

Expansion Design of
The Anderson County History Museum

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CONTENTS



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Acknowledgements.....	i
List of Illustrations.....	ii
INTRODUCTION.....	1.
a. Needs for Expansion.....	1
b. Scope.....	3
Chapter 1 Historical Background.....	4.
a. Garnett.....	4
b. Anderson County History Museum.....	4
Chapter 2 Existing Condition.....	10.
a. Exterior.....	10
b. Interior.....	12
c. Mechanical and Electrical System.....	12
d. Measured Drawings of the Existing Museum.....	15
Chapter 3 Maynard Walker's Art Collection.....	16.
Chapter 4 Addition Alternatives.....	18.
Chapter 5 Case Study - Addition to the Whitechapel Art Gallery....	37.
Chapter 6 Program of Design.....	45.
Chapter 7 Expansion Design.....	51.
a. Design Criteria.....	51
b. Design Considerations.....	52
c. Presentation Drawing.....	60
Bibliography.....	67.
Abstract	

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LIST OF ILLUSTRATIONS

<u>Figure</u>	<u>Page</u>
Fig.1 Map of Garnett, Kansas	5
Fig.2 Map of Downtown Garnett	6
Fig.3 Existing museum Interior	9
Fig.4 Front Facade of the Existing Museum	11
Fig.5 Rear Facade of the Existing Museum	11
Fig.6 Existing metal ceiling	13
Fig.7 Existing wooden floor	13
Fig.8 Measured drawings of the existing museum	15
Fig.9 Nichols Methodist Church - Plan	24
Fig.10 Nichols Methodist Church - Partial Elevation	24
Fig.11 Nichols Methodist Church	25
Fig.12 John Hancock Tower : Site Plan	28
Fig.13 John Hancock Tower & Trinity Church	28
Fig.14 Maywood Presbyterian Church	30
Fig.15 Newberry Library	33
Fig.16 Newberry Library - Link detail	33
Fig.17 Avery Hall Extension - Plan	35
Fig.18 Avery Hall Extension - Section	35
Fig.19 Avery Hall Extension - Site Plan	36
Fig.20 Avery Hall Extension	36

Fig.21	Whitechapel Art Gallery - Plans	39
Fig.22	Whitechapel Art Gallery - Elevation	40
Fig.23	Whitechapel Art Gallery - Axonometric View	40
Fig.24	Whitechapel Art Gallery - Interior	40
Fig.25	Fifth Street Elevation	54

INTRODUCTION

This thesis project deals with the expansion of the Anderson County History Museum in Garnett, Kansas for housing both the original museum and the Mary Bridget McAuliffe Walker art gallery. The Anderson County History Museum is a two-story stone structure located at Fifth and Main Street in downtown Garnett. The building originally served as a retail store, and in June 1971 the Anderson County Historical Society purchased it and opened the current museum in the spring of 1972.

Needs for Expansion

A downtown generally carries with it a true "sense of place", born of the town's history. It is in the oldest part of town, and usually the focus of the energy and activity of a small town. Too often, however, such an image is only a nostalgic memory. The common reality is a decaying downtown: its buildings in disrepair, its economy atrophied. There is no exception in Garnett. Its downtown area is also endangered by blight, deterioration and obsolescence. Currently, the city of Garnett is taking action towards the deteriorating physical and economic conditions of the downtown business district. The expansion of the museum is one of the opportunities that

will not only preserve the original museum, but can bring new activities to this area of the town.

There are five reasons for the expansion:

- (1) In the two decades since its first opening in 1972, the museum has continued to receive items donated by the citizens of Anderson County. The museum's need for additional space has increased greatly.
- (2) Mr. Maynard Walker, a son of Garnett and the owner of a gallery in New York, has donated about 100 paintings and sculptures to Garnett. The collection is already looked upon as one of the most prestigious collections in the state. Unfortunately, there is no gallery in Garnett to display them.
- (3) The ventilation, heating, air conditioning and lighting systems of the museum urgently need to be modernized to meet the contemporary needs of the museum.
- (4) A fire suppression system needs to be installed to meet the building codes and safety requirements, and to protect the priceless artifacts and art works which the museum houses.
- (5) The expansion of the museum will be a catalyst for Garnett's downtown redevelopment.

Scope

This study covers the following aspects:

- (1) Study of the historical background of the Anderson County History Museum and the city of Garnett.
- (2) Analysis of the existing conditions of the current museum.
- (3) Explanation of Mr. Maynard Walker's art collection
- (4) Program of design
- (5) Study of alternatives of building addition design
- (6) Case study - Addition and modifications to the Whitechapel Art Gallery
- (7) Expansion design considerations
- (8) Presentation drawings

Although economic feasibility is an important issue, it will not be emphasized in this study.

Chapter 1 Historical Background

GARNETT

Garnett, the county seat of Anderson County in east central Kansas, is 70 miles southwest of Kansas City on US highway 169. Its population is 3,030 (city), and 8,200 (county). (Fig.1)

Garnett was founded in 1857 by members of a free state colony from Kentucky. In 1856, the town site of Garnett was selected by Dr.D.W.Cooper of Louisville, Kentucky, with the help of George Dunn, a government surveyor. Upon Dr.Cooper's return to Louisville, a town company was organized with W.A. Garnett as president. The town then was named in honor of this man of wealth and influence, who purchased a flour mill and financed the colony of settlers.

ANDERSON COUNTY HISTORY MUSEUM

The Anderson County History Museum is located at Fifth and Main Street in downtown Garnett.(Fig.2) Built in 1881, it is one of the oldest buildings in the town.

The first building on the site of the museum was a two-story frame structure moved in 1872 from Seventh and Oak where it had been built by the Garnett Town Company in 1856 for use as a town meeting hall and schoolhouse.

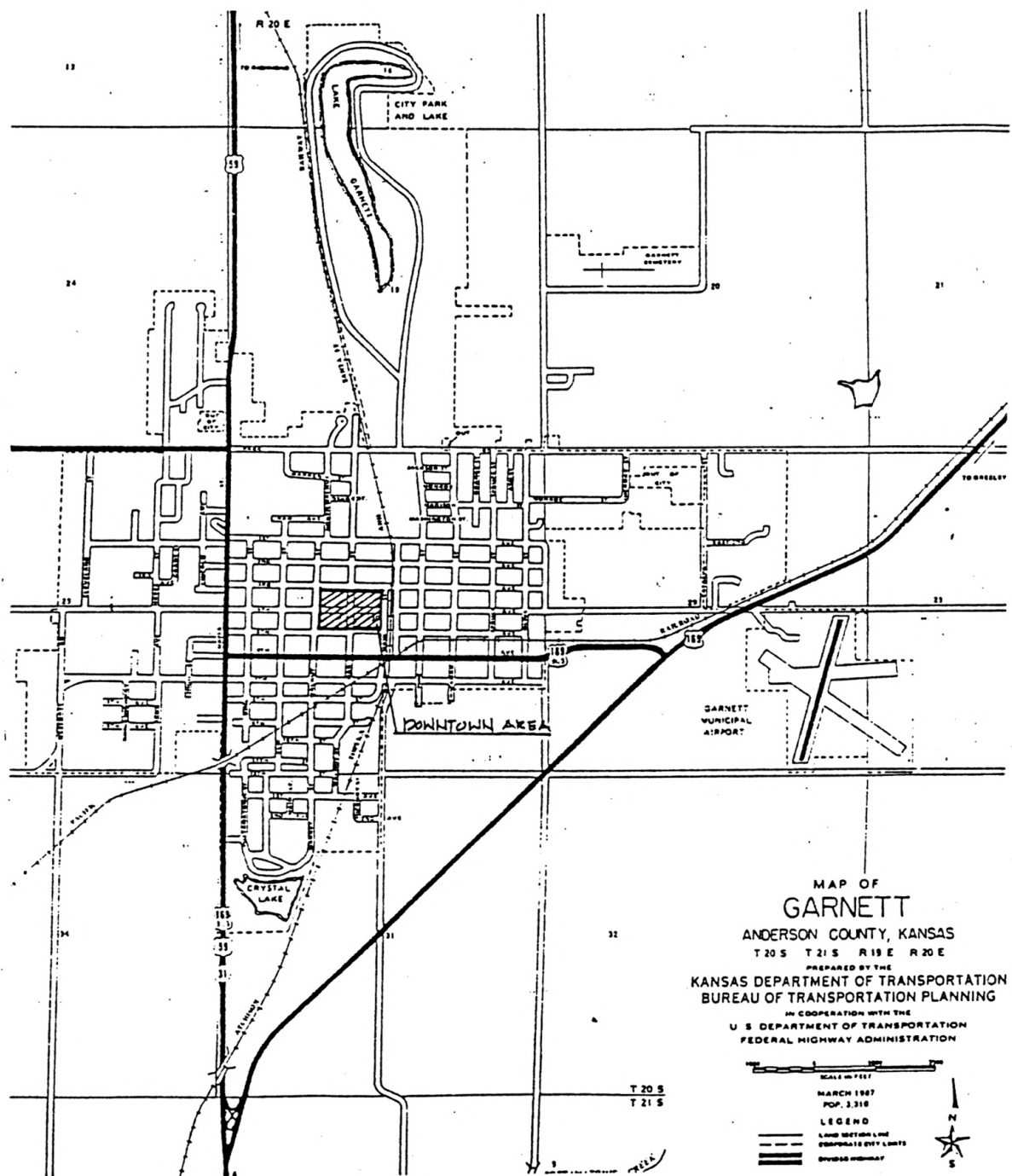


Fig. 1 Map of Garnett, Kansas

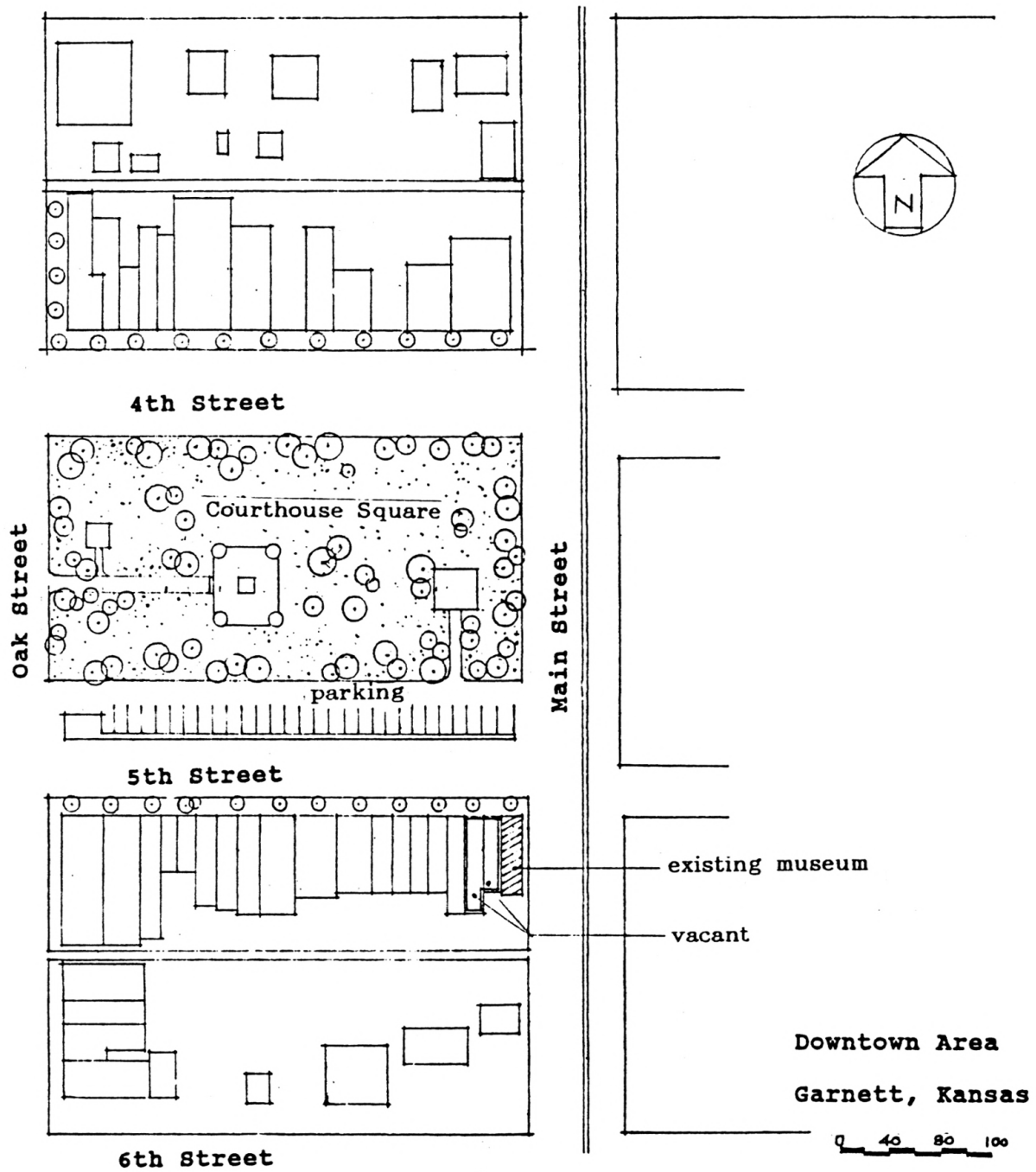


Fig.2 Map of Downtown, Garnett

It was moved to the corner on Main so it could be used in connection with the new railway. The building first housed a wagon shop and then a feed mill.

