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0 - 5% Passes No. 8 Sieve

Application rate is to be 500 lbs. per square for maximum whiteness and to assure adequate protection for asphalt and other bitumens. Meets ASTM Specifications D1863-64.

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SURFACE TEMPERATURE *°F

1 Hr. 2 Hrs. 3 Hrs. 4 Hrs. 5 Hrs.

BOTTOM TEMPERATURE °F

1 Hr. 2 Hrs. 3 Hrs. 4 Hrs. 5 Hrs.

*Based on tests conducted by the Howard Inspecting and Testing Laboratory, Inc., Montclair, N.J.
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New Leadership

The 1982 officers of the N.J. Society of Architects were inducted into office at the annual Past Presidents’ Dinner held at the Landmark Inn in December. Herman H. Bouman, AIA, of the Trenton firm of Bouman Blanche Faridy was elected 58th president of the professional society which dates back to 1896.

Other officers inducted were: Edmund H. Glunt, Jr., AIA, partner in the Red Bank firm of Kaplan Gaunt DeSantis, President-Elect; Tylman R. Moon, AIA, principal in the firm of Moon & Massimo in Flemington was re-elected for a second term as vice president; Eleanore K. Pettersen, AIA, of Saddle River, Vice President; William M. Brown, Jr., AIA, of the Newark firm of Brown and Hale, Treasurer; and Edward N. Rothe, AIA, a partner in the Iselin firm of Rothe Johnson Associates, Secretary.

Another highlight of the evening was recognition of 12 past presidents of the society who were in attendance, and are shown in the photo on this page. Herman Bouman accepting the gavel from Paul DeMassi.

Leo H. Mahony, AIA, presented a citation to outgoing president, Paul J. DeMassi, AIA, for “his meritorious service as president during the year 1981, his inspiring and successful leadership, his untiring efforts in fostering closer cooperation among membership and allied organizations and his devotion to the advancement of architecture and the profession throughout the State of New Jersey.”

Awards were also presented to three members celebrating 50 years of practice in the field of architecture: Fred W. Immen, AIA, J. Lloyd Berrall, AIA and Matthew M. Simpson, AIA.

News Bits

The New Jersey School of Architecture at NJIT has named its Professional Advisory Board Members for 1981-1982. They are as follows: Jocelyn Brainard, Richard Bottelli, AIA, Robert Gilchrist, AIA, Robert Harding Lee, AIA, Harry Mahler, FAIA (Chairman), E. Harvey Myer, Sr. and Edward Rothe, AIA. Ex officio members are: William Brown, AIA, Paul DeMassi, AIA and Sidney Schenker, AIA.

Geddes Brecher Qualls Cunningham have tripled the size of their firm’s space in their move to 120 Alexander St., Princeton.

Robert Geddes, FAIA, has announced that he is leaving the Deanship of Princeton University’s School of Architecture and Urban Planning. He has held the office since 1965. He will continue as Kenan Professor of Architecture.

Richard C. Barroca, AIA, has been promoted to an Associate of Collins-Uhl, Hoisington, Anderson, Azmy (CUH2A) in Princeton. A graduate of the U. of Illinois and Princeton University, Mr. Barroca joined the firm in 1976.

Harry A. Maslow, AIA, of Berkeley Heights, was elected Treasurer of the N.J. Federation of Planning Officials.

The office of Armstrong, Jordan, Pease, AIA, PA have relocated their offices to 26 W. High St., Somerville.

The Gruzen Partnership is the new name of the firm of Gruzen and Partners, with offices in Gateway One, Newark.

The firm of Tarquini, Lisiewski Pius, with offices in Camden, have changed their name to The Tarquini Organization.

CUH2A, Princeton, N.J.

Robert Geddes
Richard C. Barroca

Architecture New Jersey 5
Think New Jersey!

New Jersey architects can point to many advantages that accrue to the owner who uses the services only they can offer. For instance, the New Jersey design professional is familiar with local restrictions, parameters, and opportunities that influence successful design and construction of a building project. He works constantly with local building codes and inspectors, zoning ordinances, planning and development officials, material manufacturers and suppliers, contractors and subcontractors, insurance rating bureaus and utility and mortgage companies.

He is familiar with local construction costs, labor customs, and the availability of special construction expertise. Local soil conditions, climatology, ecology and other environmental considerations are matters of everyday concern to him. The out-of-state professional, on the other hand, must spend a considerable amount of time and money to merely research and evaluate the effect of these many factors on the building project.

When the architect's fee remains in state, it makes an impact on the local economy. The design professional and his employees, in addition to paying taxes that might help pay for the project, spend the remainder with other local tax paying businesses.

New Jersey is fortunate to have a new, publicly supported School of Architecture at the New Jersey Institute of Technology, Newark, among its institutions of higher learning. The school has already achieved a reputation throughout the region, and its graduates are widely recognized as well-educated for their role in practice.

At times there may be circumstances which indicate that retention of an out-of-state professional may be necessary or desirable. In such cases, it is in the owner's best interest to work with a New Jersey architect in selecting the consultant. The local professional is familiar with those who have the required expertise and who can guide the owner through the complexities of selection, discussion of fees and services, and other details incidental to the retention of consultative services. He can also assist the consultant by advising him of local factors affecting the project.

Like most New Jerseyans, members of the New Jersey Society of Architects take pride in the state and strive to maintain its heritage and brighten its future. They realize that the work they do becomes a part of New Jersey and must be a positive contribution to be of benefit to their fellow citizens.
ATLANTIC COUNTY JUSTICE FACILITY
Atlantic County, N.J.

Architect:
The Gruzen Partnership
Newark, N.J.

In Association:
w/Brown/Sullivan/Arefa

The proposed Atlantic County Justice Facility will be situated on a heavily wooded 20 acre site located adjacent to the Hamilton Township Industrial Park. The first phase of construction consists of a 224 bed detention facility with a separate on-site 80 bed halfway house. The second phase will include an addition to the detention facility to accommodate 96 beds. The detention facility will feature a central, walled outdoor recreation court and outdoor recreation area enclosed by security fencing for inmate use.

The exterior of the concrete framed areas will be sheathed in brick and the steel frame portions will be faced in ribbed metal panels. The public entrance and lobby will be articulated with skylights and floor to ceiling glass set under a deep overhang.

T. HOLMES MOORE ART CENTER
White Mountain Region, N.H.

Architect:
Herman Hassinger, FAIA
Moorestown, N.J.

The New Hampton School is an independent secondary school located in the White Mountain region of New Hampshire. While the school and its campus date back to the early 19th century, a need now exists for a student center and arts building. Rather than create a separate structure for this purpose the architect has developed a building that links the existing Gymnasium/ Auditorium building and the Dining Hall.

This solution focuses student life into a single major complex, and has the economy of using existing spaces and facilities such as toilets and lobbies for the new Arts Center. The Arts Center will contain a 500 seat flexible theater, studios, gallery and workrooms for photography, printmaking and painting.
BURLINGTON COUNTY
SPECIAL SERVICES SCHOOL
Westampton Township, N.J.

This one-story 200,000 square foot facility for the handicapped is located on a 50-acre naturally wooded site.

Its design is based on the concept of a 78,000 square foot multioriented central core surrounded by three school "subsections." The entire building emulates a residential housing development in order to soothe the anxiety that many children with special needs feel toward larger, dominating structures. A variety of outside courtyards have been included to provide outdoor activity areas which are important to handicapped children.

