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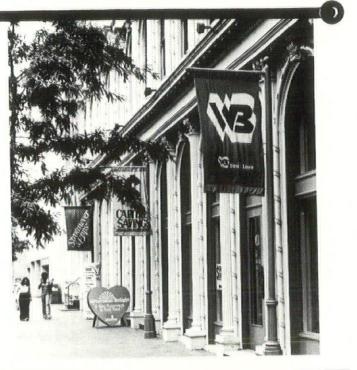
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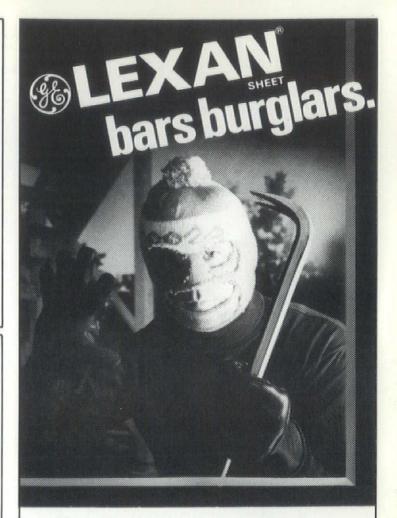


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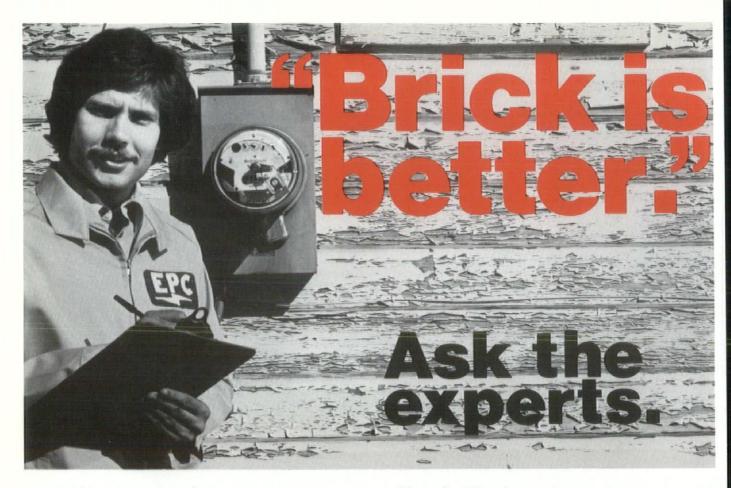
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ON OUR COVER is a view of Market Square the latest facility for the Brandermill

Community. Designed by Freeman & Morgan, Architects, the project is featured

on page 10 of this issue. (Photography, Llewellyn/Morgan & Assoc., Adver-

tising, E. T. Revere and John Morgan)



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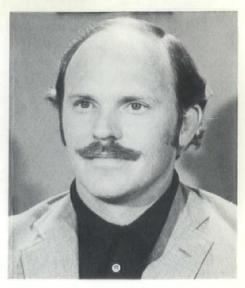
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GUEST EDITORIAL



By Frederick E. Baukhages, IV, AIA

Some First Steps Toward Preventing Energy Waste

IT IS NOT NEWS to most that energy, both consumption and conservation thereof, is one of the rime motivating factors of life in the 1980s. Concern is already heightened about present and future vailability of sources of heat, light, cooling, transportation fuel, and many other life support

ystems. This is particularly true for our built environment.

Most of our present life support and work support structures were built when energy conservation as not a prime consideration, in many cases not a consideration at all. The design, construction, nd operation of these older buildings is, by today's standards, woefully inefficient. With the npending implementation of building energy performance standards or some other form of energy aving design criteria, buildings will be subjected to the same type of energy standards legislated or motor vehicles. Such regulation may be expressed in terms of materials, appliances, and echniques mandated for use, or it could set certain levels of performance which the architect and uilder must meet through combinations of technology and creativity.

This latter solution is, of course, the more reasonable, since it allows for any technological dvances which may occur—as well as the free applications of imagination by owners, architects, nd builders. But whatever the solution adopted by the legislators, it is a certainty that buildings will ave to improve their overall energy efficiency if we are to preserve any of our rapidly dwindling sources.

To reverse the squandering of energy at our current rate of between 30 and 50 percent in today's

To reverse the squandering of energy at our current rate of between 30 and 50 percent in today's uildings, we should focus attention on three major areas of importance. Whether building, buying, refitting a building, it is necessary to look closely at the building site, the materials used, and the

Before proper energy use became a topic of general concern, a building's site was often nderrated. The design of the structure was usually more important, so the land around it was made of fit the building. Today, however, we are much more aware that the placement and orientation of ne structure can contribute to both its esthetic appeal and energy efficiency. By using natural eatures like hills and vegetation as protective shields, we can reduce the need for artificial heat or coling. Since north and west sides of a building in the northern hemisphere are subjected to the nost wind, we can cut down on the numbers of doors and windows on these exposures. And, in older climates, it is best to place major glass exposures to the south to make the best use of winter un. Depending on the particular sites chosen, there are usually several other factors which can be sed to good advantage.

Once the structure is situated, the choice of materials becomes a crucial factor. Everything from ne type and color of paint to the actual shapes used in the design can have a bearing on a structure's fficiency. In warm climates, for example, light-colored roofing can help keep buildings cooler. Vindows that open provide natural ventilation, and the use of shades, screens, and films over vindows can have a dramatic effect on the amount of light and heat entering a space. The use of imple shapes, such as squares, circles, and octagons, provides much less exterior wall space in elation to floor area than some modern angular designs; thus simple shapes reduce heat loss. In lany areas, using an attic ventilator reduces the need for mechanical cooling during periods of hot veather. In designing a structure, grouping of spaces with similar functions can contribute

neasurably to efficient "zoning" of the heating and cooling systems.

None of these considerations will be as effective, however, if the structure is improperly insulated. ne very effective and simple way to test your insulation is to pass a lighted candle by seams which re supposed to be airtight. If the candle flickers strongly, it is time to consider weatherstripping, aulking, or full-fledged insulating. The first two can be accomplished by anyone with a modicum of nechanical ability, but the third may call for the services of a professional. The amount of insulation ecessary to provide a structure with maximum protection without over-insulating is determined by variety of factors, all of which can be boiled down to a rating called an "R-value." Having consulted with a knowledgeable person to determine the proper R-value for your home, it is possible to do ome insulation on your own. Ceilings are relatively routine jobs, but walls and other interior spaces hay require hiring of an insulation contractor, since there are a number of pitfalls to avoid. Even the ost of hiring someone to insulate exterior walls can prove efficient, since the energy savings can

(Continued on page 39)

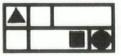
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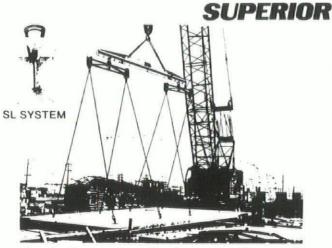
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lew Firm Opens Iorfolk Offices

Weinstein Parker Architects, AIA, has opened n office for the practice of Architecture, Planing and Interior Design at 201 Granby Mall,

oom 203, Norfolk, Virginia. The principals of the firm are: Lawrence Veinstein, AIA and Anthony R. Parker, AIA.

They are members of The American Institute f Architects, The Institute for Urban Design, he National Trust for Historic Preservation and ney hold Certification in The National Council of Irchitectural Registration Boards.

educing Flood Damage hrough Design

The AIA Research Corporation has begun a esearch study that may help alleviate the rise in annual losses due to flooding. Under a grant from the Federal Insurance Administration of the Federal Emergency Management Agency the IA/RC project will survey and analyze flood soues, examine relevant case studies, and genrate effective design strategies for easing flood amage.

The research project intends to address the eeds of architects as key figures in designing be built environment in areas that are floodprone. Historically, flood damage mitigation efforts have been predominantly site-oriented with the architect's role limited to designing buildings for a specific parcel of land. Today, design considerations at many levels interact to influence decisions that affect the individual site and building. The architectual viewpoint should include an understanding of the full array of issues that determine flood hazards.

In addition to detailing the inherent characteristics of the flooding problem, the project will develop guidelines that focus on various concepts and techniques for adjustment to flood hazards. Six major kinds of adjustments already in common use are flood control measures, such as dams and levees; floodproofing with such techniques as elevating buildings and placing water-tight enclosures (applicable to new buildings and historic preservation); forecasting, warning, and preparing for emergencies; planning and managing land use; maintaining flood insurance programs; and providing relief and rehabilitation to ease flood damage.

To adopt this comprehensive approach, it is vital that the architect have a thorough knowledge of the characteristics of both the natural hydrologic system and the built environment, and, more important, of the interface between them. The potential for conflict in this interface is the crucial issue, and the AIR/RC study will focus on providing the architect with the information necessary for resolving conflicts.

The AIA Research Corporation, established by the American Institute of Architects in 1972, performs a wide variety of applied research projects on national issues related to built invironment. The AIA/RC initiated a Hazards Program in 1975 with research that led to publication of a design primer, Architects and Earthquakes; a subsequent project developed seismic design guidelines for police and fire stations. Current projects include an analysis of building codes in relation to designing for multiple natural hazards such as earthquakes, fires, extreme winds, and floods, and energy conservation. The flood design project expands this hazard mitigation research program.

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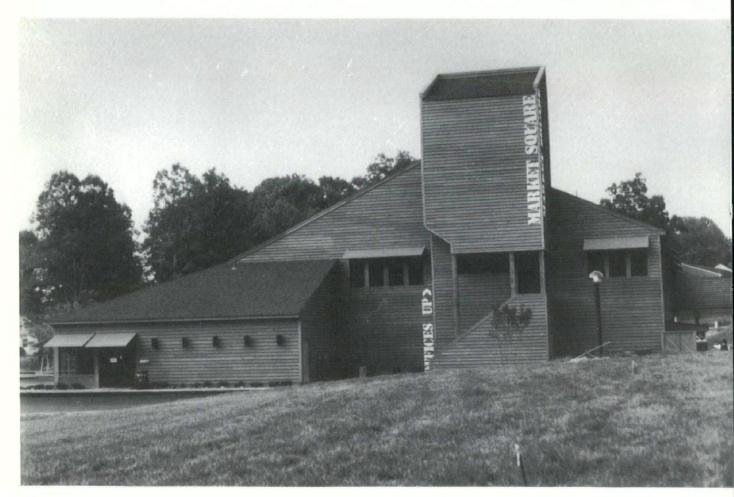
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Market Square — Brandermill Midlothian

Freeman & Morgan — Architects

Landscape Architect, Clarke Plaxco • Mechanic Engineer, Wagner & Jones Consulting Engineers Electrical Engineer, Wagner & Jones Consulti Engineers • Structural Engineer, Freeman & Morga Architects • General Contractor, Heindl-Evans, Inc Photography: Llewellyn/Morgan and Associate Advertising; E. T. Revere; and John Morgan.



