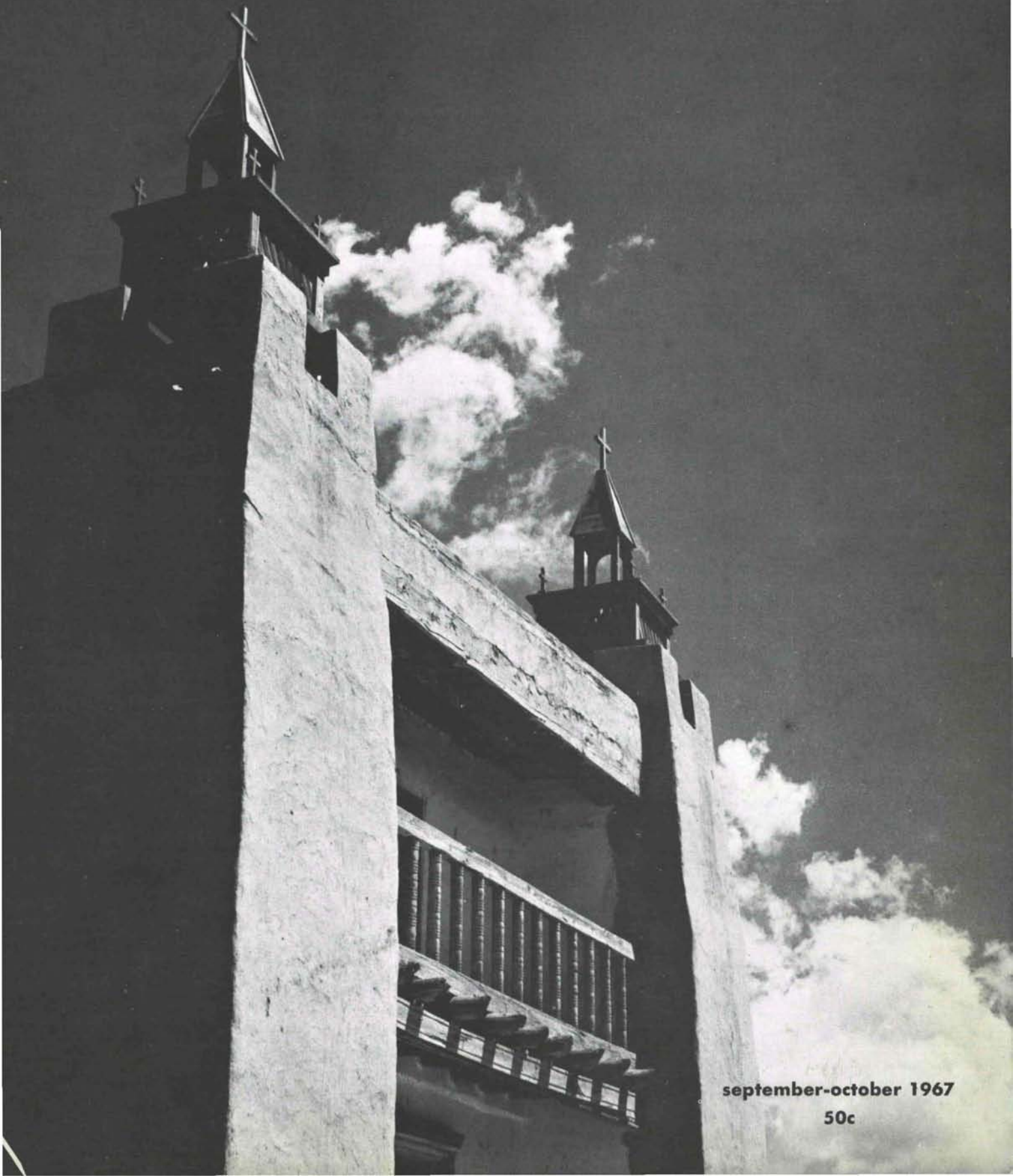


new mexico architecture



september-october 1967

50c

concrete

ONE OF A SERIES

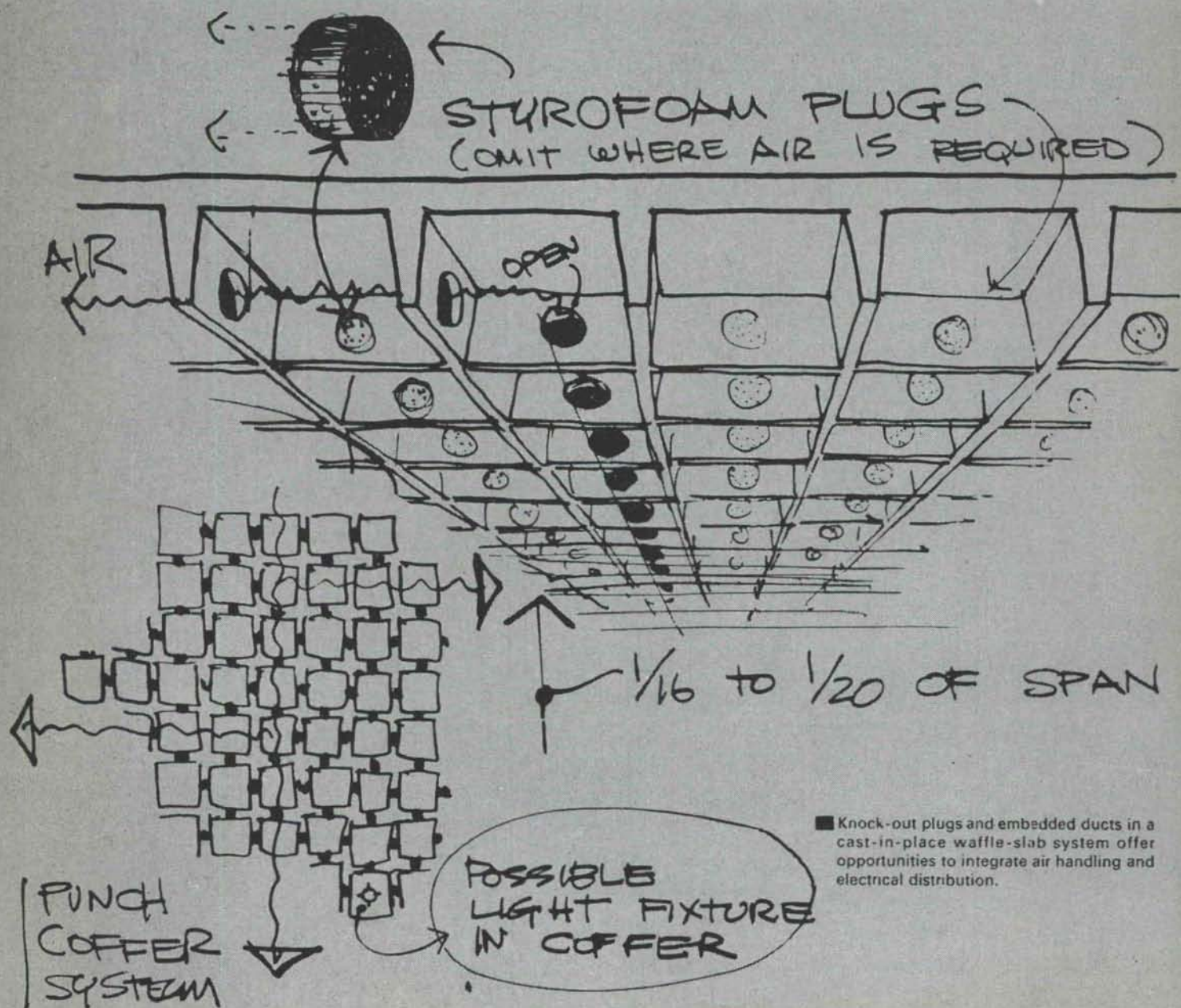
stimulus to broader design thinking in SYSTEMS BUILDING FOR SCHOOLS

In systems building, as in any departure from traditional ways, concrete offers the architect unequalled opportunity.

By its very nature, the material is ideally suited to the systems approach. It permits wider design latitude and infinite

aesthetic variations to relieve standardized structural forms.

Innumerable architects, shaping concrete to new ideas on sketch paper, are broadening the systems concept to meet the needs of industrialized techniques.



ONE IDEA LEADS TO ANOTHER



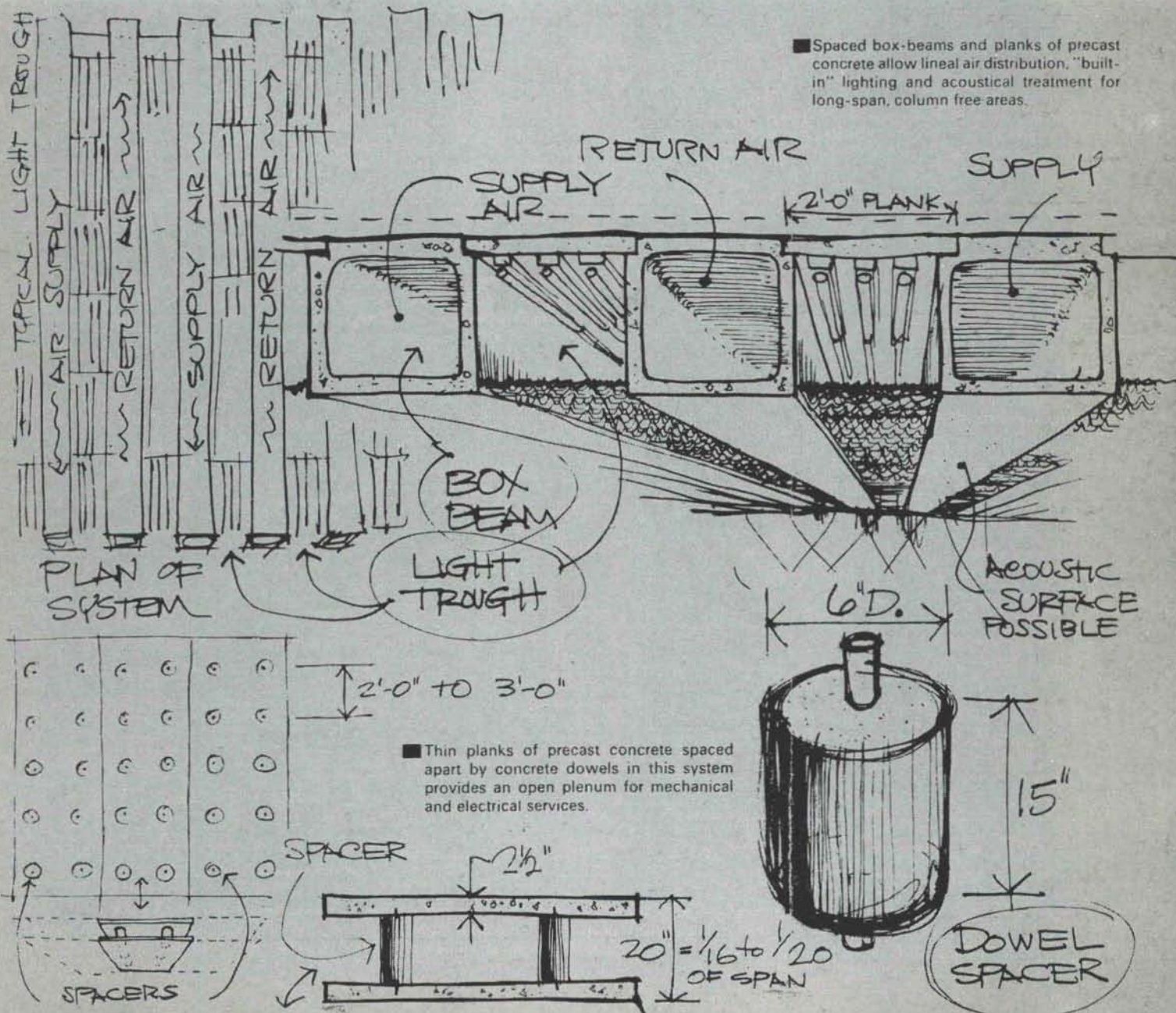
PORTLAND CEMENT ASSOCIATION

Suite 705—5301 Central N.E., Albuquerque, N.M. 87108

An organization of cement manufacturers to improve and extend the uses of portland cement and concrete.