Much of the school's interior design is an outgrowth of extensive visits to smaller facilities throughout the country. Each detail has been carefully planned to maximize the structure's human-oriented qualities and provide for the educational and social needs of the children.

PRINCETON PROFESSIONAL PARK
Princeton, N.J.

Construction is underway in Princeton on an innovative 64,000 square foot passive solar office building complex. It consists of three similar buildings set in a partially wooded site and linked by garden paths and enclosed garden spaces. Each building has a central skylighted atrium running its full length, with glass walled offices opening off it on either side. The atrium serves as an indoor "street" providing natural light, ventilation and a source of passive solar gain as needed during the seasons. Other passive features, designed to handle the weather fluctuations in New Jersey, include a rock bed to store heat during the winter and serve as a cooling source during the summer, along with a roof spraying system to reduce summer roof temperatures.

These features combined with thermal glazing, insulation, night curtains and awnings on south windows are expected to reduce the annual energy requirements of the complex by almost 75%. The special features add $8 a square foot to the construction cost but the energy savings are so great that the payback period will be only five years.
MOUNT AIRY CORNERS V OFFICE BUILDING
Bernards Township, N.J.

Mount Airy V is the most recent addition to the Mount Airy Corners Office Complex in Bernards Township. Fifth in a group of development office buildings, it will be occupied by U.S. Insurance Group/Crum & Forster. The 300,000 square foot building is divided into three separate wings which are linked by atria and a skylight that provides natural light for the public areas and interior office spaces.

Thermal storage tanks and a closed loop heat pump system incorporating heat recovery units are used for flexibility and energy conservation. Exterior walls are constructed of insulated metal panels and bronze colored glass to compliment the building’s rural setting and take maximum advantage of passive energy techniques.

ARCHITECT:
The Grad Partnership
Newark, N.J.

LIBRARY/PRINCETON PLASMA PHYSICS LABORATORY
Plainsboro, N.J.

To meet the needs of this rapidly growing research laboratory, the architects were asked to enlarge the existing library. Their solution employed steel as the main structural and architectural element, tripling the library’s size while uniting three existing wings of disparate height and construction with a common courtyard. The existing ceiling and floor finishes are continued into the new structure, and both old and new steel have been accented with color, integrating the two spaces into one. The garden, formerly the site of trailer offices, is the focus of views from the library and adjacent spaces.

ARCHITECT:
Holt & Morgan
Princeton, N.J.
Beneficial Management Headquarters
Peapack-Gladstone, N.J.

Architect:
The Hillier Group
Princeton, N.J.

This project, a 560,000 square foot office complex located on a 150-acre site, consists of five Palladian-style brick buildings. These buildings have been broken into a series of smaller wings in order to bring a "village" scale to the entire project.

Brick and cobblestone courtyards, surrounded by formal gardens, maintain the village theme while the campanile, a water tower in disguise, reminds us of old clock towers as it accents the main entry courtyard.

Underground parking facilities for 1,250 cars, hidden by plantings and garden walls, make up another 600,000 square feet of building area. A skylight and brick-lined tunnel system connects all buildings and parking garages.

MEDICAL ARTS BUILDING
CARRIER FOUNDATION
Belle Mead, N.J.

Architect:
CUH2A
Princeton, N.J.

The Carrier Foundation, in Belle Mead, New Jersey, is a non-profit 269-bed psychiatric hospital specializing in diagnosis, treatment, research, and education. The Carrier Foundation was formerly known as the Carrier Clinic before becoming a non-profit organization in 1977.

To respond to the changing needs of New Jersey's patient population, the Foundation recently expanded their services and increased the specialization of treatment programs. They retained CUH2A, Princeton architects and engineers, to design three new buildings: an Addiction Rehabilitation Unit, a Medical Arts Building and an Ancillary Services Wing.

The central 20' x 70' waiting area of the Medical Arts Building is a warm, non-institutional space. Skylights admit bright daylight through open wood trusses. Planters suspended from the trusses establish a lower ceiling plane and double as lights at night and on overcast days. Small seating areas are contained within brick surrounds, while richly-colored carpet and upholstery fabrics brighten the space and complement the brick walls. By minimizing corridors and emphasizing seating clusters set in open space with natural light, this interior contributes to a relaxed environment which is appropriate to the building's therapeutic function.
Members of VFW Post 3401 in Morris Plains recently moved into their new facility designed by Nadaskay Kopelson, Architects.

Replacing an outdated structure on another site, the building contains large and small meeting rooms and an activities room. Though designed to accommodate Veterans of Foreign Wars functions, the facility may be rented for private occasions. The principal rooms open onto a skylit entry lobby, the structure's focal point.

To maximize natural light and insure acoustic and visual privacy, glass block is used in lieu of clear glass windows. The exterior walls are masonry; the roof and interior partitions are framed in wood.

Newark Abbey, founded in 1839, has housed its Monastic community in a series of modified Romanesque buildings dating from 1871 to 1910.

In 1981, the decision was made to renovate the interior of these buildings to provide an environment more conducive to a life of solitude and prayer which forms an integral part of monastic life.

An extensive analysis of the existing buildings was made, giving special attention to defining the cloister areas and the extent of public and semi-public spaces.

Following the inventory of existing space, the project required the renovation of 30,000 square feet of living space and the addition of a 1,000 square foot Chapter Room.

The Chapter Room was designed to enclose the present Cloister Garden and provide a formal meeting room where the business of the community would be conducted.

The interior renovation of the existing building will use tile, brick, wood, timbers and stucco vaulted ceilings to provide a unified and traditional design theme throughout the complex.
Resurrection Parish Center
Randolph Township, N.J.

Architect:
The Gilchrist Partnership
Leonia, N.J.

On a gently sloping, open field surrounded by farmland, a new church for Resurrection Parish has been designed by the Gilchrist Partnership. Its curved forms are to be sheathed in weathered cypress and fieldstone to compliment the rolling hillside.

The bell tower marks the entrance to the church. The two-story narthex will contain a baptismal font with flowing water and natural landscaping. Access to the nave is along a low ceilinged ambulatory where a continuous horizontal band of windows on the outer wall will provide views of the hills to the west and which will contain stained glass inserts. The concentric seating arrangement of the nave and light from a clerestory window combine to focus attention on the chancel.

Beyond the reredos (chancel) wall is a Eucharistic Chapel seating 45. The roof of the chapel is an integral web of wood and amber tinted glass that will reflect subtle shifts of filtered light throughout the day.

The lower level of the church will contain administrative facilities, flexible meeting space, a resource center with a fireplace, a child care room and a full service kitchen.

The building has been designed and oriented for passive solar energy and will include such features as a Trombe wall and earth berms.

PSE&G
Bordentown, N.J.

Architect:
The Tarquini Organization
Atlantic City, N.J.
Camden, N.J.

Public Service Electric & Gas recently opened its new $2 million Southern Inquiry and Accounting Center in Bordentown, N.J. The facility represents a major step forward in meeting growing customer needs for prompt service and in responding to customer inquiries with greater efficiency.

The 20,000 square foot, one story building was designed by The Tarquini Organization to accommodate 132 employees at peak capacity. Office space is open, with carpeting throughout to subdue sound. The floor is raised to provide for an underfloor power feed to the desk top computer terminals (CRT's). A 48 foot spaceframe-mounted skylight spans the cafeteria and lounge area allowing natural light to illuminate the interior garden and dining area.

