The nineteenth annual design awards

Progressive Architecture

January 1972, A Reinhold publication



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January 1972

Progressive Architecture

19th annual P/A design awards program

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102 The planning jury: no awards, no citations.

Cover: Three first design awards; Bradbury and McCormack Studio photo.

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Views

Environment

Dear Editor: The importance of the topic, the shortage of energy and related environmental difficulties, discussed in your October issue cannot be overestimated.

This complex and multifaceted subject has been well covered by your publication and presented in a stimulating way. There is certainly a need to reorder our priorities, as pointed out in the editorial. In fact, we must strive unendingly for a commitment by each individual and group in our society to make the "quality" of life uppermost in their thinking. Only then will the fundamental change, referred to in the magazine, be attainable.

With regard to the architectural profession, specifically, I would say that many thought-provoking ideas were included. It is inherent to the success of our goal of a cleaner, healthier environment that people, such as architects and engineers whose work so involves this area, begin to incorporate, even at increased cost, the technological advances which have been developed to alleviate the deteriorated conditions. As other solutions, in the process of development, are proved to be beneficial, these, too, must be utilized.

I hope that *Progressive Architecture* will continue to emphasize the theme of environmental enhancement in the coming months. If the Environmental Protection Agency can be of service to you with materials or information, please do not hesitate to call upon our help.

William D. Ruckelshaus Environmental Protection Agency Washington, D.C.

Dear Editor: You are to be congratulated for the October 1971 issue. The coverage [continued on page 12]







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1. Cullen Center Bank Building, Houston Architect: Neuhaus + Taylor, Houston

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 Houston Brookhollow Complex Architect: The Office of G. Pierce • Goodwin • Flanagan
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 New Alley Theatre, Houston Architect: Ulrich Franzen and Associates,

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Views continued from page 8

of significant subjects relating to life support systems was both thorough and imaginative. I found the material extremely helpful and feel that your staff and the engineering firm of Dubin-Mindell-Bloome Associates have done a very fine job.

Innovations in the mechanical systems have been considered secondary issues for much too long. I trust that those responsible for implementing the programs called for to improve our environment will now assume the initiative.

The New York State Urban Development Corporation is committed to the philosophy that public agencies must assist private industry in introducing technological innovations. You have described challenging approaches which we will seriously consider.

David M. Pellish, AIA Technology Officer New York State Urban Development Corp.

Dear Editor: Just received your October, 1971 edition and I must congratulate your art staff for the most fantastic cover I have personally seen in many a year. Jack Dale Vancouver, B.C.

Cal Poly continued

Dear Editor: I was delighted to see your report on George Hasslein's School of Architecture and Environmental Design at California Polytechnic College in San Luis Obispo (P/A, June 1971, p. 47). Having had the privilege of lecturing at the school during the past seven years I can share Esther McCoy's enthusiasm. However, as we find the basically no-nonsense attitude at Cal Poly refreshing and practical, it is not difficult to agree also with Bob Vessely's defensive comment (P/A, Sept., p. 7) which espouses architecture as something more than draftsmanship. There is really not that much of a dichotomy. Mrs. McCoy in her rebuttal (P/A, Oct., p. 6) rightly quotes architects as pointing out the relationship between knowledge of structure and ability to make a design concept work. I think that Cal Poly is likewise strong in relating studies of human behavior and social needs to design, and to discipline the entire design and planning process by perceptive analytical and well systematized procedures. The great variety of teaching talent by permanent as well as visiting fac-[continued on page 14]

Pollution control: A corporate responsibility



Pollution and pollution abatement have become important aspects of every business. They affect budgets, profit and loss, position in the community, corporate image, even the price of stock in some cases.

Pollution is a now problem that is receiving now attention from astute businessmen. Water treatment plants, fume scrubbers and filtration systems, land reclamation, plant beautification, litter prevention, employee education programs, are all types of things industry is doing to help in the pollution fight.

But regardless what a businessman is doing today he must be considering pollution control efforts for tomorrow.

One thing he can do is write for a free booklet entitled "71 Things You Can Do To Stop Pollution." It doesn't have all the answers on pollution. But it might give a businessman a few ideas for both today and tomorrow.

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Views continued from page 12

ulty assures that students are exposed to a very wide range of ideas. Students are unusually successful in their design experimentation. One ought not forget that the examples shown by you began with thorough analytical studies. Today's computeraided comprehensive planning studies are likewise based on careful collection of data, ecological studies, systems analysis and a great deal of imaginative thinking. There is of course no need to neglect good draftsmanship. Communication is important. It is all part and parcel of a competent and creative design. Cal Poly is devoted to this kind of all-inclusive education and deserves to find all support to carry on with success

H.H. Waechter, AIA Creswell, Ore.

Beware the doggerel

Dear Editor: To this architectural sleuth A mishmash of forms is uncouth. At Goddard, "organic" Turned out merely manic. Are cynics debauching our youth? Maurice L. Wilks, AIA Associate Professor School of Architecture & Environmental Design California State Polytechnic College, San Luis Obispo [See P/A, Nov. 1971, p. 88.]

Superior

Dear Editor: I was particularly interested to see the report on "High-rise building has plastic exterior" (P/A, Sept. 1971, p. 55). From what I have gathered the fiberglass reinforced plastic (FRP) curtain walls produced tremendous cost savings. Furthermore, the design work was superior, utilizing an exterior contour surface which is very suitable for this type of material. In addition, the modular concept of having lap joints and window frames as an integral part of the panels produced additional labor and material savings. And because of design ingenuity the FRP panels were able to meet or exceed the building code's fire requirements.

As I am a structural engineer working in fiber-reinforced plastics, I can recognize the superior design achievement as put forth in this building, and I take my hat off to architects Cann-Termohlen. *Robert H. Green, PE Atlanta, Ga.* For more information, write or call any of the Institute members listed below:

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Progressive Architecture

News report

John Morris Dixon AIA joins P/A as editor

John Morris Dixon AIA, a former P/A staff member who for the last seven years has been a senior editor at Architectural Forum, has rejoined P/A as its new editor. His architectural training at MIT, plus his 12 years of experience in architectural journalism give him an excellent vantage point from which to view the profession today.

Dixon became interested in buildings and architecture as a boy; he watched his grandfather build houses, and he was doing dimensioned floor plans while still in grade school in Fair Haven, N.J. At MIT he earned a Bachelor of Architecture degree in 1955 and won the AIA School Medal for all-round academic performance. While there he was on the staff of The Tech, the school paper, his first brush with journalism.

After two years in the Army, serving as a lieutenant in Korea and Japan, he worked with George Nemeny FAIA and then with Daniel Schwartzman FAIA in New York City. While at college, he had decided that he would rather write than draw, and he has been an architectural journalist since he first joined P/A in 1960. He started as an assistant editor and during the next five years became an associate editor and then a senior editor. With the revival of Architectural Forum in 1965, he joined that magazine, where he served as a senior editor.

Dixon, his wife and their two children presently live in the Park Slope section of Brooklyn, where his interest in historical architecture has involved him in a spare-time historical survey of his neighborhood for the New York City Landmark Commission. He is a member of the Society of Architectural Historians, the National Trust for Historic Preservation and the Victorian Society. His family shares his interest: the children delight in spotting Palladian windows when traveling.

He has been active in local professional and civic affairs, chairing several New York Chapter AIA committees and serving as a Trustee of the Park Slope Civic Council and a member of the Friends of Prospect Park. His journalism career has involved a variety of writing projects. In 1962 he authored Architectural Design Preview, a survey of current projects and trends; he was a contributing author for the AIA Guide to New York in 1967 and contributed an article on American architecture to The Year's Art, 1969-70.

This is an exciting time to be an architectural journalist, Dixon feels. "The next few years are going to be a period of much experiment and little complacency. Construction activ-



ity will pick up because the need is so pressing. There will be new ways of working within design firms, new relationships between architects and clients, new applications of behavioral science, coupled with greater use of industrialization, computer technology and other new developments. There will be new and more sophisticated activity by government agencies at all levels. The exchange of information in the professions concerned with building will be more essential than ever before.

P/A has a reputation for discovering innovation in the design process and organization, and for bringing to light the accomplishments of little-known people and groups. One of our goals will be to relate the physical result to the process that shaped it, recognizing that architecture is not just what is done by the guy with the license on the wall. It is also shaped by the client, building officials, planners, engineers and other consultants, and-let's face it-by the industrial designer and package builder as well. Everyone concerned is trying to identify environmental needs, and then trying to find methods that will work to meet them. I'd like to cast aside the ideal of architecture just for architects. What really counts is what a building or a room, or neighborhood, or regional plan does for the people who use it, pay for it, see it.

P/A can be the best vehicle in the world for interpreting all these complex developments. With our staff of intense, committed people, we can contribute more to everyone concerned with planning, design and building than any magazine ever has."

Buildings on the way up





1 New neighbor for New York's Lincoln Center will provide 159 apartments in 33-story tower designed by Horace Ginsbern and Associates. Only 40 percent of site will be used for tower; rest will be landscaped and include outdoor plaza for restaurant, in building. Beneath plaza will be parking garage. Most apartments will include curved terraces. Precast concrete and glass will be primary materials.

2 Three story addition to Fanshawe College, London, Ontario, surrounds a central court and links existing buildings. Designed by Craig Zeidler Strong Architects, addition provides classrooms, labs, shops along with lecture theaters, lounges, offices and cafeteria. Poured concrete frame forms a basic modular core; other structural elements are concrete or steel. Exterior walls are brick, bush hammered concrete, ribbed metal siding and colored aluminum windows and frames with tinted glass. Engineers are: J. Maryon & Partners (s); G. Granek & Associates (m); J. Chisvin & Associates (e).

3 A psychedelic pneumatic drill rather than the traditional spade was used to break ground for additions to the Art Gallery of Ontario. According to plans by Parkin Architects Engineers Planners, the new buildings coil around existing building on three sides, allowing for phased construction and providing continuous circulation. Structure is concrete, and exterior walls are precast concrete with triple glazed windows. Among features of the enlarged gallery is the Moore Centre, housing world's largest collection of Henry Moore's works. Cost of first stage is put at \$13.7 million; completion is set for June 1974.

4 Long term research on management and treatment of a wide range of offenders is the purpose of the Behavioral Research Center at Butner, N.C. Center was designed for Federal Bureau of Prisons by Middleton, Wilkerson, McMillan. The single story, precast concrete facility will house 400 inmates in small groups; rambling structure provides 225,000 sq ft of space on 42-acre site. Cost is \$12.5 million.

5 Art school (college level) and music school (elementary to college level) will share sprawling block-long structure designed by William Kessler and Associates. Project, located in downtown Detroit, will have precast exposed concrete component structural system designed for expansion at almost any point. To be built in three stages, the Center will include a plaza level pedestrian mall winding around and through dance studios, library, exhibit hall, dining hall, industrial design shops and sculpture areas. Cast in place concrete towers will handle vertical circulation and toilet and maintenance facilities.

6 Designed around covered courtyard which doubles as lobby and shopping arcade, Dodge Center, planned for the Georgetown waterfront in Washington, D.C. will provide 187,300 sq ft of office and commercial space. Office floors are arranged around courtyard to provide natural light and views. Stepped back upper stories form balconies overlooking the river. The structure is reinforced concrete, exposed in the courtyard and covered with brick on the exterior. Space for 390 cars is provided on four underground parking levels, along with storage space for tenants. Architects are Hartman-Cox. Arcades from all four sides will provide entrances to central courtyard; at center of court will be four freestanding circular elevators.

7 Television station for Virgin Islands Public Television System is on what the architect, Ecodesign, says is their most challenging site: an unused catchment—a 45 degree slope covered with concrete once used to catch rainwater for storage. Building is of concrete block and stucco; large sliding wood doors open the station to breezes. Production areas, offices and studios are linked by an exterior studio and a network of bridges.

8 Next door to Philadelphia's Academy of Music, Academy House will offer a five-story arcade including assorted shops, restaurants and gardens, topped by 32 stories of condominium apartments. A garage for residents will be beneath the building. Also included in the lower five floors is a recording studio and rehearsal hall for the Philadelphia Orchestra. Architect Otto E. Reichert—Facilides & Associates has provided some 20 possible apartment layouts.















OSU's pillow, Monaco's boxes





Detroit development

Movie theater turned museum



Kent State hosts regional student conference

Some 250 students of architecture from 10 of the schools in the Great Lakes region of the AIA met at Kent State University in October, to listen to some well-known speakers and assemble some structures of their own design. Bucky Fuller, Dahlen Ritchie, William Mouton, Richard Ginzer and Brian Ireland were among the speakers; structures were, for the most part, constructed of plastic, but some used cardboard or other materials.

Most popular structure, and the winner of a \$100 prize, was a high plastic pillow 80' x 50' x 20' high. Supported by air pressure, it was the work of students from Ohio State University; a 12-ft-wide band of transparent plastic provided a continuous window. Another \$100 prize went to Ed Monaco, a Kent State student, for a geodesic dome built of cardboard cartons. The boxes, (prefabricated modular units might sound better), taped together by their flaps, yielded a structure with a large amount of interior shelf space. Another of the plastic shelters consisted of plastic sheet stretched over a framework of pipes.

Ford announces real estate plans for downtown Detroit

There's a Ford in Detroit's future—a 28-acre real estate development along the downtown riverfront. Planned by John Portman, the project will be built in several stages at an eventual \$400 to \$500 million; the developer, Detroit Downtown Development Corporation, is a subsidiary of Ford Motor Land Development Corporation.

Early plans call for a complex of office buildings, a hotel, apartments, stores and service and recreational facilities. Preliminary renderings and models show five high-rise towers and several smaller ones rising from an elevated plaza; buildings may be linked by enclosed bridges and walkways.

Art to the people

An abandoned movie house in the run down Pearl Harbor section of Houston is starting a new life. In late summer the Deluxe Theater was turned into an art and sculpture gallery: the exterior and lobby weren't touched, but the 7000-sq-ft orchestra section was cleared out, stage and wings were removed, walls made flush, and entrances enlarged. The floor was left sloping, and level platforms were provided for pieces of sculpture. Upstairs in the balcony a wall was built for film screenings; the balcony seats were left in place.

The first show was an exercise in community participation. The neighborhood children were paid to distribute posters about the city; unemployed workers were used in the renovation project; and local citizens took on a park planting project nearby.

Following the opening show, an exhibition of 40 paintings and sculptures, the Deluxe was used as campaign headquarters by a local school board candidate. Another sculpture show will open soon, followed by a showing of works by black artists. Eventually, the Deluxe will be turned over to the community as a health clinic.

Construction management with a British accent

Somebody wanting to toss off a nice fast quip might describe a quantity surveyor as a construction manager with a British accent. The similarities are obvious: both work for the building owner, both are concerned with getting the most [continued on page 33]

For 20th Century castles an 18th Century floor.

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News report continued from page 30

building for the owner's money, and both provide services ranging from pre-design budget advice to an active role in administrating the project.

There are some differences, as audiences who heard a recent group of quantity surveyors in several U.S. cities (most recently New York) learned. Quantity surveying is a separate profession in England, not a service that can be offered by architects; there is a professional group-The Royal Institution of Chartered Surveyors-that includes the country's 7500 quantity surveyors; and there are universities giving degrees in quantity surveying (a five-year program, soon to be a sixyear program). As Tony Brett-Jones, a partner in a quantity surveying firm pointed out, it is an old idea, dating back to the 16th or 17th Century, that has been brought up to date. Quantity surveying began with the measurement of completed work to assure that craftsmen got fair prices; around 1840, with the entry of the contractor, came a need for measurement before work started; still later, in the middle of the 20th Century, the profession took on the task of giving cost advice even before the start of design work.

In his talk, Brett-Jones outlined some of the services the quantity surveyor provides his clients. He helps determine a budget for the project, in commercial buildings balancing design, cost and return on investment; public buildings are budgeted through a system of complicated cost yardsticks showing appropriate cost per bed, operating room, student or the like. Following the setting up of a budget, the quantity surveyor assesses alternate schemes, and sees that funds are spent in a balanced manner; this cost plan is used to keep all parts of the building in proportion (financially) with each other. Once the project is underway, cost control checks are carried out periodically, and the quantity survey is the basis for the competing bids.

The quantity surveyors as a group are also involved in cost analyses of existing projects to provide raw material for their work. There is a standard system of measurement used by all quantity surveyors, and two of the major firms have published nomenclatures which, while not universally used, might be considered unofficial standards.

J. Irwin Miller receives Tiffany Design Award

With a 6 lb, 3 in. cube of solid sterling silver, Tiffany & Co. honored J. Irwin Miller, chairman of the board of the Cummins Engine Co. for "imaginative leadership" shown in the design of products, graphics and architecture. Cummins is a leading producer of diesel engines, but in architectural circles Miller is better known for his part in making Columbus, Ind. an architectural showplace.

INBEX: systems and seminars

Having surprised even its promoters with its success last year, the Industrialized Building Exposition and Congress IN-BEX set out to outdo itself with this year's production. In terms of attendance, speakers, floor space and commercial exhib-[continued on page 34]





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News report continued from page 33

itors, it seems to have done just that. Sprawling over the entire Kentucky Exposition Center at Louisville Oct. 31 through Nov. 4, INBEX is "the only trade show strictly to promote industrialized building and components, products and equipment used in it." A total of more than 13,000 attendees poured through 170,000 sq ft of display space housing 352 exhibitors. Representing a 100 percent increase in exhibitor participation over 1970, these figures seem to reflect the desire of manufacturers and allied industries to join the burgeoning "systems" market.

Seminars held throughout the show drew those registrants interested in the whys, hows and whats of systems; a moderator-plus-presentations format gave a total of 142 participating speakers or moderators. Several of the seminars dealt with the necessity of teamwork in any systems application, others with codes, specifications and responsiveness to user needs. For the developer-builder-fabricator, there were talks on mortgaging and financing, project management, plant and site handling techniques, marketing and costs.

INBEX goes far beyond the promoters' self-imposed classification of "trade show" through its seminars and presentations, and architects, both as speakers and attendees seemed to recognize the value of systems building as a tool. Still, architectural involvement in systems is in its infancy, and many exhibits gave graphic evidence that design input and imagination is still needed to make the team complete. Architects in general are still not full members.

