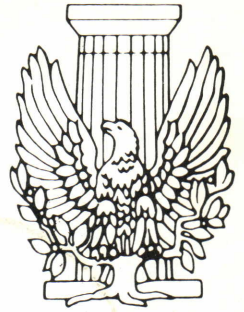


23/4

NC Architect



July
August 1976

Published by the
North Carolina Chapter of
The American Institute of Architects



THE CAPITOL



Is there a crack in the budget?

Pot holes or cracks in municipal streets not only are hazardous to motorists . . . they require money to repair. (Taxpayer's Money). New streets built with **Full-Depth Asphalt** are easier and quicker to construct, require less maintenance and are going to last longer. In short, they are more practical and will save us all money.

We believe the public wants quality within economic reason. Give us a call and we'll give you the whole story about **Full-Depth Asphalt**.



Carolina Asphalt Pavement Association, Inc.

Caswell Building, Koger Executive Center
P.O. Box 30725, Raleigh, NC 27612
Telephone: 919/781-3770

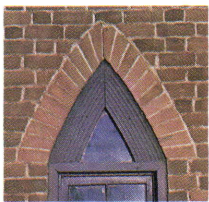
The best time to test the quality of a brick is 150 years after it's laid.

St. Matthew's Episcopal Church was consecrated on May 21, 1826, and it still stands on St. Mary's Rd. in Hillsborough. A tribute to the men who built it, and to the brick that it was built with.

To stand a century and a half is a test of quality in itself, and the brick in St. Matthew's



Church has stood the test. That's the reason people build with brick. It lasts.



And it looks good while it lasts.

And that's the reason people build with Borden Brick. Because they know that for most of this



Handmade.



Handtique.®

century Borden has manufactured brick that stands up to time. And everything else that brick has to stand. At Borden, the brick that we sell you today is made for tomorrow. And tomorrows after that. So call your Borden representative the next time your idea calls for brick. He's your best guide to one of the most com-

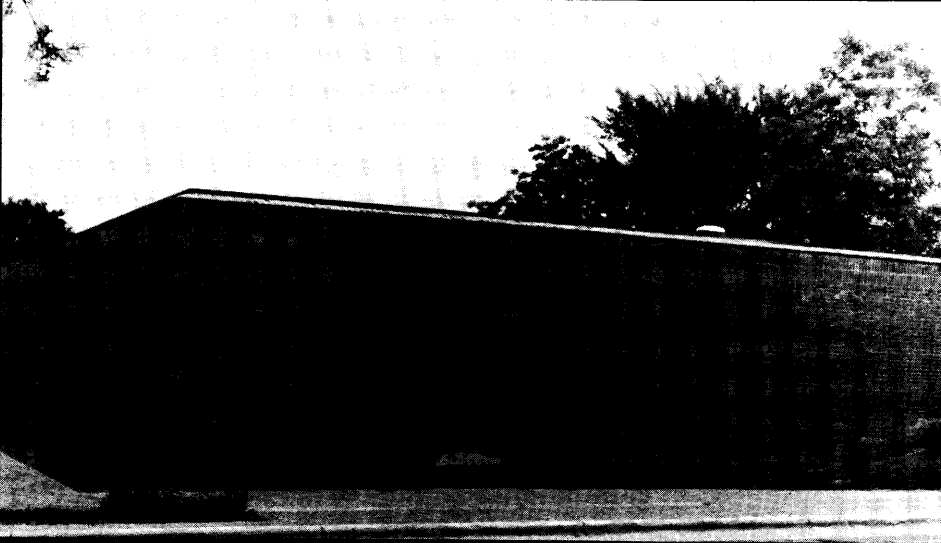


Home of Mr. and Mrs. Charles Browning, Durham, N.C. Built with Handtique.

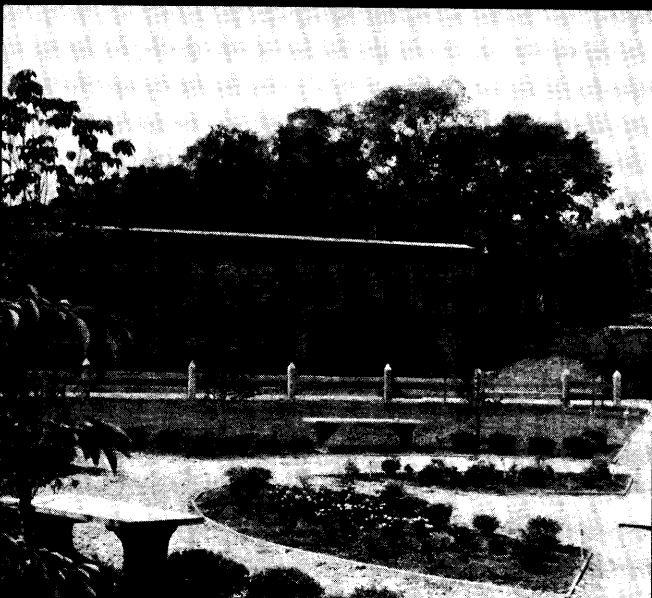
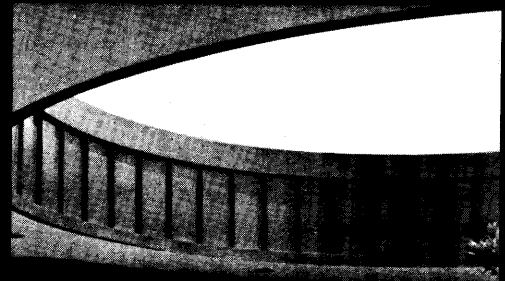
plete selections of brick — colors, textures, and sizes — in the country.

Borden Brick and Tile Co. (919) 596-8241.





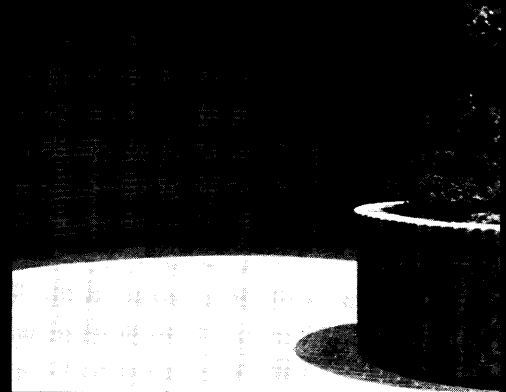
Historic Halifax Visitor Center
Halifax, N. C.