The building was designed to conserve energy, as heat pumps circulate warm air in the winter and cool air in the summer and six roof-mounted panels harness solar energy to heat domestic hot water.

The building has an emergency generating system that will allow PSE&G to continue to provide full service to customers should a power shortage occur.
Jersey City Terminal Restoration
Phases 2 and 3
Liberty State Park
Jersey City, N.J.

Architect:
Geddes Brecher Qualls
Cunningham
Princeton, N.J.

The Terminal, built in 1888, once accommodated commuters transferring between trains and ferries to and from Lower Manhattan. Neglected for years, it is now being restored as a cultural center by the State. In Phase 1, the Train Concourse was restored. Phase 2 included restoration of the main Station House's spectacular three-story Waiting Room and the addition of toilet rooms. A brick-paved plaza was also created in front of the building complex, giving access to the Train Concourse from a bus turnaround and providing superb views of Lower Manhattan. Phase 3 scheduled for completion in July 1983, will include both the structural and cosmetic restoration of the brick walls and wooden doors and windows of the entire exterior of the Station House. A monumental clock face which used to overlook the river from the Station House's central tower, will also be restored.

Senior Housing Project
Mid-Atlantic State

Architect:
Kelbaugh & Lee
Princeton, N.J.

This project for senior citizen housing in a mid-Atlantic state is sited on 2 acres of gently sloping land on the outskirts of a small town. The program includes 16 one-bedroom units, four two-bedroom units, one studio apartment, and a community facility. The design creates an intimate enclave of attached cottages which are distributed across the site in East-West strips to optimize solar orientation as well as to provide barrier-free access.

While the site is enclosed on three sides, by a picket fence, an entrance pavilion, gates, and fence openings enhance the sense of place and its security, and emphasize the view. The three-story Community Center, faced in brick to contrast with the shingled dwellings, is the project’s social and architectural focus. This project is meant to be sunny, airy, friendly, natural, and slightly beachy, and its use of solariums, unvented Trombe walls, solar vent stacks, and rotary ventilators makes it a tour de force in passive solar heating and ventilating.
George Street Revitalization Program
New Brunswick, N.J.

Architect: Don Gatarz, AIA
New Brunswick, N.J.

The George Street Revitalization program is a $3 million project to turn a section of the Central Business District in New Brunswick into a pedestrian and commercial mall. By reducing vehicular traffic to two lanes along the four blocks of George Street encompassed in the project, the pedestrian walks will be widened and paved with brick. Various forms of street furniture, planting areas and bus stops will further enhance the shopping experience in downtown New Brunswick. The southern terminus for the project, Monument Square, has been designed to incorporate seating and planting to focus on a stepped fountain and plaza with the original statue as the centerpiece. For special events, removable bollards will be used to keep traffic from George Street and allow pedestrians complete use of the mall.

With construction scheduled to start again at the end of February, completion is anticipated in September of 1982.

National Educational Technology Centre
Nigeria

Architect: The Harsen & Johns Partnership
Tenafly, N.J.

In Nigeria, in the area of Kaduna, a new town is being built as the nation's television and radio center. It is here that the National Education Technology Center will be located.

The center is to have several functions, the first of which is to control Nigeria's communications networks and provide education to the public through the media. The new facility will also serve the media needs of government, provide graduate education leading to advanced degrees in communication production and technology, and allow the training of people for jobs in equipment maintenance and repair.
Brookwood Office Center
East & West
Piscataway, N.J.

Architect:
Rothe Johnson Associates
Iselin, N.J.

Two office buildings, one three stories and 100,000 square feet, the other two stories and 50,000 square feet, are to be built on a Piscataway site. The two buildings, with their shared structural grid and their stepped facades, give the appearance that a single building has been pulled apart to allow a stream to pass between the two. A link has been planned to connect the buildings should user requirements dictate. Entrances to the buildings are located away from the stream, with interior and exterior balconies and free-standing stairs highlighting each lobby. All services are grouped around the lobby, leaving large, flexible spaces with generous window area to meet virtually any office need. The site is enhanced by the creation of two ponds that flank the entrance. Parking is screened throughout the landscaping, producing a park-like setting.

Brevent Plaza
Parsippany, N.J.

Architect:
Cahill/Prato/McAneny, AIA
Far Hills, N.J.

Far Hills architects Cahill/Prato/McAneny's 32,000 square foot office structure for Brevent Realty (a Landi Corporation — G. Mintz & Co. Partnership) is situated on a wooded lot near Route 10 in Parsippany. The speculative building's exterior views capitalize on the site, while its interior focuses upon a two-story central atrium, located beneath skylights. Due to the atrium's unique design, the structure's loss factor is extremely low. CPM/Interiors Group is assisting the owners with tenant layouts.
Ciba Geigy
Summit, N.J.

Architect:
Haines Lundberg Waehler
Basking Ridge, N.J.

This 129,000 square foot laboratory for Ciba-Geigy located in Summit, New Jersey is scheduled for completion in Spring of 1982. It will accommodate short-term safety studies, using appropriate animal species, for preclinical and pre-marketing testing of new products. The facility features an interstitial level for flexible distribution of mechanical and electrical systems. The building incorporates open laboratory spaces with non-structural partition walls designed to meet future growth and potential regulatory changes. This laboratory for Ciba is part of over two million square feet of research facility space designed for New Jersey since the original Bell Laboratories — the prototypical industrial laboratories — designed by HLW, opened in Murray Hill 50 years ago. The exterior of the two story structure is brick, accented by tinted glass and decorative metal panels that sheath the interstitial spaces.

Montclair Urban Renewal Project
Montclair, N.J.

Architect:
Parker Associates
Newark, N.J.

The Montclair railroad station, listed on the National Register of Historic Places since 1973, is the centerpiece of this project by Parker Associates. The station is to be converted into an enclosed shopping center, which will extend under Grove Street. The spaces between the railroad train sheds will be glazed with barrel vaulted skylights. One of these sheds will be used for an enclosed mall from which there will be access to approximately 33,000 square feet of retail stores and a supermarket, while the station’s waiting room will be transformed into a restaurant. The adjacent automobile dealership will be linked to the project by a new, two-story office building. Parking for the project is to be on the East side of Grove Street.
additional current projects

ARCHITECTS II CHARTERED
• 60-Bed Long Term Care Units, Vineland and Woodbine State School Campuses
• Gymnasium and Science Laboratory Additions, Rieck Ave. School for Millville
• Regional Day Schools for the Handicapped in Atlantic, Camden and Salem Counties
• Residence, Cape May Point
• Multi-Unit Housing project Tarpon Springs, Fla.
• Fire House Addition & Renovation at the Naval Air Engineering Center, Lakehurst

ARCHITECTS DI GERONIMO
• Highland Park (Mich.) Community College
• Dept. of Transportation/Maintenance Facility, Newark

ARMSTRONG JORDAN PEASE
• Applied Data Research, New office building — addition, miscellaneous projects
• State of NJ Building Authority — DBC, New general office bldg.
• Neuro-Psychiatric Institute, 60-bed Long Term Care Unit. Design and construction coordination — 11 projects
• Katzenbach School for the Deaf, Life Safety Program — entire campus — 16 buildings. Barrier Free Accessibility Program — entire campus
• Roche Clinical Laboratories Corporate Hq.
• Memex Publishing Co. addition
• First Presbyterian Church — Alterations & Restoration