In 1881, A.C. Farrow demolished the old building and built the present stone structure. At that time, A. C. Farrow lived with his family on the second floor, and ran a general store on the first floor. The building was commonly called the Farrow Building.

Founded in 1968, the Anderson County Historical Society was established with the purpose of collecting, presenting and exhibiting materials illustrating the historic development and current life of the region. In September 1968, the society opened a museum on the second floor of the Anderson County courthouse. Many items were donated and by the spring of 1971, that location became too crowded.

In June 1971, the Farrow building, the oldest building on the south side of Courthouse Square, was purchased by the Anderson County History Society, and the big task of cleaning and painting began for the volunteers.

By the spring of 1972, the front room was finished and opened. Besides the many miscellaneous displays, the main points of interest were the rooms furnished with period furniture and the old time school room.

The next year saw the completion of the second room,

labeled "the General Store" with a number of shelves of home and grocery supplies and old-fashioned clothing. The third room was completed in the early spring of 1975, and contains the farm and tool section. Among the more than 1,500 articles entered, one can see some items from the Mineral Point post office established in 1858 and the Haskell post office dated 1880, the 46 star flag that flew over the Anderson County's first courthouse, a wicker baby buggy more than 100 years old, tools, school and church items, old toys, dolls, books and clothing.(Fig.3)

The museum gives the citizens of the community the opportunity to see the objects and events that once played a part in its history.

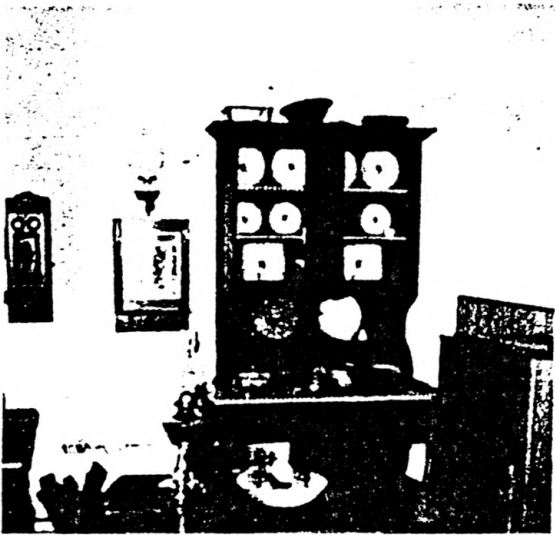


Fig. 3 Existing Museum Interior

Above left is a view of the school room and to the right is the bedroom. Below at the left is a view of the kitchen and at lower right is a view of the parlor.

(Source: Anderson County Historical Society)

Chapter 2 Existing conditions

This chapter documents the existing architectural materials and features of the building with respect to their physical condition. The information included in this chapter has been obtained by inspection of the existing building fabric.

1. Exterior

Built in 1881, the museum is a 2-story stone building with a canopy covering the sidewalk on the north side. The structural system is load bearing stone walls supporting the second floor and a flat roof covered with rolled felt and asphalt coating. The principal facade is faced with brick, whereas the other facades are exposed structural stone. (Fig.4 & Fig.5) The north facade still remains the original commercial front with a base panel and display windows on the first floor, and rectangular double-hung windows on the second floor. In 1972, several modifications were made to the two main facades. A sign (Anderson County History Museum) was mounted on the canopy, and the outside staircase on the east facade was removed because of its unstable condition.



Fig. 4 Front Facade

(Photo by author)

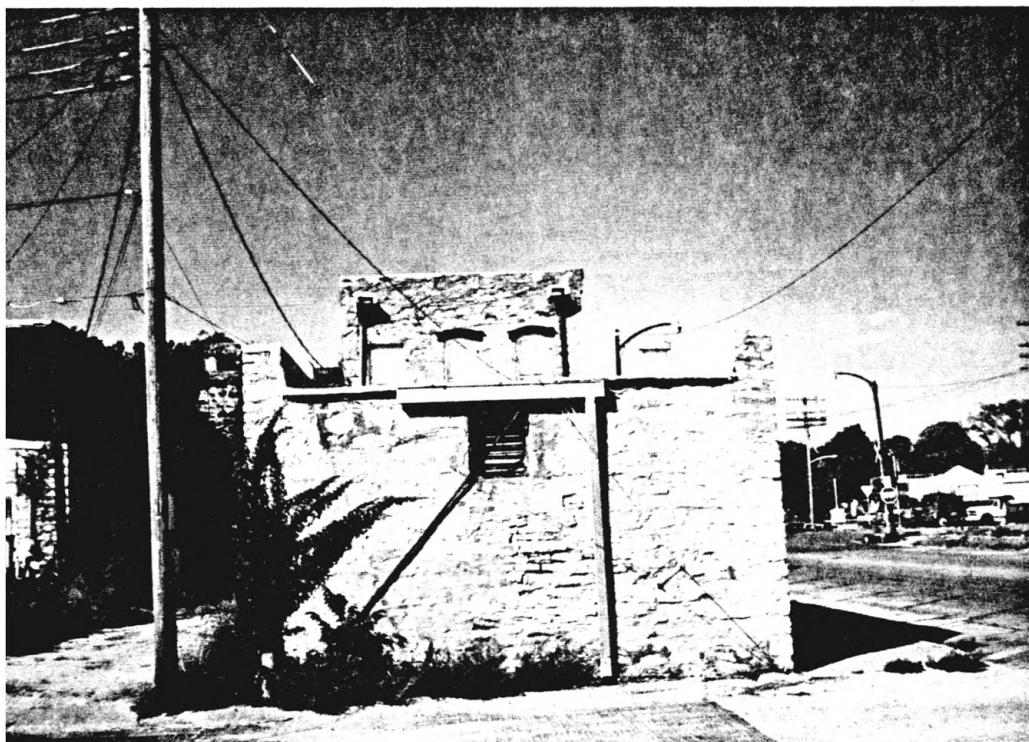


Fig. 5 Rear Facade

(Photo by author)

2. Interior

The existing plan itself is very simple. The first floor houses the entrance, information desk, two exhibition rooms for period furniture, old-fashioned clothing, old documents, newspapers, and a small storage room. The second floor houses the old time school room, the "General Store" with a number of shelves of home and grocery supplies, and storage rooms.

The interior basically remains the original design. Both the wooden floor and metal ceiling have not been altered and remain in good shape with no rotting or warp. They can continue to be used after simple cleaning. (Fig.6 & Fig.7) The main interior alteration is the addition of a wood staircase during the remodeling in 1972.

3. Mechanical and Electrical systems

The mechanical and electrical systems of the existing building are in urgent need of modernization. Presently, there is no heating system for winter, so the museum is opened only from April to October . There is no air conditioning or fire sprinkler system. On the first floor, the lighting is insufficient, and on the second floor, natural lighting enters the space only from the side windows. While the natural light levels are high on sunny days, the light tends to produce glare in the spaces

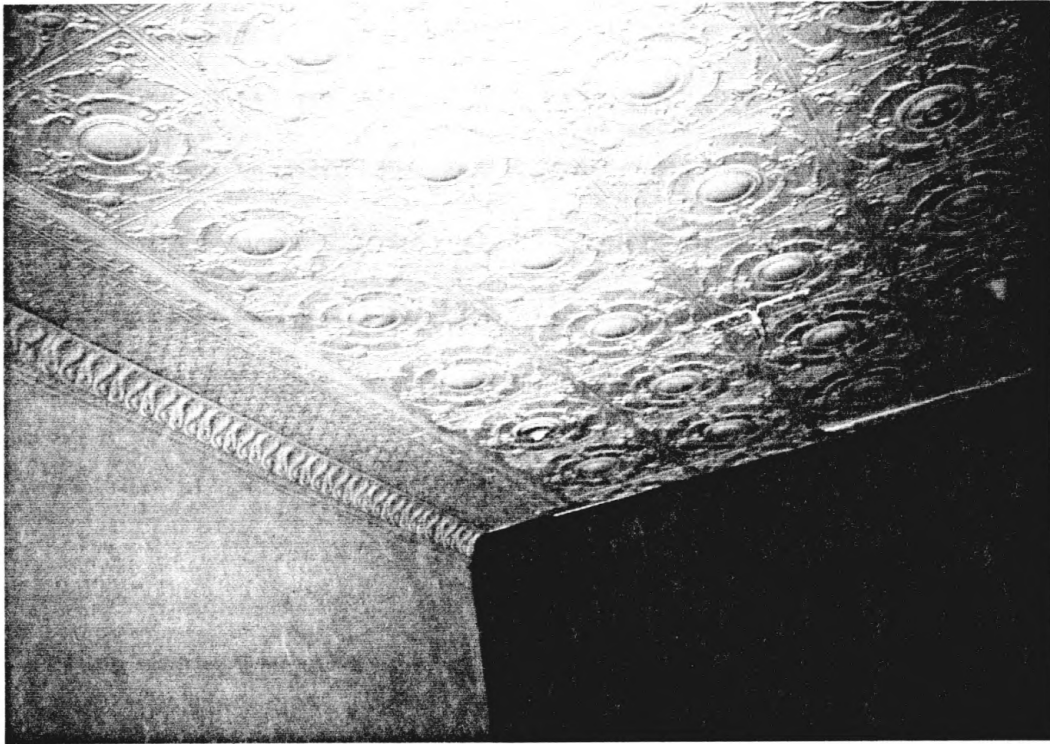


Fig.6 Existing metal ceiling
(Photo by author)



Fig.7 Existing wooded floor
(Photo by Author)

Generally speaking, the structure of the museum is in good condition: no flaws or cracks in the walls, no loose bricks and no open joints on the exterior wall. There are some minor roof leaks, which can be fixed by retarring. However, several alterations and improvements will be necessary in the interior. Presently, the organization of the interior spaces is random and the lighting system is poor and inadequate for display and exhibit purposes.

4.Measured drawings of the existing museum (Fig.8)

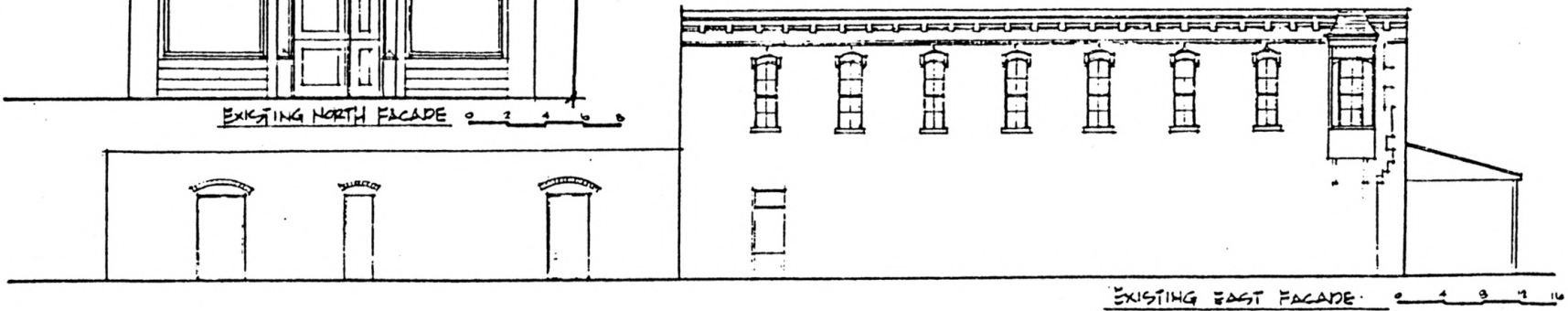
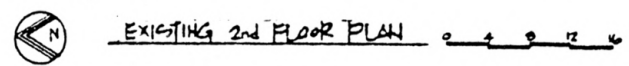
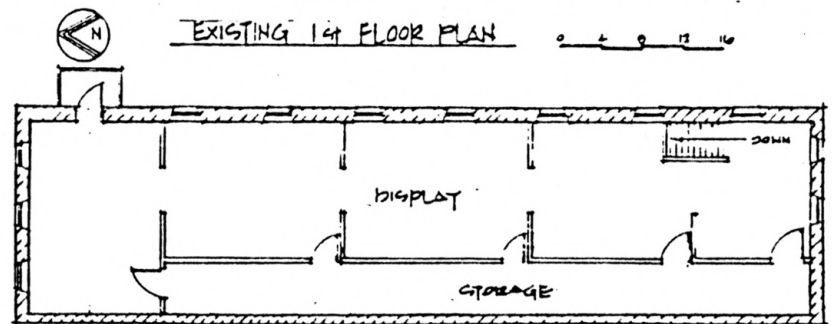
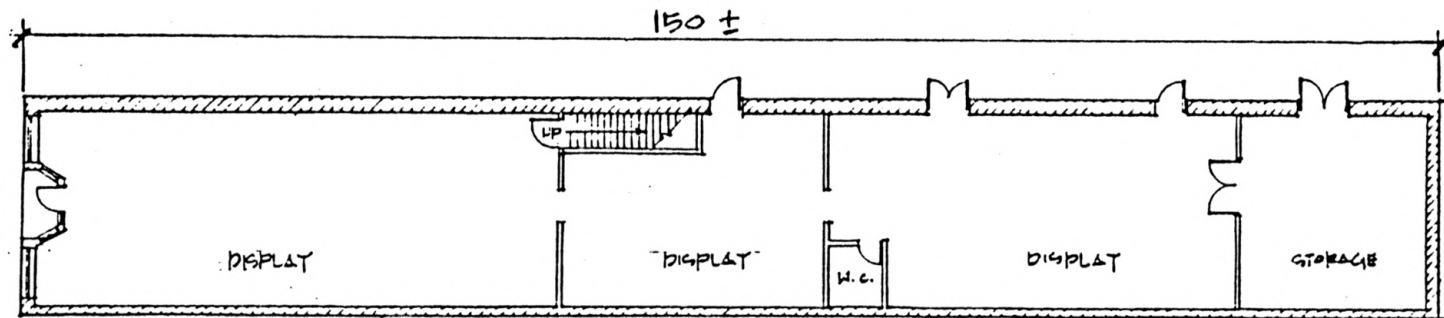


