

STATEMENT OF WORK COMMERCIAL BINDING OF MATERIALS

C.1 BACKGROUND

C.2 SCOPE

For the purpose of this contract, a serial is defined as a periodical of one or more multi-leaved, like-consumed, serially numbered graphic units submitted for binding into a single physical unit, i.e., one or more soft-cover issues to be bound together as first-time hard coverings. All paper covers are to be retained, unless otherwise specified. The maximum thickness of serial volumes shall be 64mm (2½"). Should the [Institution] elect to send volumes larger than this, the Contractor is not liable for the failure of the binding structure.

A book is defined as a single piece of graphic material consisting of an appreciable number of leaves or sections submitted for binding or recasing, or reformatting as a single unit. Some items may be bibliographically classed as serials but actually consist of only one physical unit requiring no collation and intended for use as a monograph. Such units will be bound or recased, conserved, boxed or digitized as a book.

These specifications provide for the procurement of binding, rebinding (with printed endpapers) and of books, pamphlets, and serials, and the construction of custom-fitted and economy archival boxes and portfolios. These specifications also provide for the procurement of reformatting services for facsimile copies or digital output. The Contractor shall bind monographs, serials and other formats according to [Institution] specified styles of binding or instructions for conservation treatment. All binding, boxes, reformatting and conservation shall be performed at one of the Contractor's facilities. Quality review of bound volumes is also performed by the Contractor. The Contractor shall pick up materials from the [Institution]'s loading dock where they shall be loaded by Contractor staff onto the Contractor's vehicle for transport to the Contractor's facility. The deliverables shall include bound serials and monographs, conserved materials, reformatted materials, and custom-fit protective enclosures on a not more than three-week turnaround unless extended time is arranged with COR; RUSH items on a not more than two-week turnaround; and software system support for tracking materials for binding by style, lot, and shipment. Tracking system for other services, boxes, conservation and reformatting should also be provided. This may be the same system as for binding.

C.3 STANDARDS AND GUIDELINES

In order to perform effectively on this contract, the Contractor staff shall have experience in the full range of materials and styles of binding, boxing, reformatting and conservation. This experience includes collation, preparation, leaf attachment, stamping, case-making, and casing in performed in accordance with nationally recognized standards and guidelines. In the case of conservation and applied treatment, follow AIC Code of Ethics. In case of boxes refer to specifications. In case of reformatting refer to FADGI standard 1, 2 or 3. The Contractor shall use the latest versions of and supplements to these standards and guidelines in performing the

work of the contract (see citations which follow). Should new nationally accepted standards or guidelines be promulgated during the contract period(s), the Contractor shall comply immediately with the new standards and guidelines unless otherwise directed by the [Institution].

- C.3.1** American Institute of Conservation for Historic and Artistic Works. AIC Code of Ethics and Guidelines for Practice. Available from the AIC at 1156 15th Street N. W. Suite 320, Washington D.C. 20005, telephone 202.452-9545 or online at <https://www.conservation-us.org>
- C.3.2** American Library Association. Guide to the ANSI/NISO/LBI Library Binding Institute Standard for Library Binding, (Chicago, ALA, 2008), available from the American Library Association, 50 E. Huron St., Chicago, IL 60611-2795 or telephone 1800.545.2433, PDF's available at <http://www.ala.org>, or <http://www.lbibinders.org>
- C.3.3** American Society for Testing and Materials (ASTM). Standard Specifications for Bond and Ledger Paper for Permanent Records, ASTM D3290-00, and Standard Specifications for Copies from Office Copy Machines for Permanent Records, ASTM D3458-00, available from American Society for Testing, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, (610) 832-9585.
- C.3.4** Standard for Library Binding, ANSI/NISO/LBI Z39.78-2000 (R2010) available from NISO Press, 3600 Clipper Mill Road, Suite 302 Baltimore, Md 21211. 301.654.2512.
- C.3.5** Data Elements for Binding of Library Materials, ANSI/NISO Z39.76-1997 available from NISO Press, 3600 Clipper Mill Road, Suite 302 Baltimore, Md 21211. 301.654.2512
- C.3.6** Permanence of Paper for Printed Publications and Documents in Libraries and Archives, ANSI Z39.48-1992, available from National Information Standards Office (NISO), 3600 Clipper Mill Road, Suite 302 Baltimore, Md 21211. 301.654.2512.
- C.3.7** Boxes for the Protection of Rare Books: Their design and construction. Washington, DC: Library of Congress, 1994.
- C.3.8** FADGI 2010 guidelines
http://www.digitizationguidelines.gov/guidelines/FADGI_Still_Image-Tech_Guidelines_2010-08-24.pdf
- C.3.9** Library of Congress. Technical standards for digital conversion of text and graphic materials. <http://memory.loc.gov/ammem/about/techStandards.pdf>
- C.3.10** Library of Congress Specifications for Pressure-Sensitive Adhesive Labels #700-712, for thermal transfer printing onto covers of bound books and for labels inside bound materials. <http://www.loc.gov/preservation/resources/specifications/index.html>
- C.3.11** Specifications for board used in economy archival boxes can be found on the LC website for B and E flute corrugated board.
<http://www.loc.gov/preservation/resources/specifications/index.html>
- C.3.12** *Government Paper Specification Standards*. U.S. Government Printing Office, March 2011, No. 12. http://www.gpo.gov/pdfs/customers/sfas/vol12/vol_12.pdf
- C.3.13** ASTM F1478 - 06(2011). *Standard Test Method for Determination of Abrasion Resistance of Images Produced from Copiers and Printers (Taber Method)*. ASTM International, West Conshohocken, PA, 2011.
- C.3.14** Bogus, I., G. Blood, R. L. Dale, R. Leech, and D. Mathews. *Minimum Digitization Capture Recommendations*. The Association for Library Collections and Technical Services Preservation and Reformatting Section, 2012.

http://connect.ala.org/files/43293/MCTF_Draft_Recommendation.pdf.

C.3.15 *Sustainability of Digital Formats Planning for Library of Congress Collections. Tags for TIFF and Related Specifications.*

http://www.digitalpreservation.gov/formats/content/tiff_tags.shtml#top

C.3.16 ISO 12647-8:2012(E). Graphic technology – Process control for the production of half-tone color separations, proof and production prints – Part 8: Validation print processes working directly from digital data. International Organization for Standardization, 2012.

C.3.17 ISO 12040:1997(E). *Graphic technology -- Prints and printing inks -- Assessment of light fastness using filtered xenon arc light.* International Organization for Standardization, 1997.

C.4 AUTOMATION

The Contractor must maintain a computer based binding support system ABLE or a comparable industry equivalent capable of interpreting volume specific instructions prepared using a library established system. The software must conform to standard ASCII language and character conventions and ANSI/NISO Z39.76 1996 terminology whenever possible.

The Library reserves the right to obtain or access data related to Library materials maintained in the Contractor's files.