Designed as an anchor for Brandermill's central commercial core, the Market Square Building provides retail and office space necessary to a total community. Unprecedented growth of the development had created a need for services that were absent in the area but were socially and economically desirable. Programming for the building attempted to fill these needs with an appropriate architectural solution that was compatible with Brandermill's design philosophy.

Construction of the project was handled with the Design/Build team concept which has recently found increasing favor with construction professionals. Freeman and Morgan, Architects coordinated the programming/planning efforts of the Brandermill Planning Office and the construction/contract administration work of Heindl-Evans, Inc., the general contractor. This arrangement, which kept costs down and accelerated the construction schedule, proved very satisfactory to the owner.

Additions to the shopping center are planned with Market Square providing the theme for future buildings. Texture, scale, and graphic treatment were established on this building and similar architectural expressions will be used to reinforce the idea of continuity for the entire shopping center. Ultimately, enough varied office and retail space will be provided to make the community self contained.

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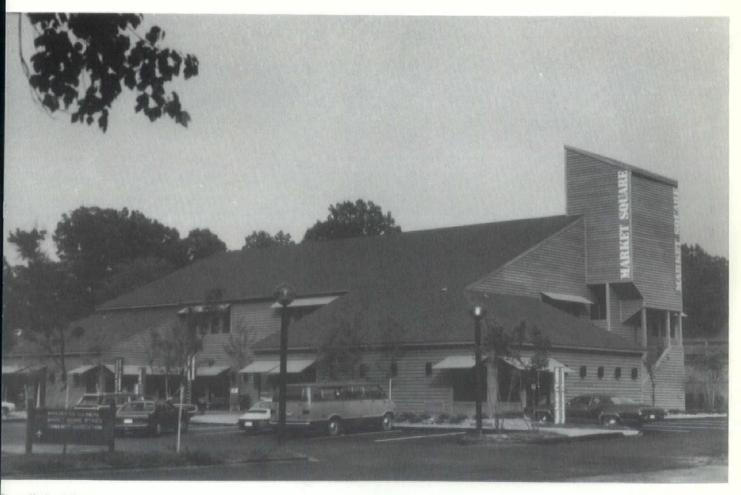
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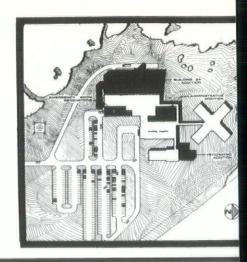
Clothing store

Heindl-Evans, Inc. of Richmond the general contractor also handled reinforcing, carpentry, structural wood, millwork, roofing, sheet metal and wood doors.

Subcontractors & Suppliers (Richmond firms unless noted)

Lone Star Industries, Inc., concrete supplier; Howard & Morgan, Inc., masonry contractor; Mack's Iron Co., Inc., Colonial Heights, steel supplier/joists & miscellaneous metal; E. S. Chappell & Son, Inc., caulking; Humac Co., wall insulation & foundation insulation; Binswanger Glass Co., glass & glazing contractor; J. S. Archer Co., Inc., metal doors & frames; Pleasants Hardware, hardware supplier; F. Richard Wilton, Jr., Inc., Ashland, gypsum board contractor; C. B. Smith, resilient tile & carpet; W. W. Nash & Sons, Inc., painting contractor; Worsham Sprinkler Co., Inc., Ashland, sprinkler contractor; M. R. Ellis & Sons, plumbing contractor; Mayhew & Chaulkley, Inc., Ashland, heating/ventilating/air conditioning contractor; and Sound Electric Co., electrical contractor.

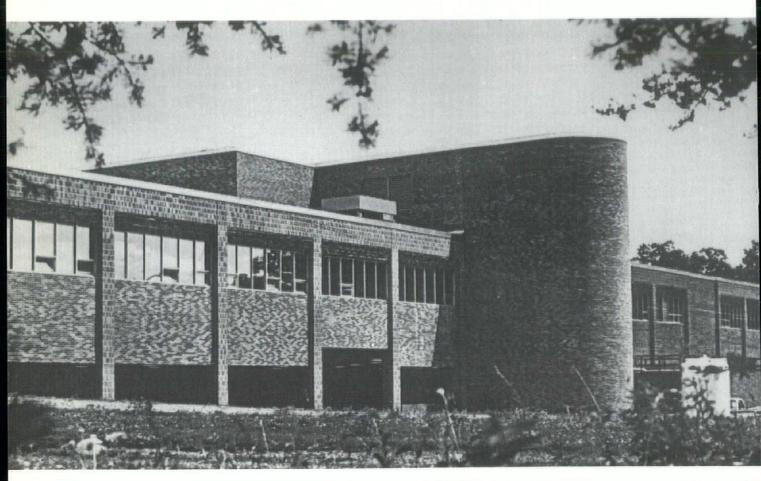


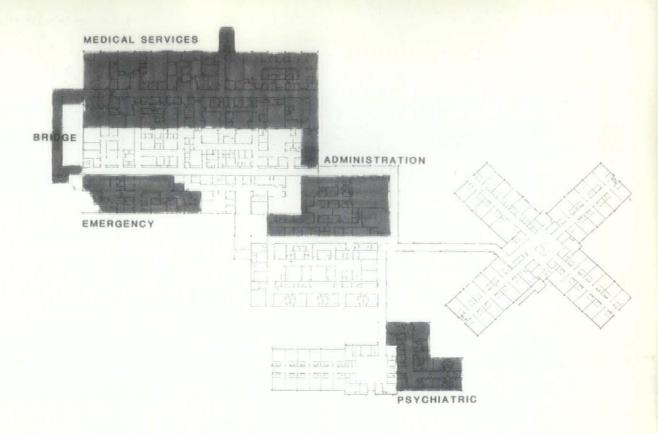


Potomac Hospital Additions & Alterations, Woodbridge

Peck, Peck & Williams — Architects

Mechanical Engineer, Glassman-LeReche & Assor PC • Electrical Engineer, Glassman-LeReche & Assor PC • Structural Engineer, B.E.C. of Virginia, Inc. Interior Design, Peck, Peck & Williams • Gener Contractor, Wayne Construction Co., Inc. • Phot graphy, Greenwood Studios.





ADDITIONS INDICATED

In 1977, Peck, Peck & Williams was hired to design additions to Potomac Hospital which would double its existing size: Administrative Addition 8,870 sq. ft.; Psychiatric Wing 5,320 sq. tt.; Building 3A 29,230 sq. ft.; Emergency Room, 5,190 sq. ft. At the same time, the board of directors entered negotiations with a "Finance-Build" company, Tandy, Inc. Because of scheduling, he architects were asked to complete design and working drawings in eight months. During that time, the design team used several techniques to keep construction cost down. At the end of this time, Tandy negotiated a price with the hospital board and the board thought it a good price.

The architects, feeling this price was much too high, recommended that the board put the ob out to bids. The board was very concerned about the possibility of a higher bid price than their "guaranteed" bid. However, the designers were convinced, and persuaded the board to take the time to bid. The project was priced by live contractors and all bids came in below the

'guaranteed price.' PROGRAM:

Expand the existing 50,000 sq. ft. hospital to meet the needs of a rapidly growing community. The hospital had to be kept operational including the emergency unit, at all times during construction.) The expansion includes:

I—A 12-bed Psychiatric Addition—including group therapy, conference rooms, occupational therapy, nursing station, offices, day room, kitchen and six sleeping rooms. This wing will eventually be converted to a detoxification unit when a larger psychiatric facility is built.

2—An Administrative Addition—enclose an existing courtyard and include offices for the administrator, two assistant administrators, secretaries, medical library, medical records, conference room, board room, auditorium, doc-

tors' rooms, intern room, miscellaneous offices and waiting room..

3—Medical Service Addition—this will include a new out-patient entry and waiting, out-patient registration, general records and accounting, radiology department, physical therapy, respiratory therapy, pharmacy, Intensive Care Unit, Cardiac Care Unit, expanded operating suite and new recovery rooms, and associated waiting rooms.

4—Emergency Room Expansion—expand emergency area after evacuation of existing administrative areas. Add four new beds, new nursing station, coronary room, cast room, holding room, special procedures, doctors' and nurses' lounges and lockers, and ancillary spaces.

5—Covered parking for doctors.

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BRICK DETAILING: The design was achieved by using brick forms and details (ie: corbelling, soldier and sailor coursing) instead of costly canopies, attachments, etc.

3. MOVABLE PARTITIONS WHERE POSSIBLE: Allowed ceilings and utilities to be put in all at

4. TAPPING INTO EXISTING MECHANICAL SYSTEM WHERE POSSIBLE.

5. DESIGNING TO MINIMALLY DISTURB EXIST-ING FACILITIES.

Wayne Construction Co., Inc. of Arlington was general contractor and handled excavating, sodding, seeding, etc., landscaping and landscaping work, foundations, concrete work, and carpentry.

Subcontractors & Suppliers

Dominion Caisson Corp., Alexandria, piling; Newton Asphalt Co., Inc. of Va., Alexandria, paving contractor; Bowie Steel Division, Bowie, MD, reinforcing; Virginia Concrete Co., Inc., Springfield, concrete supplier; Bonded Masonry, Inc., Clinton, MD, masonry contractor; L. C. Smith, Inc., Alexandria, masonry supplier & mortar; Piercy & Sutton, Inc., Baltimore, MD, steel supplier/erection/joists; R. D. Bean, Inc., Beltsville, MD, steel roof deck & built-uproof; W. & W. Fabrication, Inc., LaPlata, MD, miscellaneous metal & handrails; Arlington Woodworking & Lumber Co., Inc., McLean, millwork & wood doors; Architectural Components, Inc., Rockville, MD, cement asbestos paneling; B.C.D. Co., Weehawken, NJ, hospital casework; Prospect Enterprises, Inc., McLean, waterproofing; and Wilcox Caulking Corp. Lorton, caulking

Wilcox Caulking Corp. Lorton, caulking.
Also, Owens-Corning Fiberglas Corp., Washington, DC, roof/wall/foundation insulation; Woodbridge Glass Co., Inc., Woodbridge, glass, glazing contractor, windows & window wall; American Steel Products, Farmingdale, NY, metal doors & frames & storefront; Fries, Beall & Sharp Co., Springfield, hardware supplier; Anning-Johnson Co., Springfield, plaster contractor & gypsum board contractor; Standard Art, Marble & Tile Co., Inc., Landover, MD, resilient seamless; Acoustical Ceilings, Inc., Merrifield, acoustical treatment; Fairfax Tile & Linoleum Co., Inc., Springfield, resilient tile, carpet & special flooring; and Madison Decorating Co., Kensington, MD, nainting contractor & paint supplier

MD, painting contractor & paint supplier.