It's hoped that the random thoughts sketched out on these pages will spark ideas for you

In exploring the potential of systems building with concrete, you'll find PCA can help . . . through its technical literature and its nationwide staff of architects, engineers and specialists. Call the PCA office nearest you, or write for additional information.



DOVER
ELECTRIC
ELEVATORS
FOR HIGH RISE BUILDINGS

Mr. Architect . . .

let us show you why a large percent of
Building owners in New Mexico rely upon
us for dependable Vertical Transportation.
Hunter-Hayes Elevator Co.

106 Buena Vista S.E.
Albuquerque, N. M. 87106



OILDRAULIC ELEVATORS
FOR BUILDINGS TO SEVEN STORIES

HUNTER-HAYES ELEVATOR CO.
SUBSIDIARY ■ DOVER CORP.

Offices Throughout the Southwest



WINROCK SHOPPING CENTER
Albuquerque, New Mexico

Geared Passenger Elevators by
Hunter-Hayes.

Other installations throughout
New Mexico such as:

State Capitol Buildings,
Supreme Court Building
State Highway Buildings,
Glorietta Baptist Assembly
Public Service Indian Hospital

To mention but a few

For

- Apartments
- Schools
- Motels

ALWAYS
Specify

STRESCRETE SLABS

FIRE-SAFE, LOW-MAINTENANCE

FLOORS & ROOFS BY . . . THE



200 N. GLENWOOD • EL PASO, TEXAS

nma

vol. 9 • nos. 9 and 10 • sept. -oct. 1967 • new mexico architecture

N. M. A. News	9
New Buildings by Kenneth Clark	
Design Teams urged in Roads Program	
New Lease on life for Las Trampas Church	
New Mexico Highlands University expands	
Camp Stoney — A. S. Merker — Architect	15
The Wooden Walls	
of Territorial New Mexico—	
Richard E. Ahlborn	20
16th Annual Conference—	
Western Mountain Region AIA	26

(Cover — San Jose de Gracia — Las Trampas, N. M.)

— Official Publication of the New Mexico Society of Architects, A. I. A. —

Society Officers

President—Robert Mallory
Vice-President—Kenneth Clark
Secretary-Treasurer—Beryl Durham
Director—Van Dorn Hooker
Director—Albert S. Merker
Director—James Murray
Director—Don L. Oschwald
Director—John Reed
Director—James Voll

Commission for NMA

Bainbridge Bunting)
John P. Conran) Co-Editors
W. M. Brittelle, Sr.—Advertising
Van Dorn Hooker—Circulation
Albert Merker
Robert Mallory
John McHugh
James Murray
John B. Reed

OUR 31ST YEAR CLIMATE DESIGNING
PAINT FOR THE SOUTHWEST

HANLEY'S *and the*



IN ARCHITECTURAL
QUALITY PAINTS

SUNFOE
AMBASSADOR



HANLEY PAINT MFG. CO., INC.

EL PASO, TEXAS
PH. 532-6921
755-9821

ALBUQUERQUE
NEW MEXICO
PH. 265-1524



WE CAN DO A QUALITY BUILDING
JOB FOR YOU AT LESS COST WITH
WEYERHAEUSER LAMINATED WOOD BEAMS
WEYERHAEUSER LAMINATED WOOD ARCHES
WEYERHAEUSER LAMINATED WOOD DECKING

See us for complete Weyerhaeuser Structural Roof Systems.
We can do the complete job from estimate through erection.
Call for estimates or more information.



Weyerhaeuser Architectural Specialty Dealer

ALBUQUERQUE

1881

Lumber COMPANY

1967

3825 Edith, N.E.

Phone 345-2511

Variations on a theme :

NEW **Spectra-Glaze**®

glazed masonry units
DESIGN SERIES

(not an alternate for
any other material)

Your choice in color, texture,
form, scale and pattern . . .
Select from a variety of
scored units to reduce scale
for as little as a nickel extra
per block . . . Build, decorate
and finish in a single
operation. Thru wall,
load bearing units eliminate
expense of back-up
wall . . . Specify
Spectra-Glaze glazed
concrete units in your
base bid to realize
their unique
advantages of
design flexibility
combined with
lower-in-the-wall
costs . . . Local
delivery, world-wide.

Ⓢ Cataloged in SWEET'S

(R) Reg. U. S. Pat. Off. Canada & other countries by The Burns & Russell Co.
FEATHERLITE TILE COMPANY P. O. Box 489, Erskine Rd.
LUBBOCK, TEXAS 79408 Phone 809 & PO-3-8202



O'MALLEY GLASS & MILLWORK CO.

WE FURNISH AND INSTALL

- CURTAINWALLS
- GLASS STOREFRONTS

WE MANUFACTURE

- MILL WORK
- WOODEN "LAB" EQUIPMENT

Enjoying 55 Years of Service

ALBUQUERQUE YUMA EL PASO
TUCSON GLENDALE PHOENIX



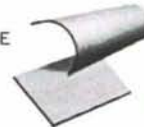
*At
Rancho Bernardo...
there is no compromise
with quality*

THE SPECIFICATIONS CALLED FOR GENUINE CLAY MISSION TILE

Rancho Bernardo, in San Diego, was a Spanish land grant, and this rich heritage inspired its architectural theme. Typical is the use of red mission tile on the handsome Bernardo Villas. Neither beauty, quality nor authenticity was sacrificed, for Frank L. Hope and Associates, architects and engineers, specified only genuine clay tile—from the kilns of San Vallé. After all, if it isn't clay... it isn't tile.

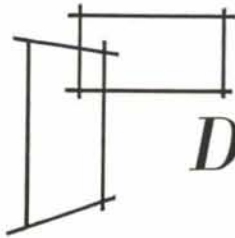
San Vallé TILE KILNS
Since 1898
Representative for Ludowici-Celadon Quarry Tile

MISSION TILE



CLAY SHINGLE

1258 NORTH HIGHLAND AVENUE, LOS ANGELES, CALIFORNIA 90038 • TELEPHONE (213) 464-7289



DON J. CUMMINGS CO., INC.

BUILDING PRODUCTS
ENGINEERING SALES AND SERVICE

● Builders Hardware

Eaton Yale *
Von Duprin *
Norton *
McKinney Mfg. *
Trimco *
H. Soss Mfg. *
L C N Inc. *
Glynn Johnson *
Falcon Lock Co. *

● Bath Room Accessories

Hall Mack *
Miami Carey *
Crown Zellerbach *

* Representative Inventory of Materials in stock in Albuquerque

● Misc. Metal Building Products

1. **Fenestra & United Steel Fab.**
Hollow Metal Doors & Frames *
Standard & Custom Fabricating
2. **The Cookson Co.**
Rolling Service Doors, Fire Doors,
Counter Doors, Rolling Grills,
Side Coiling Grills.
3. **Mills Co.**
Movable Walls & Office Partitions,
Toilet Partitions
4. **Miscellaneous**
Chalk & Tack Boards, Louvers *
Sky Lights, Coat & Hat Racks

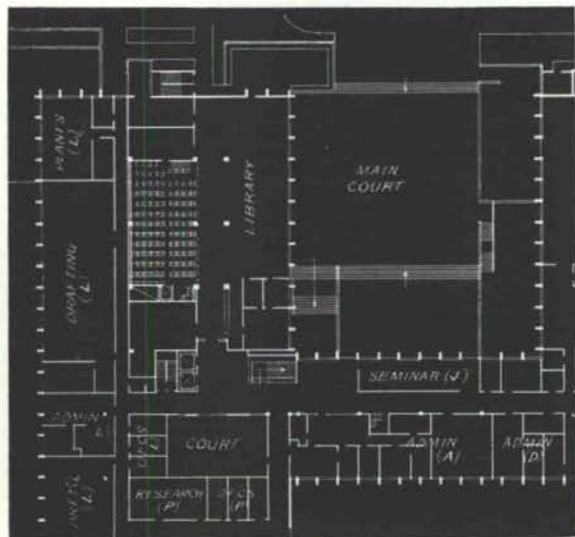
● Commercial Kitchen Equipment

G. S. Blodgett Company, Inc.
Vulcan-Hart Corp.
South Bend Range Company
Cleveland Range Company
Hobart Manufacturing Company
Kloppenbergs & Company
Koch Refrigeration
Bally Case & Cooler, Inc.
The Elliott-Williams Co., Inc.
Victory Metal Manufacturing Co.
MJM Manufacturing Company
Stero Dishwashing Machine Mfg. Co.
Waste King Corporation
Groen Manufacturing Company

2712 Carlisle, N. E., P. O. Box 3486

Albuquerque, New Mexico
Phone (505) 265-8421

Before you get to Blueprints...



we can help you
give your client
an extra service
(and at no extra cost)

Just ask our Communications Consultant to drop by. He can help you provide facilities for communications that will keep pace with growth.

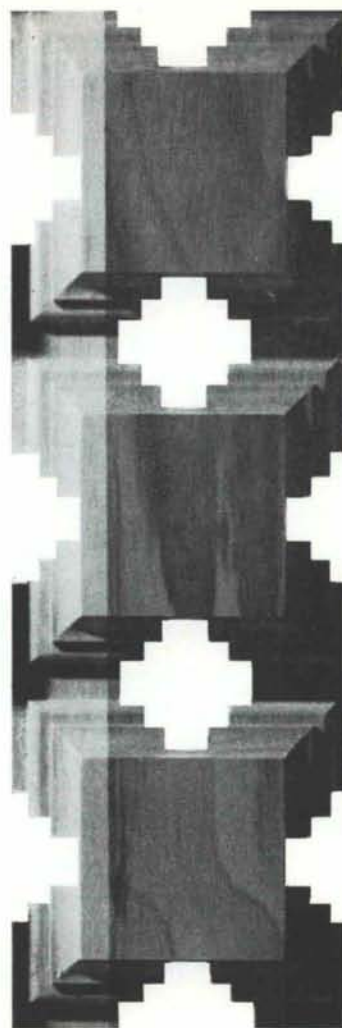
At no cost, he'll be happy to take your building plan, provide a schematic for your building's entire communications system, and deliver it to you to make it a part of your complete plan.

At the planning stage, he can show you how you can save the extra costs and delays that can crop up by waiting to plan communications after construction has begun.

Just call our Business Office and ask for our Communications Consultant. There's no obligation, of course.



Mountain States Telephone



Simplicity

is radiated in carved wood by Customwood. Expressively designed in the finest grains of hardwood, Customwood panels, grilles and doors are the focal point of any interior. Write for your personal catalog, price list and samples.