Fig.8 Measured drawings of the existing museum

(Prepared by author)

Chapter 3 Maynard Walker's Art Collection

In 1977, Anderson County saw the beginning of its most valuable benefaction when Maynard Walker of New York city, presented the Mary Bridget McAuliffe Walker collection of arts and letters to Garnett as a memorial to his mother.

Mr. Maynard Walker, a native son of Garnett, born in 1896, was the owner of the Walker Galleries, 117 East 47 St., New York.

Today, the Walker collection numbers nearly one hundred works including paintings and sculptures. Most of them were given personally by Mr. Walker, but a number of them have been donated in his name by artists and other friends with whom he was long associated.

Among the outstanding works are paintings by the following:

Andree Ruellan, Anne Poor, Ann Truxell, Arthur B. Davies, Blanche McVeigh, Boardman Robinson, Daniel Rasmussen, Edouard Manet, Frank Duncan, George Grosz, Henry Varnum Poor, Hobson Pittman, John Carlson, John Chumley, John Steuart Curry, John Heliker, John Skeaping, Joseph Stregner, Kenneth Callahan, Leon Kroll, Lily Cushing, Luigi Luiconi, Mary Ronin, Michael James, Mitchell Jamison, Robert Henri, Thedoros Stamos, Theophile

Steinlen, Wayne Williams, Walt Kuhn, and sculpture by Lewis Islin and Merrell Gage.

Mr. Walker has also given to Garnett a considerable file of letters from artists and other notables in the art world with whom he was associated. Important among them are letters from Alexander James, B. Mellon, Charles L. Homer, Clare Booth Luce, Edward G. Robinson, Edward Hopper, E.W. Root, George Grosz, Grant Wood, Jacqueline Kennedy, John Steuart Curry, Joan Payson, Katherine Hepburn, Lauren Ford, Louis M. Eilshemus, Margaret Hayward, O.H. LaFarge, Thomas Hart Benton, Sidney Howard and Walt Kuhn.

The Mary Bridget McAuliffe Walker Collection of Art and Letters gives the residents of Anderson County and adjacent areas the advantages of access to an art gallery, which is uncommon in a small community. The collection is now hailed as one of the most outstanding art collections in Kansas.

All the works will be displayed permanently in Garnett. However, since the gallery possesses more painting and sculptures than can be displayed at any one time, a rotation of the collection is necessary. Most of the items in Walker's collection are medium-sized paintings. A suitable room for display might measure about 20 x 30 feet with a wall height of 10 to 12 feet.

Chapter 4 Addition Alternatives

The design of a building addition represents a challenge to architects: how to create a new structure that is physically linked and functionally connected to an existing one, and how to make the aesthetic characteristics of a new addition compatible with an existing building. The design relationship between old and new architecture is an important issue facing all concerned architects.

There are three factors that have a critical influence on an architect's decision in making an addition to an existing building: existing conditions, design parameters, and addition design methods.

(1) Existing condition - issues typically beyond the architect's control, including :a) site location, b) building type, and c) size of project.

(2) Design parameters - include two significant issues which are partially under the architect's control: prominence and definition of context.

The issue of prominence is strongly affected by the existing conditions: size, location and use. Clearly, if a massive office building is to be added into a small-scale commercial area, the building inevitably will be prominent. Nevertheless, the architect can choose to

minimize or maximize the prominence.

Defining the scope of the context is a critical question that should be consciously addressed by the architect. Sometimes, the context is assumed to be the immediately adjacent buildings. In some other instance, the architect may choose to define the context as a multi-block or local district. Good design generally requires the larger context.

(3) Addition design methods - This is the core of any building addition design problem, and one over which the architect has primary control.

The primary purpose of this chapter is to indicate methods of building addition design in order to seek an appropriate approach to the expansion of the Anderson County History Museum.

There are a variety of ways to design an addition so that it is compatible with the existing building. Architects adding onto a building can replicate the existing building, echo its proportions and materials through a contemporary idiom, or contradict the original with opposing forms and palette.

In the book Building Additions Design (1985), David Dibner describes more than ten types of building additions, including: duplication, contrast, recall, context, linked additions, sympathetic connection,

transition, modular expansion, natural growth, facadism, internal expansion, and underground link.

In the book The contextual Architecture (1980), Keith Ray also discusses designing in relation to the context. She focuses on three ways of adding to an existing building: reproduction, partial deference, or sympathetic contrast. Among the three ways of addition, reproduction may seem to be the easiest choice, but the author says, "Reproduction is more than copying. Instead, the designer must thoroughly understand the stylistic language of the original building to be able to reassemble the parts around the new space. Without this understanding, imitation originally intended as flattery becomes parody".¹ A slightly less deferential concept often used for additions is the abstraction of the original building. The intent is to achieve harmony between the old and new by recreating the essence of the original building without reproducing in toto. Usually, this is handled by designing an addition with massing similar to the original building but substituting contemporary details. Another approach discussed in her book is to contrast the new with the old, but in a sympathetic way. In this case of addition, the contrast is often between the solidness of the masonry walls of the historic building and the transparency of the glass

¹.Keith Ray,The Contextual Architecture, p65

and steel skin of the addition.

In Architecture in Context (1980), Brent C. Brolin also discusses how to make coherent, sympathetic visual relationships between buildings. He does not catalog the methods of establishing sympathetic connection to their neighbors. Instead, he used a lot of examples to express his idea that " Architecturally felicitous relationships do not depend on copied architectural styles, or even on slavishly following some well-meant lists of design criteria. The outstanding feature to guarantee a sympathetic visual relationship is ornament"². He also points out that "General similarities may really be less important than we have been led to believe. Ornament, and the visual texture and associations it creates often seems to be a surer way to build a sympathetic visual relationship between buildings".³

Based on an analysis of the above mentioned books and other related readings listed in the bibliography, this study investigated the following five most commonly used building addition design methods identified by David Dibner and Keith Ray:

a) Duplication

b) Sympathetic contrast

². Brent C. Brolin Architecture in Context, p18

³. Ditto, p37

- c) Sympathetic connection
- d) Link
- e) Underground addition

This study will analyze the five methods and give some examples to show how a particular problem of combining an old building with the new addition has been solved. Using these examples as illustration, the author will attempt to outline the designer's design concept and approaches. The emphasis here is largely upon the visual relationships of the additions with the existing buildings and their larger physical context.

(1) Duplication

When confronted with the problem of designing an addition to an existing building, architects may make the aesthetic decision to copy either selected features or the entirety of an existing building in order to concretely join old and new.

The addition to the Nichols Methodist Church in Trumbull, Connecticut, (Fig. 9, 10 & 11) is an example. Here, architects chose to add two symmetrical wings which repeat part of the original elevation. The exterior materials are matched. Forms and window treatments bear a resemblance to the existing church. In this case the

duplication connection is a good solution, because the original church, which possesses a unique visual character, is in a dominant situation in the environment. Any other contrasting attempt would intrude upon the existing surroundings.

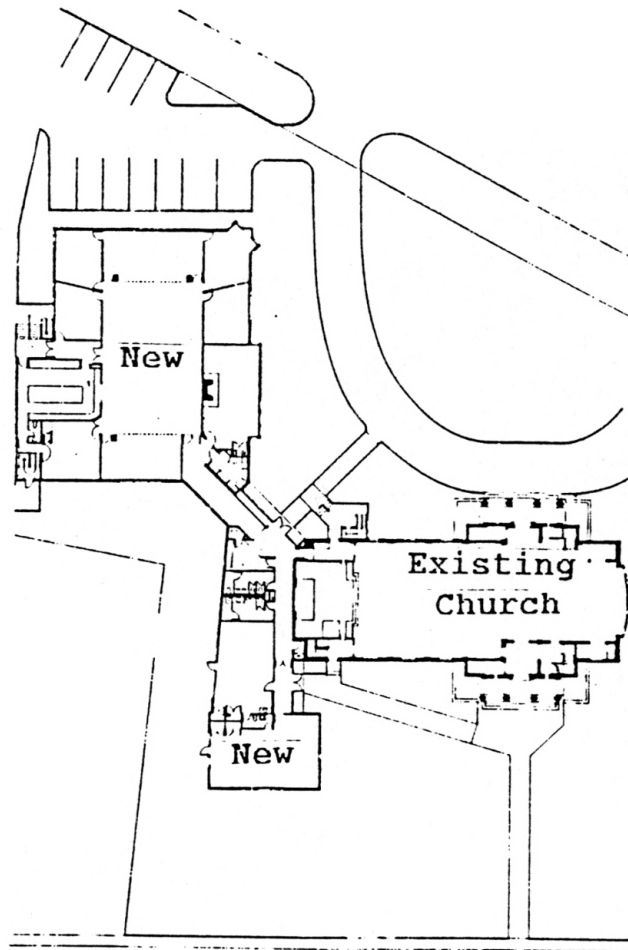


Fig.9 Nichols Methodist Church - Plan
 (Architect: Horowitz/Rothenberg Associates, Westport,
 Connecticut)