Architect:
Newberry-Ashford & Associates

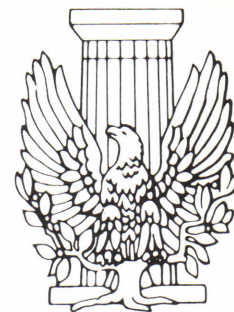
Structural Engineer:
Bass, Nixon & Kennedy, Inc.

General Contractor
Commercial Builders



July
August 1976

Published by the
North Carolina Chapter of
The American Institute of Architects



William W. Dodge, III, AIA

The Capitol

A Walk Through the Restored Building 7

Messrs. Latrobe and Richardson Meet Today's Building Codes

A discussion of today's codes as they apply to renovation 12

Value of AIA Membership

A Menu 13

Jerry L. Rogers

Revolving Fund Uses Federal Preservation Dollars

A suggestion for preservationists 14

Business and Industrial Loans Available

How to Finance a Project 16

Incidentally

Items of General Interest 17

Index to Advertisers

18

NORTH CAROLINA CHAPTER THE AMERICAN INSTITUTE OF ARCHITECTS

Michael Newman,
Tebee P. Hawkins
Frank I. Ballard
Thomas T. Hayes, Jr., FAIA
G. Milton Small, Jr., FAIA
Alvis O. George, Jr.
Conrad B. Wessell, Jr.
Turner G. Williams
John D. Latimer
Carl P. Myatt
William L. Laslett
Marvin R. A. Johnson, FAIA
Michael G. Marshall
Eugene H. Copeland
Thomas D. Calloway, Jr.
A. Lewis Polier
Thomas P. Turner, Jr.
Louise Hall
R. Mayne Albright
Betty W. Silver
Brenda Spaanbroek

President
1st Vice-President
Vice-President
Vice-President
Vice-President
Secretary
Treasurer
Director
Director
Director
Director
Director
Director
Director
Director
Director
Director
Archivist
Legal Counsel
Executive Director
Office Assistant

PUBLICATIONS COMMITTEE

Michael Bennett, Chairman
E. H. Hunter
William L. Laslett
James L. Brandt

Contributing Editors:
Harwell H. Harris, FAIA
James C. Wallace, Assoc. Prof, NCSU
E. H. & M. K. Hunter

North Carolina Architect is published by the North Carolina Chapter of The American Institute of Architects, Mrs. Betty W. Silver, Executive Director, 115 W. Morgan Street, Raleigh, North Carolina 27601. Advertising rates on request.

North Carolina Architect was formerly published as Southern Architect, Volume I, No. 1, through Volume XI, No. 11, 1954-1964.

Opinions expressed by contributors are not necessarily those of the North Carolina Chapter of the American Institute of Architects.

Lithographed by Theo. Davis Sons, Inc., Zebulon, N. C.



QUALITY METALWORK

BOARD ROOM STAIRWAY
AIA TOWER, RALEIGH

ARCHITECT: AIA TOWER COMMITTEE

J · D · WILKINS Co.

GREENSBORO N C

THE CAPITOL

by William W. Dodge III, AIA

The Capitol ... Your Capitol ...
My Capitol ... A National Landmark.
A Building. Awesome. Dignified.
Sedate. A symbol of our strength. A
reflection of our past and present.
The impetus for our future ...

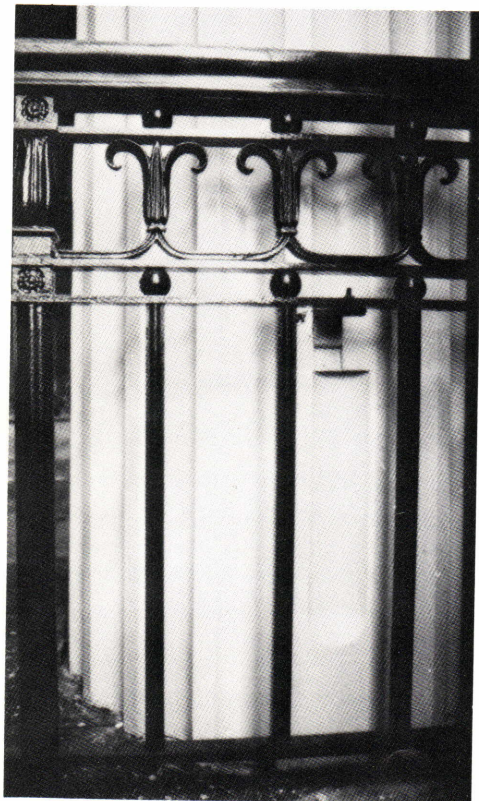
A walk through our Capitol is an
emotional experience that cannot be
described in ordinary prose. Those
of us who would know North Carolina
must visit this masterpiece of our
heritage. We should feel the solidness
of its stone floors and massive walls.
We should view the magnificence of
our House and our Senate from the
galleries above. We should look up
—and look down—from the speakers'
stands; touch the new wood screens
behind their chairs.

Place your hand on the brass-covered
lead rail at the rotunda. Think of
the thousands of hands—of our

leaders and of our families—who have
done exactly the same. Look up at
the oculus of the dome. Realize that
except for the paint you see exactly
what was there in 1840. The color
will be the same deep yellow as the
Senate and House chambers.
The shape of the stones and the
weight of the rotunda walls will
support the circular balcony forever.

Walk again, a step at a time, to the
third floor. Feel the solid strength
of stone on stone, building your way
to the top. Tighten your fingers
on the wooden rail. Look at the detail
of the cast iron balusters. See
that they are a deep and subtle blue.
An old blue. A color of history.

Step now over a metal threshold
and into the Supreme Court room.
Look back at that threshold and
see the top of one of the earliest
structural metal beams in North Caro-
lina. Know that its job is to span
the open space below and to
support the walls and the roof
above.