NYC not a good client, report says

If it takes a good client to get good architecture, then it's no wonder that the city of New York has been getting less than the best work from the architects it hires; it hasn't been a good client. That's the gist of a report by the city's Urban Design Council who also suggested a solution—a city architect.

The Council spent 20 months on the study, corresponding with and interviewing public officials and architects. Their conclusion is that the quality of services the city receives doesn't meet the highest standards. The basic reasons, the report says, are that the city's building practices are hampered by time-consuming procedures, and it pays fees lower than other government and private clients.

Significant steps have been taken toward streamlining the city's building practices, the report acknowledges, but there is still a long way to go. The city's basic services contract is seen as largely responsible for keeping architectural fees low, and the New York State multiple contracts law is blamed for a lot of the duplication and inefficiency in building procedures.

The office of a city architect, proposed in the report, would help reduce the confusion. Architects on city projects would deal with only one office, which would have the authority to make planning and design decisions, control budgets and speed up the review system.

Saint Louis Symphony seeks new settings

With the help of a grant from the National Endowment for the Arts, the Saint Louis Symphony Society is looking for ways to reach audiences outside the traditional concert hall setting. In the process, they hope to develop new concert for-[continued on page 36]

News report continued from page 36

servation Forum, Hilton Palacio del Rio Hotel, San Antonio, Tex. Apr. 27–28. Thirty-third annual conference of the Guild for Religious Architecture, Regency Hyatt House, Atlanta, Ga.

Washington report

Politics and economics prime factors in 1972

Politics and economics will dominate all other factors in 1972, which should be a very good year for architects and for the construction industry in general. Of the two, politics is dominant. It is the reason that almost all industry forecasters expect a very good year for construction. This year, they feel, will see an increase that might run as high as 8 percent, pushing total gross dollar volume to a record \$115 billion.

The background is simple enough. Obviously, it would be good for any candidate (particularly the incumbent) if the economy is in relatively good condition about mid-summer. The quickest way to pump money into the economy to achieve that result is through public works spending. So you can take it that though there will be the usual pious lip service given to the need for care in federal spending, construction work won't be stinted.

Moves have already started on several fronts. There was, for example, the release of a good many millions, just before 1971 ended, for added highway work and planning, and the moves by the Federal Reserve and other government money regulators to increase credit and keep down interest rates. Congress was doing its part, too, giving more tax relief to businessmen and individuals than the President had asked; calling for more spending (\$14 billion over four years) on stream pollution control than has ever been put into this field; setting up a revolving fund so that Public Buildings Service could proceed with federal construction without waiting for specific appropriations; attempting to inject itself into the whole wage-price control picture by granting retroactive pay to workers; and trying to increase payments for relief, disability and the like.

Thus, the reasoning goes, with more federal spending, and more money in the pockets of businesses and individuals, more will be spent. A lot of that will go into buildings, repairs and necessary service structures.

Economics is almost equally important. There is general belief in Washington that "Phase II" will work. It probably won't succeed in pulling the rate of inflation down to Mr. Nixon's goal of 3 percent. But if inflation slows to even 6 or 7 percent, that will mean a major improvement. It will mean, in fact, that the \$115 billion to be spent for construction will buy more actual bricks-and-mortar than it has for a number of years past.

Amid the confusions resulting from the new control mechanism, there are also signs that the program is beginning to have some effect. As winter approached, the rate of inflation had dropped (for a month or two, anyway) to around 3 percent; there were certainly fewer strikes and shutdowns in construction, fewer business failures among contractors; and prices of materials and money had steadied considerably.

Optimism is based on such signs, and on the general agreement that the slowdown just has to work, to stave off a [continued on page 40]

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News report continued from page 39

major catastrophe. Initial grumblings by labor leaders were taken as political ploys to cover eventual compliance.

There was no question of continuing demand as the year ended. Housing was expected to keep to the roughly 2 million-unit level it hit in 1971; industrial construction was believed to have bottomed, and be on the way up again (the petroleum industry alone, for example, estimated it would have to spend \$100 billion over the next 10 years just to keep up with demand); there was expectation that some compromise would be reached between excessive demands for environmental protection and the very real need for more fuel and power. Commercial construction—taking its fire from the housing boom—is expected to continue strongly upward.

All of which doesn't mean that life will be any easier, either for contractors or professionals. Contractors, for example, must contend with ever-increasing competition (the Census Bureau thinks there are now 800,000 of them); with a host of new regulations, such as those growing out of the Occupational Health & Safety Act (OSHA) and continuing efforts to force more minority-group workers into the field; and with still-unanswered wage and price problems.

Professionals also will be under continuing pressure from owners for more building for the dollar—if the dollar actually does buy more; with their own problems under price and wage controls; with a new set of business-getting circumstances, now that ethical bans on bidding are falling away. The question of prices, for example, is interesting: The new Price Commission said that (1) professional fees are subject to its rulings (they can be raised, but must not result in excessive gains as compared to a base period chosen from two of the past three years) but (2) firms doing less than \$50 million business annually needn't report changes in prices. Presumably, then, architects could raise their fees but, if a client complained, the Price Commission might step in.

On Capitol Hill, it is a very safe bet that the principal product will be talk, not action. It isn't as though the lawmakers had nothing to do: not only was a legislative program laid out in the President's three annual messages this month (Economic Report, Budget, State-of-the-Union), but two major Presidential initiatives—reorganization (reducing the number of Cabinet departments from 11 to 7, on a functional basis), and revenue sharing—still hung fire. Congress had its own long list of bills as well: reorganization of some of the federal regulatory agencies, to clip their judicial wings; expansion of federal grant programs (including additional attempts to tap the lucrative Highway Trust Fund); further controls on water pollution; plus the usual appropriations bills, and a spate of private or regional matters.

But most Congressional time, it appears, will go toward jockeying for position against the final countdown in the first week of November. Most Washington action, then, will come from the various regulatory agencies that don't need Congressional action on their moves. But despite their "independent" status, many of these agencies will have an eye on political effects, too. [E.E. Halmos]



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Architecture west

The 47-year-old St. Paul's Episcopal Cathedral sits on the eastern edge of Los Angeles' new financial district, bestowing a blessing on five 35- to 50-story towers and two dozen lesser ones. Designed in the Spanish Colonial Revival style by Reginald D. Johnson, it is the city's Cultural-Historic Monument No. 66.

Unlike most inner city churches, St. Paul's is richly endowed. Nevertheless, it is coming down in 1972. The reasons are that the diocese is feeling the pinch; the membership of the cathedral, which acts as a parish, is down to 517; and the $\frac{4}{5}$ -acre cathedral property is located where the going price for land ranges from \$100 to \$120 a sq ft.

The first move came in June 1969 when the steering committee of the Los Angeles and Pasadena Convocation decided seven to six that "the present cathedral property be developed commercially to produce income for the diocese."

The outcry extended beyond the cathedral parish to other parts of the diocese, and was joined by local preservationists. Older members to whom the church was home were distressed. One in her 80s, who had "been with the first dean" and helped clear off indebtedness, called it "wicked."

A public airing of the hostilities came in November last year when the Cathedral Corporation petitioned the Municipal Arts Commission to undesignate the cathedral as a monument. The Citizens' Committee to Save St. Paul's brought with them 3700 signatures and passionate arguments.

A letter from Francis Eric Bloy, English-born Bishop of Los Angeles, urged the commission "not to confuse our familiar cathedral fabric" with the church as an institution, and explained that by razing the building they "had the opportunity to double the amount of our present annual resources."

The cathedral would be included in a package of the major part of the block, put together by land developer Cabot, Cabot and Forbes of Boston. A 99-year lease of the cathedral property would insure an income to the diocese and give it an interior site for a new combined cathedral and diocese offices. Three towers would be built at the corners.

The Chancellor of the Los Angeles Diocese, Attorney R. Bradbury Clark, excused himself because the legal firm of which he is a member represents the land developer and realtor. Speaking for the Cathedral Corp. was John H. Brinsley, who furnished the comic relief of the day by questioning the designation of the building in the first place—he said, it was referred to as nondescript, and hence was not a work of dis-



St. Paul's Episcopal Cathedral

tinction. A dictionary was consulted to prove that nondescript does not mean lack of quality.

Whereupon the cathedral attorney insisted that the wording of the criteria for the selection of buildings could only refer to someone of the "caliber of Michelangelo or Frank Lloyd Wright." The Arts Commission decided that the criteria did not exclude "architects of lesser stature," and reaffirmed its original declaration.

Three months later several arches in the cathedral were damaged in the earthquake, and although both sides brought in structural engineers and the estimated repair cost ranged from \$12,000 to \$25,000, the burden of the repair was placed on the preservationists. They were given 180 days by the Cultural Heritage Board to present evidence that they could pay for the repairs; when they failed, the Cathedral Corp. had won the right to demolish the building.

Daniel, Mann, Johnson and Mendenhall are planning the new combined cathedral and diocese offices. According to project architect William S. Coburn, a lay minister in the Episcopal Church, the present plan is for the structure to "melt down into the two-level plaza" which has parking below. The first tower, to be designed by Welton Becket Associates when a major user is found, will be open at ground level to provide one of the entrances to the cathedral from the street.

The wounds are far from healed. The Rev. George Clendenin, rector of the church of the Holy Apostles in Glendale, said, "The symbolism is all wrong, the priorities are wrong. In a secular society the church must be a witness." [Esther McCoy]

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Ice cube



Sculpture. Large scale sculptures designed by well-known artists in limited signed editions of 10 and 25 can now beautify public thoroughfares, schools, office buildings, shopping centers. For example, the Association for a Better New York has given the city six sculptures to be placed at Times Square, Lincoln Center, Battery Park and three other spots. The sculptures, 8' x 14', have been sized for maximum visual satisfaction; some invite viewer participation, they can be sat upon and walked through. Guaranteed for structural soundness and compliance with standard building code requirements, and engineered so that they can be moved, all bases and pedestals are constructed of steel angle frames covered with ¼ in. steel plate, sheathed in anodized aluminum. Sculpture Editions, Ltd.

Circle 101 on reader service card

Uniplane desk and credenza. Looking like it was squeezed out of a giant toothpaste tube, this executive table-desk is a continuous form of white gelcoat fiberglass accented by rosewood. The credenza contains file drawer, two storage drawers and a center door compartment, comes with black vinyl or white fiberglass for the top center sections. Optional solid full leather desk pad available. Vecta Contract Co. *Circle 102 on reader service card*

Multilevel rug. An interesting textured effect is created by using colorful raised circles in this hand-tufted, all-wool rug designed by James Hill of SOM, San Francisco. The colors blend from shades of cerise to celadon and tropical greens creating a kaleidoscopic effect. V'Soske. *Circle 103 on reader service card*

Indoor/outdoor chaise. One-piece tubular steel lounge has a base constructed of a single piece of chrome-plated bent steel tubing. The polyurethane foam-filled sling is looped at the ends so that it slips over the cantilevered arms. Water resistant, it is suggested for poolside use as well as interiors. Also available in enameled finish in range of custom colors. Daedalus Designs.

Circle 104 on reader service card

Ice cube. Shedding a new light on the outside, this acrylic lamp of Rohm and Haas Plexiglas is impervious to weather. One from a series of acrylic wall, ceiling and table lighting fixtures in a variety of shapes and patterns. Morrison Lighting. *Circle 105 on reader service card*

Camouflaged. Designed to conceal this company's mechanical rooftop heating and air conditioning equipment from ground observation while retaining the architectural integrity of the building design, the façade framework is available with an assortment of fascia panels to blend with the building. The steel framework is fastened directly to the mechanical unit without requiring additional structural support from the roof. Colored aluminum fascia panels can be placed in mansard or vertical positions; other types of fascia panels can be used provided they do not exceed 4 lbs per sq ft. Gas-fired, electric resistance, steam and hot water heating options and direct expansion and chilled water cooling coils are available. American Air Filter Co.

Circle 106 on reader service card [continued on page 48]



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Literature

Hardboard. This brochure reviews the properties, characteristics and advantages of hardboard panelings and sidings for all types of commercial construction. Special section reports on noise control benefits of hardboard panelings based on independent acoustical laboratory tests made on a dozen commonly used partition systems. Case histories offered. American Hardboard Association.

Circle 108 on reader service card

Plexiglas mirror. A transparent acrylic plastic sheet, vacuummetalized on its back surface with aluminum, has the imagereflecting characteristics of conventional plate glass mirrors, but can be strip-heated and bent to fit around corners; can also be cut into a variety of shapes. Breakage resistant, it is less than half as heavy as glass mirrors and is available in a range of colors. Suggested applications include contract and residential furnishings, commercial and industrial displays, signs, surveillance and industrial safety mirrors and such architectural applications as balustrades, building fascia panels, graphics, doors and sunscreens. Rohm and Haas Co. *Circle 109 on reader service card*

Drapery walls. Available in aluminum or steel mesh in sizes ranging from ½ in.-20 gauge to 12 in.-16 gauge in anodized and sprayed metaltone or sprayed enamel, these draperies are suggested for use as room dividers, window draperies, closures, ceiling and acoustical decor and for privacy and light diffusion. They will adapt to most standard drapery hardware with installation of carriers and self-pleating chain done at the factory prior to shipment. Pacific Drapery Walls. *Circle 110 on reader service card*

Sculpturewood screens. Carved from ¾ in. and ½ in. walnut, birch, poplar, oak and ash in a variety of panel sizes, these sculptured screens come in solid or see-through panels with vertical or horizontal exposure. Booklet illustrates varied patterns. Penberthy Architectural Products. *Circle 111 on reader service card*

Smoke and fume resistant panels. A technical report describes resistance to dangerous smoke and fume generation of porcelain-on-steel building panels. Information is also given on thermal degradability of some paneling materials and generation of carbon monoxide, nitrogen oxides, phosgenes, hydrocyanic acid and other deadly fumes under fire emergency conditions. Alliance-Wall Corp. *Circle 112 on reader service card* **Microwave intrusion sensor.** Reportedly, this sensor works reliably outdoors as well as indoors. Using microwave signals to detect human intruders, it cannot be fooled by birds, flying papers or other intruders that do not have the size and general shape of a human. A microwave transceiver and microwave receiver, linked in tandem, are generally installed facing each other for all outdoor and certain critical indoor installations. Omni Spectra, Inc.

Circle 113 on reader service card

Versatile wall panels. Tectum, a structural wood fiber building material is suggested for new construction and remodeling. Booklet describes its insulating and acoustical properties and illustrates its application in residential and commercial interiors, as structural roof decks in cathedral ceiling installations and as a form plank for reinforced concrete construction. In varied sizes and thicknesses; natural white or spray painted. Tectum II is available with urethane membrane. National Gypsum Co.

Circle 114 on reader service card

Lumber use catalogs. These seven end-use booklets have been revised for 1972, offering data for using lumber in construction. The "Product Use Manual" is a basic technical guide for choosing the right lumber for light framing, and estimating needed quantities for siding and paneling. Other booklets include, "Stock Doors, Windows, Mouldings," "Sound Control," "Fencing, Decking, Storage," "Wood Siding," "Interior Paneling" and "Concrete Forms." Available separately. Western Wood Products Association. *Circle 115 on reader service card*

Examination handbooks. Simulated examination questions, presented in the form and style encountered on State Board and NCARB examinations, are offered in Handbook 6 designed to help the candidate for licensing to study more efficiently. Also available is a 255-page book on "Past Examinations, Problems and Solutions," a comprehensive collection of problems based on past examinations in architectural design and site planning. Architectural License Seminars.

Circle 116 on reader service card

Rooftop systems. "Environments for the modern office building" describes various heating and cooling rooftop systems. Recently introduced is this company's low-silhouette models in the 40-, 50- and 60-ton range, measuring less than 48 in. above their mounting curbs. All units are shipped to the job site in one piece including refrigeration and heating sections, filter, blower and any one of several optional return air sections. ITT Nesbitt.

Circle 117 on reader service card

Security mirrors and locks. Bulletin describes a variety of mirrors, ranging from 18" to 36" diameters, available in two round and roundtangular styles that provide a full, 160° wide angle view for complete visual control of blind areas, around corners and over store fixtures. Mirrors can be attached to walls, ceilings, columns or directly to wall or island fixtures. An 8-chain master lock system to secure valuable merchandise is also described. Reflector Hardware Corp. *Circle 118 on reader service card*



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Progressive Architecture

January 1972

For the 19th time, the editors of P/A watched another jury come and go, leaving behind its selection of the architectural profession's best designs for projects as yet unbuilt. After weeks of opening, sorting and laying out the entries (655 this year), in some sort of logical order, arrival of the jury marks hands-off time for the editors, who watch, listen and cheer on (silently) any favorite entries they may have spotted earlier. The fringe benefit, and reward for the preparation chores, is listening to these distinguished professionals discuss Architecture both with a capital A and a small a, when the word is more likely to be pronounced "building."

Jury comments are taped for consolidation by general subject matter and by specific project, but often the most meaningful comments come later, after the members have had a few weeks to mull over their experiences in P/A's board room. Although this year's jury defied tradition and refused to elect a chairman, Philadelphia architect Louis Sauer emerged as semi-official spokesman. The following paragraphs are his personal reaction to serving as a juror in a program that had previously honored his own work.

Several weeks after the final jury session, I was surprised to realize that without prior discussion we all had accepted two concerns as basic criteria for our evaluations.

Firstly, we were concerned about the individual and his immediate environment. We assumed that the architect must increase the perceptual quality of a place—the design must help a person somehow connect up with oneself and others. We talked a great deal about light, how different functions all require natural light—a relationship to the world outside.

Secondly, we were concerned about formal architectural organization. A design had to measure up to our sense of

form and style. At the same time it had to be consistent.

I suppose that given another few days together some good battles could have been fought about what is *Real* and/or *Ideal*. For although we managed not to trap ourselves or one another into argument of belief, there were two floating issues that almost came to a head during our discussions.

Was a design good/bad since it was practical in working through existing lifestyles, institutions, programs and technology? Was a design good/bad since it was contemplative in creating new lifestyles, institutions and technology?

It is difficult, however, to capture these discussions within the format of the awards program and publication of the winning designs. Since none of the submissions which sparked off our most spirited discussions were premiated, we created a special category called "comment" for these projects. The jury's intent in publishing projects under this new category was for the reader to better understand our problems and the range of architectural talent represented on the table. Some of the architects whose projects were discussed under this category, however, were reluctant to be published under this category and *Progressive Architecture* dropped it.