Customwood
MANUFACTURING COMPANY

3620 High Street, N.E.
Albuquerque, New Mexico
87107

See SWEETS 1967 2C/CU
(1966 5C/CU)

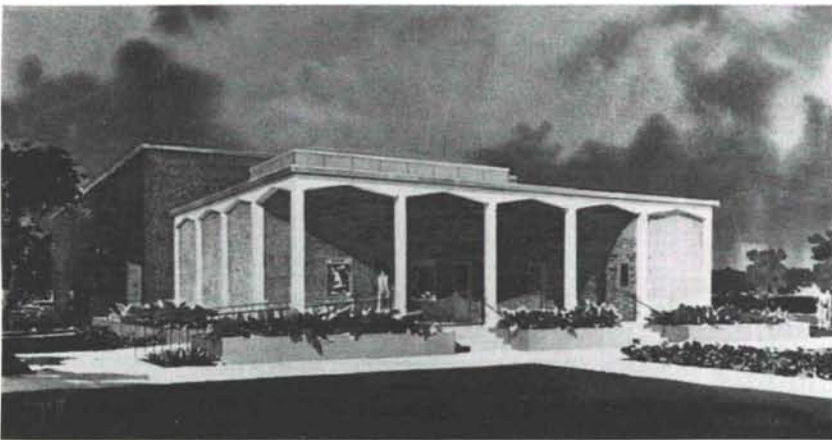
TWO NEW BUILDINGS BY KENNETH CLARK, FAIA

Two recent designs prepared by Kenneth S. Clark, FAIA, Santa Fe, for Holloman Air Force Base, New Mexico.

A 75-bed general hospital with health laboratories, out-patient clinics, and administration offices was completed in May, 1967.



And a 500 seat motion picture theatre is under construction.



AIA URGES GOVERNMENT TO REQUIRE DESIGN TEAMS IN ROADS PROGRAM

WASHINGTON, D. C. — Congress was asked today by The American Institute of Architects to make "design concept teams" of specialists a required part of the Federal Government's interstate roads program.

AIA first vice president, George E. Kassabaum, of St. Louis, Mo., told the Senate Committee on Public Works that architects were "convinced that this approach will produce a highway that is a part of the community, rather than one that takes the community apart."

Design concept teams are panels of engineers, economists, sociologists, planners and architects who focus on the "complete social, economic and physical impact" that a given freeway or expressway corridor will have on a community.

The concept team, said Kassabaum, is being tested on a 20-mile segment of the Interstate Freeway System in central Maryland. He said that AIA strongly urges that such a team be required by the Federal Government for the de-

sign of all future segments of the Interstate System.

Kassabaum added that design opportunities in highway safety have not been fully exploited, nor are highway engineers making use of significant breakthroughs in lighting, breakaway light and sign structures, and similar innovations.

"The fact of the matter is that good design cannot be prescribed," said the AIA official. "The design opportunities which a highway represents do not derive from any text book or code. Of course, there are reasonable guidelines, but the greatest design success is the product of specialized skills.

"If the Federal and state highway departments would only utilize the design skills that are now available, we are convinced the highways would be safer and less disruptive," Kassabaum concluded.

The AIA testimony was delivered as part of hearings underway on the Highway Beautification Act of 1965. The AIA, which represents 22,000 of the nation's architects, reaffirmed its stand in support of the Beautification Act.

The Institute recommended that mandatory just compensation features of the beautification law be repealed and asked that the law be amended to permit states to provide effective billboard and junkyard control by either compensation or police power.

NEW LEASE ON LIFE FOR THE CHURCH AT LAS TRAMPAS, N. M.

The Church of San Jose de Gracia de Las Trampas has been given a new coat of mud plaster, a new roof and two new towers. The project was undertaken by the people of Las Trampas with the financial assistance, and council of the Las Trampas Foundation.

Kellogg Roofing Service of Santa Fe was employed to apply the new bonded roof. Livermore Construction Co. of Santa Cruz constructed and installed the wood

More 



Serving Southwestern New Mexico
and El Paso with
Quality Concrete Masonry Products
and many allied building materials



Hollow Metal Doors and Frames

Wood and Plastic Folding Doors

Commercial Hardware

Reinforcing and Fabricated Steel

Residential and Commercial Steel and Aluminum Windows

Builders Block & Stone Co., Inc.

Builders Block & Supply Co., Inc.

P. O. Box 1633

Roswell

El Paso

P. O. Drawer FF

Las Cruces

622-1321

532-9695

524-3633

Members of New Mexico Concrete Masonry Assn. and National Concrete Masonry Assn.

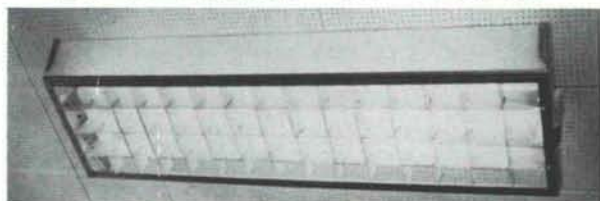
50 YEARS AGO . . .

This was the modern way to heat



TODAY . . .

IT'S HEAT-OF-LIGHT



Now there is a practical, low cost electric heating system that allows you complete freedom of material selection and expression of design. It's Heat-of-Light.

Heat-of-Light puts to use the heat given off by lighting fixtures, making it an effective, low-cost heating system, free from maintenance, and at the same time, increasing the effectiveness of the over-all lighting system.

Call Ed Fogleman at the
**PUBLIC SERVICE COMPANY
OF NEW MEXICO**

for complete details on
Heat-of-Light system.



towers. These towers were copied from the ones shown in old photographs taken of the church between 1900 and 1930.

Mrs. Tranquilino Lopez, one of the two *mayordomas* of the church for 1967, directed the crew of women plasterers and did a major portion of the plastering herself. Tranquilino Lopez and Bernadino Armijo, the two *mayordomas* for 1967, were in charge of the restoration project. Both men are also members of the Board of Directors of the Las Trampas Foundation.

The scaffolding to do the mudding job was loaned by R. E. McKee, Contractor, of Santa Fe and a truck for transporting the scaffolding to and from Las Trampas was provided by Mr. Lewis Barker of Pojoaque.



the church is stripped of all loose mud plaster.



Mrs. Fermina Leyba and Mr. Jose T. Lopez prepare the mud plaster mix.



Mrs. Oufila V. Aguilar of El Valle applies a new coat of mud plaster.



The bell is lowered from its improvised position under the balcony railing. It was hoisted and hung in its proper place in one of the towers.



Nathaniel A. Owings, FAIA, senior partner of Skidmore, Owings and Merrill, Architects, supervises the installation of the towers.



The new look of the Church of San Jose de Gracia.

More

Who Cares Who Raises The Roof?

You do, if you want a good one! The quality of workmanship you get on your job is just as important as the quality of materials. Specify ZONOLITE® VERMICULITE INSULATING CONCRETE by approved Zonolite Applicators. Get years of trouble-free service with an effective heat barrier of the "U" value you specify, and flexibility of construction that allows it to conform to any size, shape or contour. This lightweight economical material weighs just $\frac{1}{6}$ as much as structural concrete, yet makes a permanent, rot-proof, fireproof roof deck, poured all in one piece so there are no seams to calk.

Approved Zonolite Applicators observe strict quality control, following rigid industry standards. Upon completion of your roof you get a certificate signed by the applicator and by Zonolite that your concrete was mixed and applied as specified.

Avoid the risk of substandard materials and workmanship. On your next job specify a roof deck of Zonolite Vermiculite Concrete — by an approved Zonolite Applicator.



Zonolite Division, W. R. Grace & Co.

Southwest Vermiculite Co.
5119 Edith Blvd. N.W., Albuquerque, N. M.
345-1633

Design Interiors

Complete Design Service

- ★ Office Furnishings
- ★ Contract Sales
- ★ Color Co-ordination
- ★ Draperies, Carpeting, Accessories

Professional Design Staff

3 Locations to Serve You

THE PAPER MILL, Inc.
132 W. Las Cruces Ave.
LAS CRUCES, N. M.

DESIGN INTERIORS
120 Morningside, S.E.
ALBUQUERQUE, N. M.

THE INK WELL, Inc.
314 Ninth Street
ALAMOGORDO, N. M.

WORKING FOR: An improved business climate in the New Mexico Construction Industry



W. D. Ross
Executive Director

205 Truman N.E.
Albuquerque,

265-8703
New Mexico 87108

NEW MEXICO HIGHLANDS EXPANDS

New Mexico Highlands University, located in Las Vegas, N. M., has undergone considerable expansion in the last few years. This expanding enrollment is expected to continue — from 1700 students in 1966-67 to 2000 in 1968-69, and on to some 3000 students by 1975.

To guide the Board of Regents in the decisions of what will be needed and where to build for these needs, a General Development Plan has been prepared by Harvey S. Hoshour, Albuquerque architect. Mr. Hoshour lays down the broad guide lines for expansion. He asks that the present streets, which cut through the campus, be eliminated and that pedestrian malls be developed. It is unfortunate that he was not asked to present more detailed suggestions of how these malls might be designed, or how the spaces around and between the buildings might be dealt with.

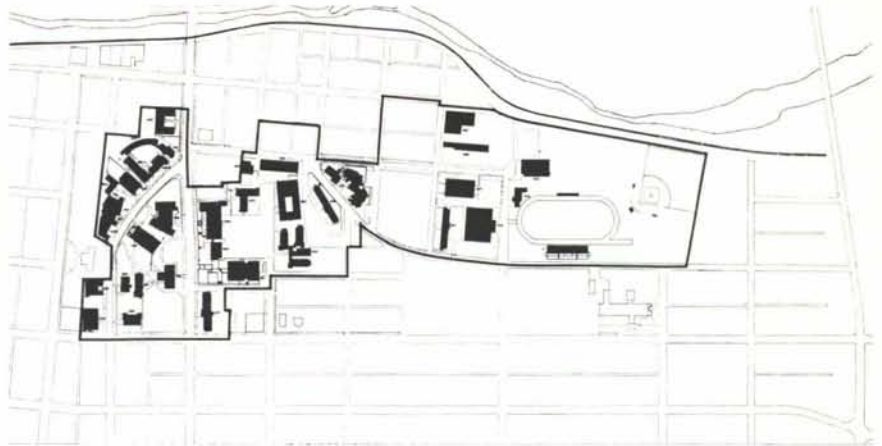
It is all too evident that no thought has ever been given to the relationship of one building to another on the existing campus. The present campus gives one the impression that each new building project was designed and constructed by separate architects on separate lots, all owned by separate clients.

While complete dominance of a single building style is to be avoided, it does seem that some cohesive order is desirable. The General Development Plan may help to establish a sense of "campus," but only if the Board of Regents will employ a continuing architectural advisor, such as Mr. Hoshour, and an imaginative landscape architect.

—JPC

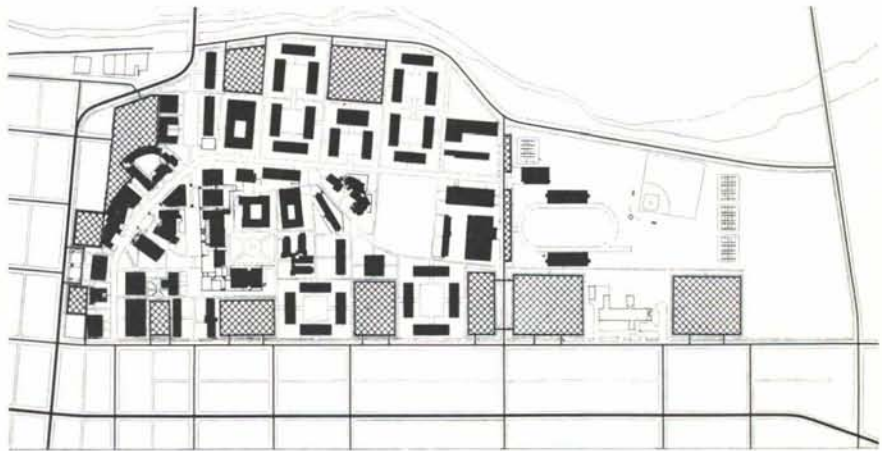
THE THOMAS C. DONNELLY LIBRARY

The new Donnelly Library is the most noticeable and impres-



The existing Campus — 1967

and the expanded Campus — 2000



The crosshatched blocks indicate parking areas. The heavy lines show the vehicular circulation.

sive of the recent work at Highlands.