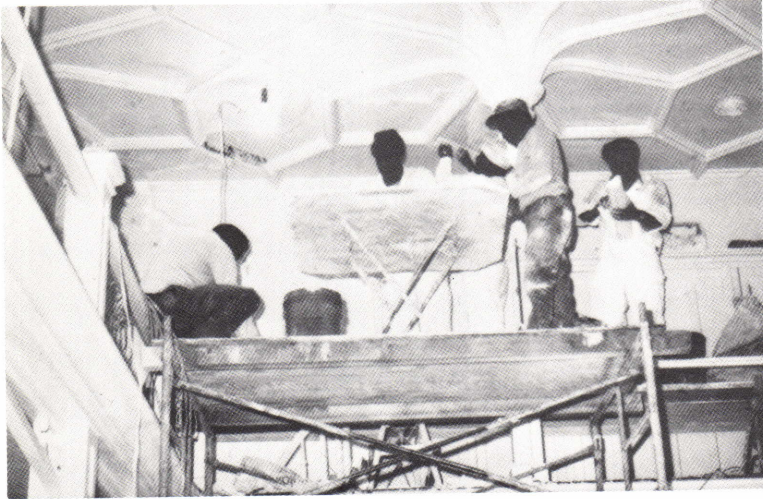
*William W. Dodge, III, AIA, is a
principal of Dodge & Beckwith,
Architects, the firm responsible for
the interior restoration of the
Capitol.*



Turn again and see the halos of the
frosted globes of the bronze gas
fixtures. They are brand new 1860's
fixtures and their design has been
carefully researched. They enhance
your experience. Their light
allows you to see the detailed
linear quality of the oak columns
and fine pendants. No, it is not oak.
This very fine example of graining
is painted pine. Look through the
plexiglass panel cover under the
north window. That finish is
original. The other is restoration.

There is history at the ceiling of this
Gothic room. Experiences recalling
the architecture of Scotland. The
plaster ribbing reminiscent of stone
detail. Bosses drop from the ceiling
in the form of poppy heads.

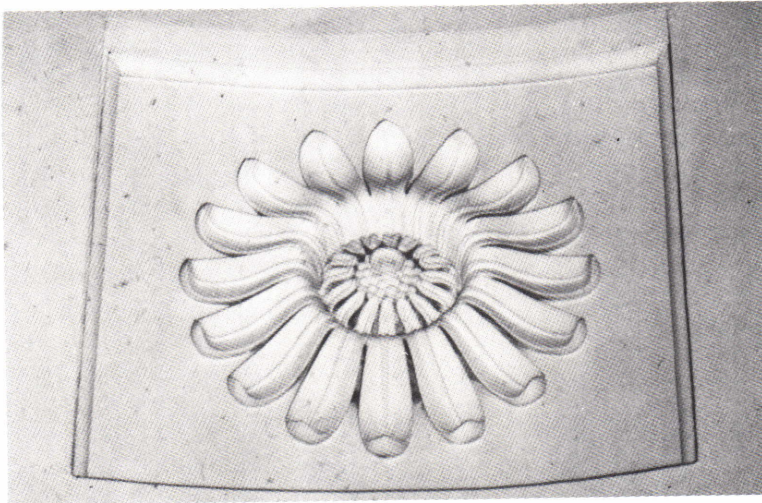
The wooden gallery is an early
addition and is apparently not con-
current with the original use of
the room, however, even this is
over 100 years old. As a matter of
fact, if you look closely at the floor,
you will find where half of the
columns have been removed. The



pattern is still there and is emphasized by carpet-tack holes. Those boards you see were cut in the 1830s.

The fireplace has been re-opened in this room. Its original black marble mantel was moved to the ground floor in 1923. Today it is again where it began — a Gothic focal point in a beautiful space.

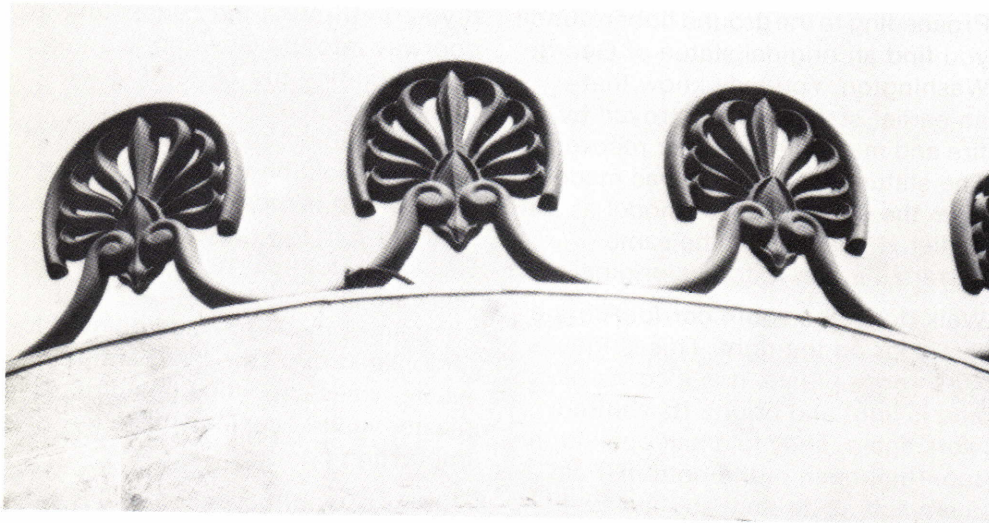
While you are here you should look down at the Capitol Square. Move your head slightly and see the molten pattern in the glass. New bronze lamp housings support octagonal copper roofs. These electrified fixtures are late arrivals to the Square, having apparently been a part of the landscape designs by the office of Frederick Law Olmstead. You will recall his designs for Central Park and Biltmore Estate. The bronze sculpture of the three presidents has been there since the late nineteen-forties. Balcony rails below you at this East portico are later additions to the front or primary side of our Capitol.



Go again through the upper part of the Senate Hall. Realize that this upper house of our legislature sat here for over 120 years. The chairs and desks are original. The laws of North Carolina were made here. Many remain unchanged as our Capitol remains unchanged. Good law and good design know no age.

