microfilm shall be removed from the air.

Solid particles that abrade film or react on the image shall be cleaned from the air supplied to microfilm storage and associated rooms by the use of dry media mechanical filters or electrostatic precipitators.

6. **Microfilm Inspection**

At approximately 2-year intervals, a 1 percent sample of randomly selected rolls of microfilm shall be inspected. For each biennial inspection a different lot sample shall be chosen, allowing some overlapping of inspection to note any changes in previously inspected samples. An agency or municipality that stores film with a service bureau should request that reports be submitted to them that include (1) quantity of microfilm of permanent records on hand, i.e. number of rolls, microfiche, jackets, etc.; (2) quantity of microfilm inspected; (3) condition of the microfilm; and (4) corrective action required, if necessary.

PART 7: IN-HOUSE OR OUTSOURCING

A variety of micrographics options are open to officials, but choices should only be made after careful analysis. The entire micrographics process can be outsourced, handled internally, or be a combination of in-house and vendor processing.

1. In-house
 - A. Advantages
 1. Security
 2. Better access to records
 3. Control
 4. Cost Savings
 - B. Disadvantages
 1. Equipment expense and maintenance
 2. Expense for supplies
 3. Lack of technical expertise
 4. Lack of backup
 5. Technical requirements
 6. Space
2. Outsourcing
 - A. Advantages
 1. Flexibility
 2. Available expertise
 3. Equipment
 4. Cost Savings
 - B. Disadvantage
 1. Control
 2. Higher unit cost
 3. Security
 4. Potential for miscommunications

Once you have determined the relative advantages and disadvantages of outsourcing and internal operations, you should analyze your situation and choose your best options. The cost should be estimated over a three to five year period for filming in-house and then several service bureaus should be contacted for price estimates. When comparing costs, camera needs as well as the workload should be considered. This will ensure a good basis for making a decision.

A municipality or state agency that has decided to outsource the microfilming service must be aware of hidden fees within the microfilming contract and be willing to negotiate with vendors. When bidding on a contract, it is important to specify that the municipality/state agency has ownership of the film.

It is essential that all contracts must meet the microfilm standard and specifications in accordance with General Letter #96-2. For further discussion of how to develop a vendor contract refer to *Contract Considerations, of Managing Micrographic Records by the National Archives and Records Administration Instructional Guide Series* or refer to the sample Microfilming Contract in Appendix D.

PART 8: RECOMMENDATIONS FOR SELECTING A MICROFILMING VENDOR

- A. Inspect the vendor's facility before signing a contract.
- B. Inspect the film processing area.
 - 1. Make sure that the vendor runs daily tests known as control strips and has a log for each microfilming processor. The control strips will ensure that each film processor is generating quality microfilm.
 - 2. Inspect the control strip logs when you visit the facility.
- C. Make sure the vendor completes a Methylene Blue Test.
- D. Review vendor's inspection reports.
 - 1. Note cleanliness and make sure that there are no chemical odors.

PART 9: CONCLUSION

The Office of the Public Records Administrator and State Archives will communicate with public officials on any updates to the items listed on reference pages 37-39 of this document. Any questions regarding any of the issues discussed in the General Letter should be directed to the Office of the Public Records Administrator and State Archives.

APPENDIX A and B

The following forms are available at
[www.ctstatelibrary.org/publicrecords:](http://www.ctstatelibrary.org/publicrecords)

Microfilm Certificate of Compliance
Certification Target for Microfilmed Public Records
Certification Target for Microfilmed Land Records

APPENDIX C

Listed below are five groups, or kinds, of documents along with the density ranges at which the documents can be microfilmed successfully.

<u>Classification</u>	<u>Description of document</u>	<u>Background Density</u>
Group 1	High-quality high-contrast printed books, periodicals, and black typing.	1.3-1.5
Group 2	Fine-line originals, black opaque pencil writing and documents with small, high-contrast print.	1.15-1.4
Group 3	Pencil and ink drawings, faded printing and very small printing, such as footnotes at the bottom of a printed page.	1.0-1.2
Group 4	Low-contrast manuscripts and drawings, graph paper with pale, fine-colored lines; letters typed with a worn ribbon; and poorly printed, faint documents.	0.8-1.0
Group 5	Poor-contrast documents.	0.7-0.85

Reference: *ANSI/AIIM MS 23-1991*, section 5.1.4, page 26.
Managing Micrographic Records, page 16.