These reactions are most unfortunate. I believe that architectural "comment" is better understood in conjunction with the published project; hopefully, such comment would be of help through such sharing of our work and experience.

The smashing project that was an award or citation often misleads since its very singular quality overwhelms other values. Often the project that does not quite come off is far more interesting in that one can better perceive the multitudinal dimensions of the problem, the architectural effort, and thus gain insight into the knowledge required to further both desired change and our evolving tradition.



Louis Sauer, Earl R. Flansburgh



John C. Parkin, Moshe Safdie



Richard Bender

The nineteenth annual P/A design awards

The jury



Richard Bender, principal of a consulting practice in architecture, engineering and building technology; Professor of Architecture and Director of the Architecture Experiment Laboratory, College of Environmental Design, University of California at Berkeley.



Earl R. Flansburgh, President, Earl R. Flansburgh and Associates, Inc., Cambridge, Mass



John C. Parkin, Partner, John C. Parkin, Architects, Engineers, Planners, Toronto, Ontario.

[Charles A. Blessing, Director of City Planning, Detroit (p. 102) sat in with the architecture jury during the second day.]



Moshe Safdie, Principal, Moshe Safdie Architect, Montreal, Que.

Louis Sauer, Principal, Louis Sauer Associates, Architects, Philadelphia, Pa.



In a year marked by a number of "firsts" in the annual design awards program, winning submissions encompass a spectrum of diverse projects ranging from an unusual zoological garden to a psychedelic prison, from a water reclamation plant to an inflatable mobile theater

It was a year of firsts for the 19th annual P/A design awards program. It was the first year the competition has invited submissions from Canada and, consequently, the first year Canadian architects have served on the board of jurors.

It was the first year that a team of jurors decided not to elect a chairman of the jury. In the past, the chairman's main task has been to act as mediator in the jury's deliberations that ultimately establish which projects are to receive awards. In deciding not to have a chairman, the jury actually made the two days' deliberations much harder on themselves; for without one person established as a final authority, the jury members put themselves in the position where they had to argue much more persuasively than usual for or against awarding a project. The whole procedure took longer because, in order to argue convincingly in presenting their cases, the jurors were forced to spend much more time scrutinizing in depth all of the details of some 50 finalists before deciding upon the 18 winning projects. Obviously, this worked to the detriment of some submissions, but for others it revealed important aspects of the projects that might otherwise have been overlooked

This was the first year that three projects have ever been honored with a first design award. Part of this is probably attributable to the fact that there was no chairman to arbitrate in the difficult decision of choosing one project for the first award. But it is perhaps more important that the jury was in unanimous agreement that it was not necessary to single out one project for the top honor, not, that is, if they felt there were three that merited that award. As they put it, they saw no particular value in making a distinction between apples and oranges.

The honor winning projects were a mobile theater, a high school, and a humanities complex for a university. It was the first time a theater has ever won first award and the first time college classroom facilities have ever won that award, but a high school received top honors 15 years ago. It might have been expected that educational facilities could have won first awards, particularly in view of many of the comments made by last year's jury members who had recognized that the quality of school design generally, over the past several years, has reached a high order of competence.

Perhaps the single aspect that distinguished this year's jury members from those of the past was revealed during their two days of discussions; they focused more intensely than usual on the broader questions concerning important social and environmental implications of the projects. While these questions have always been carefully considered in the past, this jury seemed to place a new emphasis on them when deciding which projects should receive awards.

Safdie: An architect has a certain responsibility to the program if he either accepts or helps to develop it. For example, if a school board comes to you and says we want to design a school, and our study shows the classrooms are to have no windows, the architect has certain responsibilities ... he can respond by saying I believe the classroom should have win-

Design awards

dows, and he can shun the program. In assessing these schemes, we are also assessing the program, and we attach a responsibility to the architect in having gone along with any program. The other thing we must do has to do with context; we must ask ourselves, when looking at a scheme, if that scheme responds to a problem which from our architectural experience we feel is relevant. That is where our value judgment comes in about how land should be used, and what the hierarchy is about using land, whether or not it is right or wrong to build, as we have seen here, over or under an expressway or railway.

Parkin: The architects ought, as a matter of conscience, know that there are various standards for an inappropriate site. To build beneath the legs of an expressway, or contiguous to one, or under a railway ... must be looked at very carefully.

Flansburgh: Let's say that an architect questions whether or not a school should be under a railway, and having questioned it, finds it is physically possible, and he has successfully done it, even though it may not have been anything we thought ought to have been done.

Safdie: I think that there is where we come in as a jury, in the sense that we review it in context. Context cannot be limited to the special moment of that architect of having been commissioned to fulfill that program, but to how we feel it fits into the context of building schools today. It's crazy for us to give recognition to a scheme that has solved something which we think in the context of schools is wrong ... putting it in context is our responsibility as a jury.

Flansburgh: The big problem of a railroad when it comes to a city is that it's a wall—a Chinese wall. If you build a school that would function physically and have enough sound insulation and could indeed act as a stitch to connect two parts of the community, that would be a viable kind of thing, it would be a desirable thing, and consequently it could achieve something that is beneficial.

Safdie: Yes, but then we'll have to talk about whether, if you want to make that bridge, it should have been a school rather than, perhaps, a shopping center or something else.

Flansburgh: To say whether a school under the railroad is successful is saying that at best it is a very poor site and a very poor idea. If we have a bad site ... if the architect solves the problem of the bad site extraordinarily well and has made the site livable, that doesn't mean all the problems have been solved. It often happens in architectural design awards that what gets an award frequently is the extraordinary overcoming of a difficult problem, and all the rest of the architecture goes down ... nothing else is considered ... it's just the fact that an extremely difficult problem has been overcome which, to me, only brings it up to ground zero. I think we should not give an award if the problem was difficult, if the architect simply solved it but did not advance the art at all by simply solving it.

Parkin: Yes, that becomes a kind of dermatology where we're doing the most ardent and socially irresponsible act ... the architect has to be concerned with the program ... we must get out of the problem where, as professionals, time after time, we simply take the program and complete it without ever questioning it. I found it particularly discouraging that socially

important institutions such as schools found themselves so shy of essential land resources that they had to be built as part of the infrastructure of superhighways, rather than justifying their own worth. Seventy percent of the urban population of the United States, if I recall rightly, lives on two percent of the land mass ... the United States is not a land hungry nation, and it seems ironic and socially irresponsible that schools and other institutions would be found on those pieces of land in the urban context which were left over. Safdie: It seemed to me that as we were looking at the houses, many of them were merely formalistic preoccupations with the house ... few of them showed any regard to how a piece of land is used so that piece of land adds to that house. The architects were putting objects into a composition in a particular formal milieu, and were playing around with proportions at the expense of what houses should be all about. A house should respond to where it is. Of all the housing projects submitted, there were few you could say were good places to live in ... they all looked like "projects," none of them had the quality of always having been there, of working in the community. Where there had been some technical innovations, they seemed to always be at the expense of the environment, you didn't feel that the technology in them had been used to improve the environment, to produce a better community.

In many of the houses there was a preoccupation with an intellectual approach, an obsession with a particular formal language and geometry, and a certain admiration for things like signage ... it's very influenced by Venturi's and Moore's thinking. Some very old fashioned basic questions that have to do with environment, like the clarity of circulation and the clarity of the process of building and how that comes through in the space itself, or how you understand the process of building in the building ... all of these things get sacrificed or ignored for the sake of a certain literal kind of architecture, an architecture that has its roots in words and in abstract geometries rather than in space and the light that goes on in space. That really concerns me. Unlike the formalism of the Mesian building, which is a physical formalism, here often there is a literal formalism.

Bender: There were two kinds of houses—some that were quite nice, ordinary houses, and others that made an attempt to show a direction, to set new trends. My point is that they failed. There were some houses that were pretty good in terms of what has been going on, but in terms of going beyond that to say that something was a trend setter, that it showed a direction, that it represented the opening of a generic class of house ... no, I didn't see that. The same was true of multiple housing. In fact, I think the idea of designing housing, under the present definition—a thousand units at a time—may not be the proper function of architects. I can't think of any really successful jobs anywhere.

Sauer: Yes, but on the whole there were many housing projects that we probably would have commended if the site plan had been better. The problem is really a lack of understanding of the site. There is a general lack of evidence as to what the program was in respect to the immediate environment, including the topography of the site, and to the general environment. It seemed there was just a general lack of concern, even on the good housing schemes, for the site ... for its relationship to the surroundings and its implications for the larger urban situation. If we're trying to find architecture with a capital A, that's one thing, and there is very little here architecturally with a capital A. What I want to question is if there is a tradition of contemporary architecture, what is it? A great deal of the work impressed me. I felt there was a very strong consistency in all the work, that an overwhelming number of the architects are designing in a consistent standard and at a consistent criteria of evaluating their work. I think there is a lot of good housing, the level is high if you accept the traditional area that an architect works in, with the traditional kinds of programs, and the traditional kinds of clients . . . and in those limits, much of the housing was superlative.

It's important to realize that we have reached a tradition, that it's pretty hard for an architect who isn't brilliant to go very far off. Forget the brilliant guy for a minute. Just take a guy who has an office, and he has a problem-call it housing. What's the body of information, what's the thing that he can lean upon to help him solve it? It's a tradition. He can make a competent response. I object to using the word architecture as "the art of it," because it's so subjective, individually. I can individually say "I like that; I don't like that; I think that's a great building." But architecture is achieved through a community involvement, through a cultural participation, through just sheer time. Is it of use? Is it helpful, does it solve problems, does it excite the imagination, does it lead to other things? That's why I prefer not to talk or evaluate in terms of is it architecture with a capital A, but rather to look for that tradition, and ask do we have a tradition, are we working within a tradition, has a problem been solved well within a tradition. Safdie: I feel that in general, the housing is not realistic there wasn't one submission of low density or single-family units which were adequately considered as organized groups, as workable clusters.

Flansburgh: Yes, the unit itself, what happens inside the unit ... there is probably very little that has or can be done to improve on that because you don't have very much to deal with ... it has to be solved and you accept it as a given. What bothered me was that the quality of the relationship of the units was usually not terribly well done. In many cases the siting, in terms of orientation, was not handled very well. The groupings of the units in the buildings, so you got something other than just a corridor ... that wasn't well done. You have a feeling that you just come out of the elevator, bang into a corridor, bang into your apartment and that's it. The amount of variation you can get in the economic framework you're dealing with is relatively small, but nevertheless you can get some variation. Corridors can be used as lounge areas or community spaces, they can have some variation in terms of width. Hopefully, we would have learned something about the ways in which you can put units together to provide an interior kind of space, so that getting from the entrance to the unit has more excitement and more vitality than that of just a plain metal cab going up four floors, and getting out on a corridor. There are some projects here that 5 or 10 years ago might have elicited some kind of accolade, which today are considered to be mundane.

Bender: So much of the housing seems to be forced into a pattern that was set before the requirements were cut down. And that was true of a lot of the other buildings, some of the medical facilities and schools. The programs, which developed when the resources were looser, had not changed while resources have become tighter. What happens is the thing gets gradually squeezed together, rather than evolving into a

new form to set a new shape. In other words, they simply redesigned the same project to meet the smaller and smaller budget, rather than looking at a project in a new way in the light of a new set of rules. I thought that was particularly true of the housing; they just made them a little smaller and put a few more apartments on the same site, or took out a few ammenities, that sort of thing, rather than looking at them freshly in a different way.

Safdie: Yes, the ones we've seen seem to fall short of what they are about . . . the reasons for that are complex. Some of them do have to do with the basic programs in economic parameters that architects finally must function within . . . and they're responsible for certain results that we have had to reject. Others are the result of the problems that have not been dealt with as well as we thought they should have been. Bender: I was bothered by the fact that close to a third of the houses in this country are being made by mobile home factories, and there wasn't one serious submission in that direction. Perhaps that is because these are usually not designed by architects—and maybe that's a question for architects. But it seems important to me that where there is a significant building type, such as the mobile home or sectional kind of thing, that there are no submissions in that area.

Flansburgh: Right now architecture is trying to sort out its own head in terms of where it is going in relationship to the way in which it is really practiced. We had some advocacy kind of design, which quite frankly, in terms of visual appeal, is relatively marginal. I don't think that is necessarily the future of architecture. We had one project which purported to be a systems building which was about as nonsystems as any building I have ever seen. What I found missing was that there were relatively few good systems or industrialized projects. I would have liked to have seen a great deal more innovations in design in terms of systems work because, quite frankly, most systems work is pretty appalling. But it's just beginning to get off the ground, and the interest is more solid and is growing.

Sauer: The environmental problem is so immense in front of us that it requires more than one kind of approach, probably more than one kind of solution, more than one kind of style. There are so many different lifestyles that we must be careful, when looking at these projects with our criteria, that we don't weed out solutions that are really viable for other situations. Safdie: My feeling is that an award can go to a scheme which we feel has competently responded to a program which is relevant in our view. A first award should go to a scheme which is prototypical in its solution ... its solution has contributed to the understanding of the environment because there is something prototypical about it, or it transcends its site or the particular problem, or it has a generative quality that shows a new direction or a particular evolution in the art of building. I don't think an award can go to a project merely because it competently responds to a client's program. Sauer: I agree, and I would like to go on record as saying that we of the jury are vitally interested in the issues and problems of housing, and we regret that we were unable to commend more projects in housing. It disappoints us very much. Bender: I think we should say that our judgments have been sincere, that they are sometimes only partially informed, that sometimes they are based on temporary enthusiasm ... and that they are very often wishful, wishful of what we might like to see happen.

James Associates, Inc.



South Dearborn Community High School, Aurora, Ind. An extension of the surrounding terrain, a 1000-student school provides an environment for individual educational needs

Program: With emphasis on individual learning and maximum educational opportunity for each student, instructional areas are planned for 1000 students. Core facilities such as the instructional materials center, laboratories, cafeteria and gymnasium will be built to accommodate 1250 students, providing for additional building areas and capacity in the future. *Site:* The crest of a hill in a rural area outside of Aurora, a town in southeastern Indiana. Varied terrain falls naturally away from the building and an existing brook will be used to create a lake.

Design solution: Core spaces are situated to fix the building near the crest of the hill, with academic sections progressing down the slope, giving a low profile sympathetic to the land. Future expansion will be on the west, preserving relationships between building and site which are established by the first phase. Much attention was directed toward providing internal areas with light and air. All interior spaces have natural clerestory lighting, with the exception of spaces required by the program to be closed; the complexity of the building's form results from these light sources. General classroom areas derive flexibility from movable wall systems to accommodate team teaching and individualized instruction. *Construction and materials:* Bearing walls of cast in place reinforced concrete carry a roof structure of one-way cast in

reinforced concrete carry a roof structure of one-way cast in place beams supporting a one-way structural slab and lightweight insulating slab. Some areas have two-way exposed waffle slabs, and plaster finish mechanical plenums. Interiors will include panelized plaster, wood modular units, carpeted and slate floors.

Jury comments

Flansburgh: One thing we talk about is the way that the building makes an artificial hill, and it's just so successful. You know, that's almost as good as Arne Jacobsen's Munkegard's school outside of Copenhagen.

Bender: It's a good design, like coming into the kitchen and feeling, "It smells good."

Sauer: I like it. It speaks to the spirit, perhaps more than any other project we've seen and, although there appear to be some unresolved interior problems, they can be resolved without marring the architectural intent. The architect has a problem in bringing the roof directly in contact with grade since it's difficult to conceive of daily activities using the roof. It's extremely well related to the site and very positively provides for expansion.









Credits



Dennis J. Sander

Partner in charge: Norman H. Jeffries, AIA. Associate in charge of design, Designer: Dennis J. Sander, AIA. Assistant designer: Dana J. Florestano, AIA. Structural engineering, landscape architecture and interiors: James Associates, Inc. Consultants: mechanical engineer, J.M. Rotz Engineering Co., Inc.; educational consultant, Dr. John C. Hill. Model: Stephan E. Buckman. Photography: Gregory L. Gammons.

Rendering: Dennis J. Sander. Client: South Dearborn Community School Corporation, Aurora, Ind.



James Associates, Inc.





AA

1









Works (West)



00:00 A Mobile Theater. Prototype is a highly efficient, lightweight, inflatable theater, housed in trucks and trailers, that becomes functionally integral when set up for use

Program: A demountable theater with thrust stage and seating for 1500, adaptable to legitimate performances with limited scenic requirements, and to events such as rock concerts; designed to be highly self-contained, lightweight and efficient for rapid erection and demounting under varied local conditions.

Site: USA and Europe.

Design solution: The proposal is a system of 10 specially equipped trucks and trailers which become functionally integrated with the in-use configuration. There are two support trailers that carry the pneumatic arches of the inflated structure, the main truss and lighting bridge. Four trailers contain

extendable seating and amenities, circulation to seating areas and air conditioning distribution ducts. Auxiliary trailers are used for electrical generators, dressing rooms and miscellaneous storage.

Construction and materials: The seating subsystem is extended from its trailers along site-positioned tracks and consists of standard steel and aluminum assemblies having integral fold-up upholstered seats. Seating segments can be arranged in several performance configurations. The truss subsystem, which is carried on the support trailers, is an aluminum-jointed truss and movable gantry lighting bridge with control cab. The enclosure subsystem consists of three positive-pressure pneumatic arches which, in turn, support the sealed double-skinned membranes that can be inflated or deflated to acoustically tune the theater for specific performance requirements. This membrane is secured along the periphery with water-filled ballasts. The platform subsystem in-









Craig Hodgetts



Eugene Kupper

Credits

Partners in charge: Peter de Bretteville, Craig Hodgetts, Eugene Kupper Consultant: Jules Fisher, theater consultant. Photography: Tom Brosterman. Clients: Michael Butler, Berkshire, England; Jules Fisher, New York, N.Y.



cludes stage, exits and stairs. The stage is supported and leveled by the two flat-bed trailers that carry the truss and enclosure membrane during transit. The scissors jacks on these trailers can provide settings on varied levels, including controlled vertical movement of the scenic elements or performers during a production.