A new brass railing leads you to the graceful wood stairway to the roof. Twice every day someone must climb these stairs to tend the flags. There are two new flagpoles installed recently at the same time as the present copper roof. Know that North Carolina has had its own flag only since the 1860's. The earlier flagpole over the Senate was not original to the building.





Make a special effort to see what must be one of the smallest coal burning fireplaces in the world. In the northwest office at the Senate balcony (now a mechanical room) has been added this diminutive heating device. It connects to the existing flue from below. Imagine the warmth it must have given this small room.

Continue now to the old State Library in the third floor west portico. Its details are similar to the Supreme Court room except it has two black marble fireplaces. Notice the rose brick liners. This is the only exposed brick in the entire building. Even this was covered by additional cast iron liners at one time. Notice the spiral staircase and imagine the laminated undercarriage now covered by plaster. The back of the carved skirtboard has been cut every one or two inches. Wooden wedges have been inserted to hold the curve. Notice the door facing under the stairs. It matches the door you entered. But it goes nowhere and is architectural license for symmetry. The stairs and gallery have been added to this room also. Sheet metal had been added at one time to protect the wood from the heat of a cast iron stove. The fireplace had been closed also. All this area is now restored.

The west steps lead down to the second floor. The office at this level is restored to its original splendor. Its coffered ceiling is correct. Its cornice has been run by hand with a full size metal template. Its dentils and anthemions were cast in plaster from the originals and have been installed in exactly the same manner as the original. In a sense, these details are as nearly original as those installed in the 1830's.



Proceeding to the ground floor rotunda, you find an original statue of George Washington. You may know that an earlier statue was destroyed by fire and many pieces never recovered. The statue you now see was made from the same sculpted model as the earlier statue. It is of the same carrara marble. It, too, is original.

Walk down the south corridor to the last door on the right. This is the Governor's Office. It is a corner room and is light and bright. Its shutters work again. They fold half open at the top—half open at the bottom. Fold them again and they are flush with the jambs. The excellent light control obviates the need for curtains. Notice, too, that all ground floor windows have shutters. Each window type has its own special shutter. The fireplace is the fourth in this location. It is the same marble as the original and is a duplicate of the fireplace in the adjacent office.

If you go through the connecting doorway into the Governor's outer office you find the same red walls found in the third floor corridors. After you adjust to the color, look at the stone column in the center of the room. It is most certainly in keeping with the rest of this Greek Revival structure. The door trim and base are also of stone — although sometimes they are wood painted to look like stone. The dark painted plaster walls and white painted plaster vaulted ceilings make an interesting contrast.

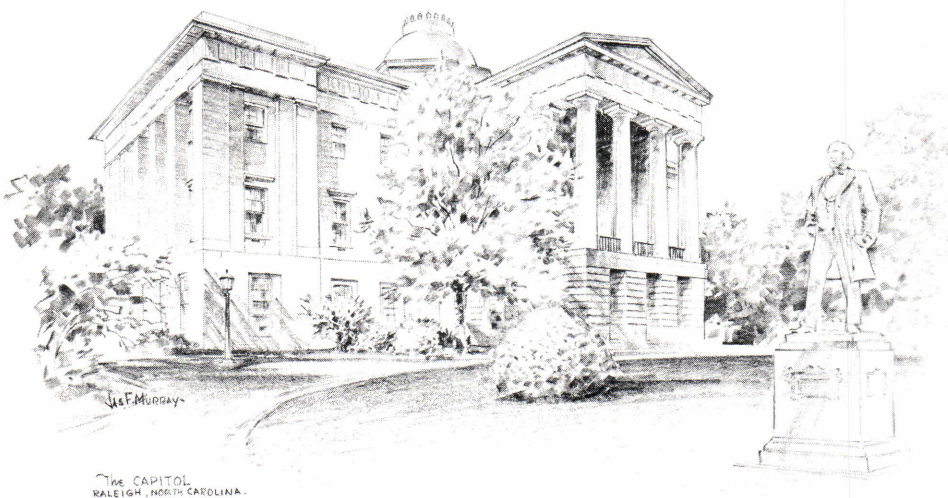
Out in the south corridor again you see that the ceiling is vaulted. It is plaster over brick. Above the cast iron door lintels are rectangular lights. There is symmetry at this level with the exception of the north corridor which has fan lights in the ceiling above each doorway light. The word "light" in this case describes an interior window between rooms.

When you return to the rotunda, take a special circular walk around the statue. Look this time at the bronze plaques and the sculpted busts in the niches. Hopefully, the brass railings will keep you from touching these parts of history, although touching also is a part of learning.

On the way out, you may notice the radiators. These are certainly not original, but they are old and they are a part of today's Capitol. They furnish heat electrically, and they contain electric coolers for drinking.

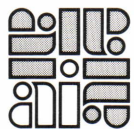
As you turn the German silver door knob to go outside, see that the vestibules are gone. The exterior glass doors are gone. Your Capitol has been restored with the utmost care.

It is now returned to you. ■



Your Associated Insurers account executive is dozens of insurance brokers in one.

With just one visit from your Associated Insurers account executive, you can talk about the insurance needs of your business to an unlimited number of stock companies, mutual companies and reciprocal organizations . . . Even Lloyd's of London and other national and international facilities . . . He can do it all: property, casualty, marine, bond, key man, pension and employee benefits. Give one of him a call today.



Associated Insurers **We've got plans for your business.**

Associated Insurers, Inc./Post Office Box 25968/Raleigh, North Carolina 27611/(919) 833-2861

Established 1933

MESSRS. LATROBE AND RICHARDSON MEET TODAY'S BUILDING CODES

Can the works of Benjamin Latrobe, H. H. Richardson and other earlier architects meet today's building code provisions?

In other words, how should a governmental unit apply contemporary building codes to the rehabilitation of a building designed and constructed in pre-code times?

Can a mansion's elegant, sweeping staircase be retained, for example, or must it be sacrificed for a fireproof stairwell?

Or, must doors that swung in originally be rehung to swing outward?

Such questions and hundreds more are being asked with greater frequency as the historic preservation movement grows in participants and in the number of adaptations, rehabilitations and restorations of still usable old buildings, and solutions are being found.