APPENDIX D

SAMPLE MICROFILM CONTRACT**

GENERAL INFORMATION

A. Scope

This contract between the Municipality/State Agency and the Microfilming Vendor applies to local/state government records reproduced in microform for the municipality/state agency and the standards/specification outlined in General Letter 96-2.

B. Prices

1. Prices shall be quoted for all aspects of the project in cost per frame to include: film, processing, document preparation (where applicable), duplication, and shipping. Prices shall also indicate total rolls to be filmed and cost per roll for silver and diazo duplicates. Price quotation by Microfilm Vendor should be attached to contract.
2. All prices shall remain in effect for the duration of the project

C. Copyright

1. All microfilm produced by Microfilm Vendor is the property of the municipality/state agency. No part of the microfilm may be sold, given away, or duplicated without expressed written permission of the municipality/state agency.

D. Compliance with Specifications

1. All work is to be done for the municipality/state agency according to General Letter 96-2. These specifications, guidelines, and standards apply to the microfilming of municipal/state agency records, processing, duplicating, and inspecting the film. The Microfilm Vendor must adhere to these directives. Any deviations from the guidelines will be given to the Microfilm Vendor in writing.

** The microfilming contract should be reviewed/or written by the appropriate personnel of the municipality/state agency.

2. A municipality/state agency reserves the right to specify additional filming methods and instructions for any and all items should this become necessary. The filming methods and instructions (i.e. reduction ratio, image placement, arrangement of records for each records series shall not be changed by the Microfilm Vendor without prior consent from the municipality/state agency. If any records cannot be filmed in the manner specified after consultation with the municipality/state agency, it shall be returned by the Microfilm Vendor with justification for its rejection. The municipality/state agency can at the time contract with another vendor to complete the portion of the project that the Vendor can not complete.
3. The Microfilm Vendor shall permit representatives from the municipality/state agency to inspect the filming facility during its normal working hours at any time during the contract period as outlined under *Part 8: Recommendations for Selecting a Microfilming Vendor*.
4. Failure of the Microfilming Vendor to meet the requirements and microfilming standards shall constitute default. The municipality/state agency shall notify the Microfilm Vendor in writing of unsatisfactory service, poor workmanship, or poor delivery. Failure of the microfilm vendor to correct the conditions of default at its own expense or to come to an amicable solution with the municipality/state agency within thirty (30) days all constitute default.

E. Subcontracting

1. All services (microfilming, processing, duplicating, and quality control) shall be done on the premises of the Microfilm Vendor or the municipality/state agency or unless written permission to do otherwise is granted by the municipality/state agency.

F. Insurance and Security

1. The Microfilm Vendor shall insure, at no charge to the municipality/state agency all materials against loss or damage from any cause, from the time they leave the municipality/state agency until they are returned. Each filming shipment is to be insured while in transit, and while in the filming facility. The limit of liability for an item lost or destroyed shall be a sum which will cover the cost to the municipality/state agency of processing an acceptable replacement item.

G. Communication

1. A representative from the Microfilm Vendor shall be appointed to coordinate the project with the municipality/state agency. The representative shall be thoroughly familiar with the terms of this contract and shall have an in-depth knowledge of technical micrographic issues and demonstrate a concern for the special requirements of preservation microfilming.

H. Preparation and Targeting

1. The municipality/state agency shall provide camera ready copy unless specific document preparation tasks are outlined in the specification or included in this contract.
2. Targets shall comply with the *Part 4: Assuring Integrity and Authenticity of the Original Records - Proper Documentation*.
3. The municipality/state agency will provide informational targets, series descriptions, indexes, and other appropriate finding aids as necessary to aid researchers in use of microfilm.
4. The Microfilm Vendor will provide all technical targets, i.e. density, resolution, start targets, residual thiosulfate test certificate etc. as outlined in the attached specification.
5. Bound volumes shall not be disbound without prior consent of the municipality/state agency.

I. Pickup and Delivery

1. Microfilm Vendor shall maintain a log acknowledging receipt of each shipment of records and shall make this log available upon request of the local government.
2. All targets and records packed by the municipality/state agency in one shipment shall be returned together in a single delivery shipment. Original materials, master negatives, printing masters (silver duplicates) and service copies (diaz copies) shall be shipped on the same date.