Jury comments

Safdie: If we had a submission here of a 747, with all its hardware and technology, it would be just as ingenious an application of a solution to a problem, and it, too, would be quite beautiful.

Bender: Yes, but it would not meet an important need, whereas this, I think, fills an important need. It succeeds because it applies with understanding and grace a new technology to a new need. We have talked about the impact of the new technology on communities and here it is. Not mass-produced tract houses, but new materials, tools and techniques used to make community life more rich.

Flansburgh: If we talk about relevancy—drama exists in New York, Boston, Philadelphia and maybe San Francisco—this brings it to the people and that has relevancy. It tackles the problem of communication, of flexibility and of portability... and I think that is 1972. As a theater, since none of the seats is more than about 65 ft from the stage, it works well. You can even get sort of an arena theater kind of situation here. We have a form that is technologically interesting; the way in which it goes up and its movable qualities are very interesting. It is a good solution to a particular problem.

Parkin: But not only within the terms of reference of the specific problem of a portable theater, but also to portable structures of all kinds. For architects to address themselves to so specific a problem is not a bad thing. We've had countless solutions in all the magazines for the general problem of fixed theaters in the past 10 years. This is a superlative answer... this has a sense of "place," or has the possibility of being a "place" when in use. If we are looking for breakthroughs, for genuine contributions rather than simply linear, formal compositions and variations on a theme, then that is what this is ... it's mobile architecture, it's theater for those small communities which might otherwise not have theater. **Sauer:** Superlatively presented. In fact, so elegant that it fogs my mind.



02:30 minutes elapsed



06:45 minutes elapsed



14:15 minutes elapsed



20:30 minutes elapsed



Ralph Rapson and Associates, Inc.





Humanities Building for the University of Minnesota, Morris, provides a three phase development along a spine to house speech, theater arts, music and fine arts on a narrow site

Program: The design of a teaching complex and supporting facilities for speech, theater arts, music and fine arts at a branch campus. Development will be in three phases, each to cause a minimum of disruption to existing facilities. *Site:* A relatively flat, wooded area in Morris, Minn., near the campus center quadrangle and bounded by existing buildings and streets. Morris is a small town in an agricultural area of western Minnesota.

Design solution: The narrow site directed a linear development, centered about a spine, or connecting "street" which responds to differing areas, volumes and functions. This link not only recognizes the severity of the Minnesota winter, but provides a visual and physical link for the three departments, art, drama and music. Phased construction can also be accomplished with minimum disruption of on-going programs. Each element satisfies its own requirements for height, area, lighting and acoustics in terms of its relationship to the forms of the whole and its bearing on the "street."

Construction materials: Poor subsurface conditions require pilings. Steel framing and steel joists are used to create light loading. Exterior face brick relates to existing brick masonry campus buildings.

Jury comments

Blessing: I really like the community aspect of that scheme, it has far more humanity and scale than we've been seeing. Flansburgh: It's got everything you would hope a building would have. It's got scale, it's got character, it's got organization, and it's all put together.

Safdie: The interior street really comes off very successfully. Parkin: To some extent, I think, at the expense of the external spaces. He has gained this intensely interesting internal space, but does a great disservice to adjoining buildings. In dramatizing the interior street, which is superb, I think it is turning its back on the exterior spaces.

Sauer: We've been talking about the kinds of environment people should have. Where would you like to be? Can it function as more than just a school? This scheme is very good that way. It's a direction for the kind of environment for a school that's very, very good, indeed.

Bender: It gives architectural form to a powerful new direction in education—the school being integrated into the community. This project shows how the school can be a model for community development; a good example.









Ralph Rapson

Credits

Kay M. Lockhart

Richard B. Morrill

Project team: Ralph Rapson, Kay M. Lockhart, Richard B. Morrill, Peter Goelzer, Jim McBurney.

Associates in charge: Kay M. Lockhart and Richard B. Morrill. Job captains: Peter Goelzer and Jim McBurney.

Consulting engineers: structural, Bakke and Kopp, Inc.; mechanical and electrical, Gausman and Moore, Inc.; acoustical,

Robert F. Lambert.

Drawings: James McBurney.

Client: University of Minnesota, Morris, Minn.





SECTION AA



SECTION BB



SECTION CC



SECTION EE





Opening onto the main connecting street, each part of the Humanities Building shares the identity given it by the axis. Each element along the enclosed link is designed to satisfy such unique program needs as height, area, light and acoustics, yet to allow for the phased construction.



Award

Walter Hall and Associates

Alternate North Cascades Complex, Ross Lake, Wash. A hotel on a dam, to keep cars and buildings out of the natural environment, is an alternate to traditional development

Program: The National Park Service is studying the feasibility of an auto-oriented resort and visitors' center at the Ross Lake Recreation Area. The North Cascades Conservation Council, contending that the Park Service plans would have an adverse effect on the natural environment, commissioned an alternate visitors' complex for the park—one that is oriented toward boats instead of cars.

Site: Ross Lake, a reservoir formed by Ross Dam in the North Cascades National Park, Wash.

Design solution: Placing the visitors' complex on the dam itself, rather than on the lakeshore, gives the recreation area a variety of uses. Parking for 600 cars is provided on a lower lake, and the parking structure, under the highway, becomes a terminal for the visitors. The lake and wilderness are left virtually untouched, except by visitors. A ferry boat links the parking terminal structure with a tramway near the dam which completes the trip to the visitors' complex atop the dam. The visitors' center serves as a base for other wilderness activities—fishing, hiking, boating, camping.

The lower, or service, level of the three-level complex is formed in concrete on the top of the dam. Parking for staff members is included along with a seminar center.

The concourse level is the prime circulation space. Terminals for the tramway (on the downstream side of the dam) and a ferry (on the upstream side) are on this level, making it the gateway to the visitors' center. Lobbies, elevators and registration desk open directly off the concourse, as do dining rooms and other public facilities.

LODGING LEVEL

Two types of accommodations are offered in the lodging levels. One, the "lodge room," is a room and bath designed as the mainstay of the vacationer. These rooms would be available on a weekly or bi-weekly basis; suites could be leased or owned by corporations for business use.

The second type of room, known as the "hostel quarters,"



is smaller than the lodge rooms; toilets, lounges and lavatories are centralized; these are designed for hikers, naturalists and other single or group travelers. Rentals are to be lower and for shorter periods of time. The first phase of construction would provide 200 units, the second, 500 by 1974. *Construction and materials:* The service level, of concrete, uses a 25'-6" column bay (representing two module bays in the lodging areas) in the parking areas; the seminar center is of structural steel modified for long spans and fireproofed. The concourse level is based on a 12'-6" lightweight steel module to provide partly enclosed, partly open concourses. Open sloped roofs and natural ventilation are combined with greenhouse type glazing for maximum heat gain in winter. For the lodging levels, standard modular units are attached to the structural frame with standard fittings.

Jury comments

Safdie: I remember when I was looking in Montreal about whether to replace a bridge during Expo, there was a proposal that we could build a causeway which also has some commercial facilities on it. Any object that has a multi-function is a positive thing.

Blessing: We are going to see many large cities where nature and man are coming together and there could well be logic in opposed uses on the basic structure. Why not begin to think in this scale?

Parkin: I think the aesthetic system is extremely interesting, but—I have to be very careful on my wording—the North American obsession for making everything two-in-one—you know, the scale combined with the shoehorn. We're not content with having anything function for its own self and its own dignity, but it has somehow to have, after the fact, yet another use factor added to it. Basically the dam has its own fundamental dignity, has its own worth. It needs nothing further. Bender: I think it's funny to go for recreation to that kind of a place and then be in a building that has no relation to the ground. I'm talking about staying here and not being able to go out to the natural landscape. The fact that it is being considered represents an institutional failure.

Flansburgh: We talk about saving the edges of our lakes, perhaps, and that sort of thing, and this saves the edge of the lake. It doesn't build a building to cut into the forest. **Parkin:** It's a shoehorn solution, so to speak.







Jim Walter, David Hall

Credits

Architects: David Hall, Jim Walter.

Project team: David Hall, Jim Walter, Marcus Bevens, David Demitruk. Photography: David Hall. Client: North Cascades Conservation Council, Seattle, Wash.

Whitley-Whitley, Inc.

JFK Recreational Center, Cleveland, Ohio. Neighborhood recreational needs—pool, gym, meeting rooms, grandstand are combined in one building for three separate clients

Program: Provide a total neighborhood recreational center meeting the needs of three distinct clients. Facilities include swimming pool, gymnasium, locker rooms, meeting space and grandstands for a new playing field. Overall site planning requirements for athletics, parking and future expansion were part of the program.

Site: A large flat property in a residential neighborhood in southwest Cleveland. A three-story high school and a one-story vocational school are already on the site.

Design solution: The new recreational center will visually link the existing buildings and enclose a presently undefined open space. Scale has been kept appropriate to the stadium facilities, the high school and people by putting the floor level of the gymnasium, pool and locker rooms 10 ft below finish grade. Two main stairways lead to this lower level from the entrance level, which contains lounges and meeting rooms. Putting the main floor level below grade allows the grandstand to become an integral part of the roof system. All mechanical equipment—grilles, stacks and the like—is hidden in the roof system; none is visible from outside. All major spaces are skylit.

Construction and materials: Major interior and exterior walls are exposed poured in place concrete. The roof structure is steel trusses with a precast concrete roof deck and a standing seam copper roof. The grandstands are double tee precast concrete plank.

Jury comments

Bender: It organizes a complex group of functions into a clean context. The result is richness rather than confusion. It's nice to see the architects understanding that it is not necessary to separate and articulate each minor element of plan and program.

Sauer: A most articulate, sophisticated architectural solution. Flansburgh: A skillful and simple integration of the needs of three separate clients. Not great but good.







UPPER LEVEL











William N. Whitley

Credits

James M. Whitley

Architects: James M. Whitley, William N. Whitley. Planner: R. Joyce Whitley. Project coordinator: Michael Benjamin. Structural engineers: Barber & Hoffman, Inc. Mechanical engineer: Evans & Associates, Inc. Electrical engineer: Altemus & Associates. Photography: Ralph Marshall. Clients: Lee Harvard Community Association; Mayor Carl B. Stokes; Dr. Paul Briggs, Superintendent of Cleveland Board of Education.



R. Joyce Whitley

1:72 Progressive Architecture 75

Interdesign Inc.

Minnesota Zoological Garden, Apple Valley, Minn. Total zoo, stressing man's relationship to nature; animals are grouped into zoogeographic regions, shown in appropriate ecologies

Program: A zoo providing public recreation and education through interpretive displays, arranged in zoogeographic units with animals in ecologically appropriate units. Site: 467 acres of a 2000-acre metropolitan open space preserve about a 20-minute drive from Minneapolis-St. Paul. Design solution: The zoo has been planned and designed as a total environmental educational experience to stress man's relationship to the natural environment. The entry/orientation complex is located between a major hill and a lake; from there visitors circulate beneath a translucent air-inflated roof to all enclosed exhibits, related educational facilities, public facilities and the science museum. North of the main entry complex are exhibits representing the seven zoogeographic regions of the world; they will be subdivided to represent appropriate ecologies within each region. The entrances to two other major outdoor exhibits, the Northern Trek and the 1880s farm and children's zoo, are also reached from the main concourse.

The Northern Trek, featuring animals of the northern hemisphere that can adapt to Minnesota winters, takes up some 200 acres of the site. Exhibits are viewed from a people mover, which makes a 45-minute circuit simulating a 9000mile journey from Norway, across eastern Europe, central Asia and the Bering Straits to Minnesota.

Ancillary, service and animal care facilities are in the east-

ern and northern portions of the site, close to but screened from the exhibit areas. Utility corridors throughout the site supply steam water, gas and electricity from a main distribution center in the northeast corner.

Construction and materials: To emphasize the relationship between the site and exhibits, to transmit light for growing plants, to melt snow, and to provide visual continuity from one area to another, a great air-inflated roof is proposed. The system consists of concrete columns and beams and an air-inflated roof stiffened by steel trusses and cables. Air ducts and drain leaders are incorporated in the columns and paired beams.

Natural rock and plant materials will be used in the exhibit areas. Concealed earth and concrete barriers restrain most of the animals; they are integrated with the guideway for the people mover wherever possible. The concourse and all structural elements are of concrete; walls are glass or precast concrete. Several materials are being studied for the translucent roof.

Jury comments

Bender: It shows a strong understanding of how to plan for growth and change; for dealing gracefully with uncertainty. Sauer: A project of this scope is difficult to evaluate in architectural detail; however, the impulse to involve people with animals with such immediacy is to be complimented. I have difficulty in projecting the quality of interior space—the attempt to make what is exterior, interior.

Flansburgh: A clear solution to an intriguing problem. The architecture doesn't get in the way of the natural environment.








Left to right: Roger Martin; Duane Thorbeck (foreground); Peter Seitz (foreground); Alfred French; Stephen Kahne.

Credits

Design team: Alfred W. French III, architect and partner-in-charge; Peter Seitz, graphic design; Duane Thorbeck, architect; Stephen Kahne, systems analyst; Roger B. Martin, landscape architect.
Transportation and utilities: Barton-Aschman Associates Inc.
Geological and hydrological engineering: Eugene Hickok & Associates.
Mechanical and electrical engineering: Jacus & Amble Inc.
Structural engineering consultant: Dr. John T. Hanley.
Program consultant: Robert Lambert.
Construction and cost consultant: Peterson & Clark Associates Inc.
Financial feasibility: Stanford Research Institute.
Photography: Hedrich-Blessing.
Client: Minnesota State Zoological Board.



Award

Daniel, Mann, Johnson and Mendenhall



Sepulveda Water Reclamation Plant, Los Angeles. Office building for automated water treatment plant will serve as visitors' center for an adjacent park and Japanese garden

Program: A fully automated water reclamation facility using the latest technology to meet Federal and state standards for waste water treatment; it will be built in five phases, beginning with an initial capacity of 40 MGD and increasing to a maximum capacity of 200 MGD. The first phase will be capable of meeting the needs of its tributary area for about 10 years. Besides the necessary equipment for pumping, filtering and treating waste water, the plant site is to include a Japanese garden as part of a park and recreation area.

Site: An 88-acre piece of ground in the Sepulveda Flood Control Basin, now being phased out as flood control systems are updated; the gently sloping site is now barren land. Design solution: Because the plant will be in a park area adjacent to a residential neighborhood, considerable emphasis was placed on human factors and the environmental and aesthetic aspects of the project.

The administration building, along with the Japanese garden, occupies the western part of the site, provides 15,000 sq ft of offices and laboratories and 5000 sq ft of display area. Besides housing the plant administration, this building serves as the visitors' center and starting point for guided tours.

The main visitors' area is surrounded by a lake; a partly glassed inclined roof offers a panoramic view of the gardens. From the visitors' center, elevated pathways lead to the garden with an elevated bridge offering a view of the plant. Other buildings include a service building for repair and maintenance facilities and buildings for the water treatment equipment.

Construction and materials: Low maintenance and corrosion resistance were prime factors in selecting materials. Primary construction materials will be concrete, ceramic tile, glass and anodized aluminum. Concrete surfaces will be natural stripped form and sand blasted. Earth berms, terraced planters and water are used as transition between tanks, buildings and the surrounding recreation area.

Jury comments

Safdie: I think the administration building is really done quite nicely and the rest looks good.

Bender: The building itself is much more direct and simple than the presentation of it. There are very few buildings we've seen that are a really nice kind of public building where people can come in and out.

Sauer: When you realize the size of the total site development, if somebody tried to put a very specific geometric form there, it would be humiliating; it would look ridiculous. This looks like it's part of the whole thing.

Flansburgh: It's the kind of thing the public can embrace and the people who work there can enjoy.

Safdie: To put an administration building with a series of major engineering works has been an unresolved problem, and they've managed to integrate it without distortions to either function.



SITE FLAN- PHASE IGZ





Credits

Principals in charge: David R. Miller, vice president, manager civil systems and engineering; S. Kenneth Johnson, senior vice president; Anthony J. Lumsden, vice president, design; Engelbert Zobl, project designer; Robert Westerfield, project manager.

Landscape consultants: Kiochi Kawana and Armstrong & Sharfman. Photography: George Stimson.

Client: City of Los Angeles, Bureau of Engineering: Lyall A. Pardee, City Engineer; Donald C. Tillman, Chief Deputy City Engineer; Philip V. King, Deputy City Engineer; Eugene D. Nelson, Project Manager. Citation

James A. Embry AIA





Chalet Village Center, Ski Mountain, Gatlinburg, Tenn. Although placed on stilts, this office building nestles into the mountain, disturbing very little ground

Program: Construction of corporate offices of the developer plus commercial rental spaces is to take place in stages allowing for expansion; office space to convert to rental space to meet the increasing needs of the growing community. *Site:* Densely wooded and mountainous four-acre site with a stream flowing through the approximate middle. Located on the access road to the Gatlinburg Ski Resort, midway between the town and the resort.

Design solution: To avoid disturbing natural vegetation at the creek, parking was arranged linearly on the upper side of the stream. The building will be placed on stilts to allow foundation work to be done by hand, to minimize destruction to vegetation and creek and elevate floors above flood levels. Individual entry bridges separate office from commercial spaces and relate to the grade of the access road.

Construction and materials: Foundations are concrete spread footings with round concrete piers above grade. The structure is exposed round steel columns 20 ft on center each way supporting parallel paired steel tube beams eccentrically loaded.

Jury comments

Sauer: This creates office space that I'd like to be in. Flansburgh: I think it is worthy of a citation. Parkin: It is a good example of a commercial venture striving to retain the natural environment.







James A. Embry

Credits

Architect: James A. Embry, AIA, Comprehensive Environmental Collaborative. Structural engineer: Famco Engineering. Photography: James A. Embry; Bill Haddox. Client: Leisure Concept, Inc., Rapaco Resources, Inc., Cincinnati, Ohio.

Tivadar Balogh, AIA

Tennis, Handball and Swim Club, Plymouth, Mich. Earth berms help buildings hug the ground and reduce what might have been an overly massive look in a residential area

Program: To provide eight indoor tennis courts, four handball courts, year-round swimming pool, club and locker rooms, outdoor courts and bleachers.

Site: Narrow grassy knoll surrounded by second growth wooded area.