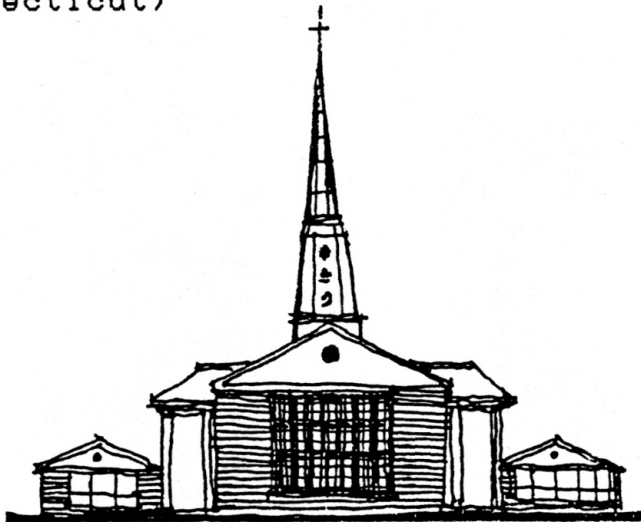


Fig.10 Nichols Methodist Church - Partial Elevation

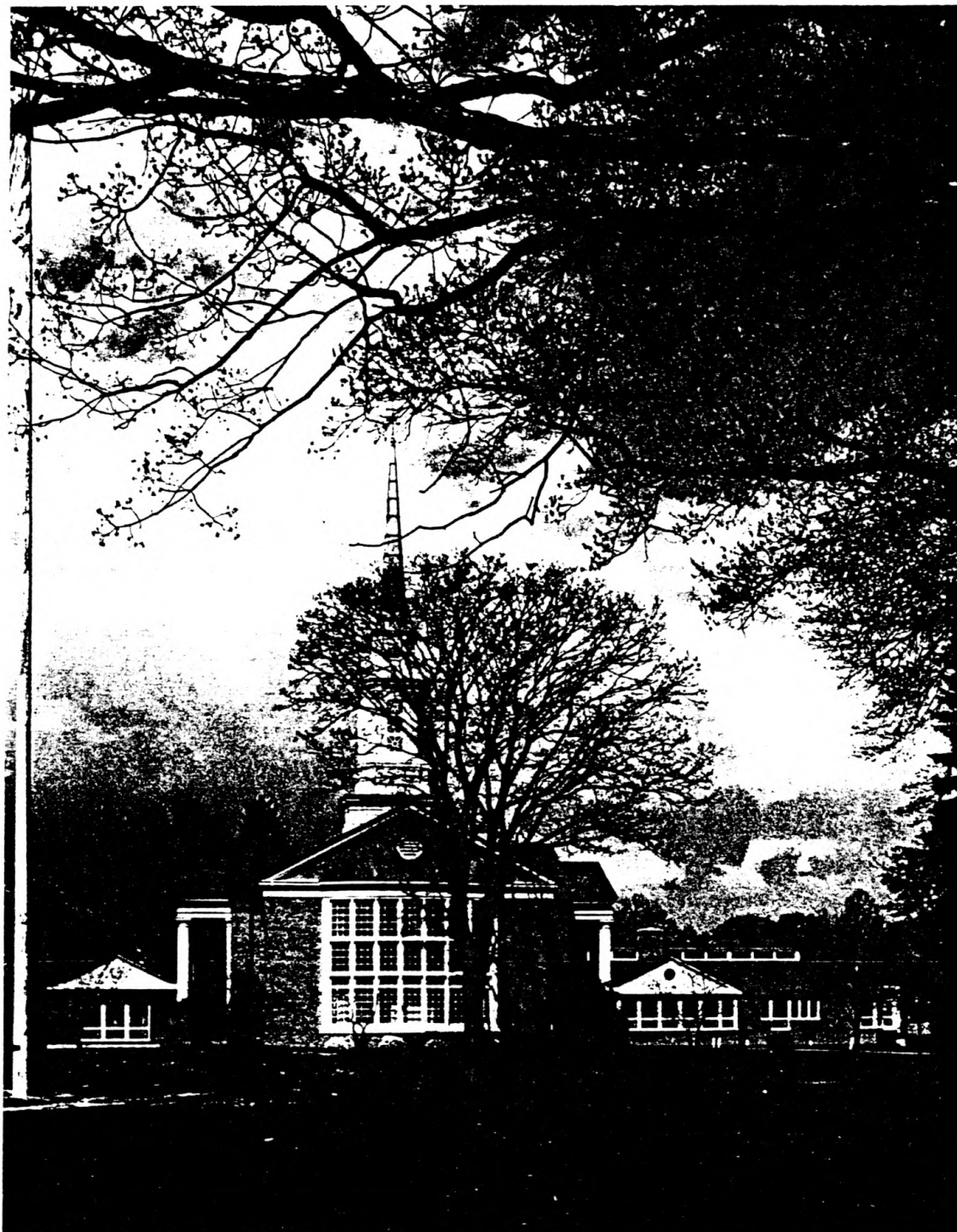


Fig.11 Nichols Methodist Church : New addition echoes features of existing church building

(2) Sympathetic Contrast

The architect's approach in this method is to contrast the appearance of a new addition with the existing building.

There are some instances where, for aesthetic or symbolic reasons, contrasting is appropriate. The Hancock Building in Boston is an example of sympathetic contrast relationship of new and old. (Fig. 12 & 13) The architects of Hancock Tower faced the problem of putting a sixty-story building on the corner of Copley Square without overwhelming both the square and its focal point - Richardson's Trinity Church. Their solution is to relate an entirely modern structure to its historical context - in spite of huge differences in scale, detail and texture. The Trinity Church is reflected in the mirror-glass facades of its neighbor, and successfully imposes its own identity. Two factors are responsible for this relative success: (1) The tower's trapezoidal plan. Standing near the church, the tower becomes a giant, two dimensional false-front. Its second side falls away because of the acute angle at the right hand corner. This two dimensional aspect diminishes its pressure sufficiently to preserve the ground-level dominance of the church. (2) The smooth glass surface offers Trinity Church a good background, which seems to emphasize the

elaborate shape and decorations of the old building, and the reflections of sky and clouds also help make much of the mass disappear.

Sympathetic contrast connections often have shock effects on environment, however, as the number of contrasts increases, their effectiveness decreases. Too many contrasts mean visual chaos. Before using contrasting connection, careful considerations must be taken to the situation and environment, because it is hard for viewers to differentiate between "contrasting with" and "ignoring".

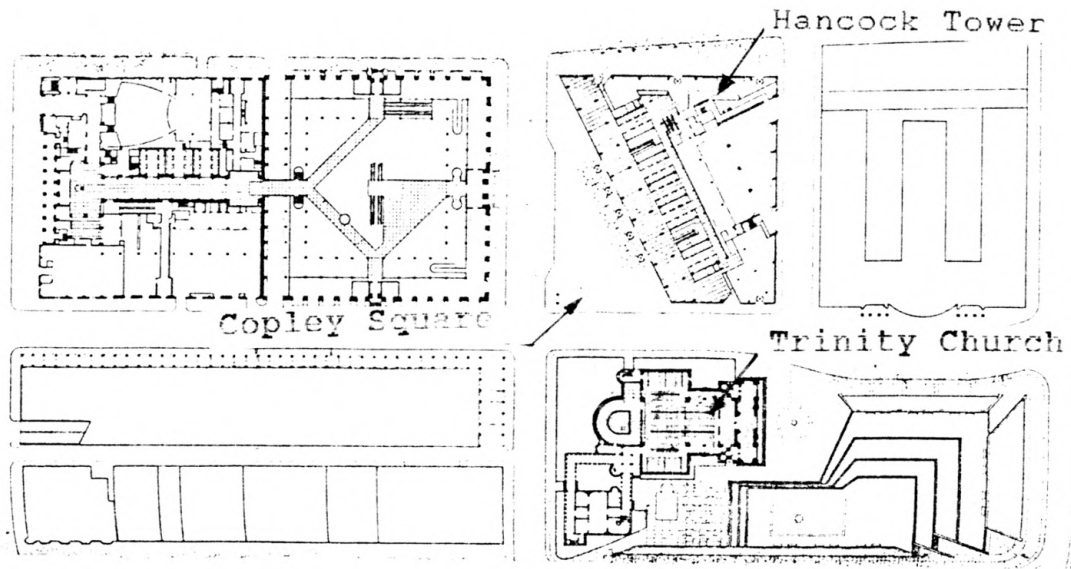


Fig.12 John Hancock Tower : Site Plan

(Architect I.M.Pei and Parnters, Herry N. Cobb, design)



Fig.13 John Hancock Tower & Trinity Church

(3) Sympathetic connection

This method of design requires the addition to an old building using materials and motifs to resemble the existing structure, but in a manner which is more contemporary. The intention is to have the new addition "suggest" or "recall" the forms, materials or colors of the original building without attempting to copy or duplicate what the old building contained.

The addition to Maywood Presbyterian Church in the suburb of Oklahoma City is an example of a sympathetic connection. (Fig.14) The 23,000 sqft. addition is more than three times larger than the original 7,000 sqft. church. The challenge to the architect was to accommodate new functions without violating the integrity of the existing building. The addition echoed the gabled volumes of the old church with austere forms that sympathize with the scale and materials of the old one without duplication. Buff and red brick were used to match the old building. Concrete horizontal banding continued the original ashlar block of the church. The addition bows to the existing church in its massing, materials and color and allows the original tower to remain dominant. But, the addition also goes its own way. Instead of duplicating the mullioned windows of the old one, the new building is punctuated by slots of glass, simplifying its mass and further accentuating the ornateness of the old church.

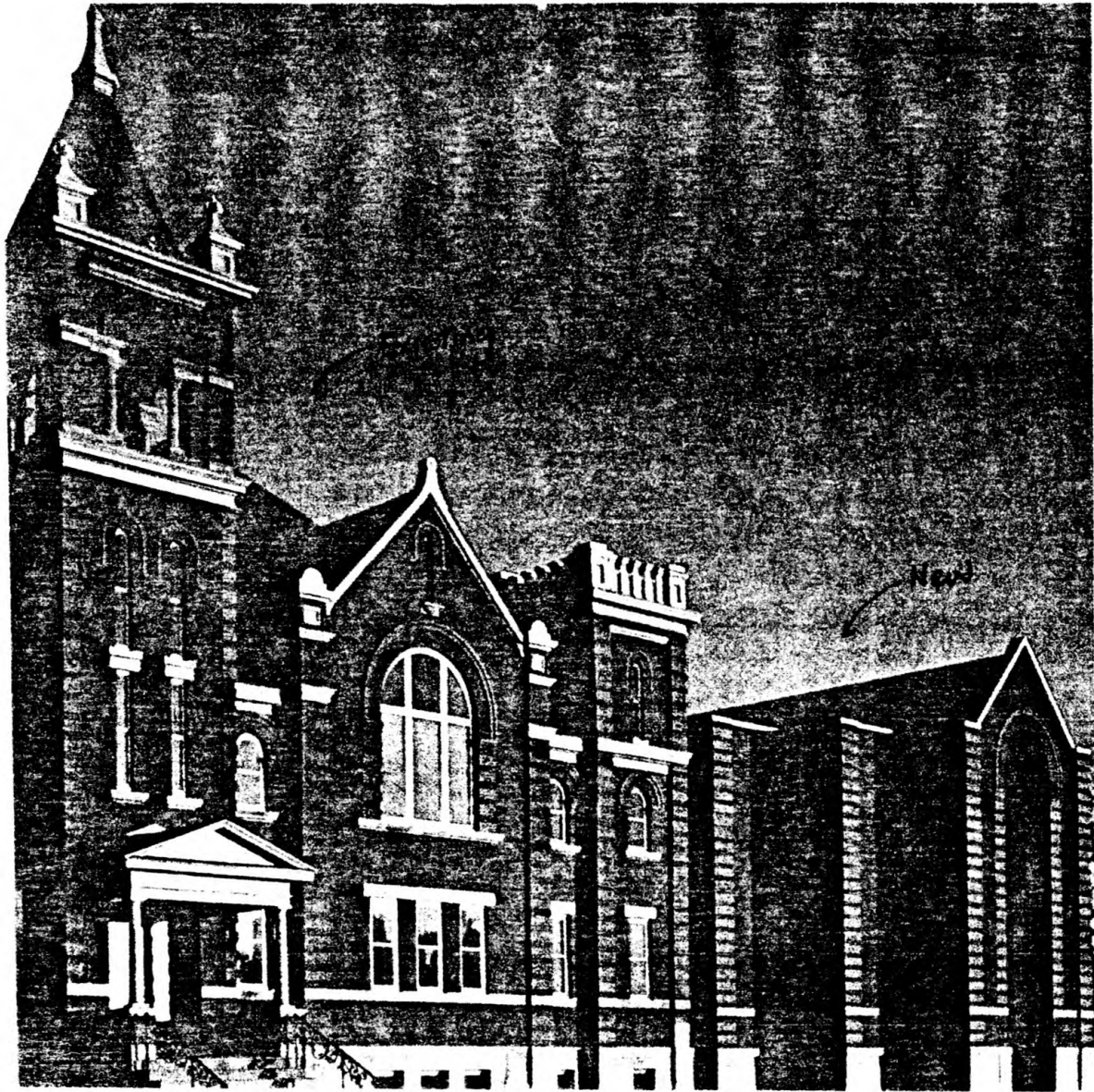


Fig.14 Maywood Presbyterian Church
(Architect: HTB, Inc. Architects, Oklahoma City, OK)

There are two basic approaches to achieve sympathetic connection:

- (a) New additions are harmonious with the existing buildings in general attributes, such as: setback from the street, spacing between adjacent buildings, massing, approximate height, facade proportions, roof shape and silhouette, rhythm of solids to void in facades, windows and door proportion, materials, colors, scale; and
- (b) The ornaments and details of the new addition capture the visual feeling of the existing building by their character and placement. Details can absorb substantial variations that might otherwise be disruptive without a loss of richness. It is one of the ways to make a clear and direct connection between new and old.

(4) Link

A link is usually a narrow tie between an old building and the new addition. The link can set back from the old facade plane or be flush with the old facade but of a different material from either old or new. In this way, the masses of the two structures may "read" independently.

The addition to Newberry Library in Chicago is an

example of link addition.(Fig.15&16) The 10-story rectangular extension enclosed book storage facilities. It is windowless because of book preservation and security considerations. To smooth the transition from the old building to the solid windowless addition, the architects used a stairtower between the masses as a link to soften the contrast. Hints of the arches in the solid wall of the addition are also used to "recall" the window form of the original.

Link is both a literal drawing-back from the existing facade, and a symbolic withdrawal from the past. It seems to say "I am new, but I am trying, as best as I can , to keep a respectful distance".