GREGORY ARNER, AIA
• St. Benedict's Urban Renewal Project
• St. Mary's Church, Newark Abbey, Interior Church Renovation
• St. Benedict's Prep Multi-Use Facility Renovation & Additions
• Newark Abbey Renovation & Chapter Room Addition
• Renovation, Alliance Church of Cranford & Lower Level Classrooms
• Mailnckrodt Convent/Villa Pauline, Sisters of Christian Charity, Mendham
• Mausoleum for Holy Cross Cemetery, Archdiocese of Newark
• Addition, Matawan Regional High School

BERTONE/PINELETS
• V.A. Medical Center, Brooklyn, NY, Redesign of all Nurses Stations
• V.A. Medical Center; East Orange, Correct Fire & Life Safety Deficiencies in Six Buildings
• Franklin Convalescent Center, Franklin Township, 60 Bed Addition and Alteration
• New Offices & Refrigerated Warehouse, Arthur Schuman, Inc., Clifton
• 248 Townhouse Units & Recreation Complex, Tinton Falls
• Community Center, Middletown
• Private Residence, Atlantic Highlands

JOSEPH S. BIANCO, AIA
• 21-story Condo in Hackensack

BLENCHER/FEITLOWITZ
• Office Buildings, Morristown, Hanover, Livingston
• Numerous school rehabilitation projects for various school districts
• Rehabilitation of all school facilities, South Orange/Marwood District
• Golf House and Storage Facility, Essex Co. Department of Parks
• Conference Center, Naval Air Engineering Center, Lakehurst

BOTTLEDI ASSOCIATES
• Adaptive use of “The Hemlocks” in Florham Park as new Corporate Headquarters for Modern Mass Media, Inc.
• Apartment Building for Grove Street Senior Citizens Housing Corporation in East Orange
• Twin Apartment Buildings for Norman Village II Limited Partnership in East Orange
• Senior Citizens Activities/Personal Care Center for Norman Tower Complex in East Orange
• Residence in Long Valley for private clients seeking environmental self-sufficiency on rugged natural site
• Office/Testing Building at Texas Eastern Gas Transmission Company’s Hanover Station

BOUMAN BLANCHE FARIDY
• Edgewater Park Senior Citizens Housing Development, Burlington
• Conversion of Summit Jr. High School to Middle School
• Expansion of Marlboro Free Public Library
• Conversion of Peapack/Gladstone School to Municipal Complex
• Renovations to Burlington Co. Jail, in association w/ Grad Partnership
• Tabernacle Twp. Middle School
• Concordia College — Chapel/Performing Arts, Center, Bronxville, NY

VAN B. BRUNER, JR., FAIA
• Camden Co. Correctional Facility
• Cumberland Christian High School & Gymnasium
• Maintenance & renovations for various schools in Camden
• Maintenance & renovations for Postal Facilities, Haddonfield area
• 168-unit two-story apartment complex “Mullica West”

• New 200 seating church and All-Purpose Room, Rock of Ages Holy Church
• New four story administration building for Camden Co., Municipal Utilities Authority

CAHILL/PRATO/MC ANENY
• Headquarters and Outlet Store, Popular Service, Garfield
• New Center Square, Hillsborough, 100 acre land use analysis
• 1,220 multi-family condominium units, Basking Ridge
• Automatic Data Processing, Inc. Clifton, NJ: interior planning consultation for Dallas, Tampa, and La Paima, Calif.
• Offices and Roseland, NJ, Headquarters
• The Corner, Hillsborough: land use and fiscal analysis for 3 acre commercial site
• Hidden Hills Country Club, Jacksonville, Fla.: conceptual development plan for a 200 condominium unit project
• Arthur Andersen, Inc., Roseland, 20,000 sq. ft. interior design of office space
• Transco Group Headquarters, Somerset, site study and 27,000 sq. ft. office alteration

ROBERT P. COLETTA, AIA
• Fire Headquarters & Mini Mall, East Hanover
• Rix Pool & Patio Supply, Hanover
• Bridgeton Park Facilities
• Waretown Library
• Essex Racquet & Health Club, West Orange
• Journal/News Printing Services, Whippany
• Office Building, Parsippany

CUH2A
• 600 Alexander Road Office Park, CUH2A, Princeton
• Master Plan, Mobil Chemical Co., R & D Div., Edison
• Interior Design & Space Planning for Attorneys, Newark and Morristown
• Veterans Nursing Facility, Paramus, D.B.C., Department of Human Resources, State of NJ
• Delaware & Raritan Canal State Park, Historic and Recreational Development, D.B.C., State of NJ
• Adaptive Reuse, The Barclay Building, NJ Institute of Technology, Newark
• Microbial Genetics Laboratory, The Selman A. Waksman Institute of Microbiology, Rutgers, New Brunswick

ECKERT MORTON RUSSO
• Administration Offices & Maintenance Shop, Middlesex Water Co.
• Executive Office Bldg., Heritage Bank-North, South, Rossmoor, Jamesburg
• New Classrooms & Arts Building, Middlesex College
• Additions & Renovations to (4) High Schools, Freehold Regional High School Dist.
• Misc. Renovations & Athletic Fields, East Brunswick High School

Architecture New Jersey 17
- Fifth Floor Addn., John F. Kennedy Medical Center, Edison
- Busch Campus Student Center, Rutgers

**ECOPLAN**
- Secaucus Parking Facility, Secaucus
- Callahan's Restaurant Prototype, Paramus
- Midland Branch Bank, Englewood Cliffs
- Norwood Townhouse Development
- Englewood Mixed Use Development
- Palisade Office Building, Englewood Cliffs
- THE EGGERS GROUP
  - Luxury Condominium Complex, Joint Venture/The Grad Partnership, Brielle
  - Air Products & Chemicals, Trevilletown, AP, Office Building, Research Labs
  - Morristown Memorial Hospital, 600 Car Parking Facility
  - Fairleigh Dickinson U., Athletic Center, Office Building
  - Bergen County, Feasibility Study for Cultural Arts Center
  - Manalapan Township, Feasibility Study for New Municipal Complex
- Vernon Valley/Great Gorge, Feasibility Study to expand Ski-Lodge

**HARRISON FraKER, ARCHITECTS**
- Princeton Professional Park, passive solar office complex
- Princeton U. School of Architecture, passive solar retrofit
- Church of Saint Mark and All Saints in Absecon Highland, passive solar church and parish hall, Galloway Twp.
- Barn Conversion, passive solar residence, Princeton
- Mexican Village, specialty restaurant, Princeton
- East Trenton Neighborhood Council, Neighborhood Greenhouses
- Private residence, passive solar, Princeton

**LEONARD N. FREED, AIA**
- Sterling Plaza, Elmwood Park, Office Bldg. & double deck garage
- Hebrew Academy of Morris Co., 11 classrooms and multi-purpose room
- Pompton Knolls Town Houses, 101 units
- Private School, Morristown, 11 classrooms and ancillary areas
- Seton Hall U., Restoration of existing buildings, Mooney Hall and New Duffy Hall
- Lakeland Regional High School, Restoration and Energy Control
- White Meadow Temple, Rockaway, Temple Expansion