Robert Walter, the architect for the Library, describes the building as follows: "This building is made



of concrete, steel, stone and glass; these are real and measurable elements that can be seen, touched, walked under and climbed through. This reality is only a part of architecture. What is not so obvious is that architecture also must offer events of the imagination, and they are difficult and elusive to define.

The space is deliberately dramatic and designed to involve people as both spectators and actors, moving on many levels against other planes and in other volumes. It is made to be used, looked out of and down from; it is not designed to be simply looked at. The large concrete forms are left raw in honesty and to fix the geometry of the space. The brilliant colors are meant as human accents, as

More 

variable as the personalities within the building.

I hope that the building will age with the warmth and kindness of nature's patina and with the use by those who feel that books record human dignity vital to our and future time.



A HIGHRISE DORMITORY

Designs have been completed by Philippe Register, architect, of a 9 story dormitory for New Mexico Highlands University. The dormitory will contain 160 double rooms to accommodate a total of 320 students. The ground floor will contain a dining room for seating 200 people at one time, an apartment, a lobby and a powder room. The eight floors, which comprise the 2nd through the 9th levels, will each contain 20 double rooms, and will have a lounge, toilet facilities, showers, and telephone alcoves.

Each of the student rooms will be approximately 12 feet wide and 16 feet long. Built-in features will include a desk with drawers and Formica top, combination bookshelf and light, and closets with built-in dresser drawers. Each room will be fully carpeted and will have one wall made of material for tacking pictures. There will be two operable windows in each room for light and ventilation.

There will be a basement under a portion of the building which will serve as a laundry area with coin operated washers and dryers, and trunk storage.

The construction will be reinforced load bearing brick with reinforced concrete walls and columns in the basement. Reasons for choosing the load bearing wall system include the attractive appearance and acoustical advantages of 6" thick exposed brick walls between rooms, and the building can be erected more rapidly than if it were constructed with a reinforced concrete frame. The floor construction will consist of precast concrete tees with 2" concrete topping.

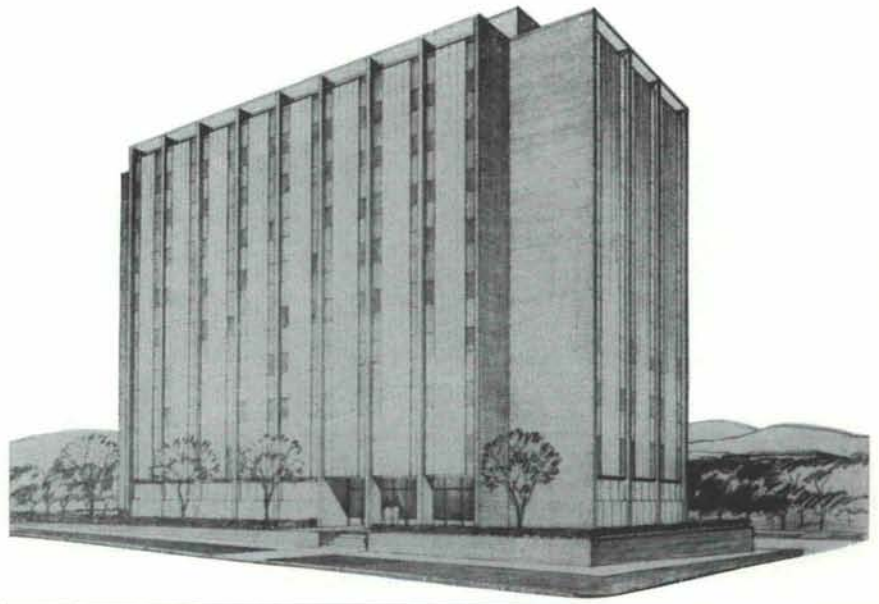
The exterior of the building will be a combination of brick and ex-

posed concrete, which will match the existing campus buildings in terms of materials. The panels between the windows will be textured precast concrete.

This building will be entirely heated by electricity. Each bedroom will have its own heating unit, and, thus, will have its own thermostat. The ground level will be both heated and cooled electrically.

It is expected that construction will be underway by the first of November, 1967, and that the building will be ready for occupancy by the first of March, 1969.

—P. R.

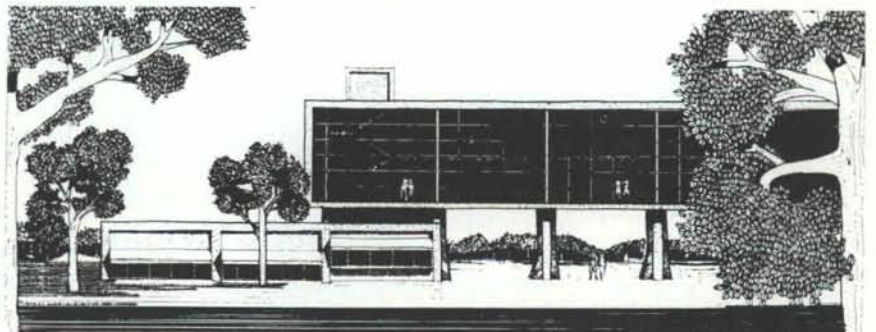


THE TEACHER EDUCATION CENTER

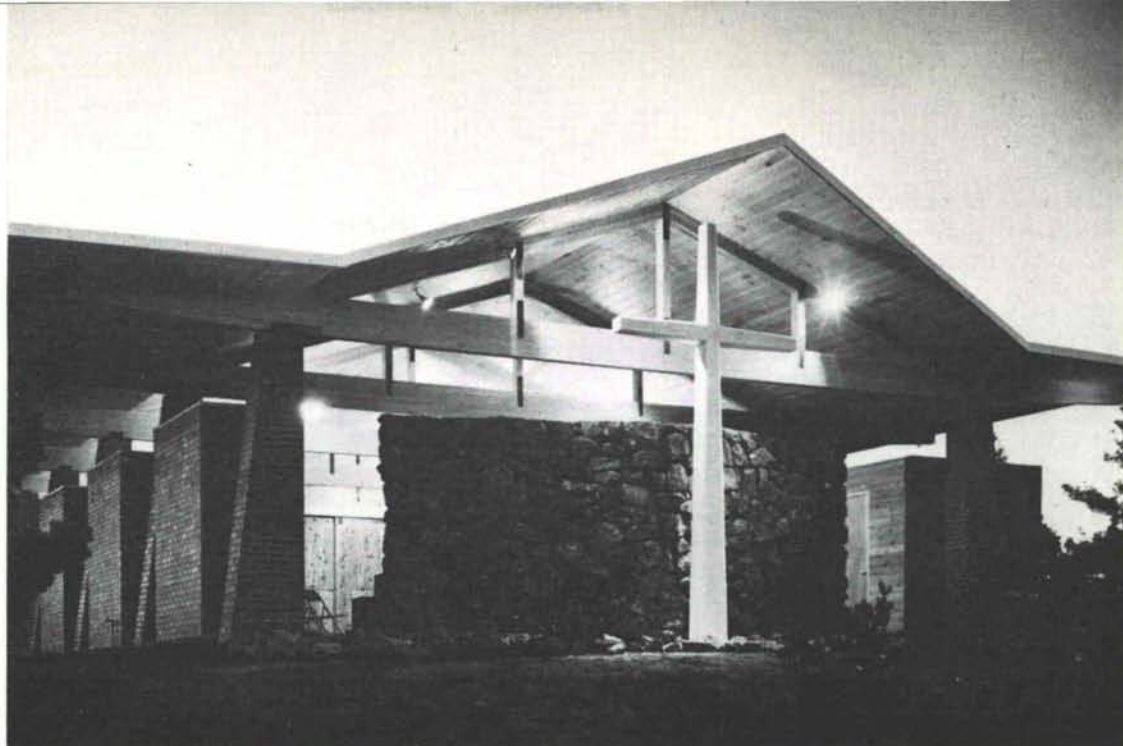
The new facilities for the College of Education at New Mexico Highlands University will front onto a recently developed campus park. The designs for the project include two single story units and

and elevated two story block. The elevated element will span the plaza area created between the separate single story units.

The plans for the 38,000 square foot, concrete frame structure are being prepared by Robert Walters, architect.



End



Camp Stoney

An Episcopal Diocesan
Camp-Conference Center

Albert S. Merker AIA
Architect

Camp Stoney, near Santa Fe, New Mexico, is located on a beautiful unspoiled site of 1500 acres of foothills wooded with pinon and juniper with magnificent views of the high mountain country. At an elevation of 6000 ft., it has a wonderful climate of cool nights and warm sunshine filled days. Moisture is rationed; just quick thundershowers. The Camp is harmonious with these surroundings, and each building is carefully oriented as to location of trees, views, and sun.

The Client desired a maintenance free Camping Center for Young People. (Use of these facilities as a Conference Center is of secondary importance.) The buildings were designed with sturdy elements and rugged materials; each has a beauty of its own—brick, stone, concrete, prefinished decking, and laminated beams.

The Chapel is the focal point as this is a "church camp." A large white concrete cross symbolizes the role of the Church in the World, and is dominant from the exterior. The native stone wall of the altar area needs very few appointments to enhance the church-like quality. There is much weather protection with a roof, brick piers and storage walls, but the open air quality is preserved for communion with nature.

The goals of the architect were to provide the client a Camp facility with durability to function well for years and to age gracefully, with flexibility to accommodate the programs of the many and varied Camp Directors who plan for the different age groups of youngsters, and, above all to create an atmosphere to inspire the young people in their relationship to God and to their Fellow Campers.

—A. S. M.

The camp is divided into separate bunk house areas for boys and girls. Each of the areas contains three bunk houses and a bath house. Built as simple "A" frame structures, each bunk house has accommodations for sixteen campers. The deep porches provide sheltered gathering places for group discussions and teaching sessions.