C.4.1 FEATURES

The contractor must be able to provide, maintain and support a web based binding support system.

The contractor must be able to provide, maintain, and support the following:

C.4.1.1 Item status report on demand if shipped materials require immediate processing and expedited return to the Library.

C.4.1.2 An appropriate (NISO Z39.50 communication interface) download capability to extract bibliographic detail (Author names, Titles, Classification and Control numbers) from the Library's bibliographic files to reduce redundant keying and facilitate preparation of binding tickets.

C.4.1.3 Assurance that the automated systems of the Contractor and the Library remain compatible throughout the contract period regardless of software application upgrades or enhancements and modifications supplied to either the Contractor's or the Library's automated installation or operating systems.

C.4.2 DATA ELEMENTS

The Contractor's system must be able to accept and store the following elements:

C.4.2.1 Title information

1. Fixed binding title worded precisely as it will be stamped on the spine of the volume;

2. Corporate author/title (e.g., Institute of Marine Engineers. Transactions)

C.4.2.2 Collection information (copy-specific, associated with a Library unit or collection)

1. Location, collection or unit assignment;
2. Classification/call number;
3. Variable information;
4. Copy or set number;
5. Slot levels;
6. History of last ten (10) volumes bound and support access to the Library's multi-year record of recently bound serials volumes.

C.4.2.3 Style information

1. Binding style and preservation reformatting/scanning
2. Category (e.g., RUSH);
3. Method of leaf attachment;
4. Choice of materials (color of cloth, foil)
5. Profile/template of variable elements.

C.4.2.4 Lot information

1. Date prepared.
2. Number of items;
3. Binding style,
4. Library operator.

C.4.2.5 Shipment information

1. Date shipped to Contractor;
2. Date returned by Contractor;
3. Container number, in the form "Container N of N";
4. Status of item (e.g., corrections to follow).

C.4.2.6 Cost information

1. Prices for current contract by binding style, box type, conservation, reformatting/scanning;
2. Projected and actual cost per lot and per shipment,
3. Cumulative costs by location or units.

C.4.2.7 Special instructions

C.4.3 BINDING TICKETS & INVENTORY CONTROL

The Library will prepare volume specific instructions on printed binding tickets, and for FTP or like transmissions unless otherwise directed. Binding instructions shall accompany each volume either as printed tickets or as system data linked to each item by means of Contractor-supplied item barcodes or other machine readable symbology.

The Contractor's system must be capable of maintaining the status of shipped materials identified in the cover machine-readable inventory which will accompany each shipment; and must return the completed work with the machine-readable inventory updated with cost information, and record of operations performed for the maintenance of Library records.

All items forwarded for binding, reformatting, conservation, boxing will be identified in the Library's integrated system by means of a locally assigned item identifier (barcode) located on the outside back cover. The Contractor shall duplicate the Library's locally assigned item barcode, and affix the copy to the outside back cover of each bound volume before returning the volume, or as directed by instructions. Placement shall be 2" from the joint and 1/4" from the top of the back cover. Duplicate barcodes prepared by the Contractor must conform to the Library's specifications for archival integrity and preservation quality.

The Contractor shall return a copy of the binding ticket in hard copy and/or electronic form. Adhesive is not permitted to affix binding tickets to the text block.

The Contractor's system must be capable of maintaining a database of new and existing serial titles and of adding, deleting, and changing the binding record for serial titles and associated volumes. At contract termination the Library reserves the right to request the Contractor's database file covering [Institution] materials in a standard data structure consistent with ANSI/NISO Z39.76-1997 Data Elements for Binding Library Materials for subsequent use by the Library.

Daily phone reference shall be available to provide ongoing automated system support.

In general, the Contractor shall comply with the methods and materials described in the ANSI/NISO/LBI Z39.78-2000 Standard for Library Binding, hereafter referred to as NISO Z39.78. The following provides a brief description of the various binding styles:

CUSTOM SERIALS: Serials requiring custom collation as defined in NISO Z39.78. The Contractor shall use the Decision Tree (described in Section C.5.3) to determine the method of leaf attachment unless specified on the binding ticket.

STANDARD BOOKS: Books requiring only standard collation as defined in the NISO Z39.78. Standard Books are double fan adhesive bound, and rounded and backed. The Contractor selects color of buckram covering material unless specified otherwise on the binding ticket.

CUSTOM BOOKS: Books requiring special treatment or that involve more labor-intensive procedures. This category may include mending, retention of original endpapers; sew-through-fold by hand; books with portions missing for which untrimmed photocopied pages are provided; books with accompanying material for which a pocket must be provided; and flush bottom binding.

STANDARD SERIAL: Serials needing only standard collation as defined in the NISO Z39.78. The Contractor shall use the Decision Tree (see Section C.6) to determine the method of leaf attachment unless specified on the binding ticket.

ECONOMY SERIALS: Serials requiring no collation that are expected to receive lower use. These volumes have the following features: Double-fan adhesive binding; flat back; and Grade C book cloth.

PAMPHLETS: Books or serials consisting of one (1) folded section or signature to be sewn-through-the-fold. Then Contractor selects color of cloth unless specified

otherwise on the binding ticket.

CUSTOM RECASE: Books to be recased as described in NISO Z39.78. These are typically hardcover volumes which require extra care. Use of a covering material that is more compatible with 19th- and early 20th-century volumes is required.

STANDARD RECASE: Books to be recased as described in NISO Z39.78. The Contractor selects color of buckram unless specified otherwise on the binding ticket.

UNLETTERED: Economy binding of books but without lettering of author/title information. Binding tickets may not be provided by the Library.

C.5 GENERAL BINDING REQUIREMENTS

These specifications shall apply to all styles covered under this contract except where noted. Technical specifications (e.g., procedures) and material specifications (e.g., thread, covering materials, boards, adhesives, etc.) unless specified otherwise, shall comply with NISO Z39.78.

C.5.1 ORDER ENTRY.

Upon receipt of a shipment, the Contractor verifies that all items on the Library **shipment Report** have been received. Any discrepancies are reported immediately via fax or email to the Library on **Error Report** form, identifying program number, lot number, binding style, number of items per lot, and number of containers received. All binding tickets must be received and corrected as appropriate by the Contractor before processing materials. Separate transmittals will be sent for boxes, reformatting and conservation.

C.5.2 MENDING.

When the Contractor discovers that mending is needed, the Contractor shall notify the Library for a decision on whether to proceed. If mending is required as a result of damage by the Contractor, the Library shall be contacted

C.5.3 METHOD OF LEAF ATTACHMENT

C.5.3.1 Decision Tree. When the method of leaf attachment is not specified on the binding ticket, the Contractor shall select the method of leaf attachment in the following order:

- (1) Recase;
- (2) Sew-Through-Fold;
- (3) Double-Fan Adhesive;
- (4) Side Sew*; or
- (5) Oversew*.