Fig.16 Newberry Library -
Link detail



Fig.15 Newberry Library

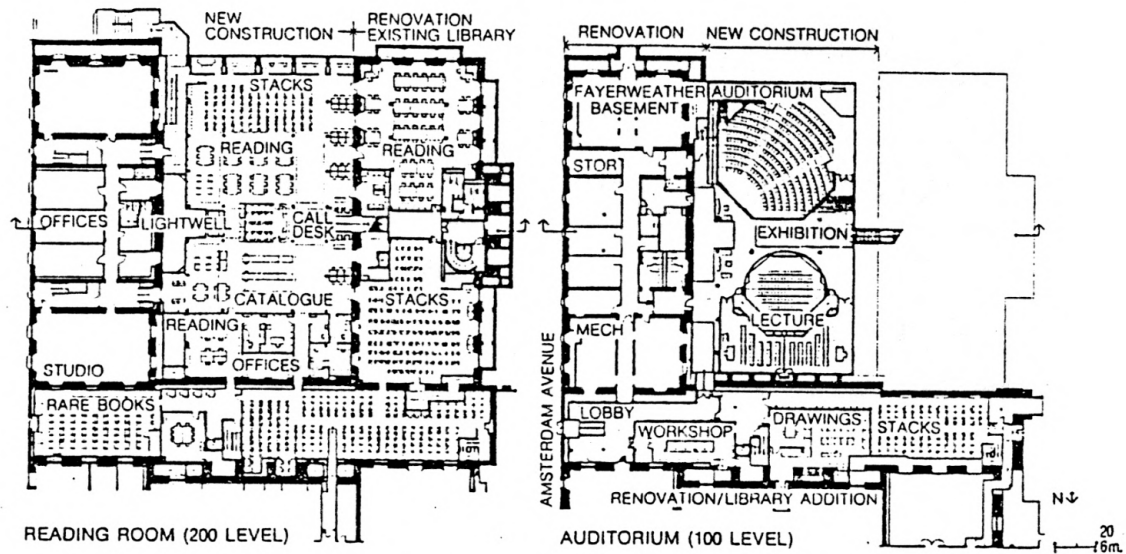
(Architect: Harry Weese & Associate. Chicago, Illinois)

(5) Underground link

The most hidden links are those which occur underground and therefore invisible above grade.

A successful example is the extension to Avery Hall in Columbia University, New York City, designed by Alexander Kouzmanoff. (Fig.17,18,19 & 20) It is a two-story-deep underground connection between four existing buildings that face each other across formal quadrangle. The roof of this link has been paved and planted to make a formal approach to St. Paul's Chapel. Here, the underground link is probably the only solution because any structure placed in this symmetric handsome court would almost certainly destroy it.

Underground additions are generally used in the extension of landmarks or where the site is limited and there is not a possibility to make other kinds of connection.



**Fig.17 Avery Hall Extension - Plan
(Architect: Alexander Kouzmanoff)**



Fig.18 Avery Hall Extension - Section

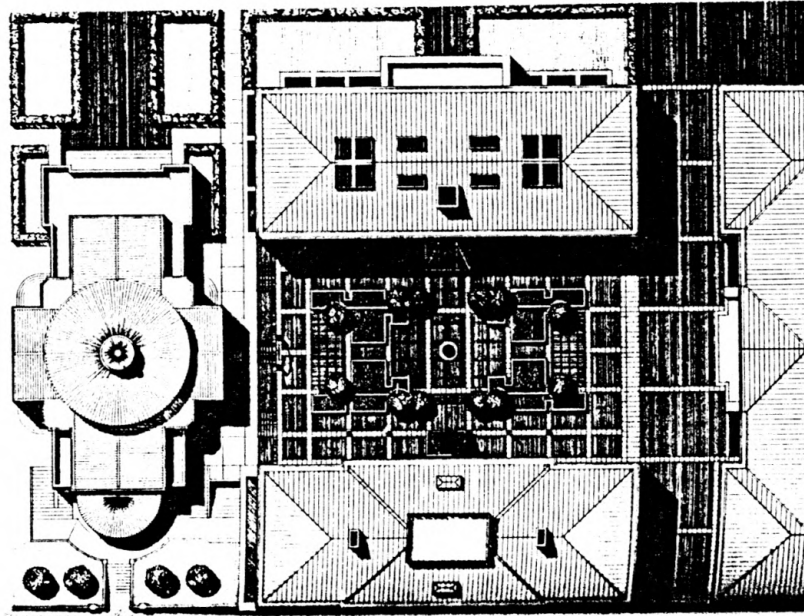


Fig.19 Avery Hall - Site Plan



Fig.20 Avery Hall Extension

Chapter 5 Case Study -

Addition to the Whitechapel Art Gallery

This project consists of alterations and additions to the Whitechapel Art Gallery in London, designed by Harrison Townsend in 1898 and built in 1901. The museum is an internationally recognized, stylistic amalgam of Art Nouveau, Arts and Crafts, and Richardsonian Romanesque that has since become an icon of turn-of-the-century architectural history. It is a successful example of making alterations and additions to an art gallery to conform to modern museum standards, while at the same time reconciling with the needs of historic preservation and aesthetic unity.

The original intention of the founders of the museum was to make art available to the poor of East London, and the gallery continues to play an important role in the local community. The purpose of the alterations and addition was to enhance and develop these uses and this entailed the following works:

1. the upgrading of the environment of the existing galleries by the installation of air conditioning, sunlight control, new artificial lighting, and a security system,
2. the provision of new or improved ancillary accommodation for the public, including a lecture

theater, studio, bookstore, restaurant and cloakrooms,
and

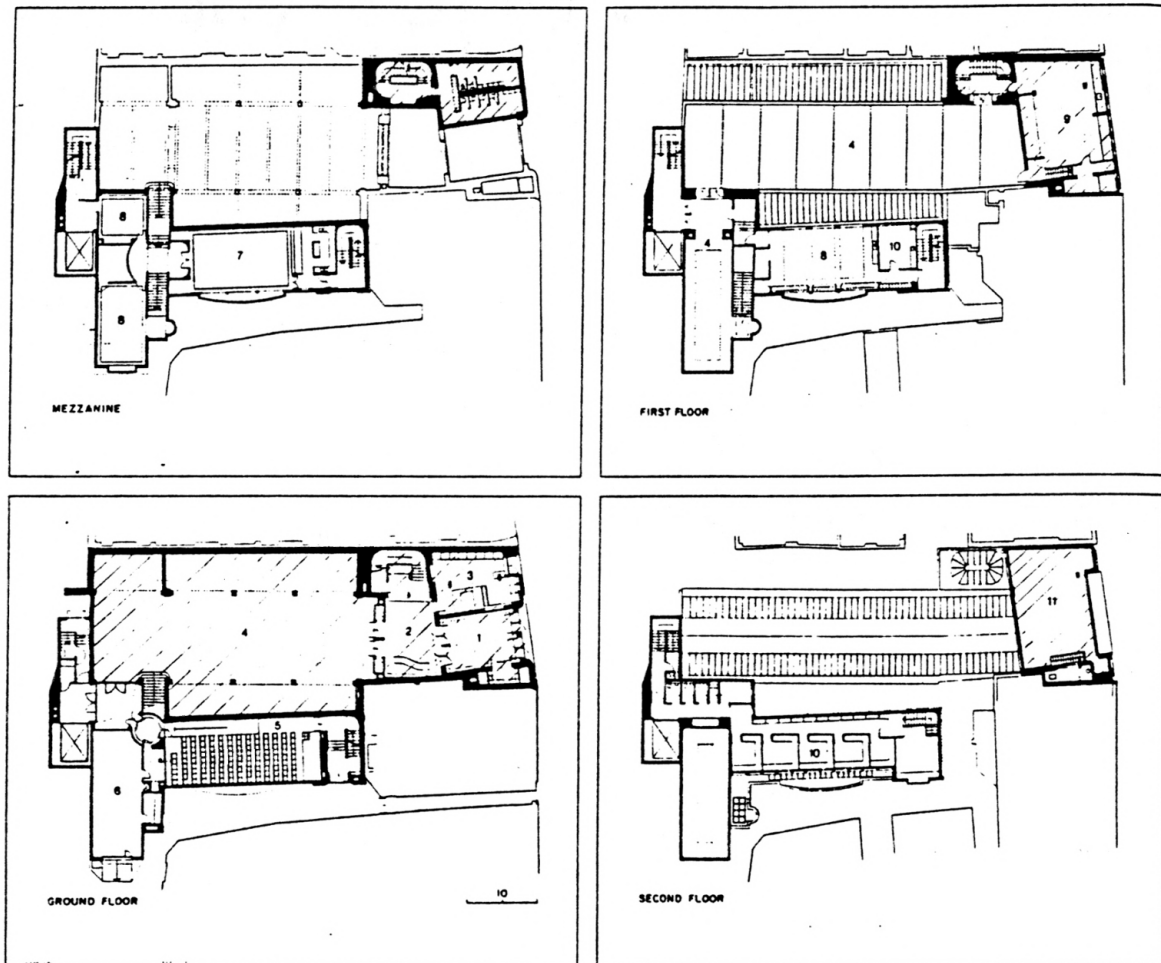
3. the provision of new support facilities, including
offices, storage spaces, workshop and freight
elevator.

Colquhoun+Miller Architects received the commission for the addition and modifications to the museum in 1982. Their design nearly doubled the volume of the Whitechapel's original 1190 square meters by adding an L-shaped wing to its western side. (Fig.21,22,23&24)

In making alterations and additions to the art gallery, the architects faced a major challenge: The art gallery's new functions and modern standards of conservation and human comfort demand that the building be more or less radically transformed. The owner, however, required that:

- a) Townsend's facade not be altered
- b) the main galleries be left intact as far as possible

This chapter analyzes how the architects coped with this challenge. As in every aspect of building addition design, each project has its own solution to its unique challenges. There are, however, several approaches which are helpful in the addition design for the Anderson County History Museum.



Existing Museum

1. Entrance vestibule
2. Reception
3. Bookstore
4. Gallery
5. Lecture theater
6. Loading/storage
7. Café
8. Meeting/education
9. Workshop
10. Staff
11. Mechanical

Fig.21 Whitechapel Art Gallery - Plans

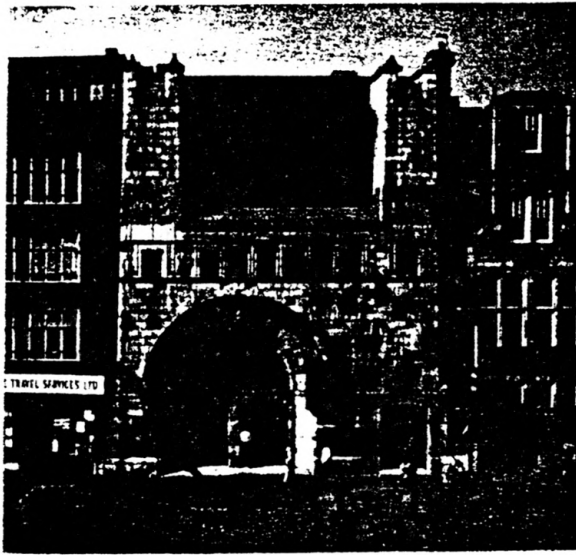


Fig.22 Whitechapel Art Gallery -
Elevation



Fig.24
Whitechapel Art Gallery -
Interior of the addition

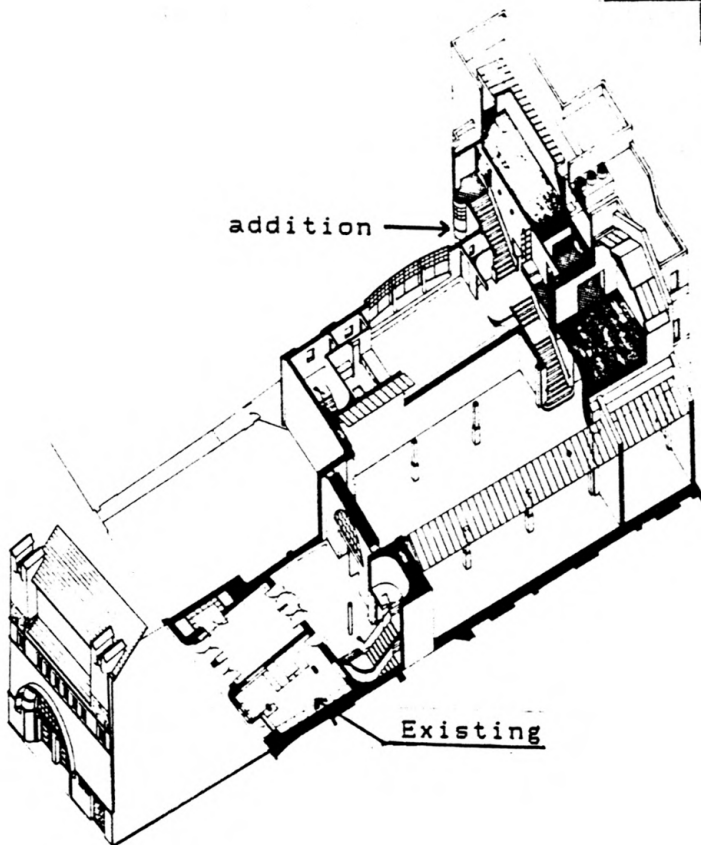


Fig.23 Whitechapel Art Gallery - Axonometric View

(1) Circulation

One of the most important functional interrelationships to resolve is the combined buildings' interior circulation system. The original building, which was formerly a complete unit in itself, now becomes a part of a larger building.