And, Michael Gordon Air Passage Equipment,
Arlington, specialties; Graham, Van Leer & Elmore Co., Inc., Tyson's Corner, folding partitions; Dover Elevator Co., elevators; United
Sprinkler Co., Inc., Alexandria, sprinkler contractor; Artisan, Inc., Vienna, plumbing contractor (American Standard fixtures), heating/ventilating/air conditioning contractor; Nationwide
Electrical Construction, Gaithersburg, MD, electrical equipment supplier & electrical contractor; Kinnear Co., McLean, rolling grilles; and
Ameray Corp., Dover, NJ, radiation shielding.



Halifax-South Boston Community Hospital

South Boston

Sherertz, Franklin, Crawford, Shaffner — Architect/Engineer



Halifax-South Boston Community Hospital's ecently completed addition was developed to louse ancillary facilities for a hospital with a bed capacity of 300 patients—109 in the existing lospital, 48 in the new addition and, design provisions for the future addition of three floors containing 143 beds. One of the more unique eatures of the four million dollar structure just completed in South Boston, is that financing of he project was handled by Farmers Home Administration (FMHA)—an unusual arrangement brought about by some timely and aggressive work by Al Burkholder, Executive Vice Presdent of Halifax Community Hospital

dent of Halifax Community Hospital.

An article in the Wall Street Journal about unds available from FMHA prompted Burkholder to apply for the money to build a new hospital in South Boston. After many letters, phone calls and personal visits with the proper authorities, Burkholder succeeded in getting his equest approved, and now the first hospital in Virginia financed by FMHA is a reality. Burkholder shared his story with other hospitals, and some of them also have obtained financing

rom this unique source.

The new life-support areas housed in the new addition include: a four-room operating suite; an eight-bed recovery area; a ten-bed intensive care unit; laboratory facilities; and emergency areas.

These emergency areas are comprised of a waiting room, nurses' station, fracture room, minor operating room, and eight treatment rooms.

Primary exterior materials include: archiectural precast concrete and bronze glass with anodized aluminum trim.

John W. Daniel & Co., Inc. of Danville was general contractor and handled foundations.

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Riverside Equipment Co., Danville, excavatng; Thompson-Arthur Paving Co., Greensboro,
NC, paving contractor; Felton Bros. Transit Mix,
South Boston, concrete contractor/supplier;
ast Coast, reinforcing; Cast-A-Stone Products
Co., Inc., Raleigh, NC, prestressed concrete;
Boston Concrete, South Boston, masonry conractor/supplier; Carolina Steel Corp., Greensboro, NC, steel supplier & miscellaneous metal;
Pridgen Cabinet Works, Inc., Whiteville, NC, millwork, paneling & wood doors; and Seager
Waterproofing, Inc., Greensboro, NC, waterproofing.

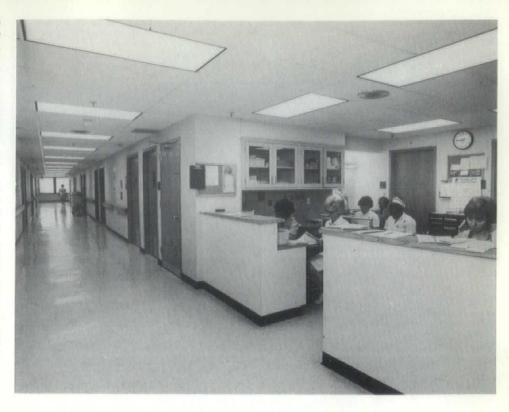
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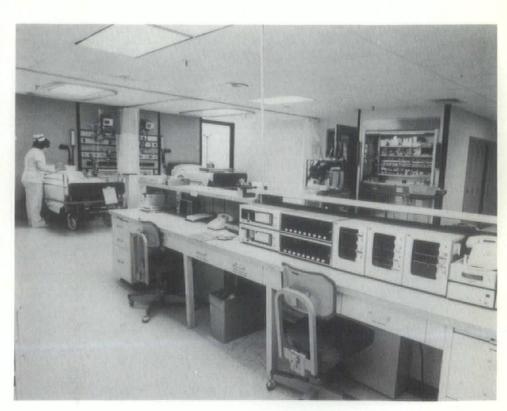
acoustical treatment.

Others were: Colonial Flooring and Acoustical Others were: Colonial Flooring and Acoustical Co., Inc., Durham, NC, resilient tile; Discount Carpet Center, Roanoke, carpet; Glidewell Bros., nc., Richmond, painting contractor & wall covering; Roanoke Engineering Sales Co., Inc., Roanoke, specialties; Westbrook Elevator, Danville, elevators; Kannapolis Sprinkler Co., Kannapolis, NC, sprinkler contractor; J. H. Cothran Co., Inc., Altavista, plumbing/heating/ventilating/air conditining contractor; and Bryantourham Electric Co., Inc., Durham, NC, electrical equipment supplier & electrical contractor.

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W. S. Hundley Annex Community Memorial Hospital, South Hill Jones & Strange-Boston — Architects

Community Memorial Hospital was planned and built by and for the people of Brunswick, unenburg, and Mecklenburg counties in 1954. Diver the next 20 years a continuing growth program was implemented by the board and the administrator, Mr. Thomas W. Leggett, virtually doubling the size of the original building. The briginal hospital, as well as the subsequent additions to 1970, was designed by Ballou and Justice, Architects and Engineers.

In 1974, the hospital began development of a Nursing Care Wing to supplement the Acute Care Facilities already in place and provide a palanced spectrum of health care. Working with Jones & Strange-Boston, who had designed six previous nursing homes, and with the Farmer's Home administration, which was interested in encouraging rural community development, construction was begun on the W. S. Hundley Annex in July 1976. The project provides 100 intermediate nursing care beds, 40 skilled care beds, laundry facilities, a complete cafeteria and all necessary therapy areas. An air conditioned glassed-in promenade connects the annex directly with the hospital so that the Acute Care Facility support is immediately and easily available to the Nursing Facility.

The architects selected a precast concrete system for both the bearing walls and the floors to aid in the speed of construction. While the

Interior Design, Thomas W. Leggett • General Contractor, Kenbridge Construction Co., Inc. • Photography, Stevens M. Jones, AIA.

projected "21 days erection time" was not quite realized, substantial savings in time and ease of working conditions were achieved. The brick cladding is actually non-bearing, and so the scaffolding time was not a penalty. A precast concrete channel fascia is used to reduce the scale on the new building to accommodate the existing building and, with the repetitively used opal glass ball lighting fixtures, provides a dominant theme for future planned additions.

Interior colors and textures were selected to highlight informality, featuring residential shades to contrast with the institutionality of the hospital.

(Continued on page 39)





To tell the Virginia Story

August 1980

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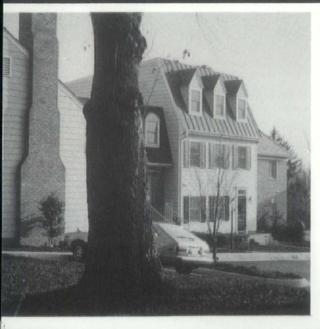




The Wrens

Wrens Way, Falls Church

Lynwood E. Brown, AIA (Formerly Bushey-Burrey, AIA) —Architect





Designers, Richard Schoppet, Assoc. Member AIA, CSI, AIDD and Donald Greenwood, Assoc. Member AIA • Landscape Achitect, Gerald I. Rupert • Mechanical Engineer, Frank Williams • Structural Engineer, Bushey-Burrey • Civil Engineer, Walter L. Phillips, Inc. • Interior Design, James Reid • General Contractor, Creative Environments, Inc. • Photography, Richard Schoppet, Assoc. Member AIA, CSI, AIDD.

The Wrens — Cluster Townhouses & Carriage House Home, in Falls Church, are designed to harmonize with the surrounding historic homes. The cluster consists of thirteen units, one of which is a restored carriage house. Careful attention was given to details to achieve an accurate representation of American traditional architecture.

Unit No. 12 faces Broad Street between the historic Birch House (built in 1849) and an early period residence on the left.

The homes were designed to resemble a cluster of single-family residences, but with a village/townhouse effect. A wide variety of materials (slate, cedar, copper, and metal roofs) were employed in order to present authentic eclectic residences. Brick, wood, sidings, windows, doors, trim, stone, and brick-and-wood garden walls were detailed much as those seen in Williamsburg.

Most of the fully-matured trees were saved, and new landscaping, walks, exterior lighting, and terraces were designed to enhance the period architecture.

The historic Birch House is also being restored by the builder/developer, James W. Reid, Jr., Creative Environments, Inc. of McLean.

Creative Environments, Inc. of McLean, the builder/developer, also handled foundations, masonry work and carpentry.

Subcontractors & Suppliers

D. I. Lyons Excavating Co., Sterling, excavating & paving contractor; Stadler Nursery, Laytonsville, MD, landscaping contractor; C. C. & G., Inc., Fredericksburg, concrete contractor; Virginia Concrete, Springfield, reinforcing; L. C. Smith, Inc., Alexandria, mortar; Ben Porto &

(Continued on page 41)

To tell the Virginia Story

August 1980

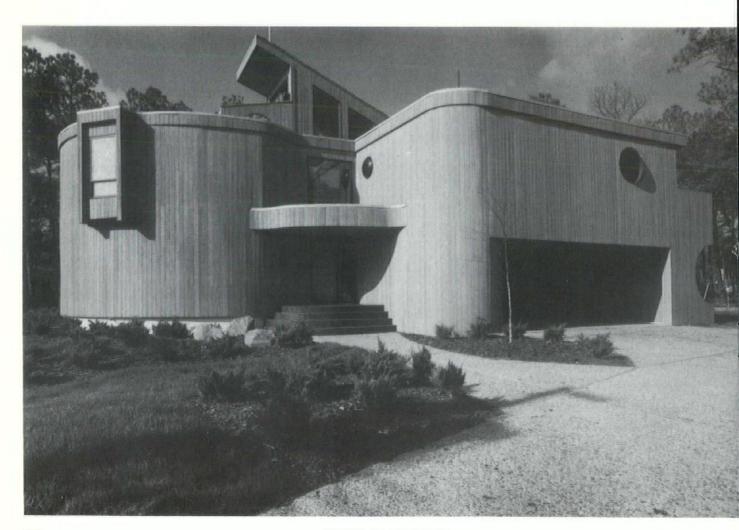


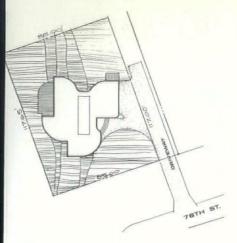
Sandler Residence

Virginia Beach

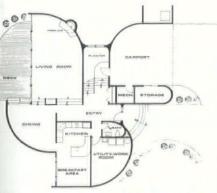
The Design Collaborative/Laszlo Aranyi, AIA — Architect

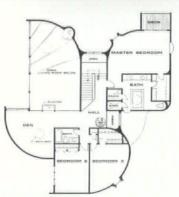
Interior Design, G. Reese Fowler Ltd. • General Co tractor, Francavilla Building Co. • Photography, Ro Mann.