*The Contractor must notify the Library before processing materials with either of these leaf attachment methods. If a text block is sewn and the sewing intact, the item shall be recased. If serial issues are in signature formats, they should be sewn-through-fold. Double-fan adhesive shall be used when issues are already in sheets rather than signatures or when the text block has been adhesive bound previously.

The Contractor shall notify the Library in cases where the brittle condition of the paper precludes binding. The Library will determine whether to return the item(s) for examination or request a protective enclosure. The Contractor shall notify the Library if an item cannot be bound in the style specified.

C.5.3.2 Sew-Through-Fold. In all cases, signatures shall be preserved (unless specified by the Library) by sewing-through-the-fold either by machine or by hand. If signatures are milled or folds are lost or damaged by the Contractor without express permission of the Library, the Contractor shall be assessed the full replacement cost of the volume. Sewing holes shall be made by punching rather than sawing. Linen tapes may be required if specified on the binding ticket. Tapes shall be spaced evenly between the head and tail of the book. The number of tapes shall comply with NISO Z39.78. When hand sewing is employed, all weak folds shall be reinforced and loose leaves hinged in with strips of Japanese tissue of appropriate weight for the material in hand.

C.5.3.3 Double-Fan Adhesive Binding. Notching is permitted, no deeper than 2 mm (1/16"). The number of notches shall be the minimum required to enhance exposure to adhesive. The Contractor must exercise judgment in determining the frequency of notches by weighing such factors as size and weight of the volume, and the calendering or coating of the paper.

C.5.4 MILLING

C.5.4.1 In removing hot melt adhesive from publishers' bindings or cleaning the backbone of the text block in preparation for binding, the Contractor shall take care to remove as little of the inner margin as possible (not more than 2 mm or 1/16") in order to allow for a possible rebinding at a later date. In cases where the Library has elected NOT to retain signatures, thick signatures should be hand slit rather than milled.

C.5.4.2 Spiral Bindings: These bindings shall NOT be milled automatically in preparation for double-fan adhesive binding. Because the majority of these are new publications, the inner margins are sturdy enough to retain rather than trimming. The Library will screen those spiral bindings whose inner margins are too damaged to retain, indicating trim instructions on the binding ticket. If there is no instruction on the ticket to trim, the inner margin shall be retained.

C.5.5 ENDPAPERS

Material composition and structural design of endpapers shall comply with specifications in NISO Z39.78.

C.5.6 TRIMMING

C.5.6.1 A **no trim** policy applies unless indicated on the binding ticket to trim.

C.5.6.2 All periodicals shall be trimmed as slightly as possible, with no volume (periodical or monograph) trimmed more than 3 mm at the head, tail and fore-edge. Trim instructions will be included on the binding slip.

C.5.6.3 UNDER NO CIRCUMSTANCES SHALL ANY VOLUME BE TRIMMED TO THE EXTENT THAT PRINTED MATTER, THE CALL NUMBER OR OTHER CATALOGING INFORMATION (INSCRIBED ON THE VERSO OF THE TITLE PAGE OR ON THE PAGE FOLLOWING) SHALL BE REMOVED IN ANY PART.

C.5.6.4 Volumes identified through collation with folded leaves (e.g., maps) shall be handled carefully both to preserve folds and to prevent them from catching in the binding. If necessary, the folded sheets shall be set out with strips of permanent, durable paper to keep them from being bound in accidentally.

C.5.7 SECURITY DEVICES

After lining up the spine, a security device is affixed to the inside spine area of the case, adhered to the case. This device is a permanent electro-magnetic tag on clear tape that has been approved for use with Library material. These devices must be inserted in economy archival boxes. Devices will be inserted in other materials as requested.

C.5.8 SPINE LINING

C.5.8.1 The spine lining in all cases shall extend to within 6 mm (¼") of the head and tail and onto each board by 32 mm (1-¼").

C.5.8.2 The spines of all text blocks shall be lined with the spine lining cloth specified in NISO Z39.78. The spine of all volumes over 38 mm (1-½") thick that have been sewn through the fold or recased, and all other volumes over 64 mm (2-½") thick or that weigh more than 2.3 kg (5lbs.), shall be reinforced with an additional layer of material. This reinforcement shall consist of alkaline paper, 90 g/m² (basis weight: 60 lbs per 500 sheets, 25" x 38"), or heavier, cut to the height and width of the spine.

C.5.9 CASE MAKING

Case construction shall follow the specifications in NISO Z39.78.

C.5.9.1 All volumes processed as rounded and backed styles shall use the traditional or narrow hinge.

C.5.9.2 Wide hinges are used for flatback construction only.

C.5.9.3 Any building up or padding used in conjunction with stubbing shall consist of Ethafoam 220 as recommended in Boxes for the Protection of Rare Books: Their design and construction (p. 1-4). All parts of the container construction shall be covered with permanent, durable paper, bookcloth, tyvek or buckram.

C.5.10 LETTERING

C.5.10.1 Lettering shall consist of personal/corporate authors; titles; variable information for serials (e.g., volume number, subseries, parts); location, collection or unit assignments; call numbers; and copy or set numbers.

C.5.10.2 Lettering shall be stamped legibly in white foil (unless otherwise directed) on the spine or the front cover, as specified by the Library. The preferred font is ___; the Contractor shall seek approval from the Library to use another font.

C.5.10.3 Call Number Lettering The following features apply to call numbers:

- Left justification
- Use of a slash-zero (0) to distinguish a zero from the letter “O”. The loop “O” is not used.
- Use of a line break at a decimal point or a blank space in order to fit the call number on the spine.

C.5.10.3.1 Construction of call numbers

LOCATION - All caps

SUBLOCATION - Upper & lower case

LINE SPACE - A line space separates the Locations/Sublocations from the rest of the call number.

CLASS - A space is added between the alphabetic and numeric portions (e.g., PH 635) to facilitate legibility. A line break precedes a decimal.

CUTTER - Periods or decimals here are never dropped. They are critical to the interpretations and arrangement of Class and Cutter numbers.

YEAR - Generally used with monographs

ENUMERATION - Periods are dropped in abbreviation (e.g., “Bd 2”). This applies only to abbreviations.

CHRONOLOGY - Displayed as year(s), then month(s).

CAPTION - e.g., SUPP

COPY NUMBER - Upper & Lower case. “Copy” is used for monographs.

C.6 REFORMATTING

C.6.1 Image Capture and Delivery

The digitization of [Institution]’s text collections demands (1) the production of high-quality images in the required file formats and (2) the sets of images, when delivered, should be coherently and logically named, placed in delivery directories with prescribed characteristics and accompanied by a carefully maintained scanning log in either print or electronic format. The file and directory names of these images will become part of the structural metadata for the discovery and retrieval of the digital content and its corresponding object on the World Wide Web.

