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# **JOURNAL** **RAIC - L'IRAC**

SEPTEMBER 1965 SEPTEMBRE



Precast pedestals supporting paving



Paving and balustrade



Precast stairway



Paving on Nathan Phillips Square



Precast struts on council chamber



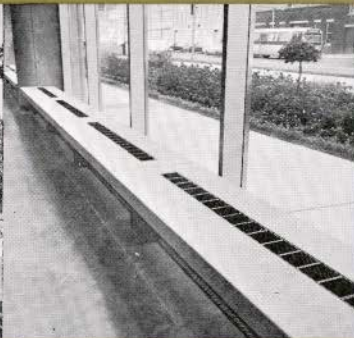
Spandrel and wall panels



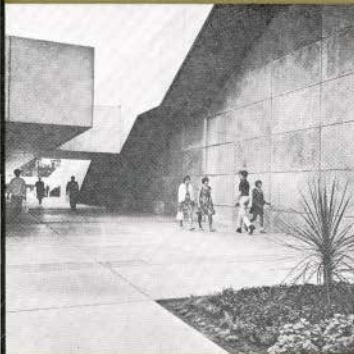
Duct covers and benches



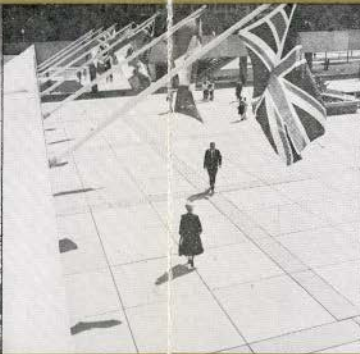
Balustrades to elevated walkway



Precast induction unit covers



Podium wall panels and balustrade



Paving slabs



Pool house wall panels and fascia

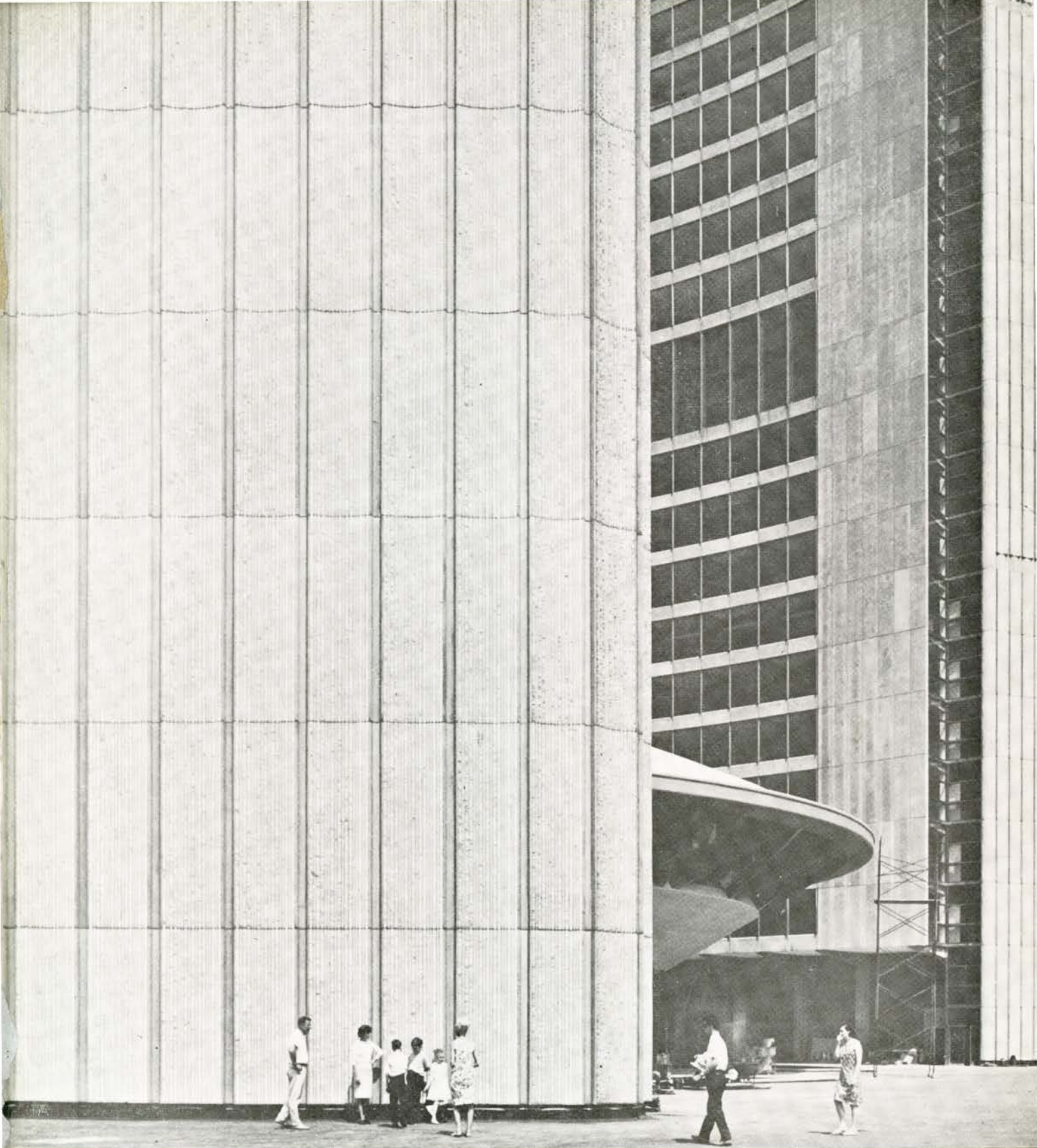
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Architect's plans were approved and job quoted in August 1961. Extensive design and testing of precast concrete followed with production continuing from 1962 through to completion and erection in August 1965. Over 20,000 tons of concrete were required for the 5000 marble faced backwall panels, 2000 curtain wall panels, 5500 one and a half ton paving slabs, 3500 pavement pedestals, 2000 balustrade panels for elevated walkway and podium, plus 4000 precast units for items such as induction unit covers, channel slabs, handrails, curved seating and benches. We congratulate the architects and the city council for this monument to precast versatility and freedom of design."

