ARCHIVAL AND SPECIAL COLLECTIONS FACILITIES

Guidelines for Archivists, Librarians, Architects, and Engineers

Edited by Michele F. Pacifico and Thomas P. Wilsted
The Society of American Archivists is grateful to the Spacesaver Corporation for providing funds to support the development and printing of this publication.

Society of American Archivists
www.archivists.org
© 2009 by the Society of American Archivists. All rights reserved.
Printed in the U.S.A. by IPC Print Services, St. Joseph, Michigan.

Archival and Special Collections Facilities: Guidelines for Archivists, Librarians, Architects, and Engineers was officially adopted as a standard by the Council of the Society of American Archivists (SAA) in February 2009, following review by the SAA Task Force on Archival Facilities Guidelines, the SAA Standards Committee, and the general archives, conservation, library, and building professions.

Library of Congress Cataloging-in-Publication Data
p. cm.
Includes bibliographical references and index.
ISBN 1-931666-31-8 (alk. paper)
CD981.A695 2009
027—dc22
2009025386

Cover Photographs (left to right):
Row 1:
Southwest Façade at Night, Georgia Archives, Morrow, Georgia.
Row 2:
Conservation Laboratory, American Philosophical Society, Philadelphia, Pennsylvania
(Barry Halkin, Photographer).
Fire Pump Room, Harry Ransom Center, The University of Texas at Austin, Austin, Texas
(James Stroud, Photographer).
Row 3:
Building construction, City of Portland Archives and Records Center, Portland, Oregon.
Row 4:
Mobile shelving, Rare Collections Library, State Library of Pennsylvania, Harrisburg, Pennsylvania (photo provided courtesy of Spacesaver Corporation).
Processing and staff area, Delaware Public Archives, Dover, Delaware.
HOK Architecture, building model for Archives II, National Archives and Records Administration, College Park, Maryland.

Designed by Sweeney Design, kasween@sbcglobal.net.
# TABLE OF CONTENTS

Foreword ................................................................. vii

Introduction .......................................................... 1

Section 1—Building Site
  1.1 Rationale .................................................. 7
  1.2 Site Selection ............................................... 7
  1.3 Site Evaluation ........................................... 10
  1.4 Site Design ............................................... 13

Section 2—Building Construction
  2.1 Rationale ................................................ 19
  2.2 Location ................................................. 20
  2.3 Environmental Issues: Below Ground and Cave Construction ........................................... 21
  2.4 Building Structure ........................................ 23
  2.5 Roof ..................................................... 25
  2.6 Mechanical Systems ...................................... 27
  2.7 Electrical Systems ........................................ 29
  2.8 Commissioning .......................................... 30

Section 3—Archival Environments
  3.1 Rationale ................................................ 31
  3.2 Paper-Based Records ..................................... 32
  3.3 Film-Based Records ...................................... 34
6.3 Mixed-Use Spaces ........................................ 83
6.4 Reading Room(s) ......................................... 87
6.5 Public Spaces ............................................ 89
6.6 Staff Spaces .............................................. 91
6.7 Non-Public Spaces ....................................... 92
6.8 General Spaces ........................................... 93

Section 7—Materials and Finishes
7.1 Rationale ................................................ 95
7.2 External Building Materials ............................... 97
7.3 Stacks .................................................... 98
7.4 Processing Areas, Exhibit Galleries, Holding Areas, and Other Areas Where Archival Collections Are Temporarily Stored, Processed, or Displayed ........................................ 107
7.5 Exhibit Cases ........................................... 112
7.6 Laboratory(s) ........................................... 115
7.7 Reading Room(s) ....................................... 118
7.8 Mitigation Strategies .................................... 120

Section 8—Storage Equipment
8.1 Rationale ............................................... 123
8.2 Shelving Systems ........................................ 123
8.3 Materials and Finishes ................................. 124
8.4 Construction and Performance ....................... 124
8.5 Layout .................................................. 126
8.6 Dimensions ............................................. 128
8.7 Accessories .............................................. 130
8.8 Oversized Records ..................................... 130
8.9 Cold Storage Shelving .................................. 131
8.10 Cabinets ............................................... 131
Section 9—Functional Spaces