C.6.1.2 Safe Handling of the Originals

Handle all materials with great care and use special caution when turning brittle pages. Move any single sheet from its container and books in and out of the boxes or pamphlet binders with great care. Stack unstapled pages back into their original order and line up page edges carefully before replacing them back into their original housing so that page edges will not stick out and risk damage by the boxes they are housed in. Make sure that pages lie flat when replacing a book back into its housing. Avoid stress on the original, especially the binding of a book.

C.6.1.3 Scanning Equipment

The vendor shall have the capability to scan images using both flatbed and overhead capture depending upon materials and technical requirements of each lot item instructions. The equipment (including lights) used for all image capture shall not damage original

materials nor shall the manner of its use cause damage. All scanning equipment is subject to the approval of the COR or designee upon contract award. Damage avoidance from handling or equipment shall have priority over the requirements including the capture of subtleties of printing or writing on originals.

C.6.1.4 Damage to Original Documents/Materials

Preventing damage to original documents shall be the primary concern during scanning. While most of the documents to be scanned shall be sturdy enough to be scanned, there may be times when it is not possible to determine, in advance, potential damage to the original source document during the scanning process. In the event that any damage to an original occurs during the initial capture, the scanning technician shall cease scanning that original and contract COR or designee for further direction. Such damage shall be defined at a minimum level to include the breaking of the book spine, pages coming out of the original binding, the cracking of brittle pages, and so on.

C.6.1.5 Collation Database

In general, the [Institution]'s MS Access collation database for text materials to capture bibliographic, structural and administrative metadata process could be the use of binding slips and referencing specifications. If both the [Institution] and the vendor agree to use an MS Access database for a project, the [Institution] will provide this database to the vendor, who shall be responsible for any database-compatibility-related matters. The [Institution] shall either export data from a pre-existing collation database or make a copy of that database for the vendor depending upon efficiency and functionality.

C.6.1.6 Data Accuracy and Database Upgrading

Using the [Institution] provided MS Access database or sharing data from a [Institution] database, the vendor shall be obligated to upgrade the data when encountering any data inaccuracy. The vendor shall return to the [Institution] a copy of the upgraded database or export the upgraded data, which can be imported into the [Institution]'s original project database. The vendor shall also submit to the [Institution] a report of errors in an electronic format.

C.6.1.7 Identifying Targets

For each item to be scanned, the [Institution] will provide a paper target to help identify the materials to be scanned. The target shall contain the unique identification number, bibliographic data and other specifications important to that item and helpful for imaging. Target may be a binding slip.

C.7 SPECIFIC TECHNICAL REQUIREMENTS FOR DIGITAL IMAGING

The vendor shall produce digital images following both the requirements listed below and collection-specific requirements that will be outlined in lot item instructions. Only master digital images shall be produced unless otherwise indicated in individual lot item instructions

C.7.1 Books – Bound

Contractor shall digitize bound books, activities to be performed shall include the following:

- Scan bound books
 - Page size approximately 8.5"x11"

- Overhead or planetary style scanner or digital camera system to be used, with book cradle to hold the book open at 180° and the pages flat
 - Cradle shall be designed to accommodate books of different sizes and thicknesses safely
- Deliver images, with [INSTITUTION] metadata, using the BagIt specification <http://www.digitalpreservation.gov/documents/bagitspec.pdf>
- Oversized materials, such as atlases, may require separate pricing.

C. 7.2 Scanning

- Scanning Instructions
 - Scan at a sampling rate of 300, 400 or 600 ppi to achieve a measureable output as requested per lot item instructions of the requested ppi. As measured by FAGDI standard targets, levels 1 star or better. (original document size) and 8-bit grayscale per lot item instructions.
 - Book spines shall not be scanned
 - Scan covers and all pages of an item, except blank pages unless blank pages are included in pagination sequence.
 - Cropping and Rotation
 - Show the edges of all pages, including the gutter
 - All pages shall be cropped with < ¼” border around the item
 - Rotate pages to the correct reading orientation
- Scanner calibration and image processing to be set for originals with a density range of 0.04 to 1.67 and the following aimpoints - a low density range only appropriate for printed textual materials and optimized for general monitor viewing on monitors calibrated to sRGB or AdobeRGB 1998 environments -
 - Density of 0.04 (patch 10 on the DICE targets, patch A on Q13/Q14) should be 5% black (equivalent of RGB level 242-242-242)
 - Density of 0.75 (patch 16 on the DICE targets, patch M on Q13/Q14) should be 63% black (equivalent of RGB level 95-95-95)
 - Density of 1.67 (patch 19 on the DICE targets, patch B or gray background on Q13/Q14) should be 92% black (equivalent of RGB level 12-12-12)
 - Tolerances specified below

Scanner Imaging Performance and Monitoring

- Overhead scanner shall meet a 1-star or better imaging performance rating as defined in the FADGI 2010 guidelines
- Scanner performance and consistency during production shall be evaluated using routine testing such as using the DICE Device Target (available as the Golden Thread target from Image Science Associates) or another agreed upon targeting software.
- Contractor shall submit digital images of targets and test results for each scanner as agreed upon – initially images and data shall be submitted on a weekly basis or for each batch, whichever timeframe is shorter.
- If scanner performance drops below the required minimum level (1-star or better for all performance metrics) or if there is a change outside normal variability of routine production performance levels, all scanning shall be stopped and the deficiency shall be addressed by the Contractor. Addressing performance issues may require recalibration, preventive maintenance, and/or repair of the scanning equipment.

File Format, Header Metadata, File Naming, and Delivery

- Save processed image files as uncompressed TIFF images
- TIFF Headers – TIFF header metadata will include the following fields-

Tag	Name	Description	Sample Values	Notes
256	ImageWidth	The number of pixels per row	3616	Typical scanner size
257	ImageLength	The number of rows of pixels in the image	4418	Typical scanner size
258	BitsPerSample	Number of bits per component	8 8 8 8	Grayscale 24-bit color
259	Compression	Compression scheme used on image data	1 = Uncompressed 4 = CCITT Group 4	
262	PhotometricInterpretation	The color space of the image data	0 = WhiteIsZero. 1 = BlackIsZero. 2 = RGB.	Additional color spaces are possible: CMYK (5), YCbCr (6), CIE L*a*b* (8), and others
271	Make	The scanner manufacturer	Sinar	Simple ASCII text string
272	Model	The scanner model name or number	54H	Simple ASCII text string
277	SamplesPerPixel	The number of components per pixel	1 3	Grayscale 24-bit RGB color
282	Xresolution	Horizontal pixel count per resolution unit (inches, centimeters)	2400000/10000	300 ppi: Rational data type – 300 pp(unit) is often displayed this way
283	Yresolution	Vertical pixel count per resolution unit (inches, centimeters)	629145600/2097152	300 ppi: see above
296	ResolutionUnit	Unit of measurement for X and Y Resolution (inches, centimeters)	1 2 3	None: pixel is irregularly shaped Inches Centimeters
305	Software	Name and version number of the software package(s) used to create the image	Stokes Software Inc. IWS – Version 02.04.01.01	Simple ACSII text string
306	DateTime	Date and Time image was	2008:07:23 17:45:21	Note the space between the date and

		scanned		time and the use of the 24 hour clock. Ambiguous – no indication of time zone. Possibly unreliable as it relies on the local clock of the scan station
315	Artist	Used for ImageProducer	Library of Congress	Image referenced: Institution

