Tennessee Archives Management Advisory

2004

SKETCH PLAN FOR A MID-SIZED COUNTY ARCHIVES: 50,000 – 100,000 POPULATION AND 10,000 – 20,000 CUBIC FEET OF RECORDS

This is a model to guide local authorities in planning a county archives—to demonstrate the kinds of things they need to consider. It is not a finished architectural plan. It is based on the square footage that is believed adequate to most county archives in Tennessee at the present time.

This design is a simple one that can be modified to suit local circumstances.

At the same time, archives require special construction that is different from an ordinary office building and different from a standard public library. Much more attention must be paid to the environmental integrity and access security of the archives that of an office building or library. Although the archives must be accessible to the public, it must be controlled access, not free or casual access. Members of the public do not “browse” the stacks of an archives the way that they do in a library or a commercial shop.

Every records in an archives is a unique item—unlike books and magazines that are published in quantity and are replaceable. Once a record is gone it cannot be replaced. Therefore special care must be taken to keep it secure and in good material condition. This means that public access must be carefully controlled and supervised to prevent thoughtless damage or deliberate theft. It means that special attention must be paid to fire and flood protection and to the environmental conditions of the archives.

A wet-pipe sprinkler system with both smoke and heat sensor activation—preferably zoned to concentrate only on the source of trouble, is recommended. To protect records from water when sprinklers activate, shelves should be deep enough so that boxes do not overhang shelves, and no records should be stored on top shelves. In the stacks area, the sprinkler pipes should be centered on the centers of the aisles between rows of shelving.

The whole archives requires a relatively thick, well-insulated protective "envelope" of walls, floor, and ceiling—surrounding all three parts—that can hold constant temperature and humidity with minimal adjustment of the HVAC systems used to control the internal environment.

The archives should be on a separately-controlled HVAC system from the rest of any building in which it is located. The system machinery (compressors, blowers, etc.) need to be outside the "skin" of the protective envelope of the archives. This requires space in the building in addition to the 1500 square feet of the archives proper.

The simpler the design, the easier and cheaper it will be to control.

The materials used for construction need to be of high quality and carefully chosen. For example, any wallboard, ceiling panels, or floor tiles used must be of inert material that does not give off gasses that contain acids that could damage the archives.

Lighting in the stacks should be centered on the centers of aisles between rows of shelving. The clearance between the tops of storage shelves and ceiling lighting should be about three feet (3') to avoid excessive heat on the archives. This means that the archives requires a minimum of nine-foot ceilings. The plenum for air-handling ducts, fire-suppressant system, and wiring usually requires another two feet, so that the total elevation from floor surface to the top of the plenum is at least eleven feet (11'). If fluorescent tube lights are used for economy, they need to be fitted with ultra-violet filter sleeves to prevent damage to archives.

There are no windows in the exterior walls.

Exterior walls must be constructed so that they are well-insulated and can prevent the leak of ambient air into the archives.

The floor surface should be of inert tile on concrete and must be able to bear the heavy load of shelving that is loaded with boxes of paper (about 40-50 pounds per cubic foot). Moisture-sealed concrete slab on strong grade (clay or stone) away from any underground springs or run-off channels, and well about flood plain, is the preferred and cheapest way to provide a proper load-bearing floor for the archives.

There are five parts to this design:

1. **The archives storage area** ("main stacks") which are the core or heart of the archives. It is here that boxes of records are kept on rows of metal

shelves or where registers and minute books can be kept on metal “roller shelves.” In some archives designs, this core is completely surrounded by a protective corridor so that it is not directly accessible from any of the other spaces. This is not a work space.

Fixed metal shelves (or if they are affordable compact mobile shelving) should be of heavy gauge steel with baked-enamel finish, and each shelf should be at least 15” deep (preferably as much as 18” deep) and at least 36” wide. The lowest shelf must be at least 3” off the floor to guard against casual flooding. Each unit of 5-6 shelves should be bolted to all other units in its row and the whole well-braced to prevent twisting from the load of boxes.

2. **The archives processing room** (or work area) where staff and volunteers can work at examining, arranging, cleaning, rehousing, and describing incoming records for use. Long (6’-8’) tables and chairs are the principal furnishings, but there also need to be shelves for holding boxes of records being worked on.

3. **The reading room** (or research room) where members of the public may inspect records and get copies of records under the supervision of staff members. Tables used for public inspection of records should be of generous proportions—perhaps 3’ x 6’ each and placed so that their surfaces are easily visible to the staff supervisor. [In some archives designs, the wall between the reading room and the stacks is made of thermal-pane glass so that the temperature and humidity control can be maintained but the public may also have a look into the “mystery” of the stacks. If the stacks are well-kept, it adds a sense of dignity and seriousness to the atmosphere.

   The reading room also requires microfilm reader-printers and copying machines, reference book shelves, and microfilm cabinets (for reference prints of microfilm).

4. **The lobby** (or reception area) where the public arrive and are registered, and where they may store their coats and briefcases, etc. temporarily. It is here that the public get their first impression of the archives. It should be open and welcoming but also seriously business-like.

5. **Support spaces** such as the loading dock, materials receiving space, lavatories, HVAC systems, custodial spaces, etc., must all be included.

Space Allocations: Numbers on Plan Show Locations:

Nr.	Space Description	Dimensions	Square Footage
(1)	Entrance		
(2)	Lobby	20’ x 50’	1000
	(2A) Public lockers for packages, coats, umbrellas, etc.		
	(2B) Exhibition cases		
(3)	Registration/reception station	10’ x 20’	200
(4)	Director’s office	20’ x 20’	400
(5)	Public lavatories (2) [handicapped access]	10’ x 20’ each	400
(6)	Reading room	100’ x 40’	4000
	(6A) Paper records reading area		
	(6B) Microfilm reading area		
	(6C) Reading room supervisor [desk] (Records access control station)		
(7)	Stacks—Shelving storage (records and microfilm)	100’ x 800’	8000
	(7A) Main stacks—Section A		
	(7B) Main stacks—Section B		
	(7C) Roller shelving for large ledgers		
(8)	Archives processing room	60’ x 40’	2400
(9)	Interior mechanical and custodial space	20’ x 40’	800
(10)	Exterior mechanical space (HVAC, electrical, telephone, etc.)	20’ x 40’	800
(11)	Materials receiving space	20’ x 20’	400

(12) Staff lavatories (2) [handicapped access]	10’ x 20’ EACH	400
(13) Loading/receiving dock [covered—weather shielded]	10’ x 20’	200
TOTAL SQUARE FEET (building footprint)		**19,000**

(14) Parking lot