**DON GATARZ, AIA**
- City of New Brunswick — Rehabilitation and New Park Facilities at Buccleuch Park, Joyce Kilmer Park, Memorial Stadium and Willor Grove Park
- City of New Brunswick — CBD George Street Mall
- Board of Education, City of New Brunswick — New Nathan Hale Elementary School
- Educational Facility Retrofit Study Grant — Application for Federal Grant to study various uses for school buildings that have outlived their usefulness as educational facilities
- Manalapan Township — Design of new Town Hall and Public Safety Facility
- Office Building Franklin Township
- Courtlandt Square New Brunswick — Design of eleven unit townhouse complex on limited site in urban environment

**GESSERT BRECHER QUALS CUNNINGHAM**
- Mobil Environmental Health & Science Laboratory, Hopewell Township
- Student Center & Housing, Stockton State College
- South Wing, The N.B. Speed Art Museum, Louisville, KY
- Liberty State Park: Phase Two Restoration
- Renovation & Modernization Program, Hospital of the U. of PA
- Society Hill Plaza Hotel, Dock Street, Philadelphia

**THE GILCHRIST PARTNERSHIP, AIA**
- Montvale Office Park
- Redevelopment Plan for Borough of Rock CBD
- Collinsworth Condominium, Hackensack
- World Headquarters for I.I.D.C., Englewood Cliffs
- Education Center for Pascack Bible Church, Hillsdale
- Church & Parish Center for Resurrection Church, Randolph Township
- Our Lady of Magnificat R.C. Church, Kinnelon

**BARRETT ALLEN GINSBERG, AIA**
- Gatehall Office Building, Parsippany
- Glenpointe Development, Teaneck, Hotel & Health Club, Retail Mall, Office Buildings
- Prudential Office Building, So. Plainfield
- Office Building, AT&T, Chicago
- Center City Complex, Hackensack
- Office Buildings, AT&T — 16 Prototypes (Various Cities)
- Warehouse, Denville

**THE GRAD PARTNERSHIP**
- Gateway III, office building for Prudential Insurance Co., Newark
- Park 80 Plaza II, Saddle Brook, the second building of a two building group started eight years ago

**THE GRUZEN PARTNERSHIP**
- Atlantic Co. Detention Facility
- Rehabilitation of Trenton State Prison
- Wellington Estates, High Rise Condominium & Townhouses, Pleasantville
- Criminal Justice Consultant, Passaic County Juvenile Detention Facility, Wayne
- Medium Security Prison, Camden
- Ocean Cove, High Rise Condominium, Long Branch
- Luther Park Cooperative, Congregate Care Housing, Teaneck

**HAINES LUNDBERG WAELHLER**

**HARSEN & JOHNS PARTNERSHIP**
- Glen Meadow Elementary/Middle School, Vernon
- Heritage III Office Building, S. Franklin Turnpike, Ramsey
- Seton Development, Psychiatric Home For Mother Seton, Baltimore, MD
- El Yunque (The Rain Forest), Restaurant/Night Club, Rehabilitation of existing building, Newark
- Heritage Office Center
- Senior Citizen Housing, Atlantic City

**HERMAN HASSINGER, FAIA**
- Concordia Lutheran Church, Wilming­ton, Del.
- Studies for area hospital — Nigeria
- On Lok House, Chintatown, Philadelphia
- New Hampton School Arts & Student Center, New Hampton, NH
- Master Plan for Campus of Upsala College, Sussex Co.
- New emergency services building, Fire & Emergency Co., Moorestown

**THE HILLIER GROUP**
- Admiral Insurance Company — Cherry Hill
- Drew Library & Science Building — Madison
- Dow Jones — Princeton
- General Foods, Inc. — Cranbury
- J. M. Huber Corporation — Edison
- New Jersey Highway Authority — Woodbridge
- New Jersey Justice Complex — Trenton
- Ortho Pharmaceutical — Raritan

**HOLT & MORGAN ASSOCIATES**
- Site Alterations and Restoration, Ital­ianate Garden at “Drumthwacket”, Princeton
- Visitor’s Center & Concession Bldg., Batsto Historic Site
- Computer Space & Offices, Institute for Advanced Study, Princeton
- Apartment Renovations in NYC
- NJ Horse Park at Stone Tavern, Upper Freehold Township

**M. ISRAEL & ASSOCIATES**
- Office/Service Center, Egg Harbor Twp., for Hovanian Enterprises, Middletown
• Modular Office/Warehouse Complex, Franklin Township
• Office/Service Center, Eatontown for Hovanian Enterprises, Middletown
• Renovation of Audio Rooms & Sales Area, Display Area, NYC
• New Marine Office Building & Crane Maintenance Bldg., Port Elizabeth for Maher Terminals
• Warehouse/Office Building, Raritan Center, for Summit Assoc., Edison
• Kings Row Adult Residence, Middletown; 128 units, senior citizens residence for Eur-Am Financial Corp., Matawan

J. ARTHUR JOHNSEN, AIA
• Sussex County Library & Fire Training Center
• Riverside Medical Building, River Edge
• Voorhees House, Mantoloking
• Noell House Addition, Montclair
• Jewish Community Center Renovation, Verona
• Mandees Retail Stores (4) — Long Island, NY
• 73 Park Street Offices & Historical Restoration, Montclair

KAPLAN GAUNT DE SANTIS
• 10-unit Condo Renovation at Highlands
• Peninsula House, Multi-use Facility at Sea Bright
• Lebanon State Forest, Administrative & Maintenance Facility
• Lincroft Bible Church
• HUD Housing Project, Easter Seal Society, Newark & So. Orange
• Administrative Offices for Twp. of Middletown
• Police Hq. & Recreation Center, Fair Haven

LAMMEY & GIORGIO
• Nautilus Fitness Center, Marlton
• Office for Maksim Management Corp., Haddon Hts.
• DeLeo Residence, Washington Twp.
• Church-Monroe Housing Restoration/Rehabilitation, Mt. Holly
• Haddon Heights Ambulance Corps Building
• Crisis Intervention Center for T.R.I.S., Sicklerville
• Vi-Tech Corp. Photographic Labs & Office Facility, Camden

LEHMAN ARCHITECTURAL PARTNERSHIP
• Minimum Security Dormitory, Rahway
• Prototype School, Newark Board of Education
• Distribution Warehouse, Newark, Toys "R" Us
• Historical Shopping Mall, Flemington
• Doctors' Office Building, So. Orange
• Office Building, Wilton, Conn.