- File Naming - instructions and aggregates to be specified prior to beginning scanning
- Deliver batches of TIFF images in BagIt files
 - Details for the Bag file to be provided prior to beginning scanning
 - BagIt specification - <http://www.digitalpreservation.gov/documents/bagitspec.pdf>
- Method of delivering files to be specified prior to beginning scanning

C.7.3 Books – Unbound Pages

Contractor shall digitize unbound book pages, activities to be performed shall include the following:

- Scan unbound book pages
 - Page size approximately 8.5”x11”
 - Automatic document feed (ADF) scanner to be used if material condition allows it. Much of our material is embrittled, and will require an overhead scanner to prevent damage to the originals.
 - For a small percentage of materials an overhead/planetary scanner may need to be used due to the fragility of the paper – follow requirements as specified above
- Deliver images, with [INSTITUTION] metadata, using the BagIt specification

Scanning

- Scanning Instructions
 - Scan at 300 ppi and 8-bit grayscale
 - Book spines and covers shall not be scanned
 - Begin scanning with the first numbered page. This page may not have a printed number, for example if the first printed page number is “iv” then scanning should begin 3 pages prior.
 - If back of last printed page is blank then it should also be scanned. This is because it is counted in the page numbering. For example if the last printed page is number 4615 then the back will be counted as 4616 and the next book will start with page 4617.
 - Do not scan tabbed inserts separating sections in the Index volumes.
 - Cropping and Rotation
 - Show the edges of all pages
 - Rotate pages to the correct reading orientation
- Scanner calibration and image processing to be set for originals with a density range of 0.04 to 1.67 and the following aimpoints - a low density range only appropriate for printed textual materials and optimized for general monitor viewing on monitors calibrated to sRGB or AdobeRGB 1998 environments -

- Density of 0.04 (patch A or white background on FADGI ADF target) should be 5% black (equivalent of RGB level 242-242-242)
- Density of 0.75 (patch M on FADGI ADF target) should be 63% black (equivalent of RGB level 95-95-95)
- Density of 1.67 (patch B on FADGI ADF target) should be 92% black (equivalent of RGB level 12-12-12)
- Tolerances specified below

Scanner Imaging Performance and Monitoring

Scanner performance must be evaluated using appropriate targets for scanner approval and for scanner performance and consistency during production. Specific requirements will be negotiated on a lot item instructions basis.

- ADF scanner shall meet a 1-star or better imaging performance rating as defined in the FADGI 2010 guidelines
- Scanner performance and consistency during production shall be evaluated using routine testing using the FADGI ADF target,
- Contractor shall submit digital images of targets and test results for each scanner for each day of production – images and data shall be submitted on a weekly basis or for each batch, whichever timeframe is shorter
- If scanner performance drops below the required minimum level (1-star or better for all performance metrics) or if there is a change outside normal variability for routine production performance levels, all scanning shall be stopped and the deficiency shall be addressed by the Contractor. Addressing performance issues may require recalibration, preventive maintenance, and/or repair of the scanning equipment.

File Format, Header Metadata, File Naming, and Delivery

- Save processed image files as uncompressed TIFF images or JP2 files
 - File format to be specified prior to beginning scanning
 - If JP2 is specified, the JP2 configuration profile to be specified prior to beginning scanning
- TIFF Headers – TIFF header metadata will include the following fields-
 - If JP2 is specified, the following metadata will be held in an XML box within the file

Tag	Name	Description	Sample Values	Notes
256	ImageWidth	The number of pixels per row	3616	Typical scanner size
257	ImageLength	The number of rows of pixels in the image	4418	Typical scanner size
258	BitsPerSample	Number of bits per component	8 8 8 8	Grayscale 24-bit color
259	Compression	Compression scheme used on image data	1 = Uncompressed 4 = CCITT Group 4	
262	PhotometricInterpretation	The color space of the image	0 = WhiteIsZero. 1 = BlackIsZero.	Additional color spaces are possible:

		data	2 = RGB.	CMYK (5), YCbCr (6), CIE L*a*b* (8), and others
271	Make	The scanner manufacturer	Sinar	Simple ASCII text string
272	Model	The scanner model name or number	54H	Simple ASCII text string
277	SamplesPerPixel	The number of components per pixel	1 3	Grayscale 24-bit RGB color
282	Xresolution	Horizontal pixel count per resolution unit (inches, centimeters)	2400000/10000	240 ppi: Rational data type – 240 pp(unit) is often displayed this way
283	Yresolution	Vertical pixel count per resolution unit (inches, centimeters)	629145600/2097152	300 ppi: see above
296	ResolutionUnit	Unit of measurement for X and Y Resolution (inches, centimeters)	1 2 3	None: pixel is irregularly shaped Inches Centimeters
305	Software	Name and version number of the software package(s) used to create the image	Stokes Software Inc. IWS – Version 02.04.01.01	Simple ACSII text string
306	DateTime	Date and Time image was scanned	2008:07:23 17:45:21	Note the space between the date and time and the use of the 24 hour clock. Ambiguous – no indication of time zone. Possibly unreliable as it relies on the local clock of the scan station
315	Artist	Used for ImageProducer	Library of Congress	Image referenced: Institution

- File Naming - instructions and aggregates to be specified prior to beginning scanning
- Deliver batches of TIFF images in BagIt files
 - Details for the Bag file to be provided prior to beginning scanning
 - BagIt specification - <http://www.digitalpreservation.gov/documents/bagitspec.pdf>
- Method of delivering files to be specified prior to beginning scanning

C.7.4 SYSTEM CALIBRATION AND PERFORMANCE

To verify vendor system qualification and performance, the [Institution] requires the use of technical targets for bitonal, grayscale and color images. With the targets serving as checkpoints, the vendor shall exercise rigorous quality control to maintain system performance quality and consistency of output. The vendor shall ensure that the scanning system is free of dust and other distorting particles, that it maintains calibration throughout each shift, and that the appropriate technical targets are used for different images.

For practical target-based quality management, multi-featured targets are preferable to those that can only provide a single performance metric (e.g., resolution, noise, or Delta E). Multi-featured image targets allow for the evaluation of common objective performance measures with a single scan or image capture. It is important for any image target to use ISO-compliant features and allow for standards-compliant evaluation and analysis – preferably with integrated or off-the-shelf software applications. Many such targets are currently available, including those available from [Universal Test Target](http://www.universaltesttarget.com/), (<http://www.universaltesttarget.com/>) [Image Science Associates](http://www.imagescienceassociates.com/mm5/merchant.mvc?Screen=CTGY&Store_Code=ISA001&Category_Code=TARGETS), (http://www.imagescienceassociates.com/mm5/merchant.mvc?Screen=CTGY&Store_Code=ISA001&Category_Code=TARGETS) and [Imatest](http://store.imatest.com/test-charts/iso-test-charts.html). (<http://store.imatest.com/test-charts/iso-test-charts.html>) Single- and multi-featured targets are available from other sources as well. Specific Target will be agreed upon with each Lot item instructions.