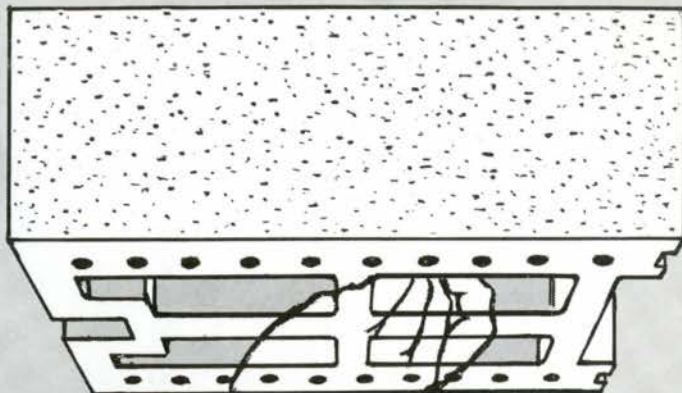


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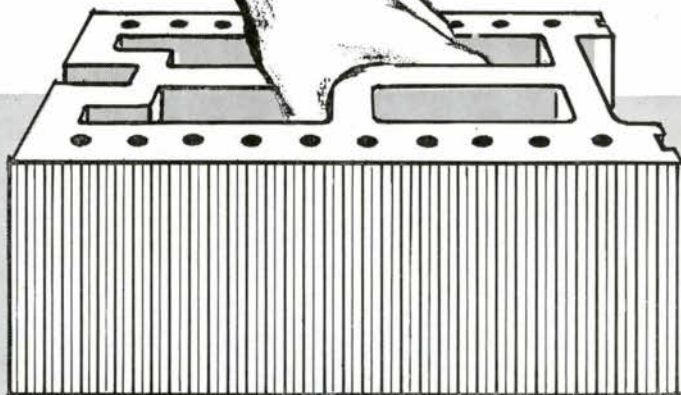
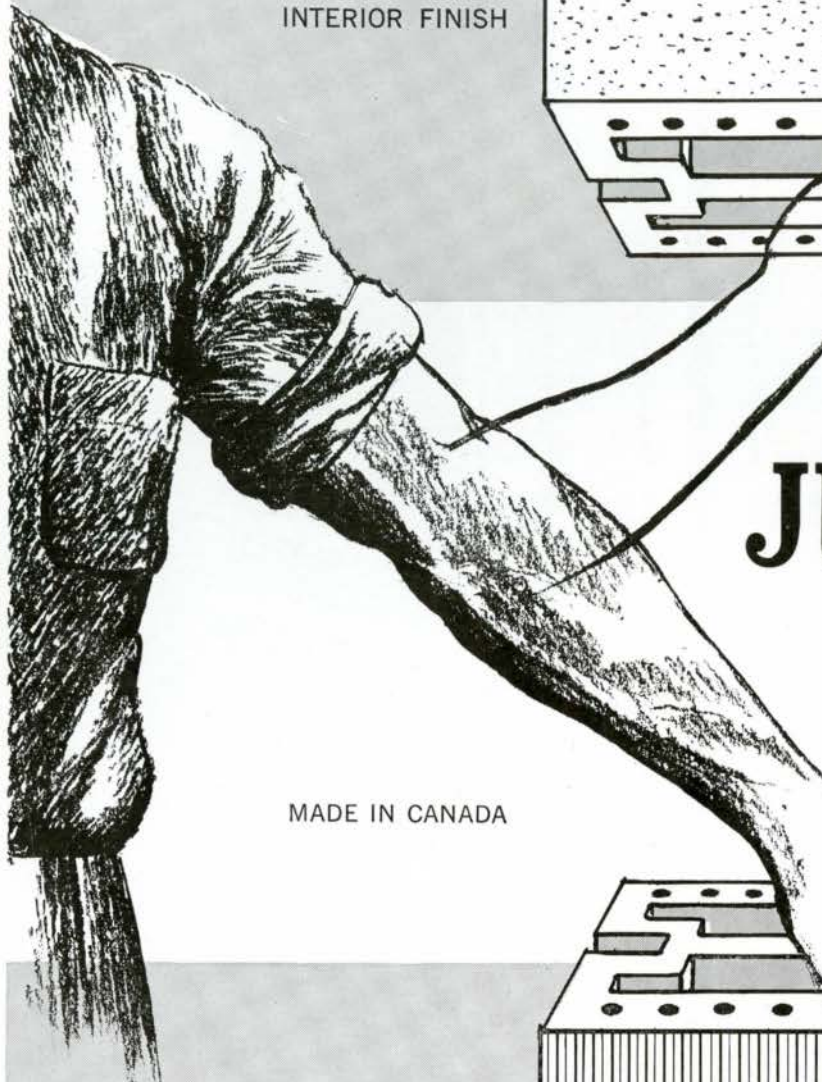


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### Toronto City Hall

#### Part I: Civic Design

- 37 Introduction and Summary of Jury Report
- 39 Architect—Planner—Landscape Architect  
Panel Discussion on the Civic Design Aspects
- 56 Architects' Statement

#### UBC Student Union Competition

- 60 A Critical Commentary on the Competition and on the Entries of the Four Finalists  
in the Second Stage
- 64 Report of the Jury
- 66 Report of the Professional Adviser

#### Awards

- 69 Federal Department of Public Works Design Awards for Architecture, 1964

#### Allied Arts

- 15 Montreal . . . Achievement and Faith, by Anita Aarons, ASTC (Sculp)