WAYNE LERMAN DESIGN GROUP
• Piscataway Office Centre
• Medical Facility, Edison

• Office Distribution Centers, Monroe Township
• Speculative Facility, Franklin Twp.
• Speculative Office/Warehouse, South Brunswick
• Corporate Office Facility, Monroe Twp.
• Office Facilities in Roseland and New York

MAHONY & ZVOSEC
• New Solar Office Building for Mahony & Zvosec, Princeton
• Institute of Forensic Science, Newark
• Islamic Center, South Brunswick
• Paterson Armory Renovations, Paterson
• Cedar Grove Senior Citizens' Housing
• Corporate Headquarters ITT, Ct.
• St. Stanislaus Kostka Rectory & Parish Improvements, Sayreville

MANDERS/MERIGHI ASSOCIATES
• Monroe House Condominiums, Margate
• Adams Terrace Condominiums, Margate
• St. Augustine Prep School, Richland
• Ace Glass Co., Vineland
• Espoma Company, Millville
• Katz Medical Offices Building, Vineland

ROBERT W. MEYER, ARCHITECT
• New School No. 6, Passaic
• Addition/Alteration, Lavallette Elementary School (joint venture)
• Administration Wing Alteration, Fieldstone Middle School, Montvale
• John S. Helmbold Education Center School for Handicapped, Corbin City
• Millstone Elementary School (joint venture)
• RWM Development Corp., Solar Houses, Piscataway

NADASKAY • KOPELSON
• Chester Public Library, New Facility
• New Facility, V.F.W. Post #3401, Morris Plains
• Executive Lobby, Morris Plains, Renovation, Warner-Lambert Co.
• Blanton Hall, Student Residence Hall, Cafeteria & Health Center, New Facility Montclair State College
• Hillsborough Development, 20 Townhouses and Patio Homes
• Lidgegro Park Townhouses, Morristown, 96 Townhouses
• Research Facility/Pilot Plant, Morris Plains, New Facility and Renovation, Warner-Lambert Co.
• Burnham Park Pool Complex, Morristown, New Facility

EUGENE F. O'CONNOR, AIA
• Quality Control Testing Facility, E.R. Squibb & Sons
• Office Retrofit, Charles of the Ritz Group, Ltd.
• 1450 Parksise, Office/Condo, New America Network
• Wyndmoor at Windsor Housing Realty Plus, Inc.
• Office/Retail Building, Rocky Hill Realty

Summit Woods Townhouses, Englewood Architect: Barry Poskanzer, AIA


Office Building, Livingston Architect: Stephen W. Schwartz, AIA

Loews Glienpointe Hotel, Teaneck Architect: Barrett Allen Ginsberg, AIA
• Maintenance Building, Tredway's Express, Inc.
• New Facility, Hope Baptist Church

PAULSEN ASSOCIATES
• Alterations to Jersey City Y M.C.A.
• Miscellaneous Alterations/Various Jersey City Schools
• Miscellaneous Alterations, Verona Municipal Building
• Christ Hospital Doctors Office Bldg.
• Alterations & Additions, Piscataway Branch Bank, Commercial Trust Co.
• Feasibility Study/ Air Conditioning, Margaret Hague Hospital, Jersey City
• Dental Clinic, Path Building, Jersey City

PHILIPS KAUFMAN AND ASSOCIATES
• Morristown Memorial Hospital
• Alexian Brother's Medical Office Building & Nurses Residence, Elizabeth
• Hackensack Water Company, Corporate Office Bldg., Harrington Park
• Suburban Propane, Computer Facility, Whippany
• Pyrotechnic Laboratory, Picatinny Arsenal, Dover
• Westfield School Expansion Program, Westfield
• U.S. Postal Service, Term Contract
73 Projects

BARRY POSKANZER, AIA
• Summit Woods Townhouses, Summit Woods Associates, Englewood
• Powers-17 Office Building, Paramus
• Washington Commons Townhouses, Meadowlands Engineering, Washington Twp.
• Summit Office Center, ABL Associates, New City, NY
• Home Furnishing Center, Rahaman, Paramus
• Birchtree Industrial Building, Birchtree Realty, Allendale
• Office Building, Van Houten Realty, Allendale

PRINCETON ENERGY GROUP
• Energy Consulting to Baker Rothschild
• Hornby Blyth for Office Building, Austin, TX
• Energy Consulting/Design Assistance to Ewing/Cole Architects, Wilson Social Center, Princeton Theological Seminary
• Energy Consulting/Design Assistance to Leroy Troyer Associates, Passive Solar Office Building, Denver, CO
• Energy Consulting/Design Assistance to Alfredo DeVido Associates, Passive Solar Prototype Housing for Consolidated Edison, NY
• Hydro-electric/Wind-electric Feasibility Study, National Audubon Society, Sharon, CT
• Wind-electric Feasibility Study, Swig Weiler Arnow Mgmt. Co., Office Complex, Putnam County, NY
• Energy Master Plan/Wind Power Feasibility Study, for Beef-Cattle Ranch, Eastern Oregon

ARTHUR RIGOLO, FAIA
• Special Needs School, Passaic Co. Vocatech, Wayne
• Light Mfg. & Offices, Wayne
• Bank, Clifton Savings & Loan
• City Hall & Police Headquarters, Joint Venture, Clifton
• Chapel, Girls' Academy, North Haledon
• High School Annex, Lakeland Regional High School
• Restaurant-Country Club, Wayne

ROTHE JOHNSON ASSOCIATES
• Woodbrook Office Center, Piscataway
• Woodbridge Place Hotel & Corporate Center, Woodbridge
• Edison Place Hotel & Office Center, Edison
• Addition to Research Tower, Rutgers Medical School
• Joyce Kilmer School Addition, Milltown
• State Regional Day School for the Handicapped, Paramus
• Bell Laboratories Office & Research Facility, Middletown

DALIM SIBDIAL-SA
• A.B.C. Montessori Nursery School, (New), Piscataway
• Plainfield Board of Education, General Rehabilitation & Repairs
• Site Plan & Landscaping for Sunset Diner, Green Brook
• Hackettstown Assembly of God Church, Washington Twp., Morris Co.
• McCalvary Urban Renewal Homes Improvements Project, Newark
• Woodland School Roof Replacement, Plainfield Board of Education

SCRIMENTI/SHIVE/SPINELLI/PERANTONI
• Somerville Borough Hall
• Raritan Municipal Building
• Skylands Manor Development, Addition & Restoration Work, Ringwood State Park

SHORT AND FORD
• N.J. Governor's Residence, Drumthwacket (Preservation of Historic Mansion for Adaptive Use), Princeton
• N.J. State Assembly & Senate Chambers (Restoration & Upgrading), Trenton
• Senior Citizens Center, East Brunswick
• Municipal Complex Needs Study, Mahwah Township
• Office Hq. Bldg., Wren Associates, Princeton

SIDNEY SCOTT SMITH, AIA
• Summer Home for 511 Main Co., Loveladies

SOUTHERN ASSOCIATES
• Life Safety Alteration at Woodbridge and Hunterdon Schools — Cottages, Hospital
• Rahway City Hall & Police Headquarters
• Solar Heat
• Jay Patel's Residence, Livingston
• New Fire Headquarters, Rahway

SUSSNA DESIGN OFFICE
• Alterations, NJ Bell Telephone Co., Offices, Toms River, Asbury Park & Pleasantville
• Interior Design of Law Offices, Groos & Novak, East Brunswick
• Life Safety Improvements, Leesburg State Prison
• Expansion of Shopping Center, Hamilton Twp.
• Conversion of Raritan Valley Hospital into Intermediate Care Facility for Mentally Retarded
• National Prototype Computer Mart Store Various Locations
• Child Care Center, U.S. Navy, Naval Air Engineering Center, Lakehurst