To verify that the system is maintained in a calibrated state, the contractor should provide a target that can be used as a “go/no go” tool. Moreover, the appropriate target for a task shall be scanned for each machine at the start of a project and at appropriate workflow intervals (e.g. at the beginning of each subsequent work week during a project) to ensure the calibration of the scanning equipment and the best possible images.

C.7.5 Scanning Components, Image Orientation, Cropping and Skew.

C.7.5.1 Scanning Components

1. Book covers:

- Scanning starts with the recto of the front cover of a book and ends with the verso of the back cover
- Scan all covers (front and/or back)

2. Inside pages:

- Blank endpapers (blank pages placed between the verso of the front cover and the first page, such as a title page or an illustration page, and between the last page of a book and the recto of the back cover), shall not be scanned.
- Endpapers shall be scanned only when they contain significant information, such as a map.
- Scan blank pages that occur between pages with printed content in the text block.

Missing Pages:

- If a leaf (two pages) is found missing, two file/place holders shall be saved for the recto and verso of the leaf to be replaced by the replacement images in the future.
- The place holders shall consist of “false images” that show the words “Page Missing”.
- The “Page Missing” placeholder images shall take the place of the missing images.
- The filenames for the “Page Missing” placeholders shall be the same as if they were assigned to actual images of the missing pages.
- If missing pages are supplied they will be inserted and fit to size of original materials.

C.7.5.2 Cropping

- Images shall be cropped to show the entire original page and beyond the page’s edges to provide researchers with a reproduction of the entire digital item.
- The color for the copy-stand background shall be white unless specified otherwise.
- The amount shown beyond the edge of the item shall be no less than 1% of the dimension of the long side image.

C.7.5.3 Image Orientation

In the delivered digital image, the top of the original document or page shall appear at the top of the display screen. An illustration or table in a book may be printed “sideways” (landscape) to fit the page, thus aligning the top of the page with the side of the illustration or table. In these cases, the top of the image shall be the top of the page and not the top of the illustration.

C.7.5.4 Skewing

The vendor and its scanning staff shall make the best effort to create images with the least skew possible (to text as opposed to paper).

The pages shall be aligned on the scanner platen in a manner to ensure little or no skew of the text from the original page (no more than 3%). Skew is measured from the two corners of the document image parallel to the longitudinal edge of the projected image frame.

C.7.6. Quality Review and Acceptance

1. The [Institution] will need three to four weeks to perform inspections and conduct tests to determine acceptance for each delivered batch. The [Institution] will notify the vendor if more time for image quality review is needed under special circumstances.

2. All unacceptable individual images shall be corrected at no additional cost to the [Institution].

C.7.7 Requirements for Print Facsimiles: a printed reproduction of a book or similar object that preserves intellectual content using current technology the inner and outer aspects of the original including original color tones, so that the reproduction is suitable for scholars to fulfill research needs without using the original. It is expected that the majority of materials sent for reformatting will be printed. All master files will be provided to the [INSTITUTION].

C.7.7.1 Print Facsimile Requirements

C7.7.1.1 Printer operators shall follow the rules regarding file naming as specified in each lot item instructions.

- The vendor shall print the print technical target images so that they can be bound at the end of the facsimile book pages, after the image technical targets.
- The print technical target images shall not be cropped or bound in any manner that would prohibit visualization, removal, and analytical measurements of the entire printed target.

C.7.7.2 Print Facsimile Paper The print facsimiles shall be of sufficient quality and durability to serve as replacements for the originals.

- The print facsimiles shall be printed on permanent paper that conforms to ANSI/NISO Z39.48-1992 (R2002); the U.S. Government Printing Office (USGPO) specification JCP A270 for uncoated permanent book papers; and ISO 12647-2:2004(E) and Amd 1:2007 paper type 5.
 - The paper shall be a smooth, matte-finish, uncoated book paper that shall have high toner/ink adhesion, dimensional stability, and correct moisture content for the printer in use.
 - The paper shall have a warm tone that will simulate aged paper, reducing differences in color between the original and the facsimile that result when the media whites do not closely match.
- The paper shall not show print-through that is in excess of the print-through of the original.
- The paper shall contain no optical brightener additives (OBAs), which impact how colors appear under different viewing conditions particularly when printed with low ink coverage and when the colors do not absorb short wavelengths. OBAs also negatively impact color compensation using custom ICC profiles, which negatively impacts the appearance of highlights and midtones.
- The paper shall meet the lightfastness standards described in ISO 12647-8:2012(E) (see standards list) for hard-copy validation prints.
 - The color of the paper shall not change by more than 2.5 ΔE_{00} values when successively subjected to storage in a dark environment, first for 24 h at 25 °C and 25% relative humidity (RH); then for 24 h at 40 °C and 80% RH; and then for one week at 40 °C and 10% RH.
 - The lightfastness of the paper when tested according to ISO 12040:1997(E) shall meet a rating of ≥ 3 on the blue wool scale.

C.7.3 Print Facsimile Inks/Dyes/Toners It is understood that some colors in the originals may be outside the press gamut.

The inks/dyes/toners that are used in the printer shall be stable and resistant to abrasion. The vendor either shall provide the [Institution] with a letter from the printer manufacturer that verifies that the inks/dyes/toners meet the conformance specifications described below, or shall provide the [Institution] with analytical test results from a reliable

testing service that verify that all the specifications below are met by the inks/dyes/toners.

The inks/dyes/toners shall be waterproof, water resistant, and compatible with uncoated paper, as described in ISO 18935.

- There shall be no mottling, coalescence, banding, bronzing, wet cockle, dry cockle, or other such inhomogeneity, which may be especially noticeable in large areas of continuous tone.

There shall be no image bleed where inks bleed into regions reserved for other inks

C.8 CONSERVATION

Conservation treatments shall be performed on general [Institution] and archival materials including but not limited to books, bound documents, and other documents in accordance with the *Code of Ethics* and *Guidelines for Practice* of the American Institute for Conservation of Historic and Artistic Works (AIC) as well as the relevant documents from the AIC Book and Paper Group and Photographic Materials Group. These documents are available online from the AIC:

<http://www.conservation-us.org/index.cfm?fuseaction=page.viewpage&pageid=858>.

Each conservation lot item instructions will include a quote for work to be performed that will be approved by the COR or designee before work may begin.

C.8.1 CONSERVATION TREATMENT. Treatments shall be performed in a manner consistent with the durability, readability, the aesthetic quality, and monetary value of the item(s).