The problems and some of the answers are explored in *Preservation & Building Codes*, a new publication of the National Trust for Historic Preservation's Preservation Press.

The illustrated softbound book contains 25 papers given by architects, building code officials and preservationists at the first national conference held on the subject. Sponsor of the conference was the Trust, with 11 cosponsors, including the American Institute of Architects.

Papers in the book first explore current issues and current solutions, dealing with historic preservation work in New Orleans, Seattle, New York, Richmond and Alexandria, Va., and other communities.

These are followed by a section on national code organizations. Topics of discussion include the following:

—Historic buildings and the Basic,

Uniform, Standard and National Building Codes.

—Application of the Life Safety Code to historic preservation work.

—Occupational Safety and Health Administration (OSHA) interest in building requirements.

William B. Lane, AIA, a practicing architect in St. Louis and chairman of the Committee on Historic Resources of the American Institute of Architects, promised that the committee would review the conference and make definite recommendations to the AIA Board of Directors. "As things are progressing now," he said, "it is a matter of convincing the various building codes organizations to include a section that gives discretionary powers to building officials when historic buildings are considered."

The National Trust for Historic Preservation hoped "to continue to serve as a communication vehicle both in responding to issues coming to its attention and in bringing those issues to the attention of national code organizations," said Russell V. Keune, AIA.

Keune, vice president for preservation services of the Trust, also suggested that a series of case studies and models for the application of building codes to historic structures might be developed.

The book concludes with summaries from the code official's view and from the architect's view.

Leo J. Cantor, PE, a commissioner of buildings in Richmond, Va., prepared the summary from the code official's point of view.

Stressing that his comments "are those of an individual building code official," he said that code officials, architects and preservation-

ists "are all working toward the same objective."

"It is apparent," he said, "that restoration of historic structures is taking place even under current constraints of codes and standards. The problem area is how to execute restorations in the most effective manner without being inhibited by 'indiscriminate' interpretation of the building code regulations and standards."

Later in his summary, Cantor said, "We have to rely on good faith. Certainly the members of the National Trust are not advocating the exploitation of properties. What we are more concerned with is how to preserve the historic ambience while allowing for adaptation of historic buildings for current use."

The architect's view was that no responsible professional would want or seek a blanket waiver from building codes for rehabilitation of older buildings.

Presenting this view was Nicholas H. Holmes, Jr., AIA, senior architect with Holmes & Geer, member of the Architectural Review Board of Mobile, Ala., and a former chairman of the AIA's Committee on Historic Resources.

Holmes asked, "Could not some provision be introduced into all codes delineating technical competency required of persons on any board of appeals or review committee?"

"The problem of adapting old buildings to new ones is not going to go away. It is going to be here from now on, and that is why this is an important conference. We have all gained a better understanding of preservation problems and the knowledge that through cooperation, inventiveness and imagination, acceptable solutions can be devised." ■

Value of AIA Membership

Adapted from *The Florida Architect*, Jan./Feb. 1976

"What is the AIA doing for me lately?", is the question so often asked by the membership.

Many of the services of AIA, the local AIA Section and the State Chapter cannot be measured accurately in dollars and cents. They are worth something only when you need or use them, for example:

- the lien law privilege for architects—worth thousands when you need it, but nothing when you don't.
- Legal preservation of "Hold Harmless" clause in the general conditions—worth thousands if you and the contractor are jointly in error, but otherwise nothing.
- Licensing law for architects—only worth something if you want reciprocal privileges in other states or if you don't think unqualified people such as Interior Designers, Residential Designers, or others should practice architecture.
- A fair method for selecting architects for public work—worth something if you value equity or getting a job for your ability—worth nothing if you prefer the old patronage game.
- Continuing Education Programs, tapes, and books, of benefit to those who use these services—certainly not worth anything to those who don't.
- Contract documents, a clear tangible result of AIA efforts. These are living instruments, being revised constantly in answer to the demands of our changing social and legal conditions. Were it not for such standard forms, can you imagine how architecture and building would be conducted in our highly legalistic and complex world? Can you imagine the costs of attorneys for each project?
- Professionals do not advertise, thus it is forbidden to members of the Institute. This is one area wherein it might be possible to place actual dollar figures on what the Institute saves a member.

What do you estimate you would pay out in advertising costs if architects advertised their services?

- What value do you place upon the relative peace of mind you now have, knowing that your client will not be solicited, nor shown a lot of uninvited sketches? (We know this does happen at times, but also know that members have been disciplined for such conduct.) Generally the rule is followed, which would not be true if there were no Institute and no ethics.
- 6 year statute of limitations—worth a lot if you're sued 7 years after your error, but otherwise nothing.
- Legislative effort by the Chapter, a necessity. Individually the profession could not achieve the results of a unified effort.
- Legal counsel for the profession through the Chapter. When a legal problem arises that is determined to have state-wide implications, the Chapter authorizes legal counsel to take legal remedies.
- Public relations, an intangible service, but yet an important service for the profession.
- The film library of the Chapter and the Institute is a service available upon demand, its value depending upon use.
- Informational service for individual members, an intangible value. Members who use the service receive direct value through answers to their questions.
- The AIA *Energy Notebook* will be a valuable tool to those who have requested it.
- The AIA *Compensation Management Guidelines for Architectural Services* is the modern concept in developing compensation for services. Use it and you will find considerable worth.
- State Agency liaison provides input

from the profession.

- The State and National annual conventions provide opportunities for several days of learning and for establishing rapport with your colleagues. Again, this program is of great value if participated in.
- The Chapter's newsletter is the primary means of internal communication, supplemented by N. C. Architect, the external public relations tool. From national AIA the **Memo** and **Journal** provide factual information to the membership. These are valuable communication tools if read, otherwise valueless.
- The national AIA library is a very important resource center. Books are available on a loan basis and research material is available at your fingertips. A valuable service when needed and if used.

The list of value received could go on and on. It is important to understand that the State Chapter and the AIA are not "you" organizations, they are "we" organizations, and as a result, will largely reflect what we want and what we contribute toward getting what we want.