THOMAS, KOLBE, THOMAS, POPONI
• St. John Of God Brothers, Westville Grove, Special Education Building Complex
• Pep Boys Store, Cherry Hill, Alterations & Additions
• Pitman Board of Education, Energy Conservation Improvements in Several Buildings, Gymnasium & Auditorium Rehabilitation
• USNR Center, Atlantic City, Building Rehabilitation & Shore Protection
• U.S. Coast Guard Electronics Engineering Center, Wildwood, Addition to Bachelor Enlisted Quarters
• N.J. Bell, Landisville Central Office, Addition
• Bible Presbyterian Home, Delanco, Nursing Unit Addition, 32 Beds

VAUGHN ORGANIZATION
• Hunterdon Co. Jail, Flemington

VENTURA PARTNERSHIP
• Four, Six and Nine Campus Drive, Prudential Business Campus, Parsippany-Troy Hills
• Raritan Plaza II & III, Raritan Center, Edison, for Summit Associates, Inc.
• Mercedes-Benz Office Building with MBNA Service Training Center, Montvale
• Orange & Rockland Utilities, Inc., Monroe Divisional Headquarters, Blooming Grove, NY
• Replacement, Modernization & Renovation, Holy Name Hospital, Teaneck

THE WEAVER PARTNERSHIP
• American National Bank & Trust, Mt. Olive
• Bonnie Brae, New School, Bernards Twp.
• 287 Corporate Center, Bridgewater
• Laney Residence, Florida
• Morris Co. Savings Bank, Convent Station
• Morris Co. Housing for Senior Citizens, Morris Township
• Prototype Solar Houses
• West Morris Regional High Schools, Alterations & Additions, Chester & Mendham
Window Replacement

by Michael Greenberg, AIA

In recent years, the rehabilitation of old, sturdy buildings has increased dramatically. Structural components usually require little attention and either equal or exceed the needs of the new use. However, in terms of energy consumption, mechanical systems and the entire building envelope go through extensive upgrading.

In this article we will address a component of the building envelope that is perhaps the most important in upgrading a building's energy efficiency — the windows. Energy conscious building owners and architects are quick to realize that a sturdy building has increased dramatically — as 50% of its heated or cooled air. This figure is even greater for operable windows.

Windows are very sensitive to energy transfer. Energy is lost through windows by infiltration, or leaks and drafts; conduction, because heat travels from warm areas to cool ones; and radiation, or the movement of heat or cold through space. Exactly how much energy is lost depends on the condition of the window. Buildings in the 40 or more years old category tend to have large, single glazed openings provided with either steel or wood windows. In addition to the disadvantage of being single glazed, the perimeter seals are often in such poor condition that they are generally considered to be non-existent.

There are three basic approaches to upgrading the thermal efficiency of existing windows, aside from internal or room-side insulating films or draperies. Existing windows can be completely removed and replaced with new, thermally broken windows glazed with insulating glass; or they can be completely removed and replaced with a thermal barrier window system composed of two single glazed windows, separated by an air space as shallow as one inch; or the existing windows can be left in place as is, and a new single glazed secondary window can be installed on the room side.

Deciding which one of the three solutions is most suitable for a specific building is not an easy matter. In any case, it should be recognized from the beginning that the largest area of savings will be in the reduction of air infiltration. An on-site test of the existing windows should be performed with the results used as a comparison against a second on-site test after the new solution is employed.

Each of the three solutions need to be considered with respect to the client's needs as occupant, the building owner (who may be the client or a third party — landlord), convenience, initial cost, pay back compared to energy savings, thermal qualities (overall performance), size and longevity. In cases where the client is only an occupant and not the building owner, his lease agreement should be carefully reviewed. If he pays for his own energy on a direct basis (not included in the rent) he will most certainly want to maximize his reduction of energy costs. If the client is only an occupant, initially he would not be responsible for cleaning and maintaining the windows. But, if he elects to completely remove the existing windows at his own cost, this responsibility may revert back to him. If the client already occupies this space, the matter of convenience and disruption of his staff is important.

Initial costs will be greater in complete removal of windows and frames. The work takes longer and is more extensive. In certain cases, for example, frames may be supporting the opening and this fact may not be realized or considered. Old frames are generally solidly anchored in place and removing them will disturb the integrity of the surrounding wall components. These old frames may also be more durable than the new materials available.

If it is determined that window removal is the procedure to follow, one method of reducing initial costs is to remove the sash only. The frames are left in place and new frames are installed either alongside or within them. Flat sections, called panning, trim the surround to provide a neat appearance. On the interior this could be accomplished with either metal, wood or drywall.

There is one important note of caution when removal is considered. The size wind load computation is the only consideration that most designers consider. With a fixed opening this will not pose a problem, but with operable windows of any type, the weight of the operable unit is also a major consideration. In a double- or single-hung installation, this is most critical. If the weight exceeds the limits of any combination of operating mechanisms, the window will surely fail in a very short period of time. This is true even if the windows will be operated only for maintenance purposes. Old, double hung windows that are very large may have to be replaced with two sets of sliding windows, one over the other.

Removal and replacement with a thermal barrier window system presents the same logistic considerations but with a different set of design considerations. Wind load tables are different and the wind loads that may be sustained by an insulating glass unit may dictate a thicker exterior single lite of glass to do the same work. Again we have the weight factor, but with a thinner extrusion for a frame, the variable in combining operating mechanisms is limited. In addition, the inside and outside windows are completely separated and the inside color finish need not match the exterior.

In secondary glazing, the existing windows and frames remain in place. The sash must be made operable, but the amount of infiltration is not a critical factor in this solution since the pressure equalization principle operates to eliminate virtually all infiltration once the secondary system is in place. However, if water is entering the building wall surrounding the window, pointing and caulking around exterior window frames will be necessary.

Maintenance of the building is important in secondary glazing. It should be clearly determined beforehand who will maintain the window in a clean, operable condition. The increase in window maintenance costs will have to be factored into the composite costs of the secondary glazing system installed as it is most certain that the landlord will pass on this added cost to the Tenant.

Secondary glazing is the most convenient of the three solutions. In some instances, the secondary windows can be installed, while a busy executive is out to lunch.

EDITOR'S NOTE: Mr. Greenberg is Director of Specifications/Research for Haines Lundberg Waehler. He is also a member of the Editorial Board of ARCHITECTURE NEW JERSEY.
The office of Ecoplan is a young and aggressive professional firm that stresses a realistic contemporary approach toward design solutions utilizing a team effort in carrying out each assignment. So complex are buildings today, that it is impossible for one person to have a complete mastery of design, technology and management skills. Therefore the input from highly individualistic professionals working in collaborative unity produces good design. This team approach, which is the basis of Ecoplan's philosophy, rests on a format that seeks an individuality for each project's solution. Design is approached with respect for people, their lifestyles, the site, and the building's identity now and in the future. The specific project as well as an overview of its impact on the surrounding area is always considered in an attempt to produce an architectural quality that will remain as a dynamic entity, in harmony with the existing environment.

Ecology, economy, energy and communications are essential parts of this firm's identity and are constantly considered in order to promote an effective and comfortable physical environment that responds to the needs of the client.

Dedicated toward assisting in the sensible growth of our environment, the highly...
skilled staff members of Ecoplan are interested in the complex problems of our society and this concern results in company guidelines that are constantly refined and improved to meet the changing conditions of a constantly changing marketplace. A major portion of the firm's work is for private developers and municipal governments including new buildings, additions and adaptive reuse of existing buildings, as well as retrofitting.