For readability, volumes shall be bound so that they open easily and lie nearly flat unless such a method is historically inappropriate or specified by the Agency. Print in the internal margins shall be readily legible.

For durability, materials and workmanship shall be of the highest quality with as little tendency to chemical or mechanical deterioration as possible. Materials shall be permanent and of appropriate durability. Processes shall be in accordance with current professional conservation practice and meet the highest standards, in accordance with AIC core documents referred to in section C.3.

Aesthetic quality of the item is primarily a function of the original creation of the object and of the materials used in its creation. The quality and integrity of the workmanship and appropriateness of the conservation treatment shall serve to maintain the aesthetic quality of the item. Purely cosmetic treatments shall generally be minimal.

C.8.2 Conservation Treatments may include but are not limited to:

- (a) Surface cleaning
- (b) Removal of tape or damaging mends
- (c) Alkalization (deacidification) of single items (aqueous and non-aqueous)
- (d) Repair of original binding, housing, mounting, etc.
- (e) Titling on spines or labels
- (f) Encapsulating leaves with polyester film
- (g) Collation and disbinding

- (h) Sewing
- (i) Rebinding in leather, cloth, paper, and/or other specified material
- (j) Other required or desired conservation treatments not listed here

C .8.3 PERSONNEL REQUIREMENTS.

Contractor personnel shall include a principal conservator with overall responsibility for all aspects of the conservation work, who will inspect the materials to receive treatment and make recommendations concerning their treatment, and will oversee conservation treatments performed by subordinates. The principal conservator or a senior conservator will perform the treatments presenting the greatest technical difficulty. The actual bench work may be performed by subordinate conservators, with the above exception. Conservation technicians and trainees may perform the simpler tasks under the close supervision of a conservator. In accordance with FAR 44.201, consent to subcontract is required. The use of subcontractors for this contract will not be permitted.

C .8.4 PRELIMINARY EXAMINATION AND TREATMENT PLAN

The principal conservator or the conservator who will perform the majority of the treatments shall examine each item individually and prepare a report, including cost estimates, on each item's condition. Before work begins a written treatment plan and cost estimate for each item or group of items shall be prepared by the principal conservator and submitted to the COR or designee. The COR or designee and the principal conservator shall agree on specific treatments based on the condition of the item(s), the conservator's recommendations, and the Customer's requirements. The COR or designee will authorize all treatment plans in writing before treatment begins. Any changes to the approved treatment plan during the course of treatment, including changes in materials or processes, must be mutually agreed upon by both Contractor and COR, and authorized by the COR in writing. COR may request multiple treatment plans based on cost and minimum or maximum conservation treatments.

C.8.5 TREATMENT MATERIALS

- C.8.5.1. Cloth.** New bindings shall be covered in stable cloths that are suitable in weight and appearance for each individual volume. Cloth repairs shall most often be done using airplane linen colored with acrylic pigments. Internal hinges shall be made of unbleached airplane linen. Sewing thread shall be made of unbleached linen.
- C.8.5.2. Paper.** Paper case papers should be used for limp paper bindings; stable text weight papers may be used for covering stiff-board bindings. Occasionally decorated papers may be used to cover the boards of stiff-board bindings. End leaves must be constructed of neutral colored, pH neutral or alkaline paper and may be handmade or machine made.
- C.8.5.3. Leather.** In general leather work will not be required unless specified in the lot item instructions.
- C. 8.5.4. Paper for Repairs.** Repair tissue should be of 100% Kozo fiber. It shall be an appropriate weight, color, and transparency for each individual use. Text must be legible through repairs; tissue used to fill losses and mend tears shall be strong enough to withstand handling and should not create a breaking edge.

- C. 8.5.5. Adhesives.** Cooked wheat or rice starch should be used for mending and initial spine linings. Methyl cellulose may be used for adhering bookplates, as a poultice, or as part of a mixture of adhesives. Polyvinyl acetate may be used where the adhesive does not come in contact with the text block or original binding.
- C. 8.5.6. Polyester Film.** Melinex or other equivalent inert polyester films shall be used for encapsulations. The minimum weight required to support the object should be used.
- C. 8.5.7. Other Materials.** The Contractor shall provide sufficient description of additional materials in their technical/managerial proposal in order for them to be reviewed and accepted as part of the proposal. Specifications for these materials shall be according industry standards, guidelines, and best practices.

C.8.6 TREATMENT PROCESSES Processes shall be in accordance with current conservation practice and shall meet the highest standards. Treatment shall follow approved treatment plan.

- C.8.6.1. Surface Cleaning.** Objects should be cleaned using a soft brush, grated vinyl eraser, block vinyl eraser, or latex or chemical sponges, as appropriate to the material being cleaned. Accretions and mold residue may be removed mechanically.
- C. 8.6.2. Washing.** Paper should be washed when necessary to remove dirt and degradation products. Paper to be washed shall be surface-cleaned prior to washing. All materials must be tested prior to treatment for solubility in all solutions with which the object will be treated. Paper shall be resized following washing when necessary.
- C. 8.6.3. Alkalization (Deacidification).** If an object is washed in water, it may be deacidified with a magnesium bicarbonate or calcium carbonate. When media are soluble in water or magnesium bicarbonate, the paper may be treated with methoxy magnesium methyl carbonate (e.g., Wei T'o) or a suspension of magnesium oxide particles in a perfluoro compound (e.g., Bookkeeper) or an approved equivalent. Deacidification of objects of high artifactual value shall be carefully considered. Many colored materials should not be deacidified. Papers made with high quality fibers and those in good condition may not require deacidification.
- C. 8.6.4. Removal of Previous Repairs.** Damaging repairs such as ones made with glassine, silk, and pressure-sensitive tape may be removed. Previous repairs made with staining adhesives shall be removed. Techniques for removal may include immersion in water or organic solvents and the local use of water, organic solvents, heat, steam, and poultices.
- C. 8.6.5. Stain Reduction.** Disfiguring stains on objects of aesthetic value may be reduced by bleaching with artificial light, or by chemical bleaching if necessary. Chemical bleaching agents must be used under highly controlled conditions and must be fully removed following treatment.
- C. 8.6.6. Paper Repair.** Tears shall be mended and losses filled with Japanese tissue and wheat or rice starch paste. Heat-set tissue should be used for modern materials. Tears, weak areas, insect damage, etc., at or near the edge of a leaf and any other large

areas of damage shall be repaired to the degree possible without causing distortion of the page. Very weak and heavily damaged leaves may be lined with Japanese paper if necessary. Folds shall be reinforced as necessary. Fills shall match the thickness and color of the leaf as closely as possible. If the use of water-based adhesives is undesirable because of weakness of the paper or its tendency to form tide lines, heat-set tissue prepared with acrylic resin and lens tissue according to AIC guidelines may be used.