Design solution: To respect the scale of the surrounding residential-rural environment, the indoor courts building is set partially below grade. An earth berm rises to meet the extended roof structure and engages the suspended perimeter flap to effect closure and avoid the use of costly retaining walls. Courts are arranged in two banks, separated by a three-level horizontal core containing locker rooms, lounge viewing area and handball courts. The swimming pool is also set within a surrounding berm system to diminish wind penetration and reduce transmission of pool activity noises. A movable roof covers the pool for cold weather use; in warm weather the roof moves laterally on a beam-track system to expose the pool and shade an adjacent terrace which overlooks the outdoor exhibition courts.

Construction and materials: The indoor tennis courts' roof is supported by deep, steel trusses located between courts and parallel to their long dimensions. Steel joists span from truss to truss. The horizontal core has precast concrete wall and floor elements supported on steel beams and columns. Movable swimming pool roof is a metal space frame covered with insulating, translucent roof panels.

Jury comments

Sauer: The site plan is not well organized since the various recreational facilities do not create anything other than their particular uses—they do not add anything.

Flansburg: Nonetheless, by using earth berms they have created a project that does respect the scale of the surroundings, it does hug the ground, and it provides the required facilities in an intelligent way.













Credits



Terry Sargent

Michael Alan Lefevre

Architect: Tivadar Balogh, AIA Project associates: Terry Sargent, Michael Alan Lefevre. Structural engineer: Robert M. Darvas & Associates. Model: Terry Sargent assisted by Michael Lefevre. Photography: Lester Fader. Client: John H. White, Plymouth, Mich. Citation

The inmates of the Billerica House of Correction and Martha L. Rothman-Elliot Paul Rothman, architects



The vocational training program at the Billerica House of Correction uses its own environment as a focus for learning and creating a more pleasant place for inmates serving time

Program: The start of a vocational training program in architectural drafting for the inmates of the prison was initiated by Sheriff John Buckley of the Middlesex County Department of Correction six months ago. The course, taught by Elliot Rothman, was expanded by him to include design, graphics and model making. Individual cells are designed by the occupants and the designs are executed by them. In an unused portion of attic space at the prison, six inmates work with T-squares, floor plans and scale models providing the designs for the common areas of the prison. It is the carrying out of such a project from the design stage through its completion that can give the inmate confidence in his ability to make choices and to affect his own environment—a rather unusual experience for a person in prison.

The inmates are currently working on proposals for the dayroom and dining room and, in the process, are consulting with various staff members on matters of function for the facilities. This type of working relationship, Rothman feels, has helped to improve the communication between two groups whose attitudes toward each other have traditionally been hostile. What work has been completed so far, has met with enthusiastic responses from the inmates as well as the staff, and the once drab green walls of the institution have been transformed into a colorful, internal world which help mitigate the sense of confinement behind four stone walls.

One participant left a note saying, "Elliot: I got parole so I am leaving. Thank you for your help. It was a good class, very creative, interesting and fun. Keep the class going. It's a good project. Peace—Rick White."

Jury comments

Bender: It's a good idea, but I don't think it's a design. That there is community involvement does not substitute for setting up some clear parameters for what the design was all about. If we think of the jail as a problem, then the perception of that space in making it bigger and the use of color to make it pleasant are part of the parameters. The project shows no indication of an understanding of this problem.

Safdie: The rooms are more depressing now after they had the exercise than they were before.

Blessing: Maybe each man thinks his own is superlative. **Flansburgh:** I think this is rather mediocre design, but I think that as a trend, I've never seen anything like this before. **Parkin:** The architect didn't do the design. He helped the inmates, tutored them, nurtured them and if there was a failure, it was the individual inmate's failure. The next occupant would be free to change it. On the one hand, we architects claim social relevancy. Here we have a beginning of humanizing confinement. This is *today.* This *is* relevant.

Bender: It shows a new aspect of the architect's role. The prisoners could have done more if the architect had done more to help them achieve their own ends.

Sauer: I think this shows that sometimes it's important for an architect to have an involvement even though "architecture" is not a result.

Left to right: Clarence G. Smith, Jr.; Elliot Paul Rothman; Walter J. Francis, Jr.; Martha L. Rothman; Harold O. Prentiss III; foreground; Roger D. Chaisson

Credits

Architects: Martha L. Rothman, Elliott Paul Rothman. Designers: Roger D. Chaisson, walter J. Francis, Jr, Harold O. Prentiss III, Clarence G. Smith, Jr. and other inmates of the Billerica House of Correction.

Photography: Sharon Lee Ryder.

Client: Middlesex County, Mass., John J. Buckley, Sheriff.

Frank Schlesinger, FAIA

Tubular steel residence near Norristown, Pa. Designing not only a house, but an appropriate expression for tubular steel framing, the architect responds to a dual program

Program: The owner, a fabricator of tubular steel, requested a house for his family that makes a major use of his product. To the design problem of achieving good spaces for diverse family activities was added the separate challenge-that of expressing a material with no established vocabulary. Site: High, sloping land outside of Norristown, Pa., with distant views of the Schuylkill River valley to the south and west. Design solution: Making the most of the structural properties of tubular steel, two 63-ft trusses cantilever 21 ft from both ends of three central supporting bays, which stand on 4" x 8" tubular columns. From beams spanning between the trusses, living room, dining room and master bedroom are hung on 2" x 4" tubular hangers. Three distinct zones of the house are set by the plan, with the lower level for children, middle level for family activities and upper level and penthouse for the parents. Both parents and children have living rooms, and a family kitchen is the activity center for the common level. Heat and glare from the directions of desired views, south and west, are to be controlled by broad overhangs and panels of heat-absorbing glass set outside the face of both trusses. The western terraces will also be protected by heat deflecting directional screening.

Construction materials: Steel tubing forms the structural frame with infill of either glazing (fixed or sliding) or aluminum panels. These panels would be backed by rigid insulation, furring channels and plaster.

Jury comments

Flansburgh: If you look at this house, you would say that that is a house that has a view in *that* direction on a hillside, and that's exactly what it is.

Safdie: It's a house that only works if you have quite a few acres around it, because of the terrace on the side and the wall-to-wall glass.

Sauer: It's a nice use of materials.

Bender: He's got everything going for him—a great site and a good budget. It's a solution that allows spaces for living rather than a geometric configuration which adapts living to space.

R

Frank Schlesinger

Credits

Architect: Frank Schlesinger Consulting engineers: structural, Lamprecht & Perry; mechanical, Vinokur/Pace. Model: Joan Roberts. Rendering: John Lawson. Photography: Lawrence Williams. Client: Tubular Products, Inc., Souderton, Pa.

Hobart D.Betts

Palmedo Residence, Long Island, N.Y. Specific requirements of the client and a personal statement of the architect meet in a rectangle enriched by diagonal walls and a deck

Program: Permanent residence for an active young family of four. Since the mother is a concert singer, the clients wanted a living room with sufficient space and volume to permit small concerts. The children, both boys, are to share a room with direct access to outside.

Site: Small, flat, heavily wooded property in a subdivision on the north shore of Long Island. Adjacent houses are neo-colonial and nondescript. There are good-sized oak trees and a few beeches; a layer of mountain laurel covers the property. *Design solution:* The unique quality of the planting and the volumetric requirements for the living room suggested a split level building of around 2500 sq ft with the dining room, kitchen and children's bedroom opening onto a small clearing in the laurel. The living room, up half a level, opens onto a deck level with the top of the laurel; the upper level study extends the space and provides additional seating for concerts. The diagonal walls organize the ascending forms of the building and provide a dramatic contrast to the rectilinear geometry of the main portion of the house.

Construction and materials: Platform framing with vertical western red cedar boarding inside and out.

Jury comments

Sauer: It's a very simple house, if you take the zoot wall away; if you take the circular element away, it's a simple rectangle. The means, to me, are simple means; the organization of the floor plan is again very simple. Functionally it works well. Bender: I don't think it is a simple house at all. It is a wolf in sheep's clothing—pseudo-rustic and tricky. It has all the superficial trappings of modish architecture.

Safdie: You can't ignore the zoot wall and the circular court. Do we exchange 50 years of knowledge of making houses for an intellectual game of some kind of geometry? Sauer: Where's the intellectual game?

Safdie: The intellectual game generates from some kind of formal vocabulary which the architect has been seduced by to the point where he has not thought of the site, he has not related to it.

Sauer: Agreed, but those are his terms.

Safdie: But the point is, what is that house all about? Explain it. Fifty years of Wright houses has taught us not to do that. There is an evolution to architecture, to environment and you can't go back.

Sauer: I don't believe there is an evolution.

Safdie: There are brief periods of regression, and this is a regression, and I'm not prepared to give an award to regression. I think this is not an understanding of environment. Parkin: The architect is serious and consistent; it is his personal philosophy. On the other hand, I would agree with our saying that the concept comes very little farther than Lincoln, Mass. 1937 with the exception of the oblique angle and the circle. Breuer and Gropius did it better. Obviously handsome, but where's the contribution to the real issues at hand? Blessing: Is livability the issue and is this the result of it? Parkin: This is simply another piece of carved out architecture. If it were like that infamous school we spoke of, then I think it becomes a matter of what you accept. It appears to be an individual statement of rapport between the architect and the client; the client came because of the architect. Safdie: It's a formal vocabulary that he's been seduced by.

Flansburgh: Let us take as a basic premise that the discipline is here. You may not agree with it—we may not even think it is valid except for the fact that he does indeed take a house, follow it well and use that kind of vocabulary. **Safdie:** I call for a minority report: My view is that any award, including a citation is wrong.

Blessing: This is socially relevant to me.

Flansburgh: Is a single family house socially relevant today? Parkin: It is only relevant for a small minority. Safdie: A single family house is relevant considering there are hundreds of thousands of homes built today. So long as it's built it's relevant.

Hobart D. Betts

Credits

Architect: Hobart D. Betts. Project manager: Robert L. Cioppa Structural engineer: Stanley Gleit. Photography: Igor Bakht. Clients: Mr. and Mrs. Philip Palmedo, Oldfield, Long Island, N.Y.

Don M.Hisaka and Associates, Architects, Inc.

Small office building, Marlon, Ohio. An enclosed private garden creates the view, a skylight and clerestories offer light to the staff of an advertising agency

Program: A building of approximately 10,000 sq ft will house administrative facilities of an advertising firm, including conference rooms and display and reception areas. Site plan to allow for future expansion.

Site: Level plot facing the main street leading to central business district of a small town.

Design solution: A two-story building unified internally by a two-story reception and display space with executive office and conference rooms on the ground floor, working offices on upper level. Since the semi-urban character of the surroundings does not provide an attractive vista, an enclosed private garden was developed as the primary exterior view for the first floor offices. Second floor offices are oriented inwardly toward the skylight, with account executive offices provided with clerestories.

Construction and materials: The structure will be poured in place concrete. The mechanical room is placed at roof level on the southwest corner of the building, centrally locating the equipment between the two wings which contain the majority of the offices.

Jury comments

Parkin: There is no obsession here with form for form's sake. Sauer: The importance here is not the courtyard—the importance is relating functions to light—to the outside world. Bender: Talk about the simplicity of handling a building—this building is good—it is very simple and direct. Parkin: I think it a very nice building.

SECOND FLOOR

Don M. Hisaka

acorgo

Credits

Project designers: Don M. Hisaka, principal; George Saire, associate.
Landscape architect: Don M. Hisaka and Associates, Architects, Inc.
Interior designer: Don M. Hisaka and Associates, Architects, Inc.
Structural engineer: R.M. Gensert Associates.
Mechanical engineer: Scheeser and Buckley.
Electrical engineer: William B. Ferguson.
Models: Don M. Hisaka and Associates, Architects, Inc., Don Lannoch.
Photography: Thom Abel.
Client: Howard Swink Advertising Inc., Marion, Ohio.

Matthews and Associates

Texas 4-H Center, Lake Brownwood, Brown County, Tex. Contrary to most camps, this educational center is designed as a compact town to leave most of its site untouched

Program: Educational center with housing, administration, dining, assembly and recreation areas with a chapel as the focal point.

Site: 78 acres overlooking Lake Brownwood, sloping steeply from water to two plateaus; low brush and scrub oak. Design solution: To preserve as much of the open site as possible, a town scheme permits all buildings to be clustered tightly around a plaza, or town square. Vistas are carefully controlled under the theory that you don't have to look at the water all the time to be aware of it (the site gives a 279 degree view of the lake). Spaces within buildings are closed off so that campers' attention is directed towards the educational activities within: views are directed towards nature and water.

The plan for the first phase of construction encloses the plaza with a chapel, administration, dining and assembly buildings plus nine units of modular housing. It also provides for indoor recreation, an outdoor pavilion, water sports, horsemanship classes and all basic site development. Expansion will add "neighborhoods" of housing stepped down from the main cluster. The typical housing module consists of two eight-bed sleeping rooms, each with a counselor's room, shower and lavatory. Between the two sleeping units is a carpeted lounge with fireplace and storage facilities. The units are stepped, with terraces overlooking the lake.

The auditorium-dining complex, approximately 3500 sq ft, includes space for games, crafts, pocket billiards, table tennis, reading and conversation. The spaces open to each other via balconies, movable walls and level changes.

The central vertical element of the entire complex is the 85ft-high chapel, which from some angles is seen as a Texassized silo recalling the farm origins of the 4-H movement. *Construction and materials:* Poured in place and precast concrete, glass and some natural cedar, all selected because of their low maintenance cost and insurance rates.

Jury comments

Safdie: That's nicely handled. It's a nice site plan, a nice organization.

Bender: A typical combination of uses, solved in a way which points out directions for future projects.

Sauer: The way this architect has brought all the programmed activities together creates a highly successful sense of community. I hope, though, the corner transition to the site will be re-examined; it's the only repelling element of the design.

Carl W. George, Jr.

Credits

Project architect: W.R. Dede Matthews.

Associated architect: Norman P. Hatfield. Structural engineer: Carl W. George, Jr., senior partner, Matthews and

Associates.

Mechanical and electrical engineers: Lockwood-Andrews-Newman. **Models, photography, drawings:** advanced students of the College of Architecture and Environmental Design of Texas A & M University, directed by Edward J. Romieniec: Joseph Giudici, Jim Holster, Gary Merkel, Mike Schanzer, Leon Willhite.

Professional photographer: Roland Chatham. Client: Texas 4-H Youth Development Foundation, Inc.

Works (East)

An Early Learning Facility for a deteriorating area in the East New York section of Brooklyn creates a special world for children by arranging flexible spaces along a glazed street

Program: In the spirit of self-help assistance, the owner, a social work organization, asked the architects to design an atmosphere for 100 preschool children plus 80 after-school teenagers. There would be no "one teacher-to-one-classroom" organization, but rather a place where children could "create their own world, participate in it, learn about it, take it home with them...."

Site: City lot on a treeless block in East New York, Brooklyn, N. Y. A one-story steel frame and wood joist building occupies the corner of the lot, and will remain. The neighborhood has undergone major deterioration for 15 years, and many structures are boarded up or in very poor condition. Present two-story brick storefront building on the west and four-story brick apartment house on the north will be demolished, as will all other buildings on the block except the early learning facility, for a Model Cities park.

Design solution: A 12-ft-wide glass enclosure "street" connects existing building to new two-story (plus basement) steel frame building. The "street" is the spine of the building, carrying the largest volume of traffic and noise as well as exposed mechanical feeder ducts for all major spaces. Within the "street" area will be sand and water play pits, benches, painted stripes, street lights, fire plugs and walk/don't walk signs. On the "street" face of the existing building, a zone of 4'-6"-high spaces with 4-ft doors and windows will provide children with areas to play doctor, house or supermarket. The rest of the first floor in the existing building (in order, away from the "street") will be special classrooms and administrative areas, then a flexible common room, with the most removed zones for quiet areas. In the new building, spaces of the "houses" are removed from noisier "street" activities with glazed overhead garage doors and through successive zones of the house/street link, the house link and the house/quiet areas. On the second floor of the new building are office, communal and woodshop areas for the after school facilities. The roof of the existing building will be a playground containing a playdome and variable equipment. The emphasis throughout will be focused on changing learning patterns

which will allow the present program to shape the environment into new configurations as needed.

Jury comments

Parkin: I think this an aesthetic system that really works. **Flansburgh:** It does look a little like a heating system in search of architecture.

Parkin: But that's one of the architect's premises, and one, I would have thought, to which he was entitled.

Safdie: That scheme impressed me much more than the other advocacy submissions.

Flansburgh: Yes, when we talk about advocacy, this is something that is really the toughest kind of design.

Bender: There is also more evidence of the tools they can use to make this work. They seem to have some ideas for the total scheme that are in harmony with what the buildings are.

Sauer: It's difficult to see through the presentation to the actual problems and solutions. I would have preferred seeing a more straightforward documentation but I do like the generosity of the interior central circulation space and the flexibility that will allow changes in programming.

Robert Mangurian

Jeff Milstein

0

Les Walker

Credits

Partners: Robert Mangurian, Jeff Milstein, Les Walker. Landscape architect: Jim Balsey. Consulting engineers: Structural, David Geiger/Horst Berger; mechanical, Dalton & Dunne. Specifications: Harry Bez. Model: Zillis/Pollack/Niven/Wasylyk/Olivas/Dolny/Zaskorski, students of CCNY. Photgraphy: Mangurian/Faro/Lundahl. Drawings: Walker/Olivas. Client: United Community Day Care Center Development Fund Co., Inc. Brooklyn, N.Y.

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Weiner Gran Associates AIA

Field House, Brandeis University, Waltham, Mass. Triangular plan and steel space frame roof provide the large volume needed to bring in such outdoor sports as track and tennis

Program: To expand the university's indoor athletic facilities with an indoor track, basketball courts for gym classes and varsity games with 2000 spectators, tennis courts, softball practice, squash and handball courts, fencing room, physical therapy, administration offices, lecture and class rooms with appropriate support facilities.

Site: Adjacent to existing gymnasium and pool building. Design solution: One leg of the triangular building faces the street to extend and reinforce its "athletic" use; the other closes off the existing parking lot while the hypotenuse opens onto playing fields. The entry plaza leads down into the major field house space, a great multi-purpose room housing the track and basketball courts. Tennis courts can be super-imposed when the room is not used for other events, and a "net cage" is dropped from the roof frame for softball practice. Lockers, showers, team rooms and folding bleachers are tucked under the entry level. Rooms for the smaller scaled sports, as well as classrooms, are at upper levels at the street side of the building; a bridge links the top level to the gym.