The American Institute of Architects, which includes the local AIA Sections and the State Chapter, could not be the effective organizations they are without the voluntary contribution of many of its members. It is estimated that the value of this voluntary professional time runs into millions of dollars each year. It is much easier for members to sit outside the ring of involvement and criticize. The non-member registered architect who usually criticizes the professional organizations and avoids involvement, still reaps many benefits of what the AIA produces for the profession.

The challenge is there for additional members to become involved. Instead of continuing to ask "what has AIA done for me lately?", ask yourself "what have I done for my profession lately?". ■

Revolving Fund Uses Federal Preservation Dollars

By Jerry L. Rogers

Preservationists have made great professional and technical progress in the past few years. By several hundred percent we have multiplied our knowledge of how to identify, record, protect and preserve historic properties. Yet we still tend to use somewhat conservative and inefficient approaches in the area of the most critical need—finance. Financial progress must equal the progress in other aspects of the work, and we are on the verge of making it do so with a device long familiar—the revolving fund.

Since the most increase in value seems to occur in dilapidated and perhaps vacant buildings that are given thorough restoration or rehabilitation, why should not the state have a revolving fund that would be matched by a federal grant for the purpose of purchasing and restoring such properties? After restoration, the properties would be sold.

The proceeds of the sale should, it is hoped, equal the amount invested in the purchase and restoration and would go into the revolving fund. After completion of such a cycle, the revolving fund would contain its original amount plus the amount of the federal grant. In other words, it would be twice as large as it had originally been. The full amount of the fund could then be used to match another federal grant.

Such a fund could grow in geometric proportions. Because it grows, rather than just revolves, it can be referred to as a capital fund. Assume that the original capital fund amounted to \$25,000 and that purchase, restoration and resale projects for the full amount of the fund could be accomplished in annual cycles. At the end of the first year the \$25,000 in non-federal match-

ing capability would have become \$50,000. At the end of the second year it would be \$100,000, the third year \$200,000, the fourth year \$400,000. The length of the period of geometric growth would depend on the amount of money the federal government could make available for matching.

Ultimately, the state capital fund would exceed the federal government's matching capability, even if there were a program of \$100, \$200, \$300 or even \$400 million a year. After that point, the fund could continue to grow by the amount of federal grants channeled into it, but the rate of growth would no longer be geometric. At that time, not all of the dollars in the fund would be required for use as a match against federal grants. These "excess" dollars could be used for other purposes.

Under the approach proposed here, restored properties would return to the tax rolls, probably with a higher contribution than before. The projects conducted with a capital fund should be coordinated when possible with a state or local tax abatement program. Many significant historic buildings today stand empty and abandoned because the back taxes on the properties are greater than their current real estate values.

It is vitally important that the funds not be lodged in an agency of the state government. When a lean year comes along and the legislature is afraid to vote a new tax, the trust fund gets legislated into general revenue.

In order to prevent that from happening, the capital fund should be administered in a private nonprofit

Jerry L. Rogers is acting director of the Office of Archeology and Historic Preservation, National Park Service. This article is adapted from a paper Rogers delivered at a meeting of the National Conference of State Historic Preservation Officers.

corporation or foundation under the effective professional control of the state historic preservation officer. It would be even better to have several such funds within the state. Funds of this sort would inevitably reinforce local efforts.

There are other advantages to using one or more private nonprofit entities for capital funds. Remember that while restoration may easily and effectively be accomplished within a state agency, purchase and resale cannot. Private entities may be able to handle these matters without the encumbrances that come with state laws. Furthermore, private organizations can often act more rapidly and with greater effect in emergencies than public agencies can.

To assure that the capital funds continue to function according to the professional standards set by the federal government and the state historic preservation officers, the state would be responsible for monitoring and enforcement.

No attractive scheme ever works as well in practice as it does in theory. Yet one can lose nothing by trying. The changes in habit that might be required by implementation of the capital fund concept are necessary for the conduct of an effective contemporary program and should in any case be made. Capital funds cannot be made to work with significant effect until the federal program is funded in excess of \$150 million a year. ■

look-in cool

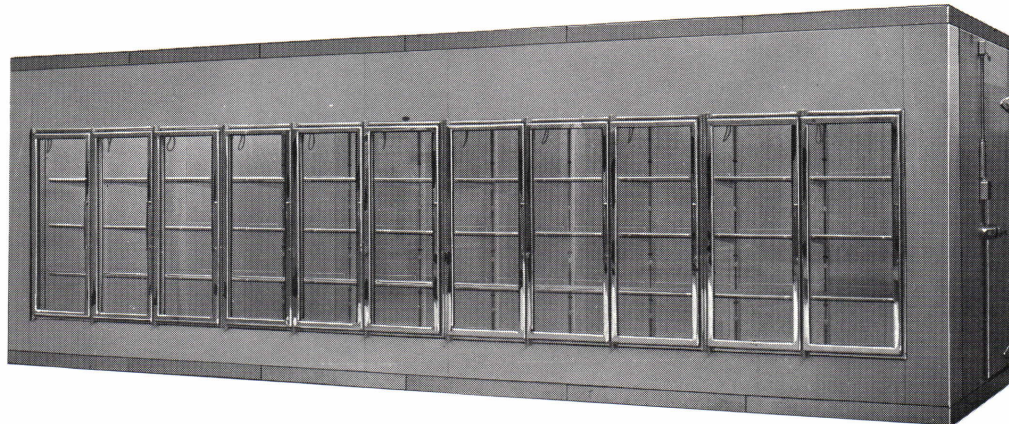
Cool to keep your perishables perfect and at their most tempting advantage. While displayed with a look of quality your customers can sense. A cool, colorful, "carry-all" case from W. A. Brown.

Prefabricated three or four inch urethane walls for economical, custom-designed display and storage refrigerators. NSF approved and listed UL electrical.



W. A. BROWN & SON, INC.

P. O. Box 1408, Salisbury, N. C. 28144
Telephone: 704-636-5131



Urethane Walk-in Coolers/Freezers — Adjustable Shelving — Specialty Equipment for Food Stores — Engineering and Food Store Planning Service.