Recent projects include interior designs for several major restaurants including two prototype free-standing buildings, showrooms, park and recreational projects, custom residences, office buildings, builder initiated residential developments, several environmental and urban planning projects, and two unique projects involving the preparation of a facade improvement guidebook for the downtown rehabilitation of the Main Street shopping area in Hackensack which has recently been implemented, and the Master Plan for the Secaucus C.B.D. which will soon be in the construction document stage.

Although the firm has only been established for seven years, the experience of its principal and key staff members covers all levels of the decision making process with many combined years at several large architectural firms.

In addition, the project mix of this office ranges from small but challenging residential additions to large scaled master plan developments, and each project is addressed with the same degree of sensitivity so as to result in a solution related to the firm's established design philosophy.

The continued expansion and development of this firm, and the desire and efforts of its principal and staff to stress a quality-built environment, has resulted in a close-knit professional organization that deals with projects of any size without losing sight of the humanistic and functional values of each solution.

Ecoplan has recently received an award from Urban Design Magazine for its sensitive solution toward the improved environment for Baldwin Park in Hackensack.

Martin Santini, AIA, President and founder of Ecoplan, originally from Trenton, holds a Bachelor of Architecture Degree from Ohio State University and a Masters Degree in Architecture and Urban Design from the University of California at Berkeley. Mr. Santini is a member of the American Institute of Architects, the New Jersey Society of Architects and Architect's League of Northern N.J. He is also a corporate member of the American Planning Association.

His qualifications are certified by the National Council of Architectural Registration Boards and he is licensed to practice Architecture in New Jersey, New York, Pennsylvania, Connecticut, Maryland, and Florida. He is licensed as a Professional Planner in the State of New Jersey.
what is architecture?

by J. Robert Gilchrist, AIA

There are two distinctly different etymological definitions for the word architecture. The first and most common of these definitions states that architecture is the art and science of the design and construction of buildings. This is followed by the definition of an architect as one who practices architecture.

The second definition, which is certainly the one that would be preferred by the purist, states that the word architect is derived from the elements, "arch", which is Greek meaning master or chief (such as used in archduke, archangel, monarch, etc.), and the Greek word, "tekton", which means worker or builder. Thus the word architect literally means master builder. This then is followed by the proper definition that architecture is the art and science practiced by architects.

The first definition above probably is an acceptable definition of the profession of architecture as it has been practiced in the United States for the past 200 years or so. The second definition above, however, more clearly describes the profession as it has been functioning throughout most of the civilized world for the past 5,000 years.

It does not strain the imagination to understand how the second definition came into being. There have always been those who have been engaged in building, albeit stone-upon-stone, bough-to-bough, hide-to-stave, lintel-to-post. Among these builders, there were those who did better than others; those who could imaginatively perceive of the finished object and could therefore best direct its implementation. It is not natural and logical that sooner or later there would emerge a group of master builders. The definition of the word architect as master builder is thus self-explanatory on the most elementary level.

The first definition on the other hand avoids such a straightforward and logical rationale. The definition is really not self-explanatory in that it involves multiple definitions of terms. What is art? What is science? What is design? What is consideration? While each of these four words has a reasonable definition or definitions, various colorations of each allow numerous combinations that permit the interpreter to make and accept a definition based upon his own personal connotations of the other words involved. Obfuscation is inevitable.

During the millennia in which the master builder was functioning in his logical role, there was no confusion. He was the leader. He, himself, designed the project and actively directed the construction process.

The architect of the second definition by-and-large has functioned passively in the role of artist and draftsman particularly in the United States. His role has shifted depending upon the project and the strength or relative positions of the owner, contractor, engineers, lawyers, realtors and other consultants. His role is altered with the nature of the client whether he be corporate president, building committee, developer, builder, investor or homeowner. All of these differing roles have made the profession a difficult one to practice much less to define.

Even if it were possible to devise different but currently precise definitions of the words architect and architecture such definitions would soon become invalid because of the universal changes that are taking place not only in architecture but in society in general.

It would appear to this observer that the profession of architecture is currently in a hiatus between two major periods of its formidable history.

The first part of this century witnessed the formation and development of the now well-recognized Modernist Period. The work of this era, no matter how caustically criticized, has served us well and will probably be treated by historians at least as well as the Etruscan and Early Roman Periods. But it has run its course. The forces and influences that brought about its being have changed and the techniques and expressions that were honest responses to the causal forces of society and technology no longer serve or satisfy.

A new period, which is not as yet identified, is now in its formative stage. New forces are being generated by a sophisticated, globally-oriented, technologically aware society which is fully conscious of its growing responsibilities to feed, house and educate all of its elemental segments and of its ability to see beyond earth's horizons.

Along with the universal awareness of this new generation is the vast amount of technological capability that is being amassed by the current generation. Technological advances are being made at such a pace that it is not uncommon for a major achievement to be outdated by the time it is implemented.

This present hiatus in architectural responsiveness occurs because an ending, that of the modernist period, by diminution is neither easily or quickly observed, and a new beginning which is so vast and swift as to be universally encompassing is too complex to be readily recognized or identified. Nonetheless, we are here in the nexus waiting, but also hopefully preparing for the inevitable metamorphosis.

During this interim period, it is not difficult to understand and to accept those architectural aberrations which are bound to occur, inasmuch as the old truths are no longer valid and the new ones are not yet evident. When respected architects for major projects revert to now eclectic forms that were primal and valid at one time or another in the past, or patch together non sequitur collages of pretty things for architectural expression because they sell well...and convince the world that they are right...the existence of such a hiatus is strongly indicated.

A new and much needed Essentialism in architecture has not yet presented itself but, if this thesis is valid, its coming is inexorable.

When the 20th century has spun itself out, what will the historians call this brief but important period in the history of architecture? Le Nouveau Fin de Siecle? Art Techneau? Pregallactic Gothic?

And how then will be answered the question, "What is Architecture?"

The NJSA sent out a questionnaire to obtain a general profile of its members. The following are the results of 145 responses.

What is your age?

<table>
<thead>
<tr>
<th>Age</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Below 30</td>
<td>4</td>
</tr>
<tr>
<td>B. 30-40</td>
<td>44</td>
</tr>
<tr>
<td>C. 40-50</td>
<td>46</td>
</tr>
<tr>
<td>D. 50-60</td>
<td>34</td>
</tr>
<tr>
<td>E. 60</td>
<td>15</td>
</tr>
</tbody>
</table>

Are you self employed?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. 71.3%</td>
<td>44</td>
</tr>
<tr>
<td>B. 28.7%</td>
<td>41</td>
</tr>
</tbody>
</table>

Is your employer engaged in architectural practice? Of 145 responses only 62 (43%) answered of those 75% Yes, 25% No.

In addition to architecture are you involved in other "professionally" related activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Professional</td>
<td>44</td>
</tr>
<tr>
<td>B. Municipal</td>
<td>36</td>
</tr>
<tr>
<td>C. Corporate</td>
<td>15</td>
</tr>
<tr>
<td>D. No Response</td>
<td>50</td>
</tr>
</tbody>
</table>
In the last issue of ANJ (Design Awards) two photos were inadvertently transposed. The Prudential Insurance Co., Eastern Operations, Parsippany designed by the Grad Partnership of Newark, which won a Good Neighbor award, is shown here (left). Wheaton Industries Research & Development, Millville, designed by Manders/Merighi Associates of Vineland, also a Good Neighbor award winner, is shown here (right).

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