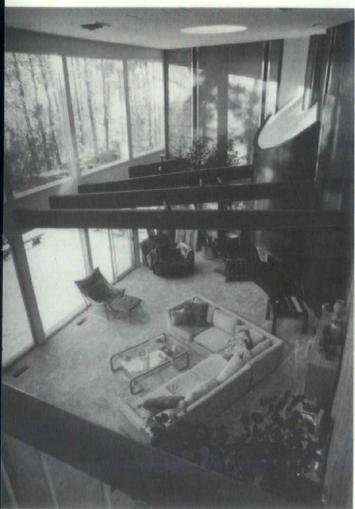












To tell the Virginia Story

August 1980

Program

The house was to be designed for a bachelor who likes curvaceous forms of all kinds. His other hobby was working with plants and displaying them in his house. Even though the house was to be occupied by one person, it had to be designed to accommodate a family in case he wanted to sell the house or in the unlikely event that he would get married.

The site is located on 76th Street in Virginia Beach and adjoining Seashore State Park on the west side

Design Solution

Based on the site conditions and the program requirements, the house was oriented to face the park and has a limited number of window openings facing the other sides.

Entering the house, one becomes immediately aware of the stairwell which serves as a light tower as it reaches up to capture the sunshine. The light is transmitted into the other portions of the house through various openings. From the second floor there is a spiral stair leading to a roof-deck.

The focal point of the house is the two-story living room with an impressive full-height fire-place. This room is a few steps lower than the surrounding area and is open to the dining room on the first floor and the den on the second floor.

Francavilla Building Co. of Virginia Beach was general contractor and handled steel erection and carpentry.

Subcontractors & Suppliers

Virginia Beach firms were: Oceana Ready-Mix Corp., concrete supplier; Tidewater Steel Co., Inc., steel supplier; Higgins Roofing Co., roofing; Insulation Service Co., Inc., roof/wall insulation; Jim Boyce, painting contractor; Duron Paints & Wallcoverings, paint supplier; Schell Supply Corp., plumbing fixture supplier; House of Lighting, lighting fixtures supplier; and 3-D Electric, electrical contractor.

Norfolk firms were: Colonial Block Corp., masonry supplier & mortar; Addington-Beaman Lumber Co., Inc., structural wood & wood doors; Powell-McLellan Lumber Co., Inc., millwork; Kitchen Towne, Div. of Towne Distributors, Inc., cabinets; Econo Drywall & Plastering Co., plaster contractor; Jayen Tile Co., ceramic tile; I & M Plumbing, plumbing contractor; and Mechanical Service Co., Inc., heating/air conditioning contractor.

Others were: Hazel, Miller, Mason, Chesapeake, foundations & masonry contractor; Pella Virginia, Inc., Richmond, glass, windows & window wall: Trus-Joist Corp., Richmond, truss joists; and Duvinage, Maryland, spiral staircase.

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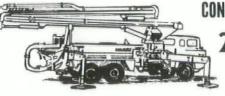
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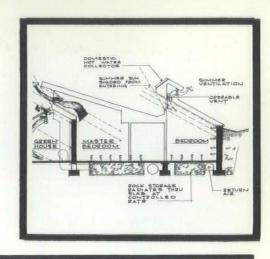
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Patterson Residence

Sotetourt County

Byron R. Dickson, Architect

This residence is situated on a sloping site king advantage of an unobstructed panoramic ew to the south. The owner desired to be as nergy independent as possible and, at the ame time, to minimize the impact of the buildgupon the site. The selection of an earth shelred passive solar design was a natural outrowth of these concerns.

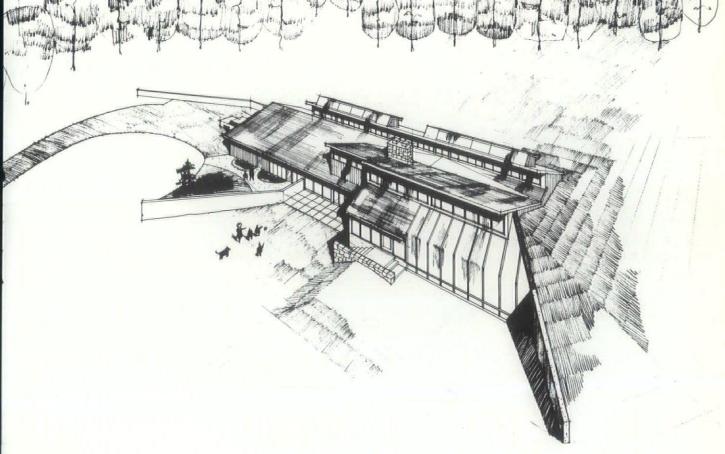
The building program calls for a 3,800 sq. ft. sidence for a young expanding family with

strong emphasis given to the time which the family spends together. The resultant open floor plan further reinforces heating by passive means. An active collector is employed for heating domestic hot water. Backup heating will be accomplished by a wood stove and a fireplace insert.

The building uses a variety of passive solar techniques to obtain a significant solar heating fraction. As the first step, the heat loss from the

Project Manager, Jerome D. Henschel • Lanscape Architect, Byron R. Dickson, Architect • Interior Design, Byron R. Dickson, Architect • General Contractor, J. E. Kidd and Sons.

building was minimized. The earth sheltered north and east walls reduce infiltration of cold winter winds, all windows are double glazed and oriented to the south. The garage provides a



o tell the Virginia Story

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buffer zone to the habitable space from the west. In addition, the entrances are both air locked. The insulation package requires an R-38 ceiling with R-25 walls. There is manually controlled R-10 movable night insulation provided to all high clerestory windows and to the thermal storage wall. In general, emphasis has been placed upon energy conservation in order to retain the solar energy which is collected.

The major solar collection occurs as direct gain through approximately 800 square feet of vertical south facing windows. Every room in the house receives some benefit, both in terms of heat gain and natural daylighting from these

windows. The problems of glare have been addressed by bringing the sunlight into both sides of the rooms or by reflecting it off a light colored surface. Surfaces used for direct gain thermal storage are finished with slate stone or skim coat plaster over concrete.

Two areas of the house are heated by indirect gain. A vented thermal storage wall, with movable exterior insulation, heats the recreation room while an attached greenhouse heats the master bedroom through an intervening mass wall. The thermal storage wall in the recreation room is constructed of concrete one foot thick and single glazed. There is some direct gain

through a window in the thermal storage wall. mass wall between master bedroom and gree house is an 8" thick concrete wall, somewh undersized to allow higher temperatures in t areenhouse.

In addition to providing indirect gain to t master bedroom, hot air from the greenhou heats fan forced rock beds placed below t concrete slab in all bedrooms and in the fami room. This was done in response to the owner desire to use carpet and wood floors in the areas thereby rendering them inneffective a thermal storage from direct gain. This hybr system removes about one-third of the energy available from the greenhouse and places below the concrete floor slab.

Domestic hot water is supplied through fo roof-mounted solar air to water collectors, ho izontally mounted above the clerestory wi dows at an angle of 45° from horizontal. Hot a is ducted from the collectors to the air to wat heat exchanger. From the heat exchanger, e cess wasté heat can then be distributed to t west supply duct and into the recreation at utility room areas, or returned directly to the collectors. Return air can also be drawn direct from the root cellar at a lower temperature improve collector efficiency. This solar h water system uses a storage tank and a back-t electric water heater all supplied from we

J. E. Kidd and Sons of Hollins is general co tractor and is handling paving, foundation concrete work, carpentry, waterproofing, fou dation insulation and glazing. Subcontractors & Suppliers

(Roanoke firms unless noted)

Tony Reed, Vinton, excavating; Dixie Buildir Products, Inc., reinforcing and miscellaneou metal; Roanoke Ready Mix Concrete Corp., co crete supplier; Hamlin & Bell, Blue Ridge, maso ry contractor; Home Lumber Corp., millwork wood doors; Superior Cabinet Co., Hollins, cat nets; and Locker & Company, Wytheville, the mal rock supplier.

Also, Robertson Sheet Metal Co., sheet meta Pella Window & Door Co., greenhouse & wi dows; Graves-Humphreys, Inc., hardware su plier; James L. Thompson, Salem, plaster co tractor & gypsum board contractor; Clifto Floor & Tile Service, Inc., Salem, carpet; She win-Williams Co., paint supplier; CMC Well Pump Supply, Inc., hot tub; Warner Supp Corp., plumbing fixture supplier; Forbes Plum ing & Heating Co., Inc., plumbing contractor Williams Supply, Inc., lighting fixtures supplie Richard Lee, electrical contractor; and Nola Company, domestic hot water system.

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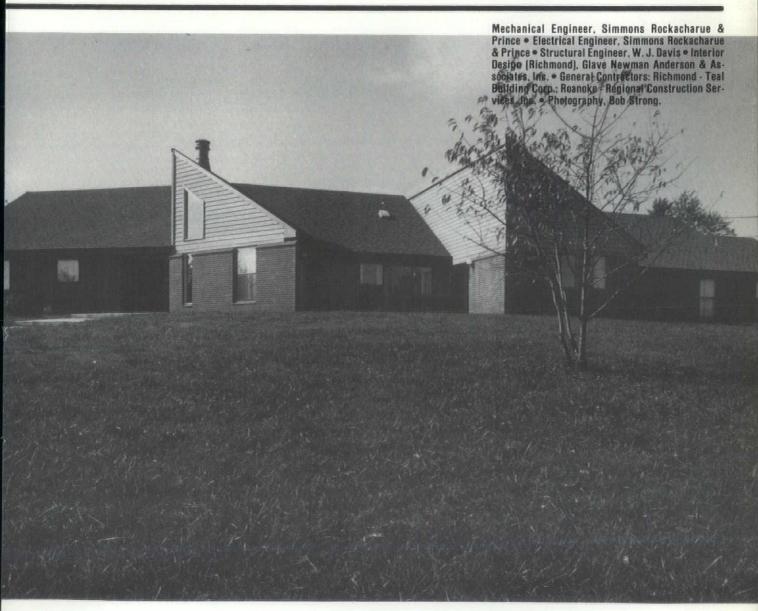
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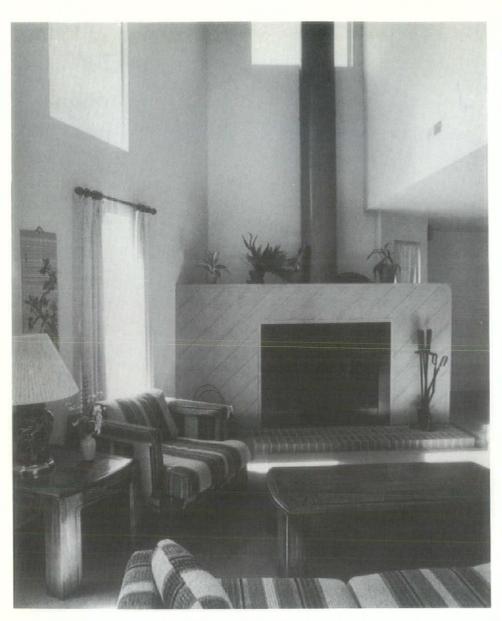
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Group Homes

Glave Newman Anderson and Associates, Inc. — Architect





Making the transition from life in an instit tional setting to living independently in a priva home or apartment can be difficult and frighte ing. One method devised to combat the har ships faced by those who must make such change has been the establishment of growness.