A New Cement provides Type S Mortar with 3 parts sand



"Makes Up Better Mortar"



BUSINESS AND INDUSTRIAL LOANS AVAILABLE

North Carolina businesses and industries have a new source of financing, according to James T. Johnson, State Director for Farmers Home Administration.

Over 60 businesses and industries in North Carolina have borrowed some \$40 million under the program to construct new plants, to expand and modernize existing businesses, and to enlarge operations through working capital loans. Some 4,500 jobs have been created or saved by these loans.

The purpose of the program, Johnson explained, is to create and maintain employment and improve the economic climate of rural areas. In this case, a rural area is a place of 50,000 population or less.

Under the program, businessmen obtain loans from lenders such as banks and savings and loan associations, and the loans are then guaranteed by FmHA up to 90 percent. These lenders play a key role making and servicing quality loans that produce permanent jobs for North Carolina people.

Some of the projects financed to date, Johnson said, include a multi-million dollar poultry processing plant, two new meat processing and packing plants, a 120-bed nursing home, and several manufacturers of farm machinery, textile equipment, automotive products, food products, as well as small businesses such as supermarkets, restaurants, and marinas.

Almost any type of business or industry is eligible and funds may be used for construction, conversion, enlargement, repairs, purchase of land, machinery and equipment, for working capital and for restructuring debts under certain conditions. Funds can also be included for interest during construction, fees for lender's

charges, costs of feasibility studies, and similar costs.

Maximum maturities may be up to 30 years on land and buildings; up to 15 years on machinery and equipment; and up to 7 years on working capital. The actual terms are set by the lender.

Interest rates may be fixed or variable and are negotiated between the lender and the borrower. Farmers Home Administration does not set a maximum rate.

Equity must be provided in such amounts as to provide reasonable assurance of a successful project but in all cases a minimum of ten percent.

There is no limit on the amount of dollars that can be borrowed. The largest loan to date in North Carolina has been \$15,250,000 and the smallest \$35,000.

According to State Director Johnson, the program has many benefits for lenders. Only the unguaranteed portion applies toward a bank's lending limits. The lender may also sell off to the holder a part of all of the guaranteed portion of the loan, which portions, including principal and interest, would be 100% guaranteed by FmHA. The lender would collect a servicing fee from the holder. The lender may also participate with other lenders in the unguaranteed portion. Savings and loan associations that are short on commercial loan funds may sell off the guaranteed portion or may purchase the guaranteed portion from a bank or another savings and loan association under a classification as government securities.

We have made a good start with this program, stated Johnson, yet we know that there are hundreds of existing businesses and industries in

North Carolina who may need these funds but are not aware of their availability.

More information may be obtained from any one of the 74 FmHA county offices in North Carolina which serve the 100 counties, or from the Farmers Home Administration state office in Raleigh, telephone number 919/755-4640, in Room 525, 310 New Bern Avenue, Raleigh North Carolina 27601. Applicants may apply to FmHA or to any bank or savings and loan association in their respective areas. ■

VALUE ENGINEERING IN THE CONSTRUCTION INDUSTRY

Published by Construction Publishing Co., a New York publisher committed exclusively to our field, this book will be sent to you within 36 hours of the time your request is received through Professional Development Resources new Publication Delivery Service. Just send your check for \$16.50 to Professional Development Resources, 1000 Connecticut Avenue, Suite 9, Washington, D.C. 20006.

The book is concise, yet comprehensive. It includes a brief history of value engineering, how to apply it, life-cycle costing techniques, the function-cost-worth approach, cost models, narratives, sketches and in-depth data for actual studies, how to organize and implement a value engineering program guidelines for establishing savings goals, and even how to set up a value engineering training program for your staff. ■

INCIDENTALLY

N. C. Architectural
Foundation
Funds Student Activities



Members of the Pitt Technical Institute Student Chapter of the American Institute of Architects (AIA) attended a dinner meeting held by the Eastern Section of NCAIA in Rocky Mount.

Bill Laslett, president of the Eastern Section, presented slides and a discussion on new directions in architecture.

Guest speaker, John Loss, department chairman of Architecture at the School of Design, North Carolina State University, talked about the expanding areas of concern in architecture and the direction of architectural education towards these concerns.

Pitt Technical Institute's architectural students presented student work at the meeting.

Connie Wessell, treasurer of the North Carolina Architectural Foundation, presented to Russ Chappell, president of the Student Chapter, AIA, a check from the foundation. Funding from the N. C. Architectural Foundation made it possible for Pitt Tech's students to attend this dinner meeting and enabled them to attend the National AIA meeting held in Philadelphia during May. ■

**Order Your AIA Documents from
N. C. Chapter AIA.
Prompt Service Guaranteed.**

Do You Know?



Walter Blue, AIA, of Greensboro, has sent in the above photograph of NCAIA members attending a meeting at Morehead City in the mid-1950's. The late Senator Willis Smith (front row, 5th from left) was guest speaker. Can you identify others? Let us hear from you.

It is with sincere regret that we announce the deaths of NCAIA members John R. McClurd of Shelby, Robert A. Atkinson of Greensboro and Leon Schute of High Point. The Chapter extends sympathy to the families of these three men.

Guidebook Published

The National Park Service has recently published a guide entitled *North Carolina: An Inventory of Historic Engineering and Industrial Sites* (NPS-150) which is a sampling of an industrial sites survey conducted in North Carolina by Brent D. Glass in 1974 and 1975. The survey was jointly sponsored by the North Carolina Division of Archives and History, Department of Cultural Resources, and the Historic American Engineering Record, National Park Service.

The 125-page guide lists 175 sites, structures, buildings, and objects. There are 31 illustrations, including 8 pen-and-ink drawings by Michael Southern. The guide is divided into eight sections covering industrial sites—extractive, bulk processing, and manufacturing—as well as structures related to engineering—power sources, transportation, and bridges. A section is also devoted to specialized structures—examples of building technology and design, industrial communities and adaptive use including the AIA Tower in

Raleigh.

Many familiar listings appear in the book, such as lighthouses, covered bridges, grist mills, depots; but a greater emphasis has been placed upon uncelebrated structures such as cotton mills, tobacco factories, bridges, and canals.