Consulting Engineers

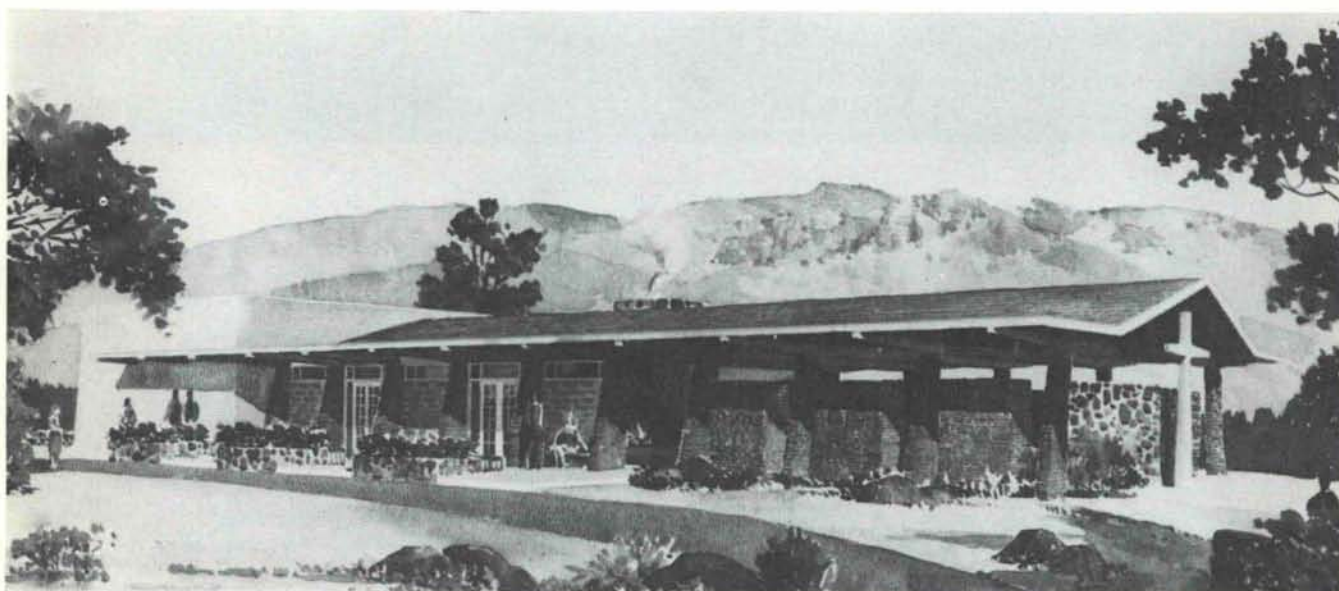
Barkman & Rogers—
Mechanical

Carl R. Albach—
Electrical

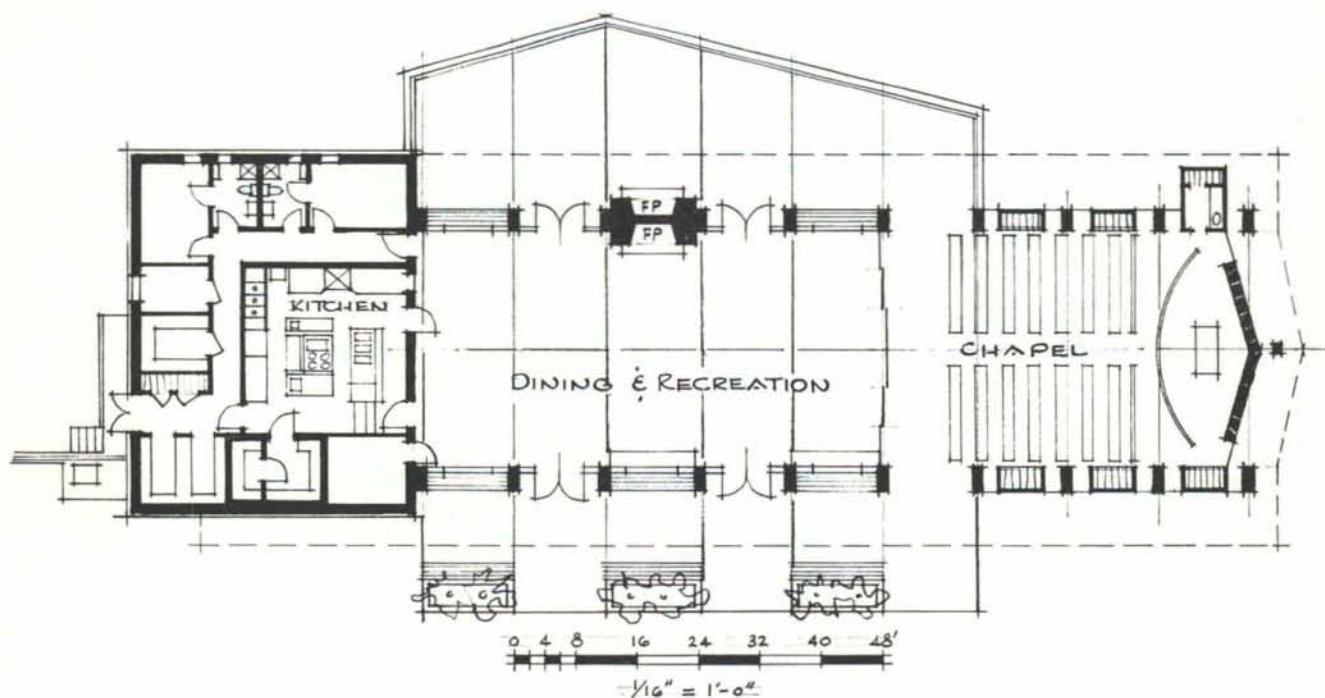
Contractors

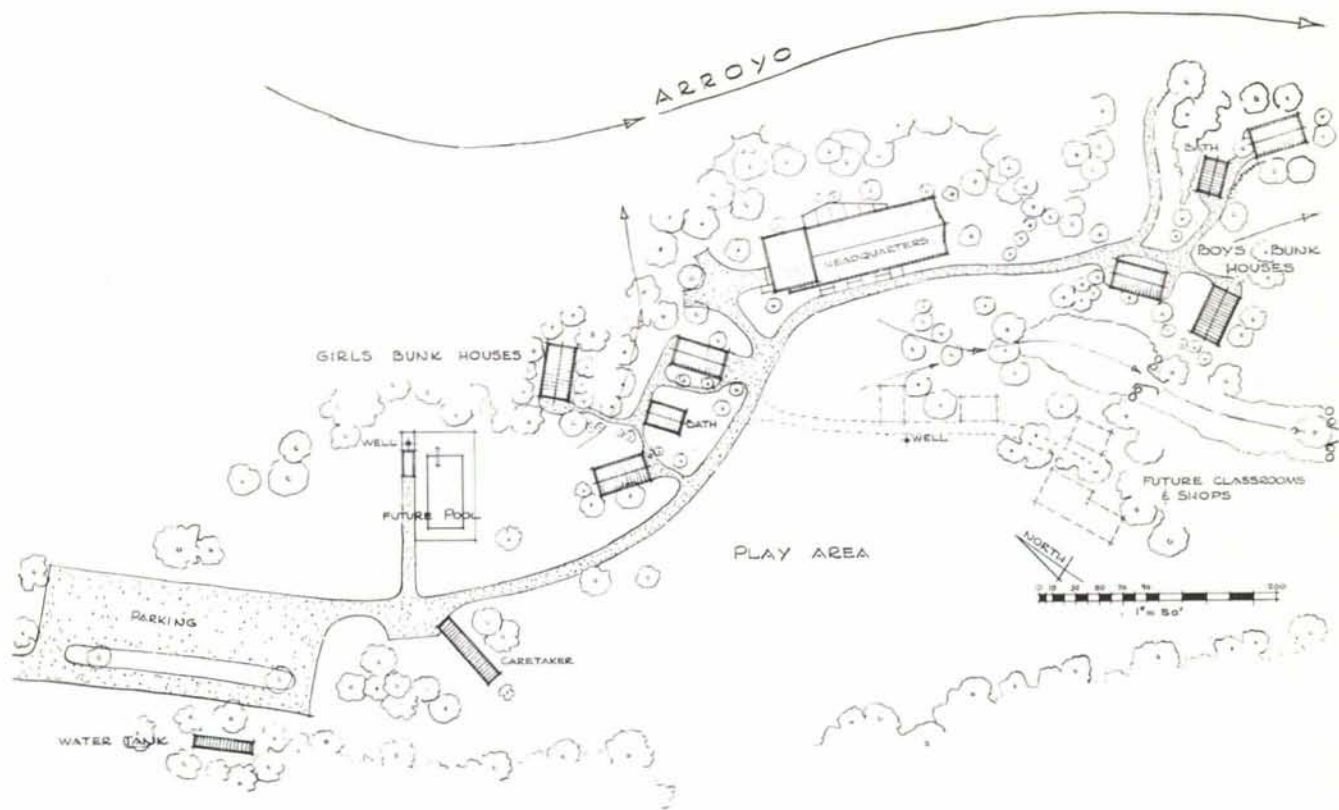
Phase 1—The bunk houses,
bath houses and
utility system.
J. R. Brennand Con-
struction Co.

Phase 2—The headquarters
building.
Star Construction Co.

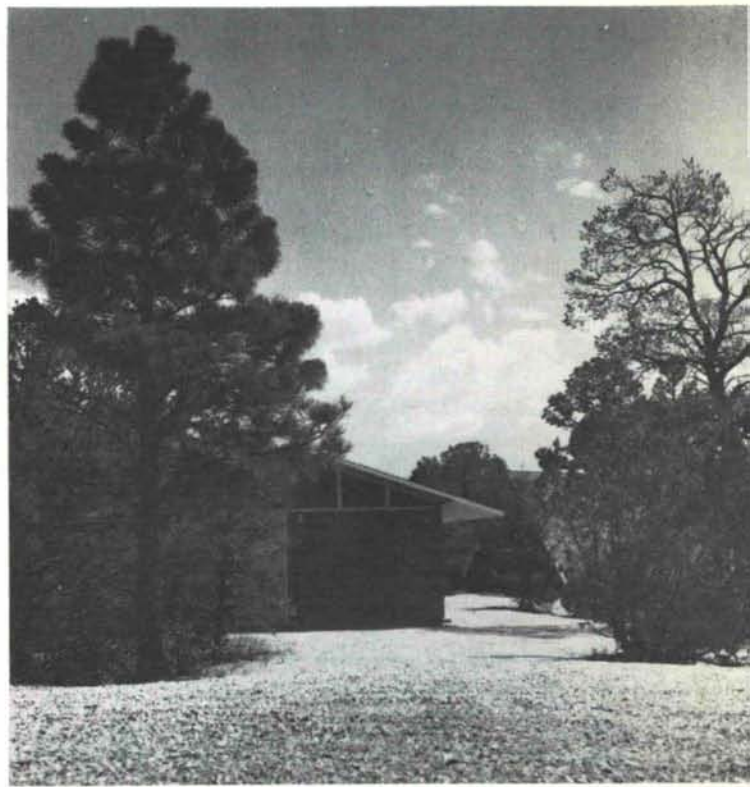


The Headquarters Building

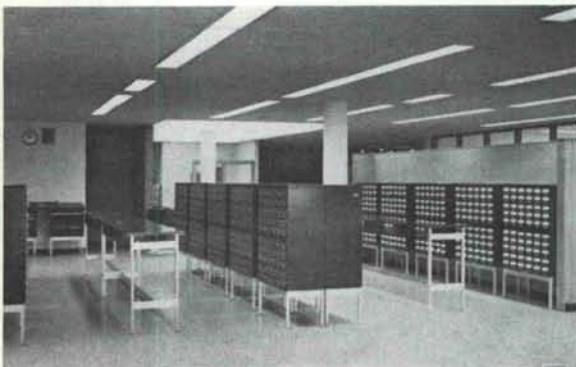




Site Plan



FROM CONCEPT TO COMPLETION



Exclusive distributors
for BUCKSTAFF

Consultation Planning Design Layout

In the library, where mind speaks to mind, uncluttered and compatible design creates study carrels, personalized learning centers. These centers are a long-time dream of theoretical educators who envisioned the creation of units flexible enough for the needs of individual thought patterns. Now, carrels incorporate storage for film, earphone jacks, 8 mm projectors, pre-recorded magnetic tape . . . and partitioned seclusion for undisturbed concentration.

Architects use our design consultation services for:
Science Labs / Offices / Artrooms / Dormitories /
Libraries / Auditorium Seating / Home Economics
Labs / Gymnasiums

UNIVERSITY BOOK STORE ALLIED SUPPLY CO.

2122 Central, SE
Phone 243-1776
Albuquerque, N. M.

ANNOUNCING GALLERY '68

by
RIO GRANDE



STEEL PRODUCTS Co.

Homeliving Ideas and Designs
of the Future . . . On Hand *Today*

- ★ Modular Cabinets (with paint impregnated)
- ★ Celotex Ceilings
- ★ Celotex Prefinished Paneling
- ★ Decorene Plastic Decorator Panels
- ★ Aztec "Space-Age" Ceramic Fireplaces
- ★ Masonite Panel Siding
- ★ Alenco Single Hung Aluminum Windows
- ★ DeVille Marbled Shower Floors
- ★ Bath Fixtures
- ★ Showerfold Tub & Shower Enclosures
(some are even gold anodized)
- ★ Davis Ornamental & Decorative Irons
- ★ Windsor Overhead Garage Doors
- ★ Frigidaire Appliances & Built-Ins

In short, Rio Grande steel's home building supply department can furnish functional assistance during design and construction. Gallery '68 is open for your inspection.

Rio Grande Steel Products Co.