In 1975, the Virginia Housing Developme Authority (VHDA) asked Glave Newman Ande son and Associates to be one of two archite tural design firms to develop a prototype gro home for mentally retarded adults. These gro homes were to serve as temporary residenc for individuals who had just left an institution setting but were not yet able to live entirely it their own. Section eight allocations from to Department of Housing and Urban Developme enabled the VHDA to finance group homes fron-profit sponsoring agencies.

The two architectural firms worked indepedently in order to come up with different soltions for the project. The prototype designs a to be sold on a per unit basis, keeping architetural fees down and allowing the repetition the design, realizing an economy of scale wh

building a quality product.

Initially, a workshop for ideas was held wi representatives from the VHDA, the state Depament of Mental Health and Mental Retardatio and representatives from eight sponsoring org nizations. The homes were to be residential an where zoning permitted, fit into existing neight borhoods. Originally the firms were given I instruction as to whether the home design would be for urban or suburban settings. But the project evolved, Glave Newman Anders was asked to develop a home for a suburba setting, while the other firm was asked to wo within the confines of an urban setting.

The VHDA had learned from a similar project conducted in Michigan, that the homes seem work best when they accommodate a minimu of six and a maximum of 12 residents, plus full-time staff, which is usually a married cople. In order for the regular staff to take vactions and spend other time away from the hom an additional bedroom was needed for subs

tute staff

"We felt it was important that the prototy design be flexible enough to be constructed or number of different types of sites," said Richa L. Ford, Jr., a Principal of Glave Newman Ande son. "We accomplished this by using comp nent parts, with similiar activities grouped tog ther in the components. The living room, dinii room, and kitchen served as one component; the drooms served as another component; served as another component.

The clients also asked for alternate pla which would allow for a recreation room or ga age. Glave Newman Anderson placed this ar

so it fed directly into the kitchen.

"In order to serve as few as six residents pl the staff, we split the bedroom components in two, six unit sections," Ford said. "These cou be placed side by side, stacked, or connected various points, depending on the site r straints."

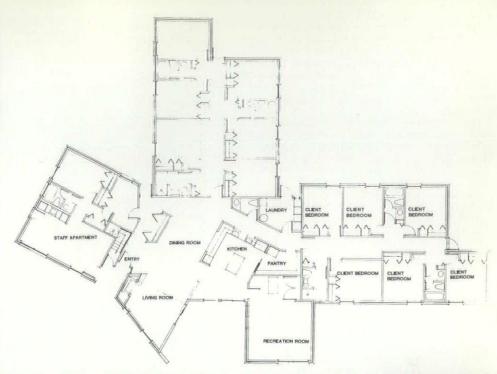
The prototype for a suburban setting follow the typical suburban home: brick with wo siding, asphalt shingles, rambling in natur with two bedroom wings off at right angles fro the living space. The resident managers' apaments were attached to the other side of t living space. The residents needed the capabity to congregate in one area, so open spac were provided in the living room, dining rook kitchen area. But the residents also needed

ve the privacy of their own room and bath, so ch individual has a private room with a semiivate bath. The bathrooms, which are tradinal in style with a bathtub, sink, and toilet, ve been placed between every two bedrooms. andicap specifications were met by providing II-in showers in two bathrooms.

"Perhaps the most important feature of these cilities is the difference between a residential id institutional setting," Ford said. "The resinitial setting features different colors, a varty of materials in its construction, and resinitial scale size rooms and appliances.

"These homes serve not only as residences, it also as educational facilities," Ford added. lesidents are taught the care of such things as shes, preparation and storage of food, how to perate such appliances as ovens and dishashers, and they are required to maintain their drooms and bathrooms, and do their own undry."

When the prototypes were presented five onths after the project started, there was lough difference in the approaches to the proem to emphasize the need for using two archicts. The other firm broke their building into ore and smaller component parts, perhaps le to the restrictions of an urban location. The ave Newman Anderson building will fit on narw sites by stacking the bedroom components,





on a hilly site by stacking the bedrooms and stepping down, and on any configuration of a flat site by reconnecting the bedroom parts.

"Our prototype is adaptable to a number of different types of locations," Ford said. "The residential appearance of the buildings allows them to be placed in existing residential communities with minimal impact or disruptive influences."

Since developing the prototype, Glave Newman Anderson has worked with two sponsoring organizations in the construction of group homes. One is the Roanoke Mental Hygiene Services in Roanoke, and the other is the Richmond Area Association for Retarded Citizens.

The Roanoke home is located on a large, oneacre plus, site. It is in a buffer zone between a residential area approximately 10-12 years old and a commercial strip. Since there was ample room to work with, the one-story scheme was used with a few minor changes made to the original prototype. These included room sizes, location of the handicapped facilities, and minimizing small lounge areas and leaving more communal space in the living and dining room areas.

"These changes were all minor," Ford said, "which illustrates how well the prototypes will work. And that was the intent of the program."

The Roanoke house has all the standard techniques of residential construction. There is a brick veneer exterior, with some wood siding. It has steel windows, sized to provide easy escape for the handicapped in an emergency. The living room, dining room, and kitchen are in one large space, with a minimum of walls to allow a number of activities to occur simultaneously without seeming cramped.

The Richmond facility is based on the same prototype and is located in a residential section on the city's northside. This is an older neighborhood and the site is much smaller than its Roanoke counterpart. In order to accommodate 12 residents, the bedroom components here were stacked and the handicapped requirements were met on the first floor. Budget restrictions prevented the installation of an elevator, but the second floor is served by two staircases, satisfying the building and fire codes. The building also has a sprinkler system. The exterior walls are solid masonry as compared to the frame construction of the Roanoke home. Both are slab on grade, using, wherever possible, wooden roof trusses and standard component pieces in order to keep costs down.

"In order to give residents some orientation to outside living, patios, which can be used during good weather, were placed in the area of the living room, dining room, and kitchen," Ford said. "The sponsoring organizations also asked that fireplaces be included in the buildings in order to add to the feeling of a home setting."

By stacking the Richmond bedroom components, a small lounge area could be included on the second floor. This can be used for activities taking place later in the evening. The interiors of both buildings were furnished with low maintenance products, such as sheet vinyl throughout the living area, kitchen, and hallway. Carpet was provided in the bedrooms to lend a sense of warmth and the bathrooms were ceramic tile with fiberglass bathtubs. Interior furnishings were provided by the sponsoring organizations.

Glave Newman Anderson and Associates is currently working with the Northern Neck-Middlesex Mental Retardation Association and the Petersburg Association for Retarded Citizens in the development of two more group homes using the original prototype design.





"Solving any architectural problem gives us a great deal of satisfaction," Ford said. "Solving a problem and at the same time helping to provide for such a pressing social need gives the firm particular satisfaction. We think this is a vital program and believe it is working as it was intended."

Teal Building Corporation of Ashland was general contractor for the Group Home in Richmond. The firm also handled clearing, footings, landscaping work, and paving.

Regional Construction Services, Inc., of Roanoke was general contractor for the Group Home in that city.

Subcontractors & Suppliers
Richmond Group Home
(Richmond firms unless noted)

J. & H. Concrete, concrete; B & W Construction of Virginia, masonry; Hanover Iron & Steel, Inc.,

Ashland, metals; C & J Builders, rough & finicarpentry; Hanover Fabricators, Ashland, truses; Georgia-Pacific Corp., cabinet work; Fratlin Brown, roofing & flashing sealants; Spa Age Insulators, foam insulation; and G. T. Du Insulation Co., Inc., batt insulation.

Also, Lowe's, doors; W. H. Stovall & Co., In Ashland, windows; Pleasants Hardware, ha ware supplier; James Greene, wallboard; I Shifflett, ceramic tile; Duron Paints & Wall Coerings, carpet & sheet vinyl; Galaxy Decoration, painting contractor; Goldberg Co., In specialties; Grinnell Fire Protection Syste Co., Inc., sprinkler system; Lawrence R. Mu Plumbing-Heating-Air Conditioning Corp., plun ing contractor; White & Yeatts Heating & Conditioning, mechanical; and Able Electric Contractors, Inc., Ashland, electrical contractors.



Church at Northern Virginia Pakton Brown/Ryon Associates, Ltd. — Architect



Mechanical Engineer, Beauchamp Associates • Electrical Engineer, Beauchamp Associates • Structural Engineer, F-D-E Ltd. • Civil Engineer, Walter L. Phillips, Inc. • General Contractor, E. H. Glover, Inc. • Photography, Ralph Snell, AIA



Church at Northern Virginia is an autonomous Charismatic Renewal congregation. Members are born-again, Spirit-filled believers, stead-fastly basing their faith on the Bible. An integral component of the Church is the Whole Word Theological Seminary which trains candidates for the ministry.

Founded in 1967, the Church is blessed with a strikingly beautiful eighteen-acre site: a gently rolling glade in the woods surrounding a tranquil lake. A small log cabin occupies the highest hill.

Over the years, a series of additions, designed by the architects, were grafted to the orginial cabin to house the growing congregation. But master planning pointed to the eventual need for an entirely new Sanctuary and educational building.

The new building would have to resolve a number of conflicting demands:

—Functionally, it had to unite a large scale worship space with multi-sized educational and assembly facilities.

—The future addition of a seminary library and a dormitory had to be projected.

—The structure would have to look as if it belonged — within its natural setting and with the existing buildings.

—Symbolically, it had to be a prominent, bold statement of faith, bigger and better than before.

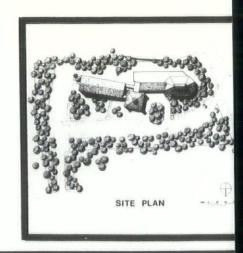
—And reflecting the times, energy efficiency was a must. As was planning for use by handicapped visitors.

Concept planning initially resulted in a onestory scheme. Further development, and careful siting, turned the single story plan into one incorporating a lower level, created by using the natural drop in grade. This permitted the seminary library (with a 26,000 volume capacity) to be included in the initial new building at a minimum of extra expense. The seminary could now seek accreditation sooner.