There are plans to conduct in-depth summer surveys of representative sites, which will coordinate the efforts of historians, architects, and photographers to produce a written, visual, and technical report on individual sites. In order to match federal monies available through HAER, the Division of Archives and History will have to raise approximately \$30,000 for these surveys in the next two years.

A copy of this book may be obtained by writing the Historic Preservation Section, Division of Archives and History, Department of Cultural Resources, 109 East Jones Street, Room 214, Raleigh, N. C. 27611. The cost is \$3.50, including postage and handling. ■

**NCAIA Business Meeting
and Workshop
Friday, 12 November 1976
Charlotte, North Carolina**

Ezra Meir Associates, Inc.

401 Glenwood Ave.

Raleigh, N. C.

Phone 828-0801



- Soil Testing
- Rock Coring
- Laboratory Analysis & Report
- Concrete, Field and Laboratory Testing

INDEX TO ADVERTISERS

Acoustics Inc.	18
Andco Industries	18
Associates Insurers	11
Borden Brick Co.	3
Brick Association of NC	4
W. A. Brown & Son	15
Carolina Asphalt Pavement Assn.	2
Carolina Builders Corp.	18
Duncan-Parnell	18
Giant Portland Cement Co.	15
Ezra Meir Assocs.	18
Moland-Drysdale	18
Sanford Brick & Tile Co.	19
J. D. Wilkins	6

For Permanent Beauty

BUILD BETTER WITH

ETOWAH

BRICK

The Moland-Drysdale

Corporation

1635-41 Asheville Hwy., Hendersonville, N. C. Phone 693-6561

Andco

adds new dimension to your designs
SIGNS - LETTERS - PLAQUES - SIGNAGE SYSTEMS

ANDCO INDUSTRIES CORP

P. O. Box 7366 / GREENSBORO, N. C. 27407 / 919 299-4511



Carolina

BUILDERS CORPORATION

On Raleigh Beltline Between U. S. 1 North & 64 East

Post Office Box 17737/Raleigh, North Carolina 27609/Phone (919) 828-7471

a acoustics
incorporated

BUILDING SPECIALTY CONTRACTORS

- ACOUSTICAL PRODUCTS.
- MOVABLE & DEMOUNTABLE PARTITION SYSTEMS.
- RAISED ACCESS FLOORS & ENVIRONMENTAL CONTROL PRODUCTS FOR COMPUTER ROOMS.
- MAPLE FLOORS & WALL SYSTEMS FOR GYMNASIUMS & INDUSTRY.
- OTHER BUILDING SPECIALTY PRODUCTS.

**3324 PELTON STREET
CHARLOTTE, N. C. 28203
TELEPHONE 704-523-4316**

Hamilton®
DRAFTING SYSTEMS

- Provide your draftsmen and engineers with the convenience, comfort, and prestige they deserve.
- Reduce fatigue
- Increase productivity



Everything for the Drafting Room

DUNCAN-PARNELL, INC.
900 SOUTH McDOWELL ST. P.O. BOX 1935
CHARLOTTE, NORTH CAROLINA 28201
704/334-9761

IF OUR BRICK LOOKS A LITTLE SMUG, IT'S NOT WITHOUT GOOD REASON.

Six good reasons, actually. Reasons that could save you quite a bit of money on your next building.

There's a new study out, done by the Texas State Building Materials and Systems Testing Laboratory. In it are some rather impressive facts comparing brick versus glass exterior walls on office buildings.

Comparing a typical 15-story office building with exterior walls of 80% brick (20% window area) to an all glass exterior building, brick will outperform glass as follows:

(1) The brick building will save 9% in initial construction cost, (in this study, \$848,735); (2) the brick building saves nearly 34% in cash equity required; (3) the brick building reduces heating and air conditioning bills by 9.8%; (4) the brick building's annual operating costs are nearly 4% less, (\$29,436 savings the first year); (5) the brick building's maximum rate of return is 28% higher; (6) the brick building's rental income is the same as the glass building.

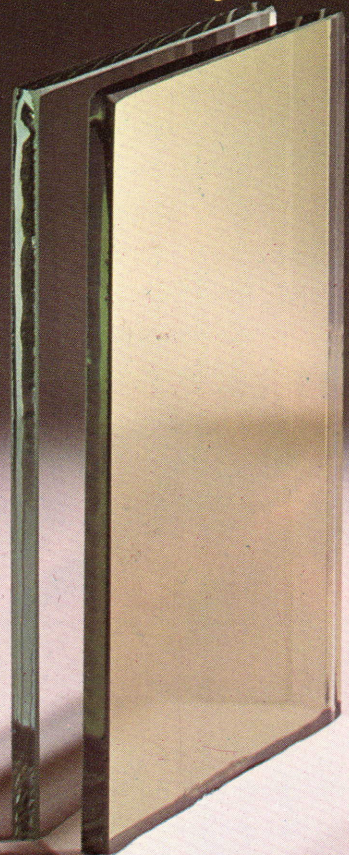
What all of this means to you as an investor or architect is a larger budget for those luxuries that attract clients. A building with a prestige image, low upkeep and a high return.

Not bad for a 5,000 year old building material. Especially now, in a time of inflated costs and energy conservation.

Smug? Sure. But, at Sanford Brick Corporation we have good reasons to be smug. Reasons that are important to you. Reasons we'd like to tell you about. Think of us the next time you build.

We have reprints of the complete TSBMSTL report that we'll be happy to send you upon written request. We have also made a film, with the permission of the TSBMSTL, illustrating this study and its six conclusions. Our qualified technical representatives would appreciate the opportunity to show this film to you and your organization. Simply call or write:

Sanford Brick Corporation
P.O. Box 458
Sanford, North Carolina 27330
phone (919) 775-2121



NORTH CAROLINA ARCHITECT



PUBLISHED BY THE NORTH CAROLINA CHAPTER AMERICAN INSTITUTE
OF ARCHITECTS. 115 WEST MORGAN ST., RALEIGH, N. C. 27601

BULK RATE
U. S. POSTAGE
PAID
RALEIGH, N. C.
Permit No. 455

RETURN REQUESTED

J AUBREY FIRBY AIA
1460 ARCHER RD
WINSTON SALEM NC 27106