The hypotenuse wall opens so that the field house becomes part of a natural bowl formed by the topography of the site, making it available as a stage for school ceremonies. *Construction and materials:* A steel space frame provides the necessary clear span. It is supported by masonry columns and the building is enclosed by masonry walls similar to existing campus architecture. Field house floor is Tartan; basketball courts are laid out with tapes as required for classes.

Jury comments

Flansburgh: They are dealing with a problem of this magnitude of space to get something that doesn't turn out to be a fantastically large structure rising on a rolling small hill just outside of Boston. All the buildings are relatively small scale, and they deal with a problem of small scale, too.

Bender: It is a thoughtful solution, an attempt to design a good "background" building.

Sauer: I enjoy the generosity of the architectural solution. It solves the functional problems and structures the site.

Martin Greenberg Irv Weiner Warren W. Gran Gary Rogers

Credits

Architects: Irv Weiner, principal; Warren W. Gran, principal; Martin Greenberg, associate; Gary Rogers, associate. Structural engineer: Paul Gugliotta. Mechanical engineer: Leonard Monroe. Model: Daniel Liebskind. Photographer: James Horner. Rendering: Albert Lorenz. Client: Brandeis University, Waltham, Mass.

Chapman and Goyette Associates, Inc.

The James Estate, Newport, R.I. condominium development for 275 families attempts to curb the destructive subdivision of a unique area of great old estates by clustering units

Program: To develop a large estate into a wide variety of housing units, introducing 275 units to meet year-round, summer and retirement markets with minimum disruption of the existing area quality. Related recreational facilities and garage/parking areas for 435 cars are to be provided. Within these constraints, as many units as possible should have distant views, especially toward Buzzard's Bay and the tidal marshes to the south.

Site: 70 acres of the highest land of Aquidneck Island which is the City of Newport, R.I., surrounded by large estates, bordered by a tidal pond and marsh on the south, with views across Buzzard's Bay. The site is distinguished by rows of mature trees and stone walls. Flowering plants and ornamental trees define several open meadows, which alternate with high areas of outcropping rock.

Design solution: Preserving open fields for area continuity and recreation, cluster development is limited to high rocky areas. Main access to the development will be along existing drives through original gates to small guest parking areas. Owners' cars will be parked separately and unit entrances reached by a series of passages and courtyards.

Basic unit plan configuration is an "L," with fixed plumbing and stair locations that are adapted to a variety of unit types from two-floor duplex townhouses to one- to three-bedroom flats. Stacked to form buildings up to five floors high, units on the upper levels include recessed balconies faced away from neighboring gardens below.

Construction materials: Exterior walls will be unpainted buffgray stucco on concrete masonry; floor and roof structure will be bar joists. Interior walls and ceilings will be plaster board,

and floors not carpeted will be wood or cork. Roofing will be standing seam copper; the heating system is to be electric.

Jury comments

Sauer: It's a very nicely organized project in that it feels like a place where people are living. It has a nice sequence of spaces. However, the overall site plan, and in particular the relationship of car arrival, parking and movement to the front door, is quite weak and the individual unit plans indicate an unusual relationship between bedrooms and living space. It would have helped to indicate who the users were to be. Not a very creative handling of the core relationship to the units. Bender: A pleasant project which imposes as little as possible in private areas and concentrates on setting a framework for the community.

Flansburgh: It's the best of the good submissions in multifamily housing. Unfortunately, the good are so few and the mediocre are so many.

Allan Chapman

pman

Robert Venusti

Credits

Partner in charge: Allan Chapman. Project manager: Robert Venusti. Landscape architect: Diane Kostial Mc Guire. Consulting engineers: structural, Souza and True; mechanical, Peterson Associates; site, Charles A. Maguire. Model: Models To Architects. Client: Living Enterprises Corporation, Marblehead, Mass.

Citation

Roger Owen Boyer and Carl A. Scholz

P.M.C. Medical Office Building, San Francisco is a terraced solution to a difficult site compounded by zoning restrictions set forth by the City Planning Commission

Program: A 75,000 sq ft medical building and a connected 120,000 sq ft garage designed as part of the master plan for Pacific Medical Center, closely related to adjacent Presbyterian Hospital (an acute general teaching hospital now under construction), Stanford Hospital and other medical, teaching and research facilities in the Center.

Site: Tight urban parcel, 28,000 sq ft, L-shaped with the new hospital to the west and medium density housing on the north. The City Planning Commission outlined design restrictions in the form of zoning limiting the size and bulk of the building.

Design solution: Setbacks and height limitations were met by a six-story building stepped down to one story on the north side facing the residential area. A four-story parking garage is underground. The terraces, which face the residential gardens, will be densely planted, as will the terrace over the garage entrance.

The south side is connected to the new hospital by the brick-paved court at the major entrance and also by an enclosed bridge at the fourth floor. Physicians' offices are located along the north terraces and the east side. Examination rooms and others used both by the public and the staff are in the interior areas. Elevators are at the west end of the first phase building but will be at the center after the second

phase building has been completed.

Although there is no real need for flexibility of the structural and mechanical systems, interior rooms will be adapted to various specialized uses by interchanging 18-, 36- or 72-in.wide modules that contain examination equipment, plumbing, storage compartments or can be custom designed for a particular purpose. By keeping the variable elements within these modules, air handling, lighting, plumbing, ceilings, floors, walls and doors need not be altered. The building is based on a 36''x36'' grid, with provision for 18 in. half-modules in certain locations.

Construction and materials: The structure is poured concrete with precast, prestressed double-tee floor joists spanning up to 52 ft. The building will be completely air conditioned and the parking levels will have a mechanical exhaust and ventilation system.

Jury comments

Safdie: It's the only office space where somebody has tried to do something with the edge that makes it a pleasant office. A simple, straightforward building, one of the few we've seen that works.

Bender: The siting and the light is quite good. It opens new ways of looking at a standard problem.

Flansburgh: One of the most human office buildings I've seen in quite a while. It really has a nice scale to it.

Sauer: I don't feel the architect has formally resolved nor adequately provided for those activities that could give greater presence to Buchanan St.

Roger O. Boyer

Carl A. Scholz

William Hull

Janet Crane

Credits

Architects: Roger Owen Boyer, project designer;
Carl A. Scholz, project manager; William Hull Sr., assistant designer;
Janet Crane, Paul A. Majka, assistant designers.
Landscape: Sidney M. Lewin and Associates.
Structural engineer: Jaime Villarroel.
Mechanical engineer: McQuillan Engineers, Inc.
Model: William Hull.
Photography: Boyer/Scholz.
Client: P.M.C. Professional Building Corporation, San Francisco.

No awards, no citations

After a day of discussion, the urban design jury decided not to give any awards or citations. To do so meant making a positive statement about a project—its approach and its solution—when, as Paul Friedburg said, "None of us feels very positive about what we've just experienced"

The urban design jury that met to consider 80 entries to the P/A design awards which had been classified as planning/urban design represented a diversified approach in the field of planning: M. Paul Friedburg, a landscape architect; Charles Blessing, of the Detroit City Plan Commission; and Ian McHarg, an ecologist as well as regional and city planner. The main criteria for evaluation of the projects by this particular jury revolved around the issue of people, people use and people need, and there emerged a strong consensus that there was little evidence that such criteria were part of the decisions. Many of the projects failed to provide any background information or basis for making decisions, forcing the jury to direct its evaluation toward the superficiality of shapes and patterns rather than the function of a working organism. Other projects, while supplying much research information, did not follow through with the design, so that the ideas remained as hypotheses only.

Many projects—whether new town or small urban development—dealt with time in terms of "now," while many of these projects—because of their size and scope—would not be completely realized for another 20 years. The jury found little evidence of an attempt to deal with this extended time element in terms of changing needs, but found, instead, rigidly delineated plans without the possibility for later modification based on an evaluation of how it functioned and met the needs of its occupants.

A third point made by the jury was the distinction that the planning entries did not represent planning by planners but planning by architects, which resulted in more orientation towards an architectural product than in a planning process or concept of land use, organization or development of a whole. Many projects, the jury felt, lacked any connection with their surrounding environments, leaving them as isolated and fragmented pieces of a larger whole.

McHarg: I think my objection to almost everything I've seen is that there isn't any statement which allows me to believe the architect/planner had any idea who the people were, what the needs were, and what was important to them in terms of the physicial or cultural environment. Obviously a program has got to be able to discuss something about the nature of man and human behavior, about the region and the site in terms of physical process and something about the nature of adaptation by every device, both cultural and physical. This kind of investigation is consequential.

Architecture is an adaptive mechanism so that we would be able to look at these without looking at the title and say that this has to be Hawaii and this has to be New York City or British Columbia. But we're not able to. We're seeing absolute uniformity irrespective of race, people, land or anything else. I have no way of treating this except in conversational terms. Obviously and capriciously the things you say about it consist of comfortable cliches which appropriately dispose of it without any knowledge of whether or not the people need this or whether it is satisfactory to any person or institution. Almost everywhere there was a rudimentary design program that came into some kind of specific urban design architectural form and the architectural form in almost all cases was simply the present cliches.

Blessing: The assumption can be that either the architect has not provided it or that he didn't choose to send it, but sent the end product which we might think of as superficial to the problem. Of the 80 or so that we've seen, unless there were restraints provided by the sponsors, we haven't seen a single overlay, much less a dozen overlays, that might attempt to relate the factors that go into the understanding of a total area. Friedburg: I think there are two issues. The first has to do with a competent plan-to be able to collect and analyze all the factors that are necessary to start the planning process. The second is innovation. The architect/planner has to look to other methods that will not only produce economic returns but will also produce the kind of lifestyle that we look foreven in terms of formal relationships, how the elements that we normally use can be organized so that they produce a greater experience than the sum of the parts. The whole notion of how people move, the energies that go to make up any kind of urban complex, the full knowledge of the socio-economic relationships, and the relationship of residential areas to commercial-just how one relates to another-are not described by the kind of planning we see. There's just no under-

Charles A. Blessing: Architect, Professional Community Planner, Civil Engineer, Director of City Planning for the Detroit City Plan Commission, Adjunct Professor Department of Urban Planning, Wayne State University Graduate School.

M. Paul Friedburg: Partner-in-charge of Design and Planning, M. Paul Friedburg & Associates, Landscape Architecture and Urban Design, Professor and Director of Urban Landscape Program at City College of New York.

lan L. McHarg: Partner, Wallace, McHarg, Roberts, and Todd, Architects/Landscape Architects/City and Regional Planners, Philadelphia, Professor and Chairman, Department of Landscape Architecture and Regional Planning, Graduate School of Fine Arts, University of Pennsylvania.

standing of the kind of spaces needed what kind of activity.

I think they also deal with patterns as opposed to real organic forms-just making a space by giving it a dimension as opposed to giving it the energy that it needs to make it come alive and grow. The architectural forms are a perpetrator of pattern and therefore you have to manipulate the landscape to give it even a modicum of identity. That is not what planning is about. In most cases the amenities are afterthoughts. McHarg: There may very well be a number of plans that are a local outrage-citizen groups screaming bloody murder and hoping that these things will not be built. We made divisions called planning and architecture and I think that what we are engaged in is seeing a fundamental problem which confronts both. Planning is not really done by planners; it is planning done by architects, a very special kind of planning because almost all of these things have some kind of architectural form no matter how bad the assumptions are. It's not the conduct of human affairs that is being planned at all. It is the physical representation of buildings and spaces. I consider the work that we have seen as commonplace cliches. Blessing: What we're missing is the lack of collaboration of professional equals, so that each might say that this is my input. Then you bring the same team back and re-analyze at each ongoing step so that the planning process does not stop with a fixed imprint over a piece of land that says this is now a dogma for 60,000 people-the monument that we'll build. Friedburg: Instead of formally developing the whole plan, it might be possible to develop one approach for one fingerand then allow, by dint of performance, the constant and dynamic change to occur with each increment of development based on what you see in the first instance. I don't believe it is necessary to make plans as explicit formalistically. McHarg: Presumably it will improve, but it will change because people change. But it will also change because the architect, planner and landscape architect better understand the nature of the people so that it becomes a continuous adaptive process. Now none of these things happen. My objection to all this is a regurgitation of the worst of the past cliches in which there has been no testing and so the stuff we're doing is worse than the best of the stuff that was done 30-40 years ago. I think it is important to note that we do know there is a level of planning in this country which would deserve commendation but which was not represented in the submissions. It is important that-for whatever reasons-some firms decided not to bother to submit. I can think of cases of quite estimable work which, if submitted here, would have received our serious attention. The people who submitted should be very pleased that while we did not give any awards, we are not proposing to initiate any prosecutions. All of the things that we are looking at are images that may or may not be realized. Their excellence is not in human terms in any sense but in graphic terms only.

After a day of discussion during which some submissions were turned back to the architectural jury, the conclusion was reached that there would be no awards and no citations. The jury chose, instead, to single out three projects for comment which, while not innovative and of award quality, were felt to be competently done, and the best of the projects submitted. These are presented on the following pages. Urban design jury: No awards, no citations

David A. Crane and Associates Lysander New Community, New York State

McHarg: I think that this is absolutely prototypical of the best that we have seen. It has no program. There is no way of knowing anything about the nature of the people or about human behavior. There is no way of knowing anything about the land, climate, micro-climate, plants or animals. And out of this comes a highly elaborate plan with an architectural expression which is very pretty and signifies nothing. It is a glossy, competent, professional piece of work.

Friedburg: I have not seen a clear plan as to how the spaces are organized, or how the movement works. That's just land use. There is very little focus. The residential is spread out into a variety of different patterns that don't reinforce the commercial hub. The understanding of that organization in terms of what it brings to the whole plan is lacking. Blessing: It would apparently relate the design to the land but there's no way of knowing. I think it implies that the spade work, planning on the terrain and perhaps the ecology were there somewhere and proceed to give body to the idea. McHarg: What information is there anywhere that will allow us to believe that this is anything more than psychic indigestion on the part of the architect?

Friedburg: You have an attempt to create a relation between the movement from place to place through the various elements like the educational center to the commercial and then to the residential. I don't find any tension building up between these and it's this kind of interaction that to me makes at least the main area viable. Why separate the densely populated high-rise living from the desirably, densely populated main space by a large athletic green instead of providing it as an option? He denies the options that the residents might enjoy by setting it up the way he wishes to see it. You choose only within the context he gives you and I don't think his options are broad enough.

Data

Architect: David Crane and Associates. Project: Lysander New Community.

Client: State of New York Urban Development Corporation. **Site:** 2700 acres of vacant land, 12 miles from downtown Syracuse. **Program:** 800 acres of industry and 5000 units of housing for 18,000 residents described as a "balanced program" having been based on some detailed studies which were not explained.

Solution: The solution was contained in a series of fragmented items labeled "Town Center," "Residential Development," "Pedestrian and Vehicular Movement" without any way indicating their relationship to each other. The rationale for each particular item was discussed, but why that choice was made over other alternatives, and what was desirable about it is not stated. The result is a collection of design suppositions which one may or may not agree with.

The overall site plan of the new town has two strong geographic elements. The first is a river which, for unexplained reasons is not considered in the siting. The second is an expressway which cuts off part of the housing from the town center.

COMMUNITY FACILITIES LINKAGES

The document explains that the form of the town center "was influenced by staging considerations and by the desire to create a counterpoint to the character of the low density areas of the site. This building form has been juxtaposed with a large naturalistic open space which symbolizes the importance of outdoor recreation in the New Community."

THE EIGHT VECTOR GRID AND SITE PLAN

The alignment of the vehicular movement system," states the document, "permits flexibility in laying out roads as well as order to movement. The design of the system responds to a number of overlapping criteria including traffic volumes, the context of the street and the kinds of activities served. The unique character of each street will be expressed in the treatment of its right-of-way to provide a visual structure." Urban design jury: No awards, no citations

Craig, Zeidler, Strong Harbor City, Toronto

McHarg: There's an enormous amount of information. I'm not so sure that all the information that's provided affected the decision. It looks as if it's basically a very simple idea. They're going to fill in some land and put housing on it. But it's done with very considerable sensitivity. The only thing that gives me confidence is the sensitivity of the presentation-in other words, not the substance but the fact that the architect can produce this makes me think that they are sensitive people. Blessing: It appears to be a lively environment and probably an enjoyable one. It's broader in scope than many others. Friedburg: What is productive about this one is that it has a great deal more to work with. The very fact that it has this incredible presence of being on the water-of relating to itgives it romance and poetry without a great deal of effort. I think the scale-from the graphic presentation-seems to be consistent with the quality of life.

Blessing: This one has examples of the design but not the whole and leaves one wondering if the total concept has been formulated or if this is preparatory to the execution of the total design.

McHarg: I have the same feeling about this. It is the preparation for plans. It is a sensitive analysis of the opportunities.

Data

Architects: Craig, Zeidler, Strong. Project: Harbor City, Toronto, Ontario, Can. Client: Government of Ontario.

Site: 1030 acres (500 acres of landfill) on Toronto's waterfront. Program: A "new town in-town" development for 60,000 residents of wide economic backgrounds and ages with an integrated system of mass transit, public parks, canals, recreation, educational and commercial facilities. The plan should attempt to combine urban liveliness and density with the intimacy and human scale of low buildings, pedestrian walkways and informal public meeting places.

Solution: An open-ended plan with only the objective and options explicitly stated as guidelines for detailed planning of each phase. Feedback from first phases and involvement of residents will be used in developing subsequent stages.

Urban Design Staff, Department of City Planning, San Francisco Urban Design Plan for San Francisco

Blessing: This appears to be a rather detailed survey of the complex factors and inputs that analyze the conditions. It seems valid-a departure from the two-dimensional typical city plan which leaves one flat because it is flat. The search here is for the components which would make a viable city. McHarg: In conception, of course, it is absolutely rudimentary in terms of first year landscape architecture applied to the large city. I don't know whether it is planning or not. Friedburg: It doesn't have to be. We deal with various levels of design interest and when you deal with a vocabulary over a large scale it doesn't have to be earmarked as planning, but it might be an important contribution to the visual unity of the city, helping to maintain the quality of the city. Based on the fact that it is large scale in its use of a single vocabulary or a variety of different vocabularies that do tie together, it gains importance. The very identity of a streetscape becomes an important issue in terms of the way you understand the city or the way you see it.