The natural division in function is expressed on the exterior. Worship space—Educational space—the forms are discrete; coupled by the Narthex

Exterior materials were selected for their appearance and permanence. Stone-based split face masonry is used inside and out. A prophecy determined the building's color: white. White mortar and white trim are used to obtain a monolithic effect, emphasizing the bold geometry. Cedar shakes cover all sloped roofs. Gutters and downspouts are copper. Dark bronze completes the limited palette of colors — appearing

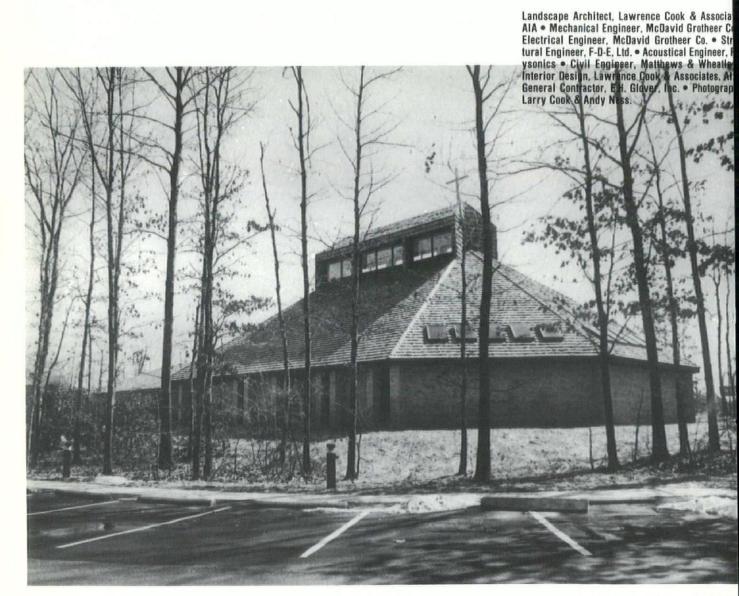
(Continued on page 41)

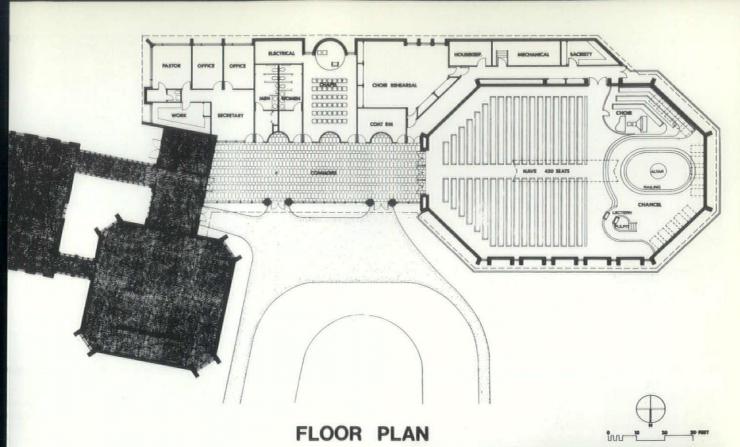


Messiah United Methodist Church Springfield

30

Lawrence Cook & Associates, AIA — Architect



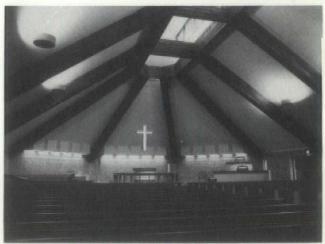


VIRONMENTAL CONSIDERATIONS—The bold of shape with traditional lantern and cross re chosen to render a strong image of the urch in the community. The church property is as a buffer to separate a long commercial ip from a fine residential planned community. e entrance drive was shortened to provide a 2a-like transition space between the parking and the Commons while providing ideal cess for the handicapped. Existing trees surunding the site were preserved. Ornamental idscaping will be planted soon.

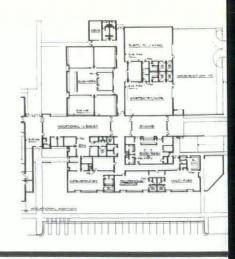
ERGY CONSIDERATIONS—This facility was signed as the first all-solar heated and cooled urch in the United States. However, the Departent of Energy did not grant assistance as a monstration project and the congregation uld not afford to install the solar system at stime. The walls and ceilings are heavily sulated for minimum heat transfer. The Compons is heated by passive solar energy. The nter sun penetrates the clerestory windows distores heat in the slate floor "solar sink" lich gradually emits the heat back into the pmat night. The summer sun is blocked by the restory overhang and vertical wing walls.

ATERIALS—Brick and mortar were selected to atch the existing buildings. The Sanctuary alls are brick outside and inside with special ick patterns used to accent the Chancel, to mreturn air grilles, and to bond the top of the all around the entire Sanctuary. The Sanctuy ceiling is gypsum board for sound reflectue with cedar siding encasing the steel ame. The Commons ceiling is spaced oak neling with sound reducing back-up insulan. All windows are dual glazed and set in stom fir frames. Most doors are custom made oak. The roof is covered with heavy cedar akes.

(Continued on page 42)







Southampton High School Vocational Addition, Courtland

Moseley-Hening Associates, Inc.— Architect

The Vocational Addition for Southampton High School is the first phase of a proposed two-phase project designed to meet increasing educational and community needs in this rural Southeastern Virginia county. A civic center proposed as the second phase would be the result of a cooperative venture between the County Board of Supervisors and the School Board and could provide a cost savings to each for expenditures made for community facilities which might otherwise be too costly for either individually.

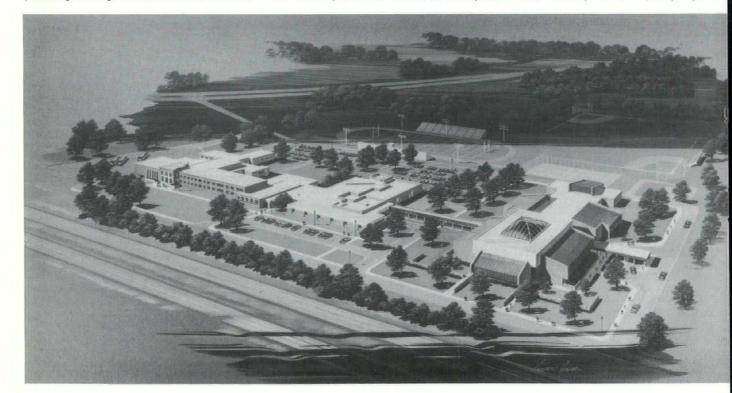
When the new Voacational Addition is completed, 43,890 square feet of space will have been added and facilities provided for programs in food service; carpentry; masonry; electricity; plumbing; heating; ventilation and air condition-

ing; stenographics; reprographics; office services and accounting; typing; cosmetology; occupational clothing; and home institutional training. A resource and career center is designed as an integral part of the student circulation pattern to encourage its use by students. A model office is provided to place business students in a simulated working environment. Another feature of the new addition, the solar water heating system, will serve as a valuable educational tool to students of the building trades while providing for most of the new building's hot water needs.

Athletic fields at the school have been updated to provide first class facilities for Southampton's State Championship Football Team. The second-phase civic center, in conceptual Landscape Architect, Watkins Nurseries, Inc. Mechanical Engineer, Wm. G. Brandt, Jr. & Associ • Electrical Engineer, Wm. G. Brandt, Jr. & Associ · Structural Engineer, Dunbar, Milby & William Interior Design, Moseley-Hening Associates, In General Contractor, Silas S. Kea & Sons Co. • Ph graphy, Huffman Studio.

form only at this stage, would house a gym sium for school and community use, an aud rium, exhibition halls, and other commun facilities.

Silas S. Kea & Sons Co., Ivor, was gene contractor and handled foundations, precase cast stone erection (with Old Dominion S Co.), masonry work, carpentry, light wei



ncrete insulation (with J. D. Wells, Inc.), and ndation insulation.

Subcontractors & Suppliers
Norfolk firms were: Winn Nursery, Inc., landping & landscaping contractor; Hall-Hodges
, Inc., reinforcing; K & P Construction Cor.,
Ilking (joint sealers); Roof Engineering Corp.,
It-up roof & dampproofing, sheet metal &
shing; Lyon Metal Products, Inc. (c/o Dave
ffey, Hampton), metal lockers; Walker &
berge Co., Inc., glass & glazing contractor &
minum windows; Carpet Installation Assotes, Inc., carpet; Anchor Fence Div. of Anchor
st Products, Inc., metal fencing & athletic
d backstops; and Door Engineering Co., dock
mpers & projection screens.

From Richmond were: Economy Cast Stone ., cast stone & precast concrete supplier; J. B. rell Co., steel roof deck, roof deck (It. weight nc. insulating), and roof insulation (It. weight nc. insulating); Miller Manufacturing Co., Inc., Ilwork; J. H. Pence Co., cabinets (casework) & od doors; Roanoke Engineering Sales Co., ., metal doors & frames & security vault ors; Lundia of Virginia, shelving; Manson & ey, Inc., acoustical treatment (ceilings) & silient tile; Schalow Manufacturing Co., Inc., alkboards & tack boards; Glidewell Brothers, ., painting contractor/supplier; J. S. Archer, Inc., overhead doors; and John G. Kolbe,

., floc, overliead doors, and doors at Rober, ., food service equipment.
Others were: J. H. Lee & Sons, Inc., Courtland, cavating, sodding, seeding, etc., paving conlictor & concrete supplier; Terminix-Seva, Inc., ffolk, soil treatment for termite control; Old minion Steel Co., Chesapeake, precast & cast one erection; Brick & Tile Corp. of Lawrencelle, Lawrenceville, masonry manufacturer; verton Corp., Riverton, mortar; and Lynchrg Steel & Specialty Co., Monroe, steel super/erection/joists, miscellaneous metal &

el stair system & handrails.

Also, J. D. Wells, Inc., Va. Beach, wall insulan & gypsum board contractor, metal stud nstruction & insulation; Architectural Procts of Va., Va. Beach, hardware supplier & efighting devices; Bay Tile Corp., Portsmouth, ramic tile, marble work & quarry tile; Seaard Building Supply Co., toilet accessories; V. E. Mills Plumbing & Heating Co., Inc., Suffolk, rinkler contractor, plumbing fixture supplier plumbing/heating/air conditioning contract; and Stanley W. Johnson, Franklin, electrical uipment/lighting fixtures supplier & electricontractor.

Interior Furnishings & Equipment Suppliers

Suppliers
Miscellaneous Desks, Credenzas, Table & airs: Buck Office Supply & Equipment, Inc., ffolk. Benches, Lounge Seating & Chairs: Litn Office Products Center, Richmond. Counter ools, Lamp, Tables & Chairs: Morton Marks & Ins., Inc., Richmond. Light Table & Paper Cutric Ginn's, Richmond. Cosmetology equipent & furnishings: Bruton & Co., Inc., Chartesville; J. H. Pence Co., Miller & Rhoads, alhimers Industrial Sales, Richmond; and roo Mfg. Corp., Conway, AR.