9.1 Rationale .................................................. 133
9.2 Loading Dock ............................................ 134
9.3 Receiving .................................................. 136
9.4 Supply Storage ......................................... 137
9.5 Service Corridors ...................................... 138
9.6 Elevators ............................................... 138
9.7 Laboratory(s) .......................................... 139
9.8 Reformatting Lab .................................... 142
9.9 Processing Room(s) ................................. 142
9.10 Computer Room ..................................... 143
9.11 Staff Spaces ........................................... 144
9.12 Reading Room(s) ................................... 145
9.13 Public Spaces ......................................... 149
9.14 Exhibition ............................................. 153

Appendices

A – Prohibited Materials .................................. 155
B – Glossary ............................................... 157
C – Bibliography ......................................... 163

Index .......................................................... 179
FOREWORD

Archival and Special Collections Facilities: Guidelines for Archivists, Librarians, Architects, and Engineers reflects the ongoing commitment by the Society of American Archivists (SAA) to produce useful and timely works that help archivists to serve as good stewards of their valuable collections. It is an excellent companion piece to Thomas P. Wilsted’s Planning New and Remodeled Archival Facilities (SAA, 2007), and also builds upon the brief facilities management discussion in Michael Kurtz’s Archival Fundamentals Series II manual, Managing Archival and Manuscript Repositories (SAA, 2004).

Professionals have long recognized the need for these guidelines for several reasons. All archivists eventually confront issues related to building planning and/or renovation. They often encounter a bewildering and incomplete array of advice and standards scattered throughout a broad range of professional, trade association, and institution-specific sources. This situation can make it difficult for archivists to communicate effectively with architects and builders. Further, unlike the situation in nations ranging from Australia to Finland to France, no generally accepted national standards exist for archival facilities in the United States.

This book begins to remedy that problem. The co-editors appear particularly well-suited to undertake this project. Tom Wilsted, in addition to authoring a book on facilities and managing several building projects throughout his distinguished career, has long been in the forefront of advocating stronger managerial skills for archivists. Michele F. Pacifico, an experienced consultant who played a key role in planning and designing the National Archives’ Archives II building in College Park, Maryland,
has published widely in the archival literature over the past several decades. They have assembled an impressive team of preservationists, architects, and archivists to draft and review these guidelines, while also soliciting input from the broader archival profession. The resulting specifications address construction issues, but also stipulate best practices for environmental controls, fire suppression equipment, security, lighting, and equipment. Archivists will undoubtedly consult this as their first step in planning a facilities project, and the extraordinarily helpful bibliography provides a deeper engagement with more specialized topics.

As Wilsted observes in the Introduction, this book really “begins the process of establishing standards that can be used in designing archival facilities.” It offers immediate assistance to builders and archivists who are involved with construction and renovation, and it also provides the profession with a baseline for reflection and analysis. In the long run, however, *Archival and Special Collections Facilities* aims to serve as the blueprint for a fully formed national standard. The process of developing official standards is long, arduous, complex, and, for most people, fairly arcane. Fortunately, in the interim, archival professionals now have a well-crafted, easily understandable, thoroughly vetted, and carefully considered set of guidelines that can help them to do their jobs better. SAA is very grateful to all of the individuals who dedicated their time and expertise to make this publication a reality. We hope you make good use of it, and look forward to hearing your comments.

*Peter J. Wosh*
Chair, Publications Board, Society of American Archivists
Director, Archives/Public History Program,
History Department, New York University
June 2009
Archival facilities are a critical element in preserving and making accessible our nation’s cultural heritage. Over the past several decades many new facilities have been designed and built that meet the highest standards for preservation and access. However, it is clear that there is a growing need to improve and upgrade existing structures or replace them with ones that meet twenty-first-century standards. Evidence of these needs is highlighted in the recent Heritage Health Index on the State of America’s Collections compiled by the Institute of Museum and Library Services. This survey of archives, museums, and libraries published in 2005 found that 26% of institutions surveyed had no environmental controls to prevent heat, light, and moisture damage with half reporting damage to collections as a result. In addition, 59% lacked adequate storage space to house their collections. There is a clear need to address these conditions, but this can only be done when appropriate guidelines are available to those planning upgraded and new archival facilities.