Blessing: It would seem to provide a basis for the next stage which might be an overall large scale city plan. As such, I think it has promise and perhaps will be followed by someone with the total vision of what this might be.

McHarg: It is distinguished from all the rest of the stuff in that it is produced by a city planning commission which has the authority to implement these proposals. Moreover, most of the things it proposes can, in fact, be realized.

Data

Designer: Urban Design Staff of the Department of City Planning, City of San Francisco.

Project: Urban Design Plan for San Francisco.

Client: Citizens of the City and County of San Francisco.

Program: To develop principles, policies and guidelines for conserving and enhancing the unique qualities of San Francisco for the enjoyment and welfare of its citizens.

Solution: The plan is a flexible framework for decision making to guide new development and to reinforce existing visual order of the cityscape. The plan outlines four major scales of concern—the plan as a whole and how major streets and axis work to orient people, the neighborhood and the preservation of its unique identity, conservation of open space, and many of the historic buildings along with use of natural resources, and finally, it outlines major principles for new development. The plan documents existing conditions through maps and photographs then, with diagrams and renderings, depicts the necessary guidelines and possible remedies.

STREETS IMPORTANT FOR THEIR QUALITY OF VIEWS

WHERE STREETS ARE MOST IMPORTANT AS SOURCES OF LIGHT, AIR AND OPEN SPACE

 Part In Tage

 Part In Tage

 Tage Tage

APPROPRIATE ESTABLISHED PATTERNS OF BUILDING HEIGHT AND SCALE

The drawing (far left) shows the preservation of open space landmarks as points of orientation by limiting building heights. The drawing discusses the overall unity of the skyline through the use of light colored façades on the exteriors.

Environmental engineering

Electrical safety in hospitals: Part II

Clarence Tsung

Last month the author discussed the isolated power system controversy. This month he considers other aspects of electrical safety in hospitals including high frequency equipment, shielded rooms, and conductive floors, discussing design, installation and maintenance

When electric equipment is designed to operate at conventional power frequencies, the circuit elements are usually discrete components, physically obvious, and generally interconnected by wires. At higher frequencies, the electric current may not be restricted to obvious conductive paths, and consequently may have effects not generally noticed.

In addition to the direct conducted current to the patient, the less obvious forms of coupling (capacitive and inductive) mostly through air, become increasingly important. High frequency power generating apparatus such as electrosurgical devices, neurosurgical lesion generators, radio-frequency diathermy, microwave therapy and radiology equipment can present a hazard to the patient or to the operator by the nature of its use and by its electrical interference with other apparatus in contact with or implanted within the patient.

NFPA 76CM offers some guidelines for the safe use of high frequency electric equipment in hospitals. In general it recommends equipment protective measures such as input isolation transformers with electrostatic shielding, electrosurgical apparatus with built-in dispersive plates and monitors and, of course, special qualifications of personnel using such equipment. In special cases, shielded rooms may be required.

Shielded rooms

Measurement of a patient's physiological condition by electronic instruments involves extremely weak electrical signals. The recordings on the instruments are obtained by a high degree of amplification of these signals. Interpretation of the records may be seriously distorted or degraded if other extraneous signals are intermixed with the desired signals. Undesirable signals are generally in the form of electromagnetic interference (EMI) by radiation. EMI can be controlled if proper precautions are exercised during the design and construction of the hospital.

Many sources of EMI are possible in a hospital, and many interference reduction and suppression techniques can be

applied. The best control of interference is achieved by shielding the entire environment within which the measurements are made. Shielded rooms are constructed of highly conductive and magnetically permeable materials with suitable provisions for access of people and utilities. Shielding is often required for rooms in which electroencephalograph (EEG), electromyograph (EMG) or other equally sensitive equipment is used, and especially where the output of such equipment is to be fed into a computer for analysis or comparison. Electron microscope rooms frequently require shielding, but those containing electrocardiograph (EKG) and other less sensitive electronic equipment generally do not. The final decision on this complicated problem of EMI will of course be made by the hospital's biomedical electronics group the consulting engineers specializing in this subject.

Conductive floors

The theory behind the application of conductive floors in operating rooms is greatly misunderstood. This particular type of floor tile is a conductor but it is not a good ground. The underlay, which may be copper strip, is bonded to the grounded structure. The floor should have a resistance great enough to limit the current from any defective equipment and yet at the same time dissipate the energy through its conductivity. No appreciable charge should be allowed to build up on the floor. In order to maintain the conductive floor so that it serves its designed function but does not create hazards by itself, the maintenance is extremely important. The surface of the floor should not be insulated by a film of oil or wax. Proper cleaning procedures and scheduled resistance testing should be strictly followed to assure the integrity of the conductivity characteristics of the floor.

In conclusion, due to the increasing use of electronic equipment in hospitals, where a patient can easily become a part of the electrical distribution system, grounding and leakage current must be treated differently than in ordinary commercial systems. It is important to point out that even the best methods of grounding, insulation and isolation in electrical systems will deteriorate and cause trouble. In addition to careful system design and protection, correct installation and proper maintenance are of paramount importance. Preventive maintenance can detect weaknesses and remedies can be applied before failure occurs.

Author: Clarence Tsung is an associate of Syska & Hennessy, Inc., Consulting Engineers, New York City.

There's more than one way to skin a building.

Libbey-Owens-Ford Co.

Toledo, Ohio

Vari-Tran. Our most expensive glass can save you a lot of money.

Architecture is rapidly taking us into the future. And the reasons are many.

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Aesthetically, it's magnifi-

cent. Its brilliant golden or silvery tone reflects the surrounding scenery which seems to become a part of the building. At night, an illuminated interior shines through like a giant beacon. In both cases, passersby are

treated to an often breathtaking sight.

Vari-Tran is equally beautiful when you look at it from the cost angle . . . even though it's our most expensive glass. That's because Vari-Tran reflects heat and light from the sun, providing substantial savings in both the initial and operating cost of air conditioning. The insulating qualities of Thermo-

pane offer similar savings on heating.

The chromium is applied by Libbey-Owens-

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The coating can be varied to produce a full range of transparency and reflectivity levels. Standard daylight transmittances are 8%, 14% or 20%.

> For many buildings, the added cost of Thermopane with Vari-Tran can be more than offset by the heating and cooling savings. R ealistically, though, Vari-Tran is *not* the best glazing alternative for *every* type of build-

ing. But somewhere among the several other types of glass we manufacture, we think there's a solution for every problem you encounter.

On the following pages you will read how Vari-Tran can and has saved owners thousands of dollars. And you'll find that Libbey-Owens-Ford gives you a lot more than one way to skin a building.

Neuhaus + Taylor designs a beehive of activity.





This projected suburban megastructure includes high and low rise office space, a motel and a regional shopping center. A widely diverse mix to make the structure a center of activity throughout most of the day and evening hours.

In its two 21-story towers, Neuhaus+ Taylor of Houston, Texas, provides a total of 170,000 square feet of office space. Faceted bay windows make every office a corner office. Vision panels for these bay windows are 1" Thermopane® insulating glass with golden Vari-Tran reflective coating on the airspace surface of outer light. Spandrels are ¼" tempered golden Vari-Tran.

Vari-Tran turns away most of the sun's heat and glare and would greatly reduce the initial cost of air-conditioning equipment. Plus the cost of operating it. A representative case history: Edison Plaza Building, Toledo, Ohio, using Thermopane with Vari-Tran coating compared with single regular glass. Savings in cost of air conditioning and glass: \$123,700. Annual reduction in owning and operating costs: \$39,900. Alternating with the vision panels are solid panels of lightweight precast concrete faced with travertine. These alternating panels of glass and travertine from the base to the top of the towers give a striking sense of verticality to the design. The champagne color of the travertine combines with the Vari-Tran to lend a softly modulated golden tone to the towers.

391,000 square feet of additional office space are located in a low block adjacent to the towers. Within the block is a "private sky" that runs for more than a quarter of a mile. It's a two-story, sky-lighted, air-conditioned greenway. The skylight would be ½" laminated glass using tempered golden Vari-Tran. It has the reflective qualities to cope with all-day exposure to the sun.

Parallel to the low-rise office block is the linear motel and retailing complex. Another covered walkway with a private sky separates the motel from the shopping center. Pedestrian bridges tie the office buildings, motel and stores together into a unique whole.

A sloping wall of 1/2" laminated glass using tempered golden Vari-Tran runs the full length of the shopping center along its major road frontage. It encloses a 32-foot-high garden space that serves shops on two floors. Two levels of parking are below.

Creatively and functionally, golden and silvery Vari-Tran coatings have unlimited potential. Both come in three heat and light transmittances, 8%, 14% and 20%. For more details, write Architectural Construction Department, Libbey-Owens-Ford Company, Toledo, Ohio 43624.





Suburban Megastructure

Plan

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Harold R. Roe, A.I.A., of Howard Associates, specifies

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Proposed location: a water resort area in Michigan.

Problem: (1) design buildings that give vacationers a complete feeling of freedom, (2) protect them from reflected glare from the water, (3) provide economical heating and air conditioning.





On a hill overlooking the lake is a public shopping facility. For glazing this building, the architect would specify Thermopane[®] insulating glass with Vari-Tran^(TM) chromium alloy on the inside surface of the outboard light. Vari-Tran is the metallic coating applied to the glass in a vacuum equivalent to that found by astronauts 125 miles straight up. It controls transmission of light and heat to almost any extent you want to reduce glare and make air conditioning more efficient.



Renderings by Howard Associates, Architectural Illustrators, Sylvania, Ohio.

Mr. Roe has designed three octagon-shaped structures—a boat sales and marina office, a cocktail lounge and snack bar, a club house. Each affords 360° view of the scenery and activity surrounding it. For glazing, the architect proposes Thermopane fabricated with Parallel-O-Bronze. This hi-performance unit controls reflected glare from the water, reduces solar heat gain to keep interiors more comfortable, and helps air-conditioning equipment function more economically.

L-O-F makes a particular kind of glass for every purpose in building design. Refer to Sweet's Architectural File. Or call your L-O-F Glass Distributor or Dealer listed under "Glass" in the Yellow Pages. Libbey-Owens-Ford Company, 811 Madison Avenue, Toledo, Ohio 43624.







For the Twin Towers in Dallas, the glass that cuts building costs.



Vari-Tran[®] coated insulating glass provides twin benefits for Twin Towers: lower construction costs, lower operating costs.



Twin Towers office building, Dallas, Texas. Owner: Sanders Campbell Development Company. Architect: Neuhaus & Taylor, Houston, Texas. Mechanical Designer: Chenault & Brady, Houston, Texas. Glazing Contractor: Nichols Engineering, Dallas, Texas.

How Vari-Tran reduced air conditioning equipment.

Chenault & Brady of Houston, who did the mechanical design for Twin Towers, studied glass cost analyses made for similar buildings with this result. Said Charles Chenault, "We had enough faith in the efficiency of Vari-Tran 108 Thermopane to design the building's mechanical system from the beginning based on that glass."

Chenault & Brady specified Thermopane® insulating glass having an outboard light with Vari-Tran 108 silvery coating on its airspace surface. Using L-O-F's heat gain calculator, this glass reduced the computed cooling load by 349 tons compared with Parallel-O-Grey®. At Mr. Chenault's figure of \$600/ton, this is a saving of \$209,400. Deducting \$150,000, the approximate additional cost of Thermopane made with Vari-Tran, an initial saving of \$59,400 was achieved.

Vari-Tran justified on construction cost savings alone.

As you can see, Thermopane with Vari-Tran saved on initial air conditioning costs—more than enough to justify its additional cost. But there's more. Vari-Tran's superior heatreflecting qualities made it economically feasible to design an all-electric building. This, Mr. Chenault estimates, will provide the owners with an additional annual saving of \$15,000 in operating costs.



How Vari-Tran increased rentable area.

The "U" value of this hi-performance glass actually increased the amount of rentable square feet by decreasing space devoted to such things as fan-coil machinery, ductwork, etc. And, of course, with an all-electric building, no boilers. Specific figures are not available yet on Twin Towers, but a similar building enjoyed a 3% increase of rentable space.

The glass that cuts building costs makes a very beautiful building.

Notice how the silvery Vari-Tran units combine with spandrels of Vari-Tran coated Tuf-flex® tempered glass to form continuous strips of reflective glass from ground level to rooftop. In Twin Towers, they contrast with extruded cement-asbestos panels and are designed with a bay window effect to give each office a "balcony" view.

Broad range of reflectivities and aesthetics available.

Vari-Tran can be golden or silver with light transmissions of 8, 14 or 20 percent. Any one can give your building expanded aesthetic dimensions (as in the photo below, showing each bay reflected in its neighbor).



If you would like a computerized cost analysis of the glass wall of a building you're planning, contact your L-O-F Architectural Representative or Architectural Department, Libbey-Owens-Ford Company, Toledo, Ohio 43624.



Control Data asked its architects how to lower costs. Their answer: Vari-Tran. A dynamic computer corporation like Control Data needs space to grow in. But it wants to keep costs down. While at the same time managing to look good. With all that in mind, building architects Henningson, Durham & Richardson specified Thermopane® insulating glass with an outer pane of golden Vari-Tran for Control



Data's new three-tower office complex.

Vari-Tran has the ability to reflect part of the sun's radiant heat. This reduces cooling requirements both in tonnage and mechanical equipment like fan-coil machinery, duct work, etc. Which means the amount of usable floor space increases.

Image? No problem.

Vari-Tran's golden coating adds desired warmth and beauty. Each building is reflected in the other. And all three towers present an ever-changing mural of sky, clouds and sun.

Most important, there's cost. Control Data's architects developed a computer program to compare the results of using reflective glass with grey or clear glass. They found Vari-Tran saved enough air conditioning tonnage to pay for itself, even though it's our most expensive glass. Not to mention the future reduction in operating costs.

Vari-Tran is available in silvery as well as golden coatings with light transmissions of 8, 14 and 20 percent. If you'd like a computerized cost analysis of glazing alternatives for a building you're planning, give us a call. We'll be glad to do it for you. Contact your L-O-F Architectural Representative or Architectural Dept., Libbey-Owens-Ford Company, Toledo, Ohio 43624. You'll see how lowering costs can be a beautiful idea.









The Control Data Headquarters Building Owner: Control Data Corporation, Minneapolis, Minn. Architect: Henningson, Durham & Richardson, Omaha, Neb. General Contractor: Kraus-Anderson of St. Paul Co., St. Paul, Minn. Glazing Contractor: Larry's Glass & Mirror Co., St. Paul, Minn.



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PARALLEL-O-GREY[®] – Parallel-O-Grey glass has a neutral grey color resulting in no color change of objects viewed through the glass. Like Parallel-O-Bronze, Parallel-O-Grey is a glare-reducing and heat-absorbing product.

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Specifications clinic

Performance specifications

Harold J. Rosen, PE, FCSI

The growing popularity of performance specifications, for which no true definition exists, prompts this analysis of their use and abuse and the need for caution

There seems to be a certain fascination with performance specifications. Even those with only modest experience with specifications bandy the term about as if its use would eliminate the ills of imperfect specifications and the lack of qualified specification writers. Actually, a satisfactory definition of the term does not exist. If we are to produce performance specifications, the term should at least have a recognizable, fully developed meaning. After establishing a definition, we can determine whether it would be appropriate to use this form of specification for every area of specification writing.

There is no problem concerning definitions of other types of specifications, i.e., descriptive, proprietary and reference standard specifications. In the descriptive specification or prescription type as some would term it, methods are specified. Described in cookbook fashion are the materials, workmanship, installation and erection procedures to be employed by the contractor. This approach is based upon the wealth of information and experience that has been produced on known materials and methods. The specifier is aware that if he specifies known bricks and mortar and proper workmanship techniques, the contractor can erect a quality masonry wall. There is no disputing this approach.

With the proprietary specification, the specifier determines that a specific product by a specific manufacturer is appropriate for the project and then embodies the manufacturer's specification in his specification. In some instances it may require some editing but the basic technical language is used as provided in the proprietary specification.

The reference standard specification is one which incorporates by reference a specification for material and/or workmanship based upon ASTM, ANSI, ACI, NFPA or federal specifications. Among these reference standards are some that employ descriptive specifications and some that employ what may be termed performance specifications.

It would be well at this point to establish what might be meant by the term performance specifications. When we specify by means of descriptive specifications we describe methods which lead us to an end result. This is based upon

past experience with materials and workmanship. Since it is the end result that the specifier is seeking it would appear natural to describe the result wanted. This might be expressed in the following terms: "A performance specification is one in which the end result is achieved by formulating the criteria for its accomplishment." The criteria for materials is established on the basis of physical properties and for equipment it is based upon performance characteristics. However, much depends upon the intelligence and/or the integrity of the manufacturers and the contractor and the workmen's skill to produce the end result based upon performance. A description of end results required may not always clearly convey to the manufacturer, contractor and workman exactly what the specifier has in mind. Also it may be possible to obtain the appearance of the desired result by inferior methods or workmanship.

It is not suggested that performance specifications will always lead to unwanted results. What is questioned is the ability of the specifier to always include the proper parameters or characteristics necessary to achieve the end results.

Generally, performance specifications are employed when there is limited information about known materials and methods, leaving the formulation of the product and its installation in the hands of the fabricator who presumably has the necessary expertise in this area; witness the specification for the capsule used for the space flight in which three astronauts died in flames in seconds because of the flammable finishes in the capsule. Had the specifications been written around known materials, the tragedy might have been averted. In using performance specifications it may very well be that the characteristics concerning flammability were overlooked.

When the specifier has secured the effect wanted by using certain methods, it may be better to specify the method to be followed with a descriptive specification. When he is dealing with unknown products and systems he attempts to use performance specifications. For example, in specifying building systems for the first time, the specifier may have no other choice but to specify end results rather than descriptive methods. But his first performance specifications may be fraught with gaps, inconsistencies and just plain ignorance.

There are any number of performance specifications for materials, for example, sealants, but the development of even these performance specifications has taken a number of years, borrowing on the field experience with sealants and the expertise of the users and formulators.