7100 2nd NW 345-2611

- ★ By the way, we also fabricate and sell steel here.

WOOD is WARM and WONDERFUL!

MEMBERSHIP:

ALBUQUERQUE LUMBER CO.
BALDRIDGE HOME SUPPLY CENTER
GIBSON LUMBER CO.
HOME BUILDERS SUPPLY CO.

SANDIA LUMBER CO.
SHOFNER LUMBER CO.
APACHE LUMBER CO., INC.
FIR PINE LUMBER CO.
GEORGIA-PACIFIC CORP.

U. S. PLYWOOD CORP.
SAGEBRUSH SALES CO.
WEYERHAEUSER
DUKE CITY LUMBER CO.
NEW MEXICO TIMBER INC.

These are the experts on wood and wood products to contact
for information and consultation . . . members of



LUMBER MERCHANDISERS ASSOCIATION
ALBUQUERQUE, NEW MEXICO



Attractive use of prestressed concrete double tees in roof,
floor and pedestrian bridges on new Day Lodge at Santa Fe
Ski Basin high in Sangre de Cristo Mountains.

Architect — John Reed



PRESTRESSED CONCRETE PRODUCTS, INC.
MANUFACTURERS OF ROOF AND FLOOR DECKS

THEY EXCEL IN

- ECONOMY • PERMANENCY • DURABILITY
- VERSATILITY • FLEXIBILITY
- and most important • FIRE RESISTANCE

1900 MENAUL ROAD N. E., ALBUQUERQUE, NEW MEXICO 87106

(505) 345-2536



FLUFFY DRYING?

if you want the job done right
...do it with gas

SOUTHERN UNION **GAS** COMPANY

The Wooden Walls of Territorial New Mexico

by:

Richard E. Ahlborn

Associate Curator
Division of Cultural History
Smithsonian Institution
Washington, D. C.

Architectural historians seem to agree that Spanish buildings in New Mexico are characterized by wall construction in adobe brick.

The classic work on Hispanic structures in New Mexico by George Kubler (1940) focused on the region's remarkable series of Franciscan churches. Although many of these were built of stone in the first colonial period, 1598-1680, they converted largely to adobe wall construction in the reconquest era, 1693-1821. More recent investigations, including *Taos Adobes*, (1964) and the article on "The Architecture Of Northern New Mexico" in the 1966 September-October issue of this journal by co-editors Bunting and Conron, pointed out the continuing significance of adobe construction in the Mexican period, 1821-1848, and to a slightly lesser extent in Territorial times, 1848-1912.

Between the Mexican and First World War, building projects in New Mexico reflected the shifts from Hispano-Mexican to Anglo-American authority, technology and taste. An influx of Protestant sects increased ecclesiastic building, and the new Territorial Government required expanded space. In addition, there was the need to house a new complexity of secular institutions, both military and commercial. The diminished threat of Indian hostilities, the advance of rail lines and communication ties, and the remarkable increase of governmental and commercial activities all implemented an expanded physical and economic security. Photographs suggest that the resulting commercial and governmental buildings in post Civil War New Mexico drew inspiration from stone and brick models of Mid-western Victorian revival styles.

The military end of the War between the States found men moving westward again. From 1870 to 1910 the number of inhabitants in New Mexico rose from ninety-two thousand to three hundred and twenty-seven thousand. Settlers, new and old, needed houses.

The older building technology of adobe wall construction was not always sufficient. Moreover, Anglo-Americans were accustomed to solving their domestic housing problems with wood. Powered saws, planers and lathes, as well as the wide variety of molding planes, from Sandusky and eastward, joined the adze, auger, axe, hand lathe, and other traditional tools introduced by Spaniards before 1600. The domestic architecture in New Mexico became a blend of Hispanic and Anglo-American woodworking technology.

Spanish-Americans were masters at woodwork. Seventeenth-century churches and houses in Mexico displayed precisely cut and intricately fitted wooden ceilings and framed doors whose design origins lay in the Mudéjar style of Moorish Spain. Even along the unstable northern frontier of New Spain, hand-somely carved wooden beams (*vigas*) supported heavy earthen roofs in 17th-century stone missions. It is, however, not in these imposing, official struc-

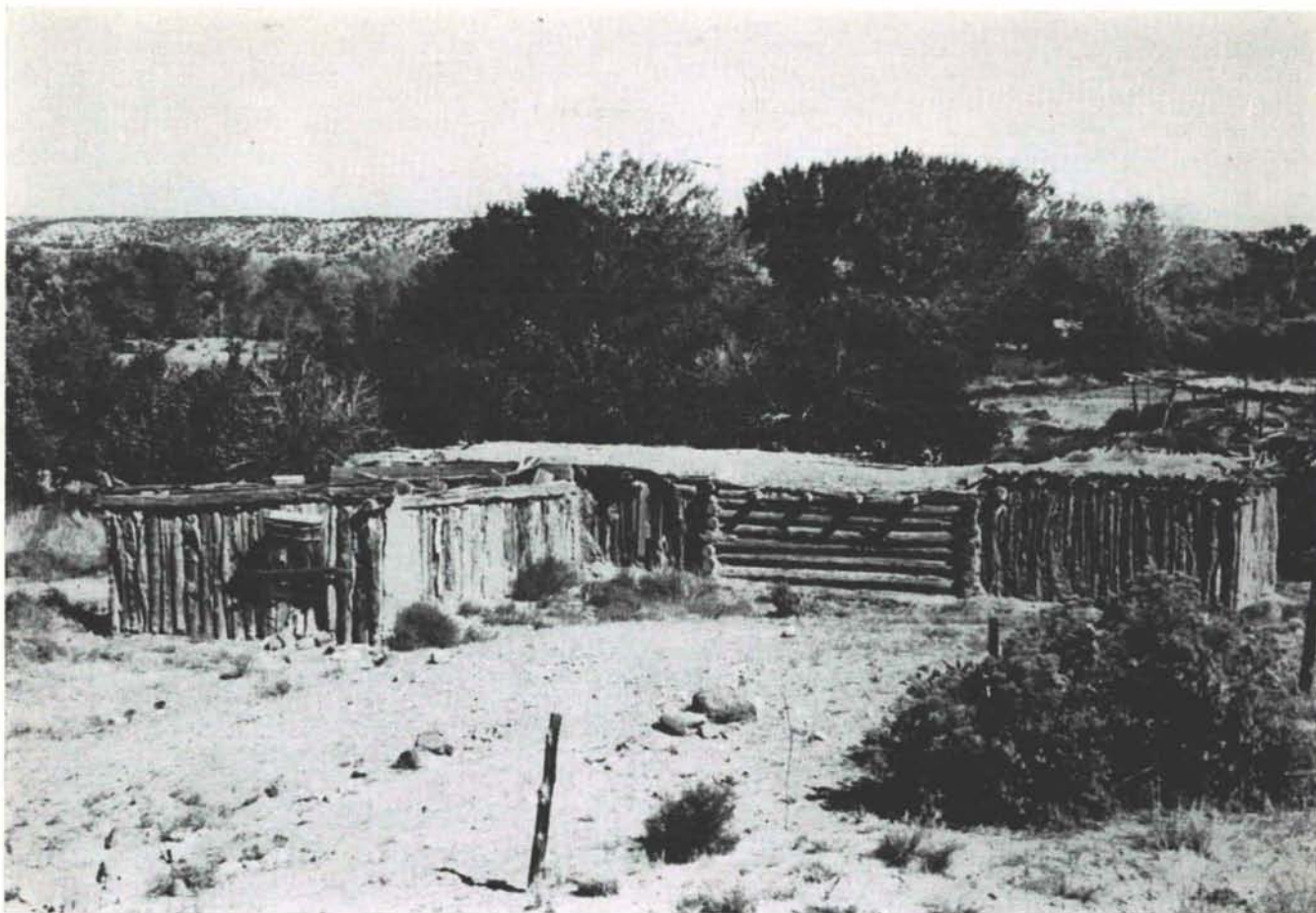


Plate 1

tures of colonial New Mexico, but in the vernacular building methods used by Spanish settlers to raise fences and house walls that we must look for an Hispanic building tradition in wood that persisted through Territorial times.

In New Mexico, Spaniards called a wall of vertical members a *jacal*. The method, often used in pre-Renaissance Europe to form a defense wall, was known as a pallisade: stakes driven upright into the ground and lashed together. Spain and Mexico used the *jacal* to fence in corrals. By Territorial times in New Mexico, closely set posts filled in with adobe plaster served as walls for corrals, stables and houses.

On the Atlantic coast, settlers from northern Europe also built wooden walls before 1700. While Englishmen employed vertically set timbers and inner planking, Scandinavians raised walls of horizontal logs. Massive framing with stout vertical beams eventually gave way to balloon construction in well-settled areas, but houses built of logs set lengthwise and notched at the corners followed the frontier West.

The log house moved into the great river basins and plains, and finally out to California and New Mexico.

Plate 1 shows the two basic methods of constructing a solid wooden wall just described: the vertical post and the horizontal log. Both techniques appear in a single structure built a few miles north of Española on the Chama river, probably before 1900. The form of house and stable are not clearly separated — a practical combination used from rural times in Medieval Europe through frontier times in our Western States. The wall building technologies of Hispano and Anglo-Americans, the use of available materials, and the continuation of a traditional way of life are successfully combined in this specimen of vernacular architecture. It is an exceptional document of the cultural history of Territorial New Mexico.

In our example, the upper end of each vertical post is cut into a tenon. When lined up, the pointed ends establish a running tongue. This lets into a groove cut on the underside of a horizontal capping beam. In nearby corrals, posts set at intervals and at