Also, Reprographics furnishings & equipent: A. B. Dick Co., Va. Beach; Franklin Office ipply, Franklin; and J. H. Pence Co., & Miller & loads, Inc., Richmond. Occupational Clothing rnishings & equipment: Cutters Exchange, c., Nashville, TN; Franklin Office Supply, anklin; Graves-Humphrey's, Inc., Roanoke; iller & Rhoads, Inc. & J. H. Pence Co., Richond; Nasco, Fort Atkinson, WI; and Union becial Corp., Philadelphia, PA. Home Institutal furnishings & equipment: Cutters Ex-



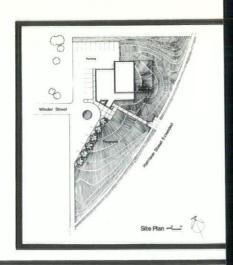
change, Inc., Nashville, TN; Goldberg Co., Inc., J. H. Pence Co., & Thalhimers Industrial Sales, Richmond; and Virco Mfg. Corp., Conway, AR.

Richmond; and Virco Mfg. Corp., Conway, AR.
And, Electricity, Plumbing & HVAC Trades
equipment & furnishings: Diversified Educational Systems, Inc., Berryville; Graves-Humphreys,
Inc., Roanoke; J. H. Pence Co., Richmond; and
Arthur B. Williams, Jr. & Associates, Inc., Sanford, NC. Model Office furnishings & equipment:
Atlantic Word Processing, Inc., Thalhimers Industrial Sales & Miller & Rhoads, Inc., Richmond;
Franklin Office Supply, Franklin; and International Business Machines, Norfolk. Stenographics furnishings & equipment: Atlantic Word
Processing, Inc., John L. Glisson, Inc., Miller &

Rhoads, Inc., and J. H. Pence Co., Richmond; Franklin Office Supply, Franklin; and International Business Machines, Norfolk.

Others were, Office Services & Accounting furnishings & equipment: John L. Glisson, Inc., Miller & Rhoads, Inc., and J. H. Pence Co., Richmond: Franklin Office Supply, Franklin; and International Business Machines, Norfolk. Carpentry & Masonry Trades furnishings & equipment: Graves-Humphreys, Inc., Roanoke; Virco Mfg. Corp., Conway, AR; and Miller & Rhoads, Inc. & J. H. Pence Co., Richmond. Vocational Library equipment & furnishings, Miller & Rhoads, Inc., J. H. Pence Co., and Thalhimers Industrial Sales, Richmond.

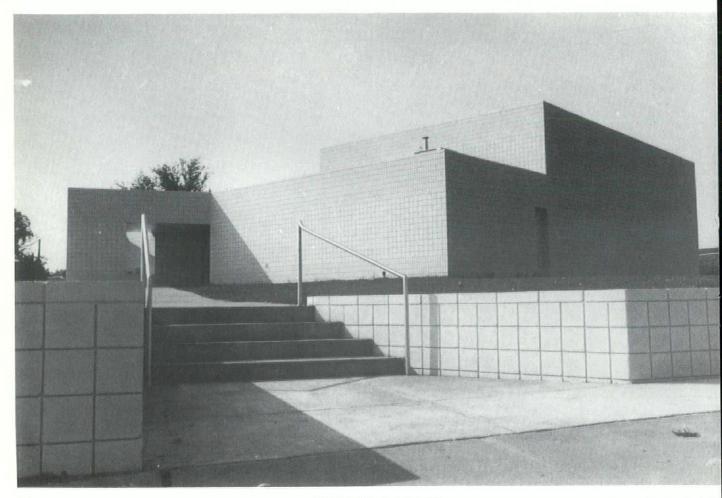




Randolph Boys' Club

Fraher and Harrison — Architects

Mechanical Engineer, CEK, Inc. • Electrical Engin CEK, Inc. • Structural Engineer, St. Clair, Callawa Frye • General Contractor, A. D. Whittaker Const tion, Inc. • Photography, Fraher and Harrison.



Subcontractors & Suppliers (Richmond firms unless noted)

E. G. Bowles Co., excavating, sodding, seeding, etc. & paving contractor; Watkins Nurseries, Inc., landscaping contractor; Richmond Block, Inc., precast copiong; Bowker & Roden, Inc., reinforcing; Old Dominion Masonry, Inc., Ashland, masonry contractor; Holmes Steel Co., Inc., Ashland, steel supplier/erectin/joists/roof deck & miscellaneous metal; Miller Manufacturing Co., Inc., millwork & cabinests; and Richmond Roofing Co., Inc., Ashland, built-up roof & roof insulation.

Also, Perkins & Glass, Inc., glazing contractor; Architectural Hardware, Inc., metal doors & frames; Ar-Wall, Inc. of Va., windows; Pleasants Hardware, hardware supplier; H. E. Satterwhite, Inc., quarry tile; Manson & Utley, Inc., resilient tile; W. W. Nash & Sons, Inc., painting contractor; J. S. Archer Co., Inc., toilet partitions; R. J. Tilley, Plumbing & Heating, Inc., Ashland, heating/ventilating/air conditioning contractor; and W. C. Lang & Son Electric Co., Inc., Ashland, electrical contractor.

The Boys' Club of Richmond, a non-profit organization supported by the nited Givers Fund, has been providing programs for inner-city youths, ges 7-15, at its Central Unit for over 20 years. In 1970 the need of an utreach program was documented and the Club opened its first Extenon Unit in an old home in the Randolph Redevelopment Area of Richond. Membership at the the existing facility inadequate. Because remobling and enlarging the building were not feasible, a fund raising impaign for a new building was started in 1978.

The newly completed building is located on a 1 1/3 acre site on the astern edge of the Randolph Urban Renewal Area. The building, which is signed to accommodate a membership of 300 youths, contains approxtately 6,7000 square feet and includes a games room, library, gymnaum, locker rooms, kitchen and other support spaces. The gym is esigned to allow for expansion in the future. The use of modest materials, oth interior and exterior, were necessistated by budgetary restrictions. The building was completed in May 1980.

A. D. Whittaker Construction, Inc., Ashland, was general contractor and indled carpentry, waterproofing and caulking.

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Locker Rin.



First National Bank

West Atlantic Branch, Emporia

Fraher and Harrison — Architects

Mechanical Engineer, CEK, Inc. • Electrical Engin CEK, Inc. • Structural Engineer, Dunbar, Milb Williams • General Contractor, W.F. Hamm Const tion Co.

The West Atlantic Street Branch was the first step in a carefully laid plan for expansion of the First National Bank of Emporia. The building program called for a traditional design which could be easily expanded to become the bank's main office in the next few years.

main office in the next few years.

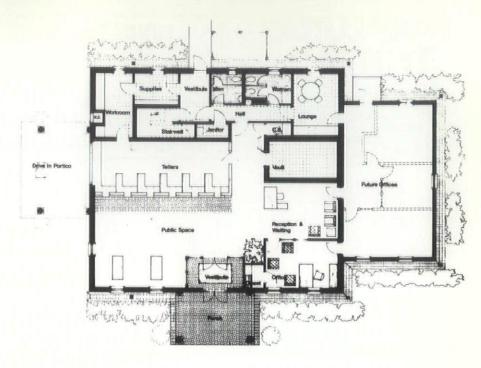
The site of the building is in a rapidly expanding commercial corridor west of downtown.

Because of the location, little pedestrian traffic

would be expected and the site was planned allow for maximum access from vehicles to main banking lobby and to allow ample sta ing space for vehicles using the drive-in facties.

The building contains 3,025 square feet of ished space and 740 square feet of unfinis space on the first floor and 2,235 square fee unfinished space on the second floor. Constr





First Floor Plan

on was completed in April 1979. The general Intractor was W. F. Hamm Construction Com-any of Petersburg.

Subcontractors & Suppliers

Wisco, Inc., Emporia, excavating & paving intractor; Ragsdale & Davis, Petersburg, conete finishing; Hercules Steel, Jarratt, reinforcg, steel supplier & steel erection; Garrett, con & Pool, Inc., Blackstone, concrete sup-

plier; Jones & Meredith, Kenbridge, masonry contractor; John R. Houck Co., Richmond, steel joists; L. D. Kennedy, Emporia, carpentry; Han-over Fabricators, Ashland, wood trusses; and

Weaver Brothers, Inc., Newport News, millwork. Also, Tri-City Plumbing & Heating Co., Petersburg, built-up roof; Roofing & Supplies, Inc., Richmond, roof shingles; Architectural Hardware, Inc., Richmond, metal doors & frames;

Pleasants Hardware, hardware supplier; H. E. Satterwhite, Inc., Richmond, ceramic tile & brick paving; Fendley Floor & Ceiling Co., Richmond, acoustical treatment & carpet; Chapman & Martin, Inc., Amelia, painting contractor & wall covering; Daniel Brothers, Lawrenceville, plumbing/heating/ventilating/air conditioning/electrical contractor; and Meyer & Meyer, Richmond drapprise and window treatments mond, draperies and window treatments.



o tell the Virginia Story

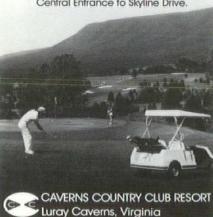
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(Information Courtesy of Travel Devel ment Department, Virginia State Cham of Commerce 1980 Calendar of Events. dates subject to change by localities.)

Late August

Doswell
August 25-31 EAST COAST COUNTRY MUSIC CH.
PIONSHIPS Kings Dominion, I-95 at Doswell, (Route exit 20 miles north of Richmond, VA. Seven days of best of Virginia's Country and Bluegrass performers fr Aug 25 through Aug 31. Each of the seven days then will be ten regional bands competing for cash prizes. a.m. to 8:00 p.m. Pay one price, general admission to Kings Dominion, Mr. Lin Benfield, Box 166, Doswell, 23047, c/o Kings Dominion 804/876-3371

Lexington
August 30 ROCKBRIDGE COMMUNITY FESTIVAL
event is held annually on the Saturday before Labor D
Artists and craftsmen offer their wares for sale. Demor strations of traditional skills such as blacksmithing, weaving, butter making, candlemaking, etc. 10:00 a.m.-p.m. \$10.00 for exhibitors, but has not been decided for the 1980 festival. Greg Raetz, Harer & Goss, Lexington 24450, P.O. Box 916, 703/463-7121.

Breaks
August 30-Aug. 31 TRI-STATE AUTUMN GOSPEL
SING. Tri-State Autumn Gospel Sing Breaks Instersta Park, Breaks, VA. Quartets from several states invited. to 10:00 p.m. on Aug. 30, and on Aug. 31st-10:00 a.m. 5:00 p.m. Free. Ruth Hutchinson, Route 2, Box 335, Grundy, VA 24614. 703/531-8215.

Dublin

August 30 to Sept. 1 2nd ANNUAL VIRGINIA MOUNTAIN CRAFTS GUILD FAIR. Modern and traditional crafts, demonstrations and sales. Held at Claytor Lake State Park. Sat. and Mon. 10:00 a.m. til dark; Sunday n til dark. 50¢ admission to park. VA Mountain Crafts G Fair, Box 1287, Dublin, VA 24084.