The original gallery's interiors suffered from awkwardly narrow proportion of the site, and lack of spatial continuity between floors. The brick-enclosed staircases squeezed into either end of the building served as the only access between the first floor and second floor galleries. To create a more accessible means of reaching both galleries, and to take advantage of the spaces at the front of the building, the architects replaced the stairs nearest the street with a bookstore on the ground level and a workshop above, and positioned a staircase in a former lightwell off the newly created reception area.

The existing staircase at the rear of the first floor was demolished to make way for a straight flight of stairs dramatized by a skylit and act as the major axis through the new L-shaped addition. The stair not only helped integrate the old circulation pattern into the entire building, but provided what was lacking in the original building : a sense of continuity between floors.

(2) Elevation considerations

To respond to the client's requirements, the architects' strategy in designing the addition was based, on the one hand, on the need to preserve all that is typical, and, on the other, on the license to invent new forms and not in any way to copy the original building's particular clothing.

One of the new facades on Angel Alley is not visible from the main road and can never be seen at the same time as Townsend's facade, and it has been treated freely.

Another facade, visible from the site's western side, has been treated carefully. The new elements have been designed in a way that is sympathetic to the existing fabric, but without imitating it. The architects chose decorative motifs similar to the old gallery, and reflected the original architect's 19th-century picturesque tendencies with sculpted bay and oriel windows. In doing so, the addition is at once a recollection of the original museum in style, choice of color and use of materials, but in a more contemporary manner.

(3) Mechanical and electrical systems

In this project, the architects did everything possible to conceal the sophisticated new climate control

and security systems required to meet the standards of today's museums. The renovation of the original basilica-like first floor gallery with toplit aisles entailed upgrading the building's mechanical, lighting, and security systems to contemporary gallery standards with minimal structural intervention. Requisite temperature, air purification and humidity controls were discreetly tucked into a space between the skylights over the aisles and the adjacent exterior wall, and fed into ceiling ductwork. The glass in the skylights was replaced with a sandwich of laminated, wired, and ultraviolet-filtering glazing to control direct sunlight. Incandescent lighting fixtures are adjusted on soffit-mounted tracks, and the laser-based security system installed in the friezes of the aisles. "The nicest comment visitors have made about the interiors is that they do not know where our design begin and Townsend's ends."⁴ noted the project architect John Miller.

⁴. "A Fine Wave" Architectural Record, July 1986.p107

Data of project

Project: Whitechapel Art Gallery, London, England

Client: Trustees of the Whitechapel Art Gallery

Architects: Colquhoun+Miller, Architects

Program: 2300 square meters addition, including permanent
and temporary exhibition space, storage, studio,
lecture and education spaces, and new bookstore.

Engineers: F.J. Samuely & Partners

General Contractor: R. Mansell Ltd.

Chapter 6 Program of Design

The Anderson County History Museum and Walker Art Gallery has two major parts: a history museum and an art gallery. The history museum houses a permanent exhibit concerning the history and development of the region. The art gallery contains a collection of paintings and sculptures.

This chapter analyzes each of the major functional components and defines the functional areas they need to contain. In addition, the desired gross area of each component is stated.

1) Entry hall

The entry will have several functions:

- a) serve as a corridor connecting the new addition and the existing museum,
- b) complete a circulation loop for the entire museum,
- c) provide a transition between the hustle and bustle of the outside world and the special precincts where art is displayed,
- d) exercise certain symbolic functions. It is important for the entrance hall to be attractive as the first and usually the last impression of the institution. The whole flavor of a museum can be suggested by its entrance hall.

e) act as a point of control and orientation.

The problem of circulation is an important issue in design. The visitor should be led into the museum and through it naturally and easy without the feeling of being in a maze. Control of public access at the entrance is critical. Information, telephones, gift shop, library and community room must be accessible to visitors without their going through the gallery.

Proposed area: 1200 sqft.

(2) Exhibition Space

The heart of any museum lies in its collections and its exhibition spaces. Exhibition spaces must provide a sympathetic background to enhance the visitor's appreciation of works of art without becoming the major object of display itself. The museum contains two major exhibition spaces:

1. Anderson County History Museum

There are four parts in the history museum:

- * period furniture and old-time school room.
- * "General Store" : home and grocery supplies.
- * Farm and tool section
- * Old documents and pictures

Proposed Area: 5400 sqft

2. Mary Bridget McAuliffe Walker Art Gallery

The gallery consists of two parts: a main permanent exhibition area and one or two small temporary exhibition spaces.

As the collection includes paintings, sculptures and files of letters, varied lighting techniques are needed. Small files of letters need to be displayed in open cases, shelves or tables at their appropriate viewing level (about 36" above the floor), and can give some visual emphasis by using localized lighting. A few especially noteworthy letters would be displayed under glass, and the entire collection would be open to scholars. The public would not handle any papers.

Proposed area: 5100 sqft

In designing the exhibition spaces, primary attention must be given to the problem of lighting. Lighting design is a complex issue involving light intensities, types of light sources, ultraviolet filtration, and the relation between infrared radiation and maintenance of constant temperature and humidity conditions. Generally, a mixture of natural ambient light and direct incandescent light seems to be the most acceptable solution.

There are four basic criteria for lighting design, they are:

- * Objects should be lit
- * Exhibition spaces should be lit to convey the feeling or idea of the exhibition.
- * Lighting should be done with the visitor in mind.
- * Lighting should be done with the art object's condition in mind - a conservation consideration.

(3) Library

The library is an important museum arm for both the public and the curatorial staff. Location of the library depends on whether it is intended primarily as a staff or public function. The library here is mainly for the Anderson County History Society and also open to the public. It includes:

- 1) A reading room with book stacks and archives cabinets.
- 2) A librarian's room for administration, storing and lending slides and photos of the collection.

Proposed area: 1000 sqft.

(4) Community Room

The role of a museum in small communities is expanded to include educational as well as display functions. The museum will be a center for all kinds of cultural activities. The community room is intended for lectures, musical programs and meetings. It should have a separate

entrance, and be usable by itself without opening the other parts of the museum, thereby preserving the security of the collection areas.

Proposed area: 1000 sqft.

(5) Storage

Museum storage occupies a considerable proportion of the total area and its design must make efficient use of the allocated space. Some of the storage ought to be in the form of study collections accessible to those interested. Careful consideration must be given to ceiling height, movement route, climate control, security and fire prevention, detection and suppression.

Two kind of storage spaces will be needed:

- * collection storage for exhibition cases.

Proposed area: 4000 sqft

- * general storage: the storage for janitor's supplies, office supplies, and any other material unrelated to the collection. These utilitarian rooms should be separated from the collection storage.

Proposed area: 500 sqft.

(6) Workshop

The workshop is the space for preparing exhibitions, and carrying out simple conservation procedures. It should have easy access to both exhibition and storage

spaces.

Proposed area: 600 sqft.

(7) Mechanical Room

A mechanical room is designed to provide environmental control for all spaces within the museum and be located so that noise and vibration do not affect the museum's other functions.

Proposed area: 500 sqft.

(8) Administrative Space

Spaces for management and administration vary according to the size of the museum, the extent of its cultural activities and the size of the staff. This museum will provide office space for a director, a curatorial staff member, a secretary, and about 3 volunteers.

Proposed area: 550 sqft.

(9) Other basic needs

Toilets, drinking fountains, and public telephones should be provided for staff and visitors' needs.

Chapter 7 Expansion Design

The design phase of this study is to do an expansion design for the Anderson County History Museum for housing both the original museum and the Mary Bridget McAuliffe Walker Art Gallery.

The proposed addition to the Anderson County History Museum is located on the west side of the original structure on Fifth Street. There are two roads serving the site directly, Fifth street to the north and Main street to the east. Both Fifth and Main streets are zoned as a commercial district. It is appropriate to build a museum there. The site currently has all necessary urban services and infrastructures, such as sewers, storm drains, water, gas and electricity. Ample parking can be found on the opposite side of the street where an existing parking lot can accommodate up to 40 cars.

(1) Design Criteria

Based on careful analysis of the museum's existing conditions, its current collection's needs, and its context to the courthouse square and the whole downtown area, the following design criteria have been derived:

- a) make the new addition physically linked and functionally connected to the existing museum as an

entity;

- b) preserve the existing museum's character to the greatest degree possible, while expressing the contemporary changes;
- c) make the interior layout functional for the proposed uses;
- d) make the exterior appearance of the whole structure respond sensitively to the history and context of its surroundings; and
- e) meet the applicable building codes.

(2) Design considerations

The museum encompasses two buildings: a 19th century stone structure, and an addition, which almost doubles the size of the original museum. The design of this museum addition embraces a wide variety of concepts and approaches. This chapter will concentrate on several issues which are central to the problems facing the Anderson County History Museum expansion.

a) Visual relationship of the old and new

The design approach for the museum came from some basic ideas. The first is the museum's context. The museum is located at a prominent corner of Courthouse Square in downtown Garnett. The Courthouse Square is the focus of Garnett city. The center piece of the square is

the Anderson County Courthouse, which was designed by George Washburn, the prominent Kansas architect. Except for the courthouse, the other adjacent buildings are mainly small scale (one or two story) retail establishments. The majority of the neighboring buildings were built during the period from 1890 to 1920, and are of either brick or limestone construction.(Fig.25) Although the buildings on the street are of different size, mass, color and style, they share some common features including setback, ornamental cornices, rhythm of second story windows and store fronts on the first story. This requires that the proposed new addition help to maintain the visual continuity of the place. Therefore, in this situation, a sympathetic connection is more appropriate than a contrasting one.

The second is the existing museum itself. On the one hand, it is an ordinary building, and its form and ornaments have no distinctive character, and, on the other, visual continuity does not mean stylistic homogeneity. Instead, it means the "sense of place", which evolves when each new building is sensitively related to its surroundings. It seems that a duplication is not necessary.

The third is the availability of an adequate site. The two existing buildings adjacent to the museum are vacant. Both of them were severely damaged by fire in 1975, and

Fig. 25 Fifth Street Elevation
(Prepared by author)



are structurally unsound. Careful analysis revealed that they are beyond repair, and it is possible to use the space for the expansion of the museum. An underground addition would be inappropriate here.

For all these reasons, a sympathetic connection is employed in the design of this museum addition. The design concept here is not to copy the old building, but to extract the essence of the old detailing, using the same form and composition elements of the original facade, but working within the context of new functions. The three major factors in making the elevations are:

1. echo the horizontal cornice of the existing museum.
2. continue to use two traditional materials: red brick and stone.
3. utilize narrow punched windows of the same proportion as the existing windows and uses white trim around the windows to connect the building even more surely to its neighborhood.

As windows can be a distraction, the exhibition spaces are surrounded by the gift shop, community room and library making free window arrangement possible. The result is that with its facade of red brick, large display windows on the first floor, and narrow punched windows with white trim on the second floor, the museum

as a whole slips inconspicuously into the neighborhood.

Although the brick used in the addition is a near perfect match, to avoid a direct collision of new with old - a glass atrium is inserted at their juncture as a link. On the one hand, it is a symbolic separation of the old and the new, on the other hand, it helps to emphasize the entrance of the museum and gives the museum an identity of its own.

b) Interiors

(1) Circulation

One of the key issues to face in the combined buildings' interior is the circulation system. The original museum, which was formerly a complete unit in itself, now becomes a part of a larger building. In this design, an entrance atrium is added between the original structure and the new addition. It mediates between the old structure and the new parts of the building.

The most important internal alternation affecting the public use of the existing museum is a new staircase in the entrance atrium. The former staircase hidden at the far end of the ground floor gallery is replaced with a ceremonial flight of stair with daylight spilling from the skylight. The entrance atrium acts as a pleasure dome for the public. More important, it fills essential circulation functions. It not only serves as a corridor

connecting new galleries and the original museum, but also completes a circulation loop for the entire museum.

(2) Lighting

Lighting is a critical issue in museum design. In this design, a mixture of natural light and direct incandescent light is used.

A large skylight covers the entrance atrium and brings in natural light. The skylight has been glazed with two layers of ultraviolet-filtering glass and fitted with louver blinds to control direct sunlight. Daylight enters the galleries from the atrium and a few exterior windows fitted with ultra-violet filters. The artificial lighting consists of placing sources parallel with the walls and directed at the paintings at an angle of about 30 degrees. Glazed velarium is used below the skylight and all the fluorescent fixtures are used with plastic diffusing covers to avoid creating glare in the visitors eyes. To enable fine adjustment, all artificial light sources are fitted with dimmers. The recommended level of illuminance for works of art on paper (including water colors, drawings, prints, historical documents, photographs, and textiles) is 50 lux.