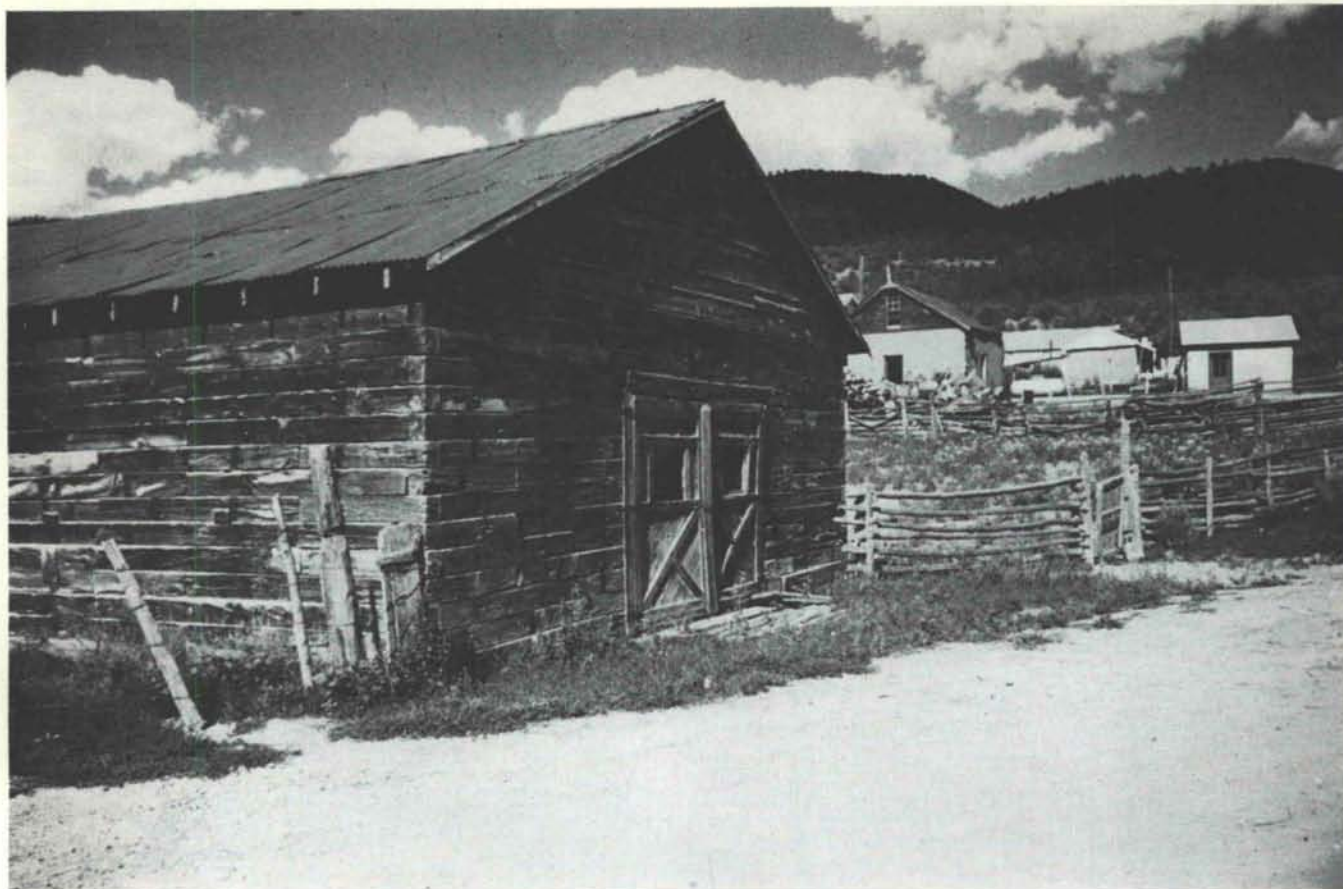


Plate 2

corners are often allowed to retain their natural forks in order to support a capping beam placed at right angles to the parallel walls which they brace. Where nails are plentiful, tops of posts are cut flat and covered by a plank. In houses at Cañones, this plank supports ceiling beams (*vigas*), whose ends are cut flush with the wall and covered with a fascia board. Cracks between posts are filled with adobe plaster, often of sufficient thickness to hide the *jacal* construction. These methods of building wooden walls with vertical members as seen in rural northern New Mexico seems to be a Spanish innovation.

On the other hand, the "log cabin" type of wall appears to have been introduced to New Mexico by eastern settlers from Ohio, Missouri, and Kentucky by early Territorial times. An inventory of 1766 (Twitchell I, no. 454) in the Land Management Bureau at Santa Fe suggests a house made of logs, but the description is too brief to establish the exact method of wall construction. Fortunately, early photographs provide visual documents of log build-

ings in New Mexico, such as the grist mill at the Pascual Martínez house in Taos.

This trading center for Indian and Spaniard, and later for eastern trapper and mountainman, was the site of a sawmill set up by Wilfred Witt before 1860. Las Vegas, because of its site on the railroad, had the Territory's first planing mill in 1879. (Bunting, *Taos Adobes*, p. 11)

Plate 2 indicates a distinctive use of milled lumber in a barn at Vallecitos. Short, thick planks, averaging 4 by 6 by 48 inches, are nailed horizontally over a frame. The unusually short length of these planks may be the result of spacing between studs. However, the lack of uniform size suggests the economic use of scrap lumber. Horizontal sheathing on the gable ends of the barn introduces the third type of wooden wall common to Territorial New Mexico.

Throughout sparsely settled Rio Arriba county, numerous post-Spanish War houses display board and batten gables set above what appear to be traditional walls of adobe brick. Actually, these walls are

made of frames covered with horizontal wooden siding. On this board surface, strips of lathing are set at an angle about a foot apart to produce a diagonal pattern of ridges that hold a thin covering layer of adobe plaster. Board siding may also be set on the diagonal and covered with tar paper before the slanting pattern of lathing is nailed on. The shallow crust of adobe which is held by and covers over the diagonal lathing requires constant repair.

Plate 3 illustrates a common variation in the frame, siding and lathing wall. Here, wider lathing is attached as vertical planks, but the lathing is again used to support a surface of adobe plaster. The adobe surface has fallen away to reveal a set of short, narrow planks set perpendicular to a horizontal median board under a window. Built shortly after the nearby south penitente *morada* of Abiquiú (about 1910), the small building serves as a tiny chapel honoring Our Lady Of Guadalupe.

Wood also appears in buildings of adobe brick. Short beams appear as deeply set lintels over door and window openings. Planks are used to strengthen and level the courses of adobe brick. However, neither use of wood represents the extent of technological innovation shown in the vertical post or diagonal lathing method.

We may assume that the lack of wooden walls in Spanish-colonial New Mexico reflected a cultural preference for adobe technology, as well as an acceptance of the relative inaccessibility of large timbers. Even in Hispanic houses of the mid 1800's, including those built near forested mountain slopes and well-timbered streams, walls of adobe brick predominate. (Post or jacal walls are poorly documented before 1850.) It is not until railways carried machinery for planing and sawmills into the territory that houses began to display the variety of wooden walls described here.

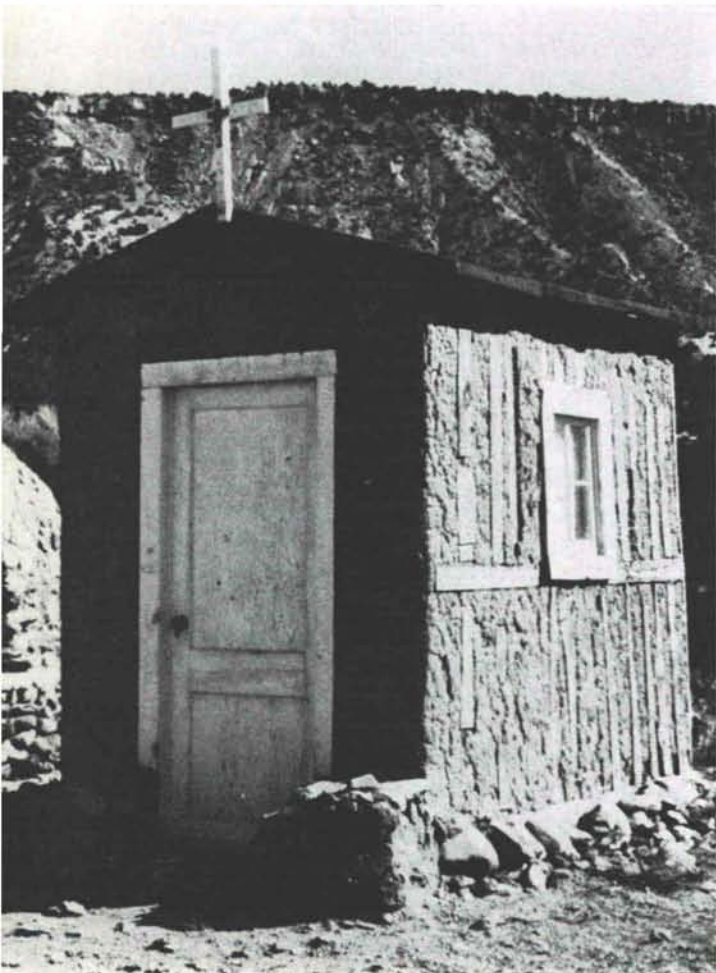
The Territorial architecture of New Mexico is distinguished by more than wooden pediments and porch banisters, and patterned cornices of kiln-fired brick. The Hispanic use of vertical-post walls continues alongside methods of the English-speaking frontier to raise walls of horizontal logs and, with the introduction of milled, standard size pieces of lumber, of siding and lathing on framed studding.

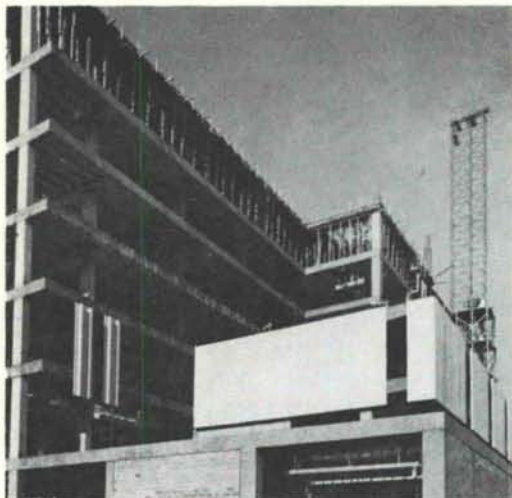
In comparison to Spanish colonial times, adobe takes on a less dominant role as the basic building material of the region. Brick, stone and wood begin to win popular use. But it is noteworthy that adobe is used on board walls of diagonal lathing and vertical posts, perhaps as an Hispanic preference for its visual effect.

Despite the increasing weight of Anglo-American culture, its materials and technology, the traditional forms of late Spanish-colonial architecture in New Mexico persist through the 1800's and well into the present century. This heritage included the use of wooden walls in the vernacular buildings of Territorial New Mexico.

— Richard E. Ahlborn

Plate 3





EDGAR D. OTTO & SON INC.

NEW MEXICO QUARTZ BEAUTIFIES HOSPITAL

Installation has begun on 1400 precast concrete panels on the exterior treatment on St. Joseph's Hospital, Albuquerque. The white quartz exposed aggregate surface material was acquired here in New Mexico. The panels are being produced on Otto's new high production impact table facilities, the only facility of its type in New Mexico. A new peak in product strength and uniformity.

Architect—W. C. Kruger & Assoc.

Engineer—Robert Krause

Contractor—Lembke Constr. Co., Inc.

243-6721

2700 2nd St. S.W. Albuquerque, New Mexico 87103

KINNEY BRICK COMPANY INC.

Manufacturers of:

- Common Brick
- Patio Brick
- Face Brick
- Roman Brick
- Norman Brick
- "SCR" Brick

Distributors for:

- Acme Brick Co.
- Major Brick Co.
- Eureka Brick Co.
- Texas Clay Products
- Alamo Clay Products
- • • • •

Samples and information upon request

Visit Our Office & Showrooms at Plant
5 miles South just off of Second Street
ALBUQUERQUE, NEW MEXICO

Phone 877-4550 P. O. Box 1804, 87103

ALBUQUERQUE TESTING LABORATORY

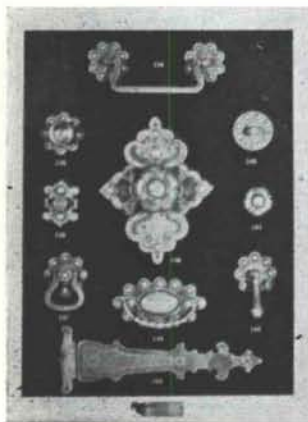
Sub-soil Investigations
For Structural and Dam Foundations

**Two Drills and Crews now
available for Prompt Service**

Laboratory Analysis and
Evaluation of Construction Materials

**All work done under the supervision
of Registered Professional Engineers**

532 Jefferson St., N.E. — P. O. Box 4101
Phone AL 5-8916 Albuquerque
Phone AL 5-1322 New Mexico



Display Spanish Designs

BUILDERS and DECORATORS HARDWARE

• • • • •
Largest selection
in the southwest.
20 different finishes
• • • • •

Come in, visit
and linger in our
show rooms.

BIG JO LUMBER CO.
of Santa Fe

309 San Francisco St.

Ph. 983-7395

Dependable . . .

**SOUND, INTERCOM
AND POCKET PAGING
FOR EVERY BUILDING TYPE**

Our broad experience in this specialized field
is available to you. Contact us for general
planning help.

No obligation, of course.

Executone OF NEW MEXICO

111-A CORNELL DR., S.E., ALBUQUERQUE, N. M. 87106
PHONE 242-4611



TO
WHOM
IT MAY
CONCERN:

"... Trus Joists were delivered ahead of schedule to both jobs and their use speeded the completion in each case."