The construction of a new or remodeled archival facility provides the opportunity to address functional building issues and collection preservation and conservation. A purpose built facility offers the greatest flexibility but a well-designed renovation can also meet staff, researcher, and collection needs. Building designers should take a broad view of building needs. While collection preservation is critical, increasingly this function requires less than 50% of the building space and each building area requires careful planning and attention. When planning new and remodeled facilities, archivists and building designers should look at other building successes and at best practices throughout the profession as they work through the planning process.
Successful archival facilities are the result of active involvement of building users and occupants. Archivists must seek broad, active participation in the planning process. Archivists should review printed literature, professional standards, and guidelines, and bring pertinent information to the attention of building designers and ensure that these are incorporated into the building plans. In smaller archives, staff participation may be limited by lack of time and expertise. In such circumstances, staff should make a strong effort to become knowledgeable about building issues. Where time is a concern, they may want to suggest the hiring of one or more consultants to assist with building planning and programming.

The pattern of ignoring archival input in building planning until late in the process has been common and must change. As a primary client and building occupant, archivists have much to add to a successful building design. Each profession—architects, engineers, archivists, and operational and maintenance personnel—has a role to play in the building design. The lack of input from a single profession results in a building that is less functional and that fails to meet the needs of both archival collections and building occupants. Failure to have early and complete involvement by archival staff results in either unnecessary change at later stages in the building process or a less than adequate design. Archivists must not only take the time to become knowledgeable about the building process but use their political skills to ensure their involvement in the planning process.

Standards and guidelines for archival facilities are a critical element in creating or renovating buildings that meet the needs of staff and researchers and ensure the preservation of the collections. The archival facility is the common denominator in the preservation of archival and special collections. Without appropriate facilities and building systems, it is impossible to meet the building’s first priority—collection preservation. Archival facilities store paper-based materials but they also contain photographs, maps, multimedia materials and electronically formatted materials. Archival facilities contain unique collections that are usually not replicated elsewhere. They require special environments and security to ensure that material is preserved and protected from theft. The appropriate site, structure, building systems, environmental controls, security, lighting, materials and finishes, equipment, and functional spaces in an archival facility protect the archival collections from deterioration, natural disasters, and theft, provide spaces for collection storage and processing, public programs, staff and researcher use, and ensure adequate space for programmatic and collection growth.
Throughout their discussions, guideline authors discussed how to balance the needs of building designers undertaking renovations versus new, purpose built facilities. A major challenge in meeting the needs of an archival facility is an adequate budget. Building designers are constantly facing a balancing act of requirements and designs that must be evaluated against a fixed budget amount. Such choices require prioritization, but building designers must always keep in mind that collection preservation is the highest priority.

In creating these guidelines we hope that both audiences will find them useful and appropriate. In developing each chapter, we have standardized language to clarify meaning. Throughout the guidelines the authors use a series of terms that indicate the level of importance of any particular issue. These terms are:

- Must = Required
- Should = Highly Recommended
- May = Acceptable
- Not Recommended

Building designers can use this prioritization in making design choices and in evaluating options. With the exception of requirements, building planners must balance archival needs and building requirements with funding available. The result should be a building that is fully functional and meets both collections and staffing and public needs.

American building standards are drawn from a variety of sources. Federal, state, and local governments specify standards that buildings are required to meet. Likewise, specialized building professions also develop standards and guidelines that are required for all or for specific types of buildings. These standards are applied and interpreted by building designers in the course of creating or renovating an archival facility.

While no specific national guidelines or standards currently exist for archival facilities, archivists, architects, and contractors can draw from a number of sources that address aspects of archival design and construction. These include standards developed internationally by the International Organization for Standardization (ISO), the National Information Standards Organization (NISO), and facility standards developed by the National Archives and Records Administration (NARA).