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undley Annex

(From page 17)

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., caulking. Also, Consumers/Dornin-Adams, Inc., Lynchrg, built-up roof, other roofing, roof insulation sheet metal; W. H. Stovall & Co., Inc., glass, azing contractor, windows, window wall & prefront; John J. Bagley, metal doors & imes; Pleasants Hardware, hardware super; Virginia Plastering Co., Fredericksburg, aster contractor & gypsum board contractor; vid Allen Co., Raleigh, NC, ceramic tile; Mann & Utley, Inc., acoustical treatment & resil-nt tile; M. P. Barden & Sons, Inc., painting ntractor, paint supplier/manufacturer & wall vering; Cates Building Specialties, specials; Westbrook Elevator, Danville, elevators; mmonwealth Fire Protection Co., Ashland, rinkler contractor; W. A. Dagenhart & Son, chmond, plumbing fixture supplier & plumb-g/ heating/ventilating/air conditioning conctor; Bryant-Durham Electric Co., Inc., Durm, NC, lighting fixtures/electrical equipment pplier & electrical contractor; and Roanoke gineering Sales Co., Inc., toilet compart-

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(From page 7)

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In such a complicated area as energy consumption, it would be foolish to suggest that any one solution will provide all the answers. The overall easing of our energy problem will come about when a wide variety of solutions are applied. By preventing energy waste now we can apply one of the first and easiest remedies. That alone is a giant first step.

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(From page 19)

n, Ltd. Bethesda, MD, stonework contractor; County Asphalt, Inc., Leesburg, stonework oplier; Union Iron Works, Herndon, steel super; Lamar & Wallace, Inc., Landover, MD, millrk & wood doors; and Wailes and Edwards, hesda, MD, cabinets.

Also, J. W. Loveless Roofing & Guttering Sere, Ashburn, built-up roof; J. A. Cassidy Co., ., Beltsville, MD, Pella windows; Southern ors & Acoustics, Inc., Merrifield, resilient tile; P. Stevens store, Aberdeen, NC, carpet; H & Smbing & Heating, Herndon, plumbing conctor; and James R. Harris, Inc., heating/air

nditioning/electrical contractor.

And, from Arlington, Murphy & Ames, strucal wood; American Insulation Co., roof/wall undation insulation; William Hottle, gypsum ard contractor; Leonard Schneeman, ceramic ; John Kampans, painting contractor; Duron nts & Wallcoverings, paint supplier; Union Ilpaper & Paint Co., Inc., wall covering; and minion Electric Supply Co., Inc., lightng fixes supplier.

Church at Northern Va.

(From page 29)

soffits, door and window frames, and the

SS.

n plan, the Nave starts out as an equilateral angle, symbolic of the Trinity. It is covered by imple, single sloped, roof rising uniformly to e of the points. From the front, this highest nt dominates both the composition of new ms and the existing building. The height was by the Biblical directive to build at the highpoint. Since this spot was already occupied the Chapel, the new Sanctuary's high points fixed at a level above the Chapel's apex.

As the white, split face, masonry walls at the de back of the 350-seat Nave converge toward raised chancel, attention is focused on the trgical centers — altar, pulpit, and baptistry. It is roof construction consists of laminated od beams and a wood deck. Wood slats form front and rear walls — housing and hiding eakers and air grilles. The floor is carpeted in

al blue.

An extensive sound system is incorporated of the Nave. Microphones are suspended from ceiling to pick up prophecy for recording, sed circuit televison is planned in. An audio p, enhancing sound for hearing-impaired lividuals, is included.

The spacious Narthex is walled in glass north d south, split face masonry east and west. d oak trim lends warmth. Colors are subdued ve for a red stripe tracing the ceiling's multi-

el perimeter.

The educational portion of the building is anged, linearly, stepping down the contour of land. Splashes of rainbow colors are used oughout to brighten this area.

Subtle changes in angle and orientation direct ws in many directions:

. the Nave overlooks the glade, and lake;

· the Narthex points to the woods;

 Classroom views take in the original cabin and Chapel of the Descending Dove.

For energy conservation, window areas are lited in size and double glazed. They are contrated for maximum visual impact.

Heat pumps are used to provide environmenconditioning for the building. Because of the urch's complicated use patterns, a sophistited mechanical control system was installed, orporating many energy saving features. Together, in tangible form, the new Church at Northern Virginia makes manifest the fervent faith of its congregation.

E. H. Glover, Inc. of Bailey's Crossroads was general contractor for the project.

Subcontractors & Suppliers
American Excavating Co., Inc., McLean, excavating; Craven's Nursery, Fairfax, landscaping;
National Asphalt Paving Corp., Merrifield, paving contractor; Bowie Steel, Bowie, MD, reinforcing; Innamorato Construction Co., Inc., Alexandria, masonry contractor; Perry Steel Sales, Inc., Silver Spring, MD, steel supplier; Hallmark Iron Works, Inc., Newington, miscellaneous metal; James H. Carr, Inc., Kensington, MD, structural wood; Arlington Woodworking & Lumber Co., Inc., McLean, millwork; and Prospect Enterprises, Inc., McLean, waterproofing.

Also, Orndorff & Spaid, Inc., Beltsville, MD, roofing & sheet metal; AC&R Insulation Co., Inc., Beltsville, MD, roof/wall/foundation insulation; Woodbrige Glass Co., Inc., Woodbridge, glass; Bilt-Rite Steel Buck Corp., Greenbelt, MD, metal doors & frames; James A. Cassidy Co., Inc., Beltsville, MD, windows; J. B. Kendall Co., Washington, DC, hardware supplier; T. M. Woodall, Inc., Takoma Park, MD, gypsum board contractor & acoustical treatment;; McClary Tile, Inc., Alexandria, quarry tile; and Fairfax Tile & Linoleum Co., Inc., Alexandria, resilient tile &

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And, F. W. Harris, Inc., Annandale, plumbing contractor; Perrin & Martin, Arlington, heating /ventilating/air conditioning contractor; Dominion Electric Supply Co., Inc., Arlington, lighting fixtures supplier; Becker Electric Co., Inc., Alexandria, electrical contractor; Taylor Lumber & Supply Corp., Rockville, MD, trusses; and McCarthy Manufacturing Co., Inc., Alexandria, sound system.

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Messiah Church

(From page 31)

PROGRAM-To an existing religious facility, provide a 13,400 SF addition to include: SANCTUARY—6,200 SF, to seat 450 persons

in the Nave plus 50 persons in the choir; client insisted on a central aisle and the Chancel separated from the Nave.

COMMONS-1.800 SF, to serve as a gathering place before and after services; an overflow space for special holidays; the main hall for social functions.

ANCILLARY WING-5,400 SF, to provide specialty spaces including: administrative offices for the pastor and staff; a lecture room which can serve as a chapel, choir robing and rehearsal room; support spaces

E. H. Glover, Inc. of Bailey's Crossroads was general contractor for the church

Subcontractors & Suppliers American Excavating Co., Inc., McLean, excavating: Newton Asphalt Co., Inc. of Va., Alexandria, paving contractor; Bowie Steel, Bowie, MD,



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reinforcing; Jones Masonry Co., Fairfax, masonry contractor/supplier & mortar; Perry Steel Sales, Inc., Silver Spring, steel supplier/erection/joists/roof deck; Hallmark Iron Works, Inc., Newington, miscellaneous metal & handrails; Structural Systems, Inc., Gaithersburg, MD, structural wood; Arlington Woodworking & Lumber Co., Inc., McLean, millwork, paneling, cabinets & wood doors; Prospect Enterprises, Inc., McLean, waterproofing; and Wilmar Contractors, Inc., Vienna, caulking & painting contractor/supplier.

Also, Virginia Roofing Corp., Alexandria, built-up roof, roof insulation & sheet metal; Cedar Roofs, Inc., McLean, other roofing; Davenport Insulation, Inc., Springfield, wall insulation; Allen Glass Co., Inc., Alexandria, glas glazing contractor; The Ceco Corp., Blade burg, MD, metal doors & frames; James A. C sidy Co., Inc., Beltsville, MD, windows; W Weaver & Sons, Inc., Washington, DC, hardw supplier; Dodd Brothers, Inc., Falls Church, pl ter contractor & gypsum board contract McClary Tile, Inc., Alexandria, ceramic Southern Maryland Floors Co., Waldorf, resilient tile & carpet; A-Citywide Cooling Heating Co., Inc., Annandale, plumbing fixt supplier & plumbing contractor; Air Move Inc., Springfield, heating/ventilating/air cortioning contractor; and Milton G. Connor C Inc., Alexandria, lighting fixtures/electri equipment supplier & electrical contractor.

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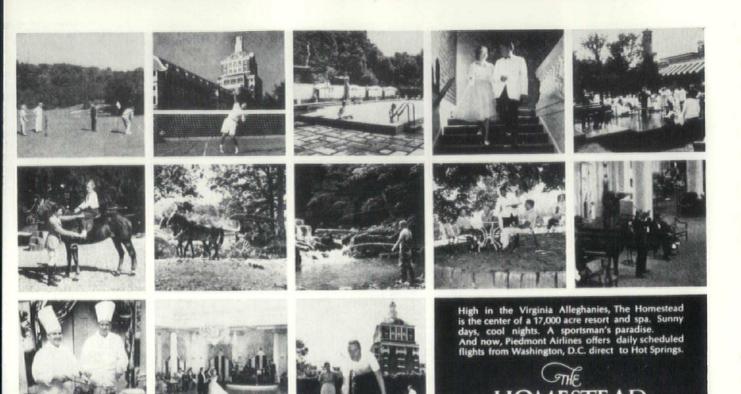
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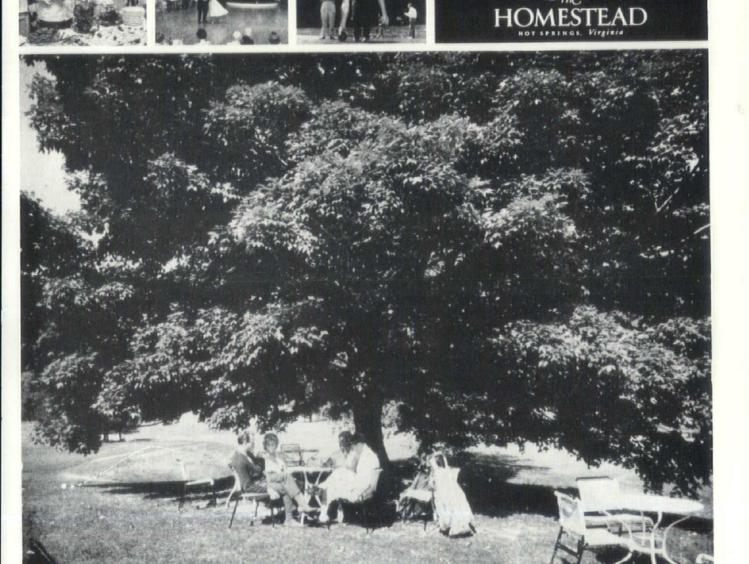
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