That's the opinion of Mr. E. B. Cunningham, Cunningham Construction, Inc., of Albuquerque. Here he refers to two buildings recently completed by his firm; The San Pedro Branch Library and an office building on San Pedro, N. E. He also states, "We found Trus Joist most cooperative in supplying shop drawings and help during installation."

Trus Joist also saves the architect time and work. And the client?

Saves him money!

San Pedro Library
Architect
John Reed, A.I.A.



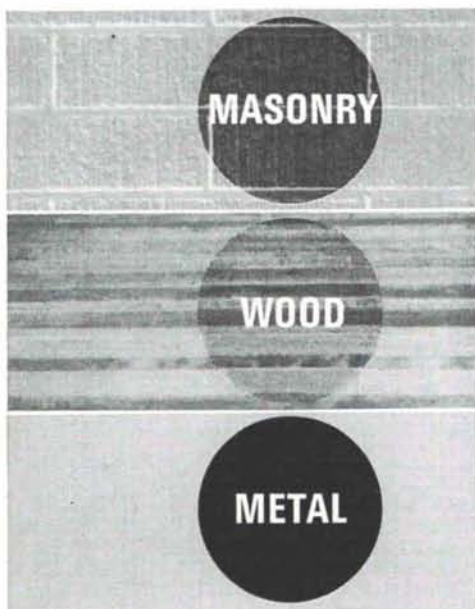
George B. McGill

1113 Pennsylvania, Northeast
Albuquerque 505/256-2058

Flex-tile

An outstanding new two component coating that actually out-performs baked enamels for hardness, gloss, resistance to water, chemicals and stains

MAY BE
APPLIED
BY BRUSH,
SPRAYER
OR ROLLER



Another Quality
Product of . . .



2714 4th St., N.W.
P.O. Box 6086
Albuquerque,
New Mexico



TOILET COMPARTMENTS



- Endless design and pattern possibilities
- Durable, easy to maintain
- Assured local availability ceiling hung, floor mounted or overhead braced

Formica Brand Laminated Plastic is the ideal surfacing material for toilet compartments and other restroom partitions, for the same reason it serves so handsomely on surfaces in other parts of a building.

FORMICA DISTRIBUTOR



PHONE 233-2317
312 INDUSTRIAL, N. E. P. O. BOX 1098
ALBUQUERQUE, NEW MEXICO

16th Annual Conference - Western Mountain Region - AIA



THE TOWN AROUND US

By nature, the Architect seems to be a protestant. He rebels against the ugliness of his surroundings, he bemoans the desecration of our natural resources and he derides uninformed civil officials. In the midst of all this, he rarely stops to wonder how he may play a real and positive role in improving the quality of our environment — the town around us.

In a nation facing an awesome population growth, a vast movement of our rural citizens into urban areas, a wholly new set of social and environmental problems, the architectural profession is finding new challenges.

This conference is dedicated to the task of examining the challenges before us and to seeking ways in which we may meet them.

November 5-8 - Broadmoor Hotel - Colorado Springs - Colorado

Architects!

COMING SOON:

A NEW LINE OF

**CREATIVE
CONCRETE
PRODUCTS**

under the new name of



ALBUQUERQUE AGP GRAVEL PRODUCTS COMPANY

new mexico architecture nma

Published bi-monthly, by the New Mexico Society of Architects American Institute of Architects, a non-profit organization, 115 2nd St., S.W., Suite 200, Albuquerque, N. M. 87101.

Editorial Correspondence: All correspondence should be addressed to John P. Conron, P. O. Box 935, Santa Fe, New Mexico 87501.

Editorial Policy: Opinions expressed in all signed articles are those of the author and do not necessarily represent the official position of the New Mexico Society of Architects, A.I.A.

No responsibility will be assumed by the editor or publishing organization for unsolicited contributions. Return postage should accompany all unsolicited manuscripts.

Subscription rates: single copy 50c; one year \$2.50. Second class postage paid at Roswell, New Mexico.

Change of address: Notifications should be sent to N.M.A., Box 18, University Station, Albuquerque, N. M. 87106 at least 45 days prior to effective date. Please send both old and new addresses.

Advertising: Requests for rates and information relating to advertising should be addressed to W. M. Brittelle, Sr., 115 2nd Street, S.W., Suite 200, Albuquerque, N. M. 87101.

INDEX TO FIRMS

Cooperating in the public relation program of the NMA magazine, making possible its publication and the page upon which their message may be found.

Albuquerque Gravel Products	26	Lumber Merchandise Assn.	19
Albuquerque Lumber Co.	6	McGill, George B.	25
Albuquerque Testing Lab.	24	Miller Metal Co.	27
Anderson, Clinton P.		Mountain States Telephone	8
Agency, Inc.	27	New Mexico Pipe Trades	12
Atlas Structural Concrete, Inc.	4	N. M. Marble & Tile Co.	27
B & B Steel	27	O'Malley Glass & Millwork Co.	6
Big Jo Lumber Co.	24	Otto, Edgar D.	24
Builders Block		Prestressed Concrete	
& Stone Co., Inc.	10	Products, Inc.	19
Cummings, Don J. Co.	7	Portland Cement Assn.	2 & 3
Customwood		Public Service Co. of N. M.	10
Manufacturing Co.	8	Rio Grande Steel Products Co.	18
Design Interiors	12	San Valle Tile Kilns	7
Executone of New Mexico	24	Southern Union Gas Co.	19
Featherlite Tile Company	6	Southwest Vermiculite Co.	12
Hanley Paint Mfg. Co., Inc.	6	Stryco Sales, Inc.	25
Hunter-Hayes Elevator Co.	4	University Book Store	
Hydro Conduit Corp.	28	Allied Supply Co.	18
Kinney Brick Co., Inc.	24	Wellborn Paint Mfg. Co.	25

Complete Insurance & Bonding Service

General Insurance

CLINTON P. ANDERSON AGENCY INC.

215 5th St. S.W. (505) 243-5664

Albuquerque, N. M. 87101

HEAR ABOUT THE REVOLUTION?

THE REVOLUTION
IN HIGH QUALITY
FLOOR COVERING

EPOXY TERRAZZOS

ARE A PART OF THIS EXCITING
REVOLUTION. BEAUTIFUL, SEAM-
LESS, GROUND IN PLACE TERRAZZO
FLOORS GIVE EVERLASTING WEAR,
EASE OF MAINTENANCE AND COLOR
AND DESIGN VERSATILITY.

LET US TELL YOU
THE EXCITING
STORY OF EPOXY
TERRAZZOS FLOORS

NEW MEXICO MARBLE AND TILE CO.

414 Second St., S.W.

Albuquerque, N. M.

P. O. Box 834 • Phone 243-5541

Miller
Metal company

Direct Factory Dealers for

LENNOX

Heating and Air Conditioning

Readily available for your information and/or use
are complete specifications along with Technical
data for the Heating and Air Conditioning require-
ments of your project.

Just call **268-3351** for **Ed Miller** at Miller Metal
Company or the territory manager for **LENNOX**,
Bob Vetterman at **265-0417** for an appointment.

118 Alcazar S.E.

Albuquerque, N. M. 87108



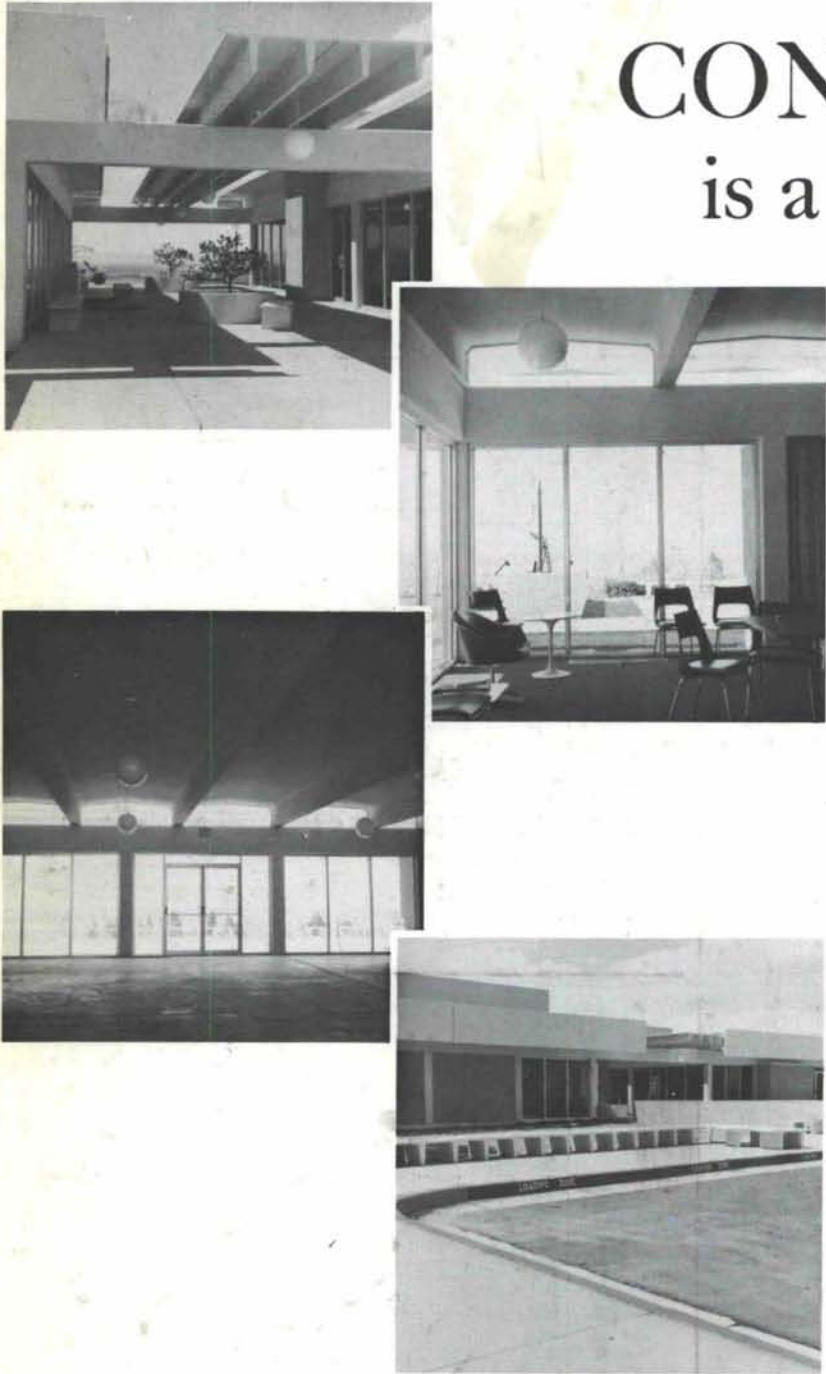
Jim Denison

525 Harden Blvd.
Hobbs, New Mexico 88240 phone 393-7814
Plain Steel - Structural - Misc. - Rebars - Joists

Lillian Dolde, Vice-President
Albuquerque, National Bank
Albuquerque, N.M. 87101

Bulk Rate
U. S. Postage
PAID
Roswell, N. M.
Permit No. 47

CONCRETE is a pleasure



THE UNIVERSITY OF NEW MEXICO GOLF COURSE CLUB HOUSE IS A FINE EXAMPLE OF THE DECORATIVE USE OF CONCRETE . . DEDICATED TO PLEASURE FOR GENERATIONS TO COME.

CONCRETE DOUBLE TEES and SINGLE TEES ADD STRENGTH AND BEAUTY, DOWN TO SUCH DETAILS AS PLANTERS and SEATS.

ARCHITECT — JOHN REED
CONTRACTOR — WEAVER CONSTR. CO.



HYDRO CONDUIT CORPORATION

2800 SECOND ST., SW • ALBUQUERQUE, NEW MEXICO 87103