Even with these resources, archivists and building designers often have difficulty in finding and interpreting the different facilities standards. This problem is threefold. The first is that there is no single location or set of
archival facility standards that can be consulted by professionals. Archivists and designers must gather information from individual institutional standards and a variety of professional building associations to develop what is often an incomplete set of building criteria. A second problem that designers face is that these standards, delineated by different groups, are not always in agreement. There is often a lack of consensus about specific issues such as temperature, relative humidity, and air filtration levels. This not only causes confusion or indecision, but also encourages designers to ignore standards or select those that are the easiest to meet or the most cost-efficient. A third difficulty in developing standards or guidelines is the United States federal system. Although there are national standards for many building issues, they are used and interpreted at the state and local level using local building codes which can alter their impact and use.

Internationally, a number of countries have already established national standards for archival facilities. Great Britain established a national standard for archival facilities as early as 1977, with the most recent update completed in 2001. Other countries, including Australia, China, Finland, and France, also maintain national standards for either archival or records management facilities. One of the tasks of the committee was to review all existing standards and determine those that should be included in these guidelines. The bibliography cites a select list of standards directly related to archival facilities and the protection of archival records.

Archival and Special Collections Facilities: Guidelines for Archivists, Librarians, Architects, and Engineers begins the process of establishing standards that can be used in designing archival facilities. This effort began with the approval of the Society of American Archivists’ (SAA) Council through a recommendation of SAA’s Standards Committee. SAA created the Task Force on Archival Facilities Guidelines to research and write guidelines. This document will serve the archival profession by providing building designers with a central source of information when designing new or remodeled facilities and serve as the foundation for future standards.

Each section of the guidelines was initially created by one individual. A second task force member reviewed the initial draft and provided comments and suggestions. The entire draft was ultimately reviewed by all task force members. Michele Pacifico and Thomas Wilsted edited the drafts and incorporated pertinent comments and suggestions. The SAA Standards Committee circulated the draft to a number of architects, archivists, conservators, and construction specialists for comment and input. The guidelines were also shared with fellow professionals in the
National Association of Government Archivists and Records Administrators (NAGARA) and the Council of State Archivists (CoSA). The SAA Standards Committee and the SAA Council conducted a final review of the document prior to their approval.

The archival facility guidelines cover the following topics:

- Building Site
- Building Construction
- Archival Environments
- Fire Protection
- Security
- Lighting
- Materials and Finishes
- Storage Equipment
- Functional Spaces

The members of the guidelines’ task force represent a number of professional bodies and organizations and each has wide experience in planning and designing archival facilities. They are:

- **Patrick Alexander**, National Archives and Records Administration (Retired)
- **Nick Artim**, President, Heritage Protection Group
- **David Carmicheal**, Director, Georgia Archives
- **Ernest A. Conrad**, President, Landmark Facilities Group
- **Michele F. Pacifico**, Guidelines Co-chair and Co-editor, Archival Facilities Consultant
- **Gregor Trinkaus-Randall**, Preservation Specialist, Massachusetts Board of Library Commissioners
- **Scott C. Teixeira**, Associate, Hartman-Cox Architects
- **Diane L. Vogt-O’Connor**, Chief, Library of Congress Conservation Division
- **Thomas P. Wilsted**, Guidelines Co-chair and Co-editor, Archival Facilities Consultant

The Society of American Archivists will continue to review these guidelines over the next five years and assess their application and value to the profession. This will allow input from archivists, architects, engineers, contractors, and others who apply these guidelines to building
design and construction. Ultimately, it is the Society’s intent to create a fully developed national standard for archival facilities. Such an effort is time-consuming and rigorous and involves the national standards bodies and many other professionals in the process. The SAA Council, the SAA Standards Committee, and the Facilities Guidelines Task Force view these guidelines as a working document that will grow and evolve over time. We encourage SAA members and others to forward comments, suggestions, changes, and additions as they use this document. Comments will be reviewed and changes to the document made as needed. Comments can be sent to: Ongoing Chair of Facilities Guidelines Task Force or the SAA Standards Committee.

The Committee would like to thank Nancy Kunde, Chair of the SAA Standards Committee, and Nancy Beaumont, Executive Director of SAA, for their initial response and enthusiasm for this project and for the SAA Council’s and the Standard Committee’s approval and support. In addition, we want to especially thank the Spacesaver Corporation for funding to support the work of the committee, including travel and publications costs.

Thomas P. Wilsted