3. All shipments to and from the municipality/state agency shall be made via an agreed upon commercial carrier unless other arrangements are outlined below:

4. A schedule for pickup and delivery of records and microfilm is outlined below:

J. Quality Control Inspection, Errors and Delays

1. All first generation silver-gelatin microfilm shall be inspected by the Microfilm Vendor for compliance with this contract.
2. All first generation silver-gelatin microfilm shall be inspected by a independent inspecting agency chosen by the municipality/state agency.
3. Any errors made by the Microfilm Vendor, which are identified during the inspection process, shall be corrected or the rolls refiled without additional charge within 30 days of the Microfilm Vendor's receipt of items for correction. Any extra transportation or mailing cost resulting from such errors shall be paid for by the Microfilm Vendor.
4. Additional Microfilm Vendor errors shall be corrected at no expense to the municipality/state agency if identified with one year of the completion date (last date of filming) of the project.

K. Special Microfilming

Methods of microfilming other than those specified in this contract and attached specification may occasionally be requested by the municipality/state agency. Specifications for services not described in this contract and rates charged for these services shall be provided on request from the Microfilm Vendor. Any special treatment requiring extra charges shall not be carried out by the Microfilm Vendor without the express permission of the municipality/state agency.

L. Invoices

The Microfilm Vendor shall provide detailed invoices for each completed shipment with 14 days of delivery of the shipment to the municipality/state agency. Invoices shall reflect the price structure delineated in this contract. They shall reflect the master negative numbers and shall include the number of exposures filmed and the charge per exposure, the number of rolls produced, the number of duplicate rolls, and any other itemized charges, and total charges for shipping.

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- Delaware. Delaware State Archives. Division of Historical and Cultural Affairs. *Standards for Microfilming Public Records in Delaware*, 1992
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- Vermont. State of Vermont. Agency of Administration. *Public Records Specifications for 35mm Microfilming*, August, 1994.

STANDARDS

- ANSI/AIIM MS14-1996. *Specification for 16mm and 35mm Roll Microfilm. Corresponding International Standard ISO 6148:1993.*
- ANSI/AIIM MS17-1992. *Test Chart for Rotary Microfilm Cameras.*
- ANSI/AIIM MS18-1992 (R1998). *Micrographics - Splices for Imaged Film - Dimensions and Operational Constraints.*
- ANSI/AIIM MS23-1991. *Practice for Operational Procedures/Inspection and Quality Control of First-generation, Silver Microfilm of Documents.*
- ANSI/AIIM MS29-1992. *Micrographics - Cores and Spools for Microfilm Recording Equipment - Dimensions.*
- ANSI/AIIM MS34-1990. *Dimensions for Reels Used for 16mm and 35 mm Microfilm. (Corresponding International standard ISO 1116:1995).*
- ANSI/AIIM MS45-1990. *Information and Image Management - Recommended Proactive for Inspection of Stored Silver-Gelatin Type Microforms for Evidence of Deterioration.*
- ANSI/AIIM MS48-1990. *Recommended Practice for Microfilming Public Records on Silver-Halide Film.*
- ANSI/AIIM MS51-1991. *Micrographics - ISO Resolution Test Chart No. 2 - Description and Use. Corresponding International Standard ISO 3334:1991 (NIST-SRM 1010a)*
- ANSI/AIIM MS111-1994. *Micrographics - Standard Recommended Practice for Microfilming Printed Newspapers on 35mm Roll Microfilm.*
- ANSI/NAPM IT9.1 - 1996. *Imaging Materials - Processed Silver-Gelatin Type Black and White Film - Specifications for Stability. Corresponding International Standard ISO 10602:1995.*
- ANSI/NAPM IT9.2-1991. *Photographic Processed Films, Plates, and Paper - Filing Enclosures and Storage Containers. Corresponding International Standard ISO 10214:1991.*
- ANSI/NAPM IT9.6-1991 (R1996). *Imaging Materials - Photographic Films - Specifications for Safety Film. Corresponding International Standard ISO 543:1990.*

STANDARDS (cont.)

ANSI/NAPM IT9.8-1994 (R1994). *Imaging Materials Photographic Film - Determination of Folding Endurance.*

ANSI/NAPM IT9.10-1996. *Imaging Materials - Photographic Film and Paper - Determination of Curl. Corresponding International Standard ISO 4330:1994.*

ANSI/NAPM IT9.11-1993. *Processed Safety Photographic Materials - Storage Practices. Corresponding International Standard ISO 5466:1996.*

ANSI/NAPM IT9.17-1993. *Photography - Determination of Residual Thiosulfate and Other Related Residual Chemicals in Processed Photographic Materials - Iodine-Amylose, Methylene Blue, and Silver Sulfide Densitometric Methods. Corresponding International Standard ISO 417:1993.*

INTERNET RESOURCES

American National Standards Institute

www.ansi.org

National Archives and Records Administration

www.nara.gov

Northeast Document Conservation Center

www.nedcc.org