(3) Storage

As the gallery possesses more paintings, sculptures and artifacts than can be displayed at any one time, this calls for a rotation of the collection, always leaving a number of items in storage. This requires a thoughtful consideration of conservation in storage.

Paintings are among the most vulnerable museum objects. The best way to preserve them is to keep them in the dark in specially made boxes in an air-conditioning storeroom, because any exposure to light will cause discoloring, bleaching, and sometimes darkening. In order to get as near and possible to the ideal state of conservation, the storage space is located at the south end of the addition. It is windowless and excludes natural light. Temperature and humidity will be automatically maintained at a constant level by mechanical devices. A temperature of $62^{\circ}\text{F} \pm 2^{\circ}\text{F}$ is usually acceptable, with a relative humidity of $55\%(\pm 3\%)$. If the atmosphere is too dry, paper will become brittle, if too damp, mold will appear and distortion of paper will occur.

(4) Modification of the existing interior

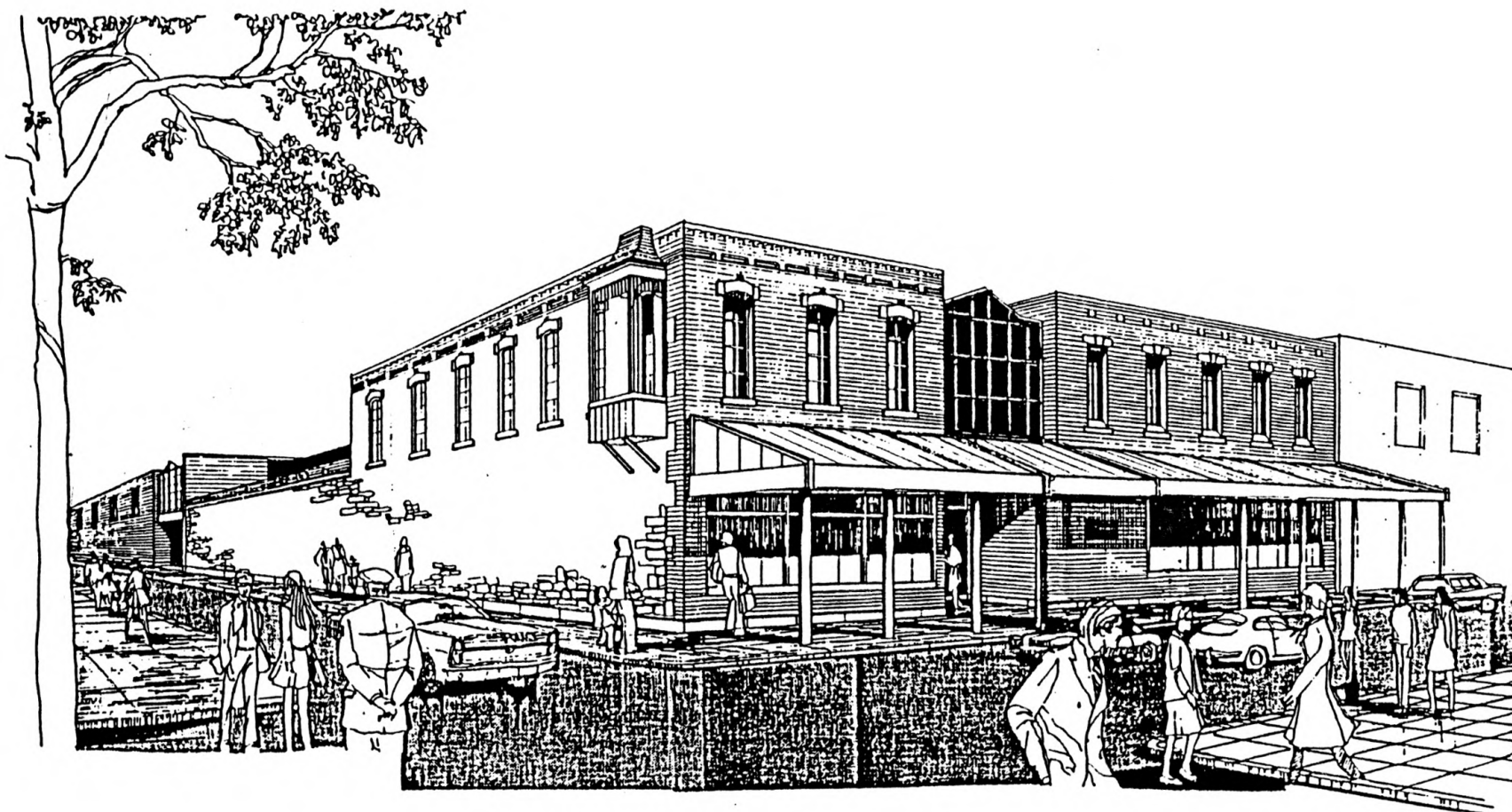
To respond to the museum's need for a better physical environment for display and exhibit purposes, there are two major alterations and improvements in the existing building:

1. transformation of the old interior into a series of well-proportioned rooms which house the Anderson County History Museum's collection.
2. elimination of ultraviolet radiation and reduction of the quantity of daylight coming through the side windows in the existing building by replacing the glass on side windows with ultraviolet-filtering glazing.

C) Presentation Drawings

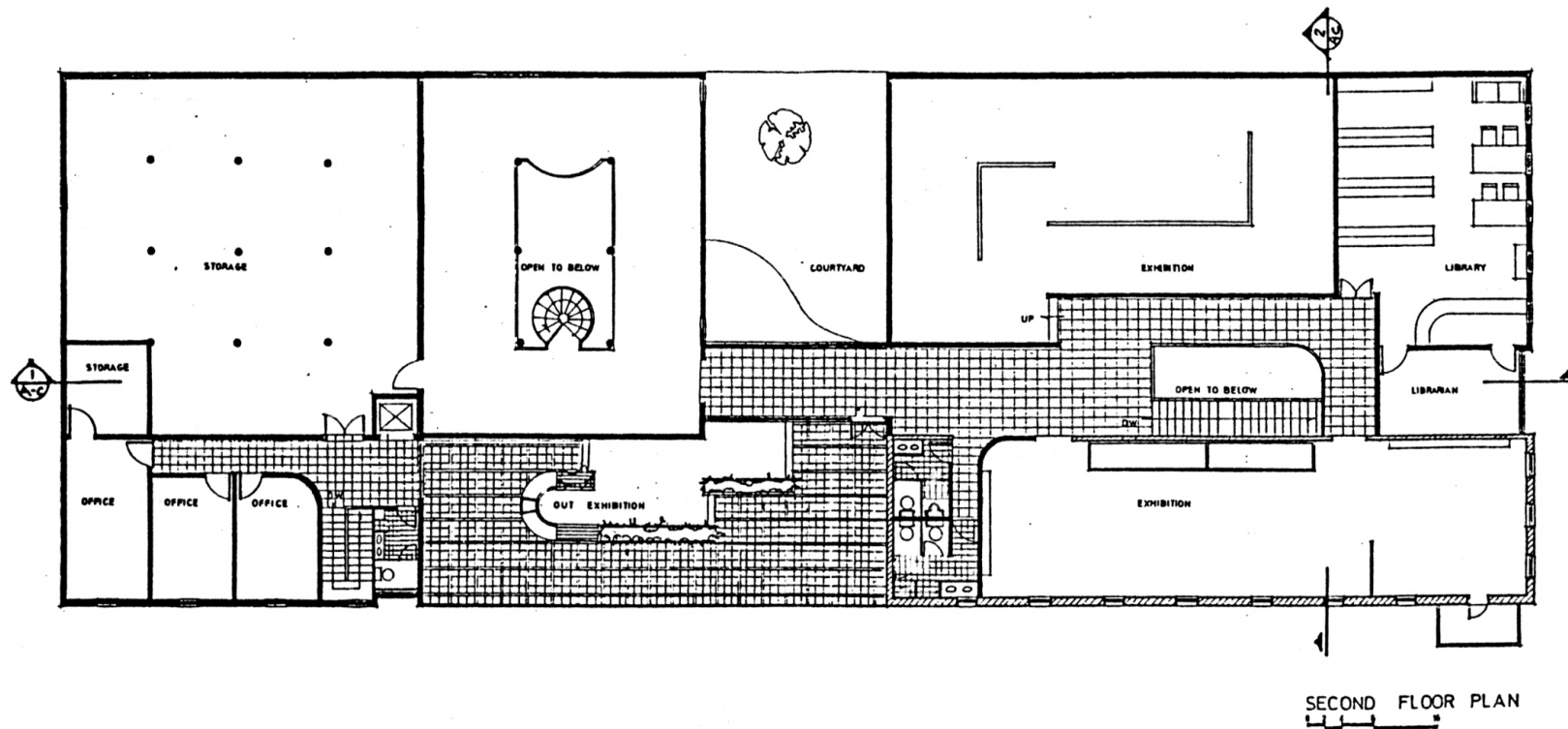
Presentation drawings are on the following pages:

- . View of exterior from Northeast
- . First floor plan
- . Second floor plan
- . Elevations
- . Site plan
- . Sections
- . Perspective view of lobby
- . From the rest area see courtyard
- . Isometric view



EXPANSION OF
ANDERSON COUNTY HISTORY MUSEUM

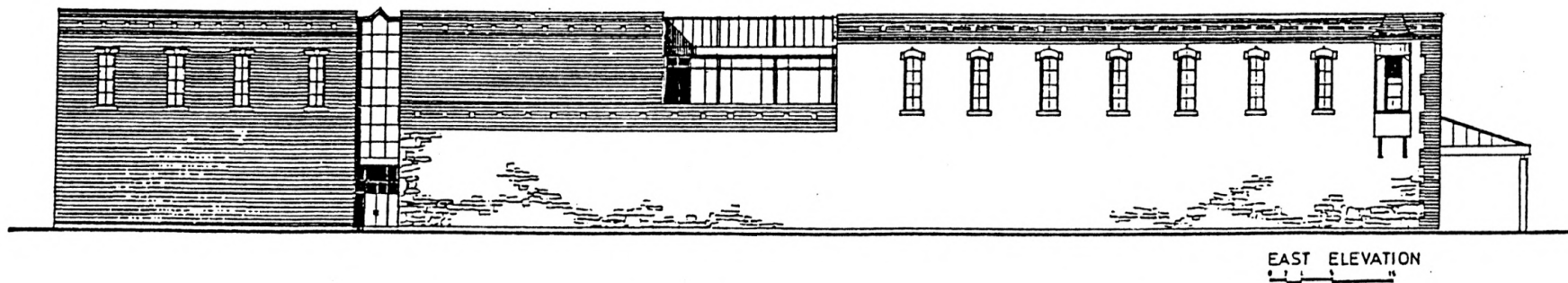
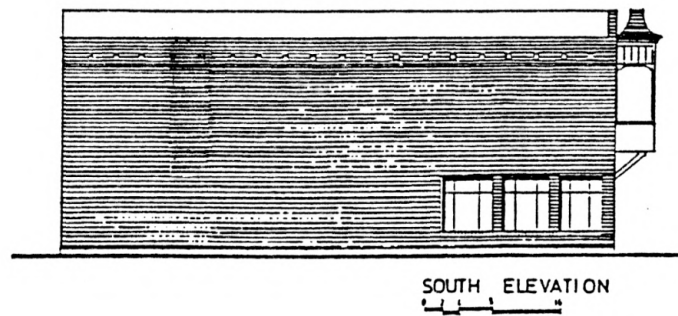
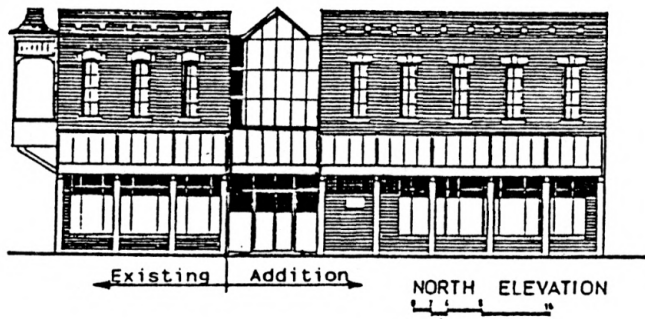
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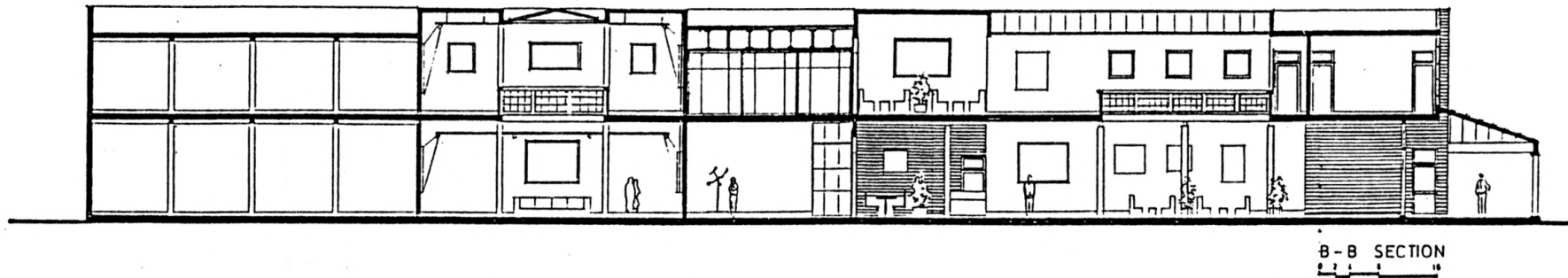
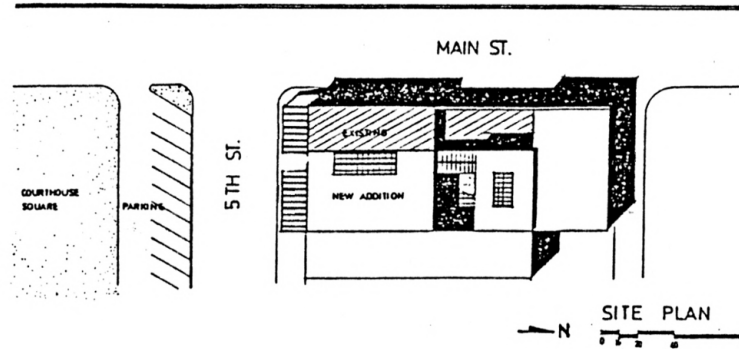
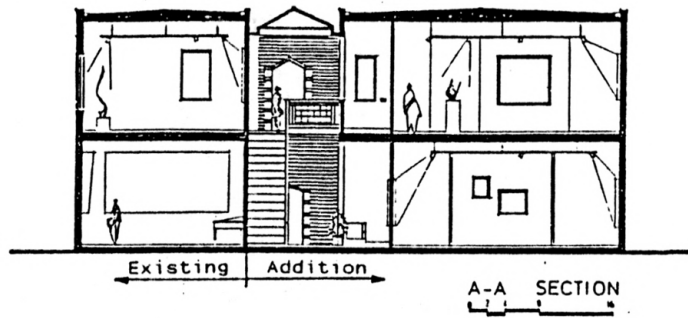
EXPANSION OF ANDERSON COUNTY HISTORY MUSEUM