- C. 8.6.7. Trimming.** Artifacts shall not be trimmed.
- C. 8.6.8. Sewing.** Unbleached linen thread of the appropriate weight shall be used as long as it is available. Sewing may be supported, using cords or linen tapes, or unsupported on text blocks with only one or two gatherings. If possible, sewing shall be through the original holes. No spines shall be sawed and no text blocks shall be over cast. The sewing selected shall allow for maximum openability in relation to the appropriate structure and style of binding for the individual volume. Interior hinges made of airplane linen should be sewn on with the new endpapers if the volume is being rebound.
- C. 8.6.9. Treatment of Endpapers.** End leaves from previous bindings with notations should be preserved as part of the volume. New end leaves should be sewn onto the text block through the fold. One or two folio end leaves may be used depending on the binding structure. Existing bookplates shall be incorporated into the new binding when specified.
- C. 8.6.10. Binding.** Covering material may be full, half, or quarter leather; starch-filled, acrylic-coated cloth or paper-lined cloth; or paper. Structures may be laced-in, split board, or paper or cloth case. Sewing supports shall be laced-in or adhered onto the board. Supports shall not be cut at the top of the shoulder or at the joint.
- C. 8.6.11. Polyester Film Encapsulation.** Polyester film shall be sealed along the edges with an ultrasonic welder.
- C. 8.6.12. Titling and Decoration.** Information to appear on the spine of the volume will be clearly designated by the Agency. Typical information includes author, title, and sometimes date of publication. Titles shall be horizontal whenever possible, but may be vertical if the spine is narrow. Call numbers may be required, typically appearing at the tail of the spine. Titles may be stamped or tooled directly on the covering material or onto a leather or paper label. Paper labels may be stamped or printed by machine. Leather spines and labels may be tooled in gold leaf or stamped in foil. Ornamentation applied to the leather spine and boards may be in blind, gold leaf, or foil.
- C. 8.6.13. Boxing and other protective enclosures.** Protective enclosures shall be constructed to the dimensions of the volume and any associated material to be retained. The housing may be a phase box, drop-spine box, a portfolio, or other custom enclosure, as deemed appropriate to the object. The housing shall be constructed of stable materials such as those recommended in section C.3.11, Binding.

C. 8.6.14. Other processes. The Contractor must provide sufficient description of additional processes in their technical/managerial proposal in order for them to be reviewed and accepted as part of the proposal. Specifications for these processes shall be according industry standards, guidelines, and best practices.

C.8.7. CONTRACTOR QUALITY REVIEW. The principal conservator shall inspect each item after treatment to verify the absence of errors and defects in workmanship and to ensure the work performed meets the requirements specified in the treatment plan approved by the COR or designee.

C.8.8. AGENCY INSPECTION AND ACCEPTANCE. The COR or designee will inspect each item individually upon receipt for errors or defects in workmanship and to verify the work was performed in accordance with the approved treatment plan. The COR will notify the Contractor about items failing inspection for necessary action.

C.8.9 REQUIREMENTS FOR PROTECTIVE ENCLOSURES. For projects consisting of protective enclosures only, the following requirements apply.

C.8.9.1. Materials. Materials used in constructing protective enclosures shall be permanent and of appropriate durability. See specifications C.3.

C.8.9.2. Processes. Construction of protective enclosures shall be in accordance with current professional conservation practice and meet the highest standards. Protective enclosures shall be constructed to the dimensions of the volume and any associated material to be retained.

C.8.9.3. AGENCY INSPECTION AND ACCEPTANCE. The COR or designee will inspect each enclosure to verify absence of errors and defects in workmanship and to ensure the enclosures meet the requirements. The COR reserves the right to return items failing inspection to the Contractor for corrective treatment at no additional cost to the [Institution].

C.8.9.4. The COR will notify the Contractor of acceptance of completed work within thirty (30) days of receipt (or other mutually agreed-upon time period).

C.9 DELIVERABLES AND DELIVERY

C.9.1 TYPES OF DELIVERABLES

The deliverables shall include bound serials and monographs, conserved materials, reformatted materials, and custom-fit protective enclosures on a not more than three-week turnaround unless longer time is agreed upon with COR; RUSH items on a not more than two-week turnaround; and software system support for tracking materials for binding by style, lot, and shipment.

C.9.2 DELIVERY MEDIA AND DELIVERY IDENTIFICATION

C.9.2.1 Delivery Media

The [Institution] may accept delivery via hard drives depending upon specific circumstances and lot item instructions. The digital imaging performed shall yield deliverables of types listed below:

- Digital image sets, plus MD5 Checksum files (if applicable), delivered on CD-Rs or an alternative media/method using the Bagit specification.
- Return an upgraded version of the MS Access database, which the [Institution] provides. This upgraded database shall contain updated metadata, including correct image file names, and Scanning Log Comments.
- Written documentation comprising a list of the delivered CD-Rs/ media units, a printout of the directories and files, a printout of Scanning Log Comments from the vendor Production Database, and any other relevant comments regarding the delivery.

C. 9.3 BACKUP OF DIGITAL FILES

The vendor shall retain backup copies of all digital files created under this contract until notified by the [Institution] that final archiving is completed. At the end of the contract period, the contractor shall erase or destroy all backup or duplicate files.

C.10 SHIPPING AND SHIPPING DOCUMENTATION

Shipment shall be at contractor's expense.

Shipments of bound materials or conserved materials or boxes should be documented with a shipment lists containing the number of items and indicating the lot and shipment date as directed by COR or designee.

Each shipment of digital files shall be accompanied by object, directory and filename lists of the contents for each delivery media unit. The shipment lists shall contain numbers of objects (e.g. CD's, cartridges, etc.) and filename lists recording file sizes and the date and time of creation information for each file.

C.10.1 RETURN OF GOVERNMENT FURNISHED MATERIALS

All products developed under this contract shall belong to --, including the proprietary rights therein. The vendor shall return to the [Institution] all original materials in good condition.

C.10.2 REPLACEMENT OF ITEMS

For some collections, the [Institution] will be furnishing the vendor the only or the best existing copy of a unique item. If vendor loses or destroys the furnished version, and if materials exist that can be used to prepare a replacement, the vendor shall prepare or pay the cost of preparing a new copy of the best type possible. If no replacement possible then vendor pays appraised market value.

In other cases, the [Institution] may already hold a copy of the item. If so, and if the vendor loses or destroys the material originally furnished, the vendor shall prepare or pay the cost of preparing a suitable duplicate from the copy on hand. This duplicate or print will be used in production.

C.10.4 SCHEDULING DELIVERIES

It is the responsibility of the vendor to insure that arrival of shipments and pickups at the [Institution] occur between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday excluding Federal holidays.

All vendors delivering materials to the [Institution] are responsible for providing vehicle and driver information to the -- prior to the scheduled delivery date

C.10.4.1 Place of Delivery (F.O.B. Destination)

Supplies and/or services shall be delivered F.P.B. destination to:
[Institution]