Performance specifications are not a simple answer to complex problems. They can be developed, but it takes time, experience and knowledge.

Author: Harold J. Rosen is Chief Specifications Writer of Skidmore, Owings & Merrill, New York City.

The June of the second second

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The outdated form

Bernard Tomson and Norman Coplan

Are parties bound to arbitrate even though the arbitration procedure provided by the contract was not available when the dispute arose is the issue here

Prior to March of 1966, the American Institute of Architects provided a standard form of arbitration procedure to resolve disputes arising between parties involved in a building project. This procedure was incorporated by reference in the form contract documents issued by the AIA. Under said procedure, if two parties to a contract were involved in a dispute, each party selected an arbitrator who, in turn, selected a third arbitrator. If there was no agreement on the selection of the third arbitrator, the dispute was to be submitted for arbitration and resolution under the rules of the American Arbitration Association.

In 1966, the American Institute of Architects discontinued all arbitration functions and became a party to the "Construction Industry Arbitration Rules" which were to be administered by the American Arbitration Association. This change in procedure was reflected in changes in the arbitration provisions in the form contract documents thereafter issued by the AIA.

Occasionally, contracts in the construction field have been written on outdated forms that provide for arbitration of disputes pursuant to the standard procedure of the AIA, a procedure no longer in existence when the contracts were written. There also have been situations where disputes have arisen under contracts that were current at the time they were executed, but when the dispute arose some years later, the arbitration procedure provided under the contract was no longer applicable. The issue to be resolved under either of these circumstances is whether the parties are bound to arbitration even though the arbitration procedure provided by the contract was not available when the dispute arose.

This question was recently considered by a New York Appeals Court, in the *Matter of Kingsbrook Jewish Medical Center*, N.Y.L.J., June 19, 1971. The facts, as reflected by this case, involved an agreement between an architect and owner which was made in 1968 utilizing a 1963 form issued by the AIA. The architect had claimed fees totaling approximately \$317,000 but had been paid only the sum of \$177,500. A dispute arose in 1970 concerning this balance and the architect sought to arbitrate pursuant to the provisions of the architectowner contract which provided that "Arbitration of all questions in dispute under this Agreement shall be at the choice of either party and shall be in accordance with the provisions then obtaining of the Standard Form of Arbitration Procedure of the American Institute of Architects." The contract also provided that the agreement to arbitrate would be "specifically enforceable under the prevailing arbitration law."

The owner sought and obtained a stay of the arbitration on the ground that the AIA did not provide a standard arbitration procedure and that he could not be compelled to arbitrate pursuant to a procedure administered by the American Arbitration Association as he had not agreed to such procedure. The Appellate Court, in reversing this decision and requiring the arbitration, stated:

"From the language quoted it appears clear that the dominant or primary intention of the parties was that disputes should be resolved by arbitration and not by time-consuming litigation. In fact article 12 further provides, expressly '[t]he decision of the arbitrators shall be a condition precedent to the right of any legal action."...

"But, says respondent, we agreed to arbitrate before the AIA, and not before the AAA. The form of arbitration stipulated was purely procedural in that it should be in accordance with that of the AIA. The Standard Form of Procedure of the AIA as it existed in 1958, and presumably up to 1966, permitted the parties intending to arbitrate any claim or dispute 'subject to arbitration under any of the Standard Documents' of the AIA to 'designate whether the arbitration shall be administered in accordance' with the standard procedure of the AIA or the rules of the AAA.

"March 8, 1966, the AIA discontinued all arbitration functions and became a party to the 'Construction Industry Arbitration Rules,' effective March 8, 1966, which Rules were to be 'administered by American Arbitration Association.' The form used in the execution of the agreement between the parties was that originally adopted by the AIA in 1963. When executed in 1968, the AIA no longer separately conducted arbitration procedures, a somewhat incidental function for the AIA, but had consented to the assumption of that responsibility by the AAA, which acted as administrator of the Rules. It is a fair construction that the parties, in carrying out their avowed intention to seek arbitration of any disputes which might arise, intended as well to utilize any procedure sponsored and approved by the AIA and of which it was an integral part. These were in reality the AIA provisions existing at the time arbitration was sought."

In this case the court rejected a literal and narrow interpretation of the contract and based its decision upon what itperceived as the dominant and primary intention of the parties. The danger, however, in utilizing outdated forms is apparent. Although the court did not have before it a fact situation in which the AIA form contract was current as of the time of its execution, but the arbitration procedure inapplicable as of the date the dispute arose, it would appear that it would reach the same conclusion if that were the case.

Authors: Bernard Tomson is a County Court Judge, Nassau County, N.Y., Hon. AIA. Norman Coplan, Attorney, is Counsel to the New York State Chapter of the AIA.



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Town plan by Gropius

Town Plan for the Development of Selb by Walter Gropius and the Architects Collaborative, Inc.: in collaboration with Kurt Leibbrand and Verkers—und Industric planung, Gmeh. Cambridge: The MIT Press, 1970. 75 pp. \$15.

Reviewed by Charles B. Leach, Chairman of the Department of Regional Planning, Ohio University, Athens.

Walter Gropius and the other members of the Architects Collaborative, Inc. developed a master plan for the city of Selb, a porcelain manufacturing center of some 20,000 people in northeastern Bavaria. This plan, termed the last extended work of Gropius, is presented in this publication together with the concurrently developed traffic plan for Selb as designed by Professor Kurt Leibbrand of Frankfort.

According to the written account of the Mayor of Selb, published in the opening pages of the book, Professor Leibbrand had been awarded a contract to do the traffic plan for the city before the city was aware of a possibility of retaining Mr. Gropius to produce a master plan. When this possibility became reality, the city requested both men to work together and produce a joint effort. Apparently, much data was passed around between and among offices, but the final product unfortunately appears almost as much as two distinct programs and plans as they would had there been no relationship. The concepts of planning held by the two men are obviously too diverse for their methods to appear coordinated and their products to appear unified.

The format of the book presents the Mayor's statement first. This gives a brief history of the city, its present economic condition and its involvement in planning for its own future. Gropius and Leibbrand then alternately make opening remarks, present their planning solutions and offer implementation schemes. Although there is some perceptible coordination between Leibbrand's placement of new roads and Gropius' redesign scheme for the core and his site selections for new development, the symbiosis of the two plans appears to end at that point. The text for both plans is limited, and the greater portion of the presentation takes the form of photographs and multicolored drawings, maps and statistical graphics, which make the book readable and easily absorbed.

Leibbrand's traffic plan is largely geared to efficiency. He has collected data to show the distribution of traffic loads and to indicate origin and destination of vehicular traffic. His solutions are in terms of relieving peak hour pressures from the central streets. His methods are fairly unsophisticated; for this reason, they are quite workable and are also easily understood by laymen, a necessity for final implementation. They are worthy of study by planners of small American municipalities, since they offer officials the ability to make intelligent decisions based on data gathered with small cash expenditures. Leibbrand's descriptions of his solutions are sometimes quite confusing to one not familiar with Selb, as they require constant referral to the only map showing street names, which is in the front of the book.

Gropius' plan, unfortunately, does not live up to my expectations. The Gropius tradition of throwing off old styles and returning to an honesty of thought and feeling was not apparent in his plan for Selb. His introductory remarks, "The Core of the Town as Center of the Planning Conception" are general to the point of being vague. They also appear to be a means for glossing over a poorly conceived job. His use of the now standardized format of a rejuvenation of the town core for both the pedestrian and automobile, while at the same time providing for controlled growth at the urban periphery, expresses a conservatism unbecoming a master.

Gropius states that, "The final aim of successful planning is to raise the standard of town life, thereby expressing practically and aesthetically—the pride of its inhabitants." Yet, his plan contradicts the goal of expressing this pride if only because, with a few minor adjustments, it is the same plan which has been presented over and over for hundreds of cities. There is no indication of his concern for those unique features of Selb in which its citizens may take pride, but there is a suggestion of Gropius' involvement with those features he feels they should have to make it a viable city.

The single unusual and redeeming feature of the plan is its implementation in four stages, stages which are fixed according to actual population growth rather than to specific time periods, making the implementation features highly flexible. This is a level of thinking needed by all planners. However, it is unfortunate that Gropius did not see fit to entertain more radical and thoughtful processes throughout his planning program.

Genius and the Mobocracy by Frank Lloyd Wright. (New enlarged edition) New York: The Horizon Press, 1971. 247 pp. illustrated. \$20.

Having added 19 drawings by Louis Sullivan and one by Frank Lloyd Wright to the original 41 drawings and having included two essays by Louis Sullivan on Frank [continued on page 142]

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Books continued from page 132

Lloyd Wright's works as well as 54 photographs, many of them details of Sullivan's ornament in executed structures, the publishers felt they had good reason to issue this new edition of *Genius and the Mobocracy*—up from its original 113 pages to more than twice that number.

In October, 1949 when the first edition of this book was published, Thomas Creighton, then editor of *Progressive Architecture*, wrote, "Frank Lloyd Wright has had more influence on architecture in our time than any other man.... Now that you know where this reviewer stands about Frank Lloyd Wright, it can be reported that *Genius and the Mobocracy* is a tiresome and rambling repetition of remarks that have been made by the author many times in his writings and his talks. The historians will be disappointed that little new source material has been added to the story of Louis Sullivan; the plates of Sullivan's drawings are somewhat freer in conception but otherwise little different from those previously published.''

Agreed. The best reason for new interest in this book are the excellent photographs.



If you like Ted Williams, Pierre Bonnard, the Plaza, George C. Scott, John Hartford, Remy Martin, and the early Hemingway, you'll like the character of Robert Long lamps and lighting.



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A House in the City by H. Dickson McKenna. New York: Van Nostrand Reinhold Co., 1971. 159 pp. \$12.95.

Described in its subtitle as "A Guide to Buying and Renovating Old Row Houses," this book is just that. Essentially directed to the consumer in search of a row house, the architect will find much to interest him in the hundreds of photographs, drawings and plans as well as the definitive remarks accompanying them.

History of Notable American Houses by Marshall B. Davidson. New York: American Heritage Publishing Co., Inc. 1971. 383 pp., illus. \$19.95.

Lost America, edited by Constance M. Greiff. Princeton, N.J.: The Pyne Press, 1971. 256 pp. illus. \$17.95.

It wasn't enough that both books arrived on the same day. Compounding that minor coincidence was a certain amount of overlap between the books, most noticeable in the publication of what bids fair to become the historical building demolition photograph of recent times. It shows a clamshell bucket delivering a fatal blow to the National Presbyterian Church in Washington D.C. In Notable American Houses it occurs at the end of a coda dealing with the continuing loss of large chunks of the American architectural heritage. In Lost America it shows up at the end of the introduction setting the tone for the whole book.

Notable American Houses is the story of how part of the great American dream was lived—a period-by-period look at the American house, packed with descriptions and essays, illustrated with photos and drawings. It is, of course, more than just a history of housing design; it is a social history showing how life was lived in the most outstanding and, sometimes, most typical houses built in this country. In the best traditions of the book's publishers, American Heritage, the illustrations are lavish and the writing is good. For travelers, a companion volume listing the historic houses of the U.S. is available.

Lost America is something else—another of those catalogs of buildings that are no longer with us. It is the first of two volumes (this one covers the U.S. east of the Mississippi, the other will start at the river's bank and go west from there) and it conjures up visions of a past that is gone for good, torn down to make room for filling stations, shopping centers and office buildings or demolished by storm, fire or vandals. (None of the buildings shown in [continued on page 148]

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Books continued from page 142

Lost America met the mysterious fate of a structure listed in another similar publication; that one simply "disappeared.") It is quite comprehensive and touched here and there with an ironic sense of humor. You could laugh, sometimes, if you weren't so outraged.

Planning Recreational Places by Jay S. Shivers and George Hjelte. Cranbury, N.J.: Farleigh Dickinson University Press, 1971. 380 pp. illus. \$27.50.

A glance at the contents page of this book tells all: Under "The Concepts and Strategies for Planning Recreational Places" are nine sections including planning process, principles for planning recreational places, physical and extra-physical planning factors in urban regions, design elements of recreational places, planning a recreational complex, construction features, development of construction costs, theories and trend research in recreational planning. Part II is equally comprehensive and covers "Planning Applications and Recreation Service System Components." The authors are authorities in this field and have collaborated on what is a text that makes an excellent reference and source book for those working in this and related areas of planning.

Architectural Delineation: A Photographic Approach to Presentation by Ernest Burden. New York: McGraw-Hill Book Co., 1971. 310 pp, illus. \$18.50.

The techniques of using photography to depict architectural projects are offered by this architect/author in his profusely illustrated book. Instead of traditional rendering methods, Mr. Burden uses the camera as both a producing and presenting tool, and describes his techniques in an easyto-follow fashion, showing step-by-step workings of his photographic system.

The discussion of the camera involves perspective, camera angle, composition and sequential series and demonstrates how to handle difficult site-coordinated layouts and how to render aerial layouts of small areas or whole cities within their surroundings. Sections on drawing techniques are included, with portfolios of style and drawing from the work of many delineators. In a presentation section, Mr. Burden illustrates how to create models for photography, and also discusses the slide show as a form of dramatic presentation. [continued on page 152]
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Architect: William L. Pereira Associates. Structural Engineer: Brandow & Johnston Associates. General Contractor: Diversified Builders, Inc. Ready-Mixed Concrete with POZZOLITH admixture: Consolidated Rock Products. Twin nine-story towers of the new Financial Plaza in Newport Center are forerunners of high-rise structures which will soon transform the skyline of Newport Beach in megalopolitan Los Angeles.

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Books continued from page 148

Documents

The documents listed below are available from the associations and agencies cited. Request for such documents should be directed accordingly.]

Standard for the Installation of Sprinkler Systems. (NFPA No. 13). 200 pp. \$2.50. **Recommended Practice for the Care and** Maintenance of Sprinkler Systems. (NFPA No. 13A) 31 pp. \$1. National Fire Protection Association, Boston, Mass. 02110.

These are new editions of sprinkler system standards: NFPA No. 13 has been amended on three points; NFPA No. 13A has been rewritten to give greater emphasis to the necessity for frequent inspection of control valves

CSI 25 Specification Series. The Construction Specifications Institute, 1150 Seventeenth St., N.W., Washington, D.C. 20036.

This is a special series of documents offering standardized specifications for 25

frequently used items. Each document has been written by appropriate CSI committees. Subjects covered in this first shipment include: concrete masonry, metal oxide waterproofing, sheet metal roofing, ceramic tile, elevators and lawn sprinklers. Additional shipments covering other subjects will follow. With binder: \$30 (member), \$37 (nonmember)-without binder: \$25 (member), \$30 (nonmember).

Earthquake Safety in the City of Long Beach Based on the Concept of Balanced Risk by J. H. Wiggins, Jr., and Donald F. Moran. J. H. Wiggins Co., Inc., 2516 Via Tejon, Palos Verdes Estates, Calif., 90274. 200 pp. \$6.

This report presents the methodology for relating death risk to building safety on the basis of occupancy factors, soil conditions, earthquake recurrence probabilities and structural factors. The rehabilitation of existing structures as well as the design of new structures is also treated.

How the earthquake should be considered in the establishment of public policy is considered, with a model ordinance to be used as a guide included.

The Basic Functions of Digital Computers and Work Processing Systems by Clyde V.L. Pearson. Published by Tricosal Technical Press, Inc. 1246-18th St., San Francisco. Two-volume set: 115 pp. \$4.95.

These volumes cover word processing, automated specifications and computer systems. Included are suggested courses of action, relevant information on word processing programs, planning, office procedures, applications, costs. The set provides answers to many questions raised by designer/specifiers and other members of the construction industry.

Technical digest on design of steel joist roofs to resist ponding loads. Steel Joist Institute, 2001 Jefferson Davis Highway, Suite 707, Arlington, Va. 22202. 32 pp. \$1.

This booklet is concerned with the selection of steel joists for flat roofs to resist loads resulting from accumulated water on the roof, and reviews in depth the structural behavior of steel joists under these conditions. It describes the general nature of ponding, roof design to resist ponding, accounting for camber and recommended design procedure.

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Progressive Architecture

Notices

Appointments

John C. Parkin Architects Engineers Planners of Toronto announce the admission to partnership of: J.B. Mar, MRAIC, Peter H. Warren, MRAIC, and Donald L. Wilson, MRAIC

Frank J. Abbadessa and Edoardo Leoncavallo have been made associates of Curtis and Davis, Architects and Planners of New York

Paul R. Drag has joined Christopher R. Wojciechowski, AIA of Los Angeles as partner in charge of design and planning. Bert M. Elliott has been made director of projects.

Ross J. Ferlita has joined the staff of Rowe Paras Associates Architects, Inc., Tampa, Fla. as head of the landscape and planning department.

Raymond P. Aubin, AIA has been appointed an associate of the architectural firm of Faulkner, Fryer and Vanderpool.

Jack R. Shaw has joined Walter W. Scarborough, Inc., Houston, as director of interior design.

Name changes

Dorman/Munselle Associates are now Richard Dorman & Associates, Los Angeles.

New addresses

The Nolen and Swinburne Partnership, 1624 Locust St., Philadelphia, Pa. 19103.

Perkins and Will, 445 Hamilton Ave., White Plains, N.Y. 10601 and 122 E. 55 St., New York, N.Y. 10022.

Christopher R. Wojciechowski, AIA, Wilshire West Plaza Building, 10880 Wilshire Blvd., Los Angeles, Calif.

Wheeler & Gray has opened offices at 1608 N. Main St., Santa Ana, Calif.

Richard Dorman & Associates, 8899 Beverly Blvd., Los Angeles, Calif.

New firms

Vickery, Palmer, Bashor, Architects, Engineers, Planners has opened offices at 44 E. Pine Knoll Dr., Greenville, S.C. 29607.

Sattelberg Partnership, Architects, Planners, Consultants, 2509 Browncroft Blvd., Rochester, N.Y. 14625.

Robert J. Gorski, E. Harvey Myers, and Patrick M. Gilvary have formed the partnership of Gorski, Myers, Gilvary AIA Architects at 20 Nassau St., Princeton, N.J. and 12 Broad St., Red Bank, N.J.

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Architect: Registered in California, eighteen [continued on page 160]

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