#### Perspectives

- 9 By Fred Price, RAIC Executive Director  
Par Fred Price, directeur général de l'IRAC

#### Technical Section

- opp. 52 Flashing for Membrane Roofing, by M. C. Baker, September Building Digest Supplement, Division of Building Research, NRC, Ottawa

#### Departments

- 19 News
- 95 Reader Service Reply Cards
- 96 Index to Advertisers

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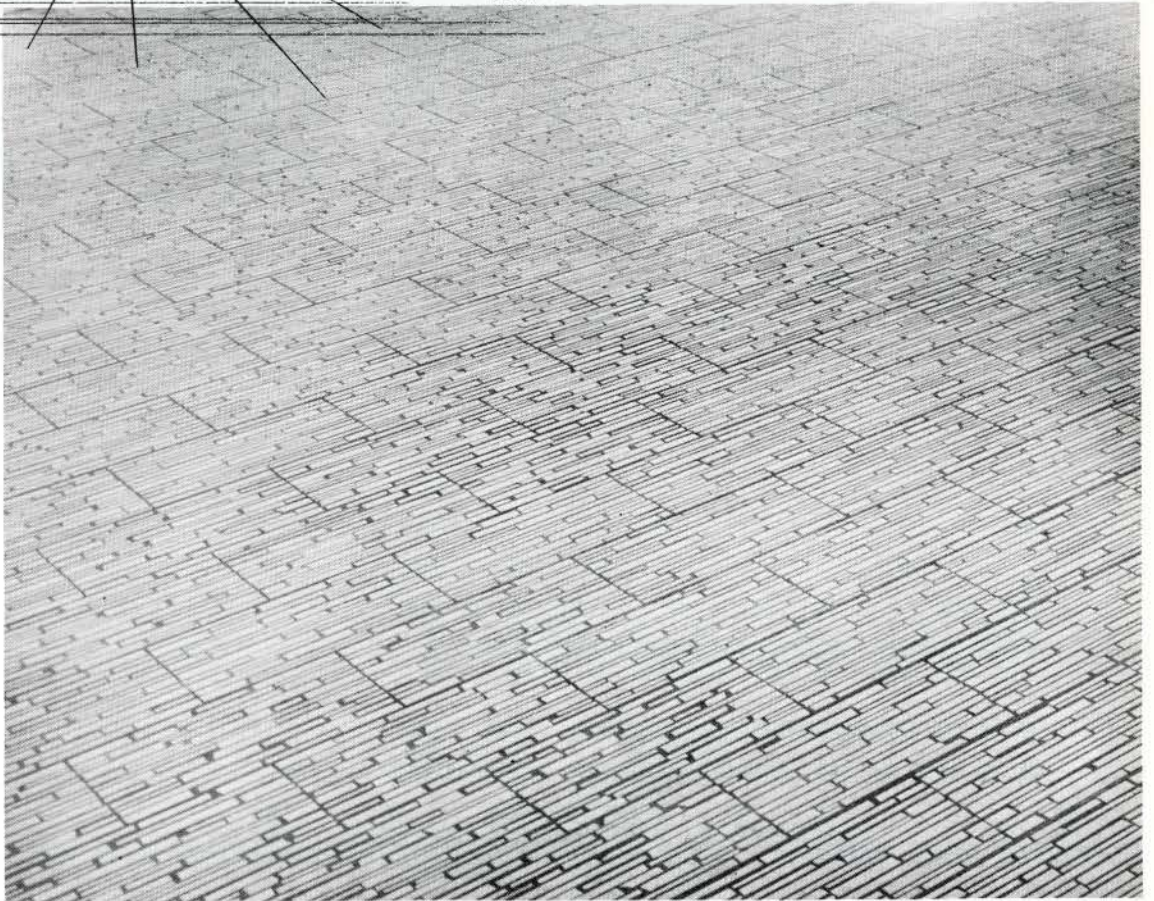