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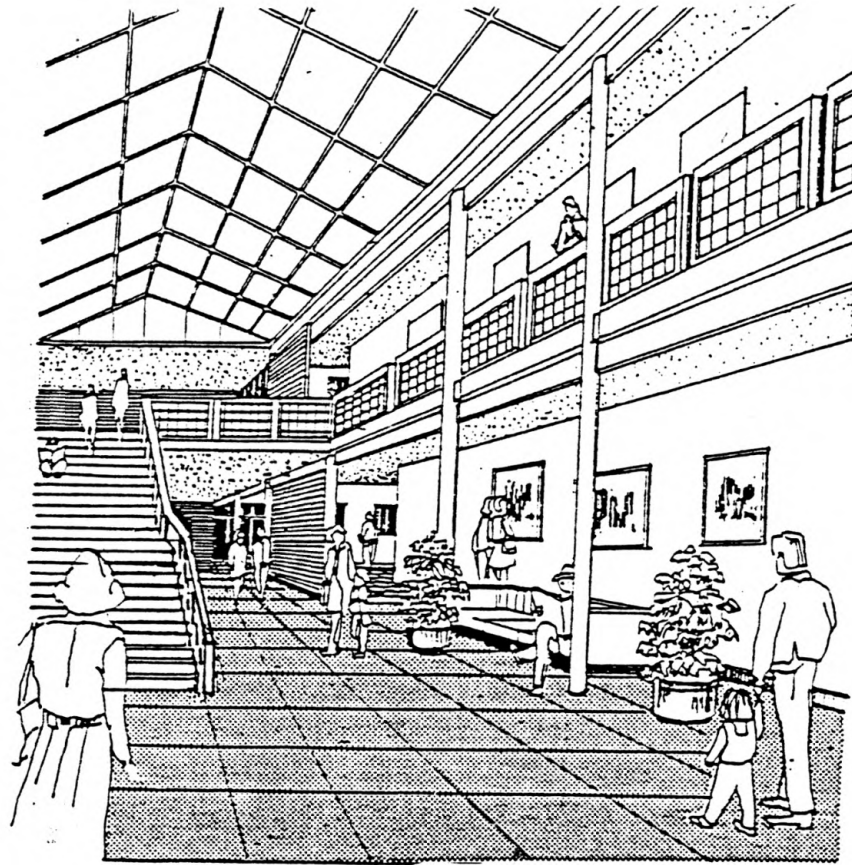


EXPANSION OF ANDERSON COUNTY HISTORY MUSEUM

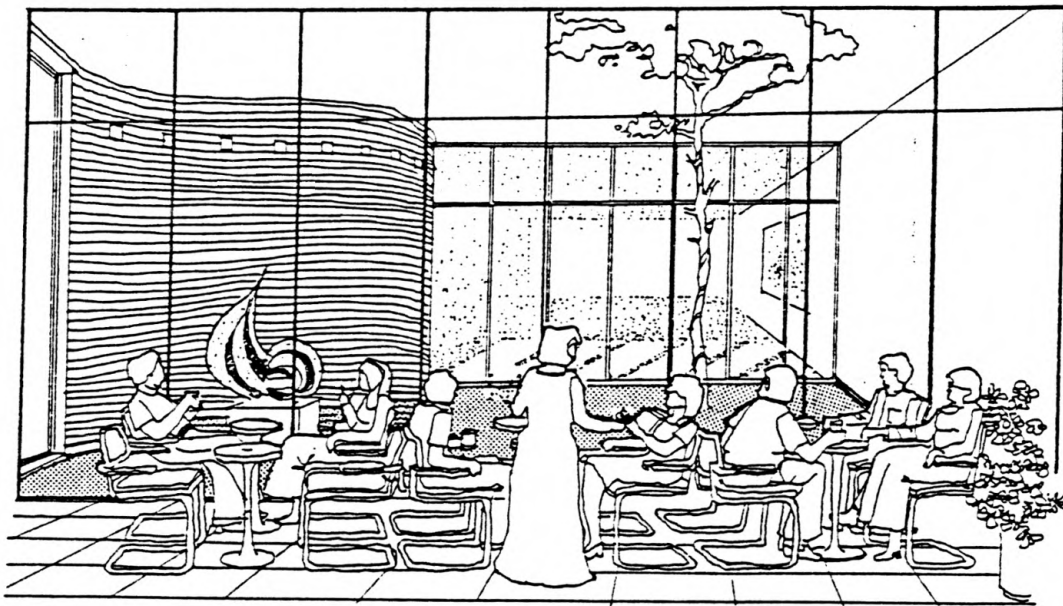


EXPANSION OF ANDERSON COUNTY HISTORY MUSEUM

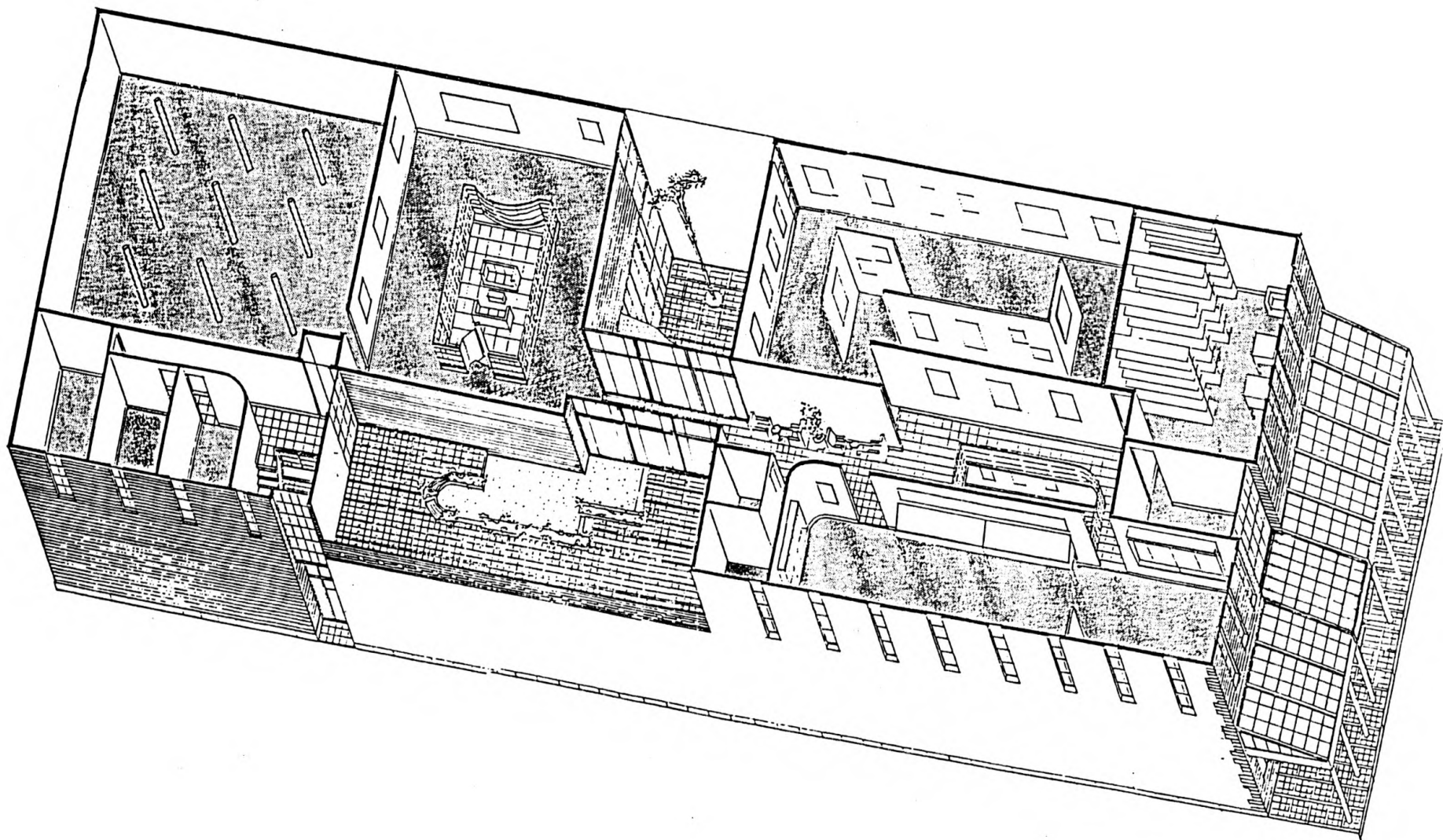
.D.



Perspective View of the Entrance Atrium



From the Rest Area See Courtyard



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Expansion Design of
The Anderson County History Museum

by

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B.Arch, Department of Architecture
Tsinghua University, China, July 1986.

AN ABSTRACT OF A THESIS

submitted in partial fulfillment of the
requirements for the degree

MASTER OF ARCHITECTURE

Department of Architecture
KANSAS STATE UNIVERSITY
Manhattan, Kansas

1991

ABSTRACT

This thesis project has two objectives. The first objective is to study the method of the design of building additions. The second objective is to expand the Anderson County History Museum in order to better house the current museum collection of historic artifacts, and to be able to add the Mary Bridget McAuliffe Walker art gallery. The expansion reflecting all aspects of this study is translated into a physical design proposal.

An important issue facing all concerned architects is the design relationship between old and new architecture. The design of building addition represents a challenge. Two questions are most evident: how to create a new structure that is physically linked and functionally connected to an existing one, and how to make the aesthetic characteristics of a new addition compatible to an existing building.

There are variety of ways to design an addition so that it is compatible with the existing building. Five of the most commonly used building addition design methods are discussed in this study, including: duplication, sympathetic contrast, sympathetic connection, link and underground addition.

This thesis presents a proposal for the expansion

design of the Anderson County History Museum and includes a design program for the museum. An analysis of the existing museum conditions, consultation with the community to identify their needs and desires, visits to a number of county history museums, and the addition of the Maynard Walker Art Collection to the Museum's artifacts, are reflected in the proposal. The design criteria require that the proposed museum preserve the existing museum's character to the greatest degree possible, while express the contemporary changes. In the meantime, the exterior appearance of the whole structure must respond sensitively to the history and context of its surroundings. A concise historical review of the museum and the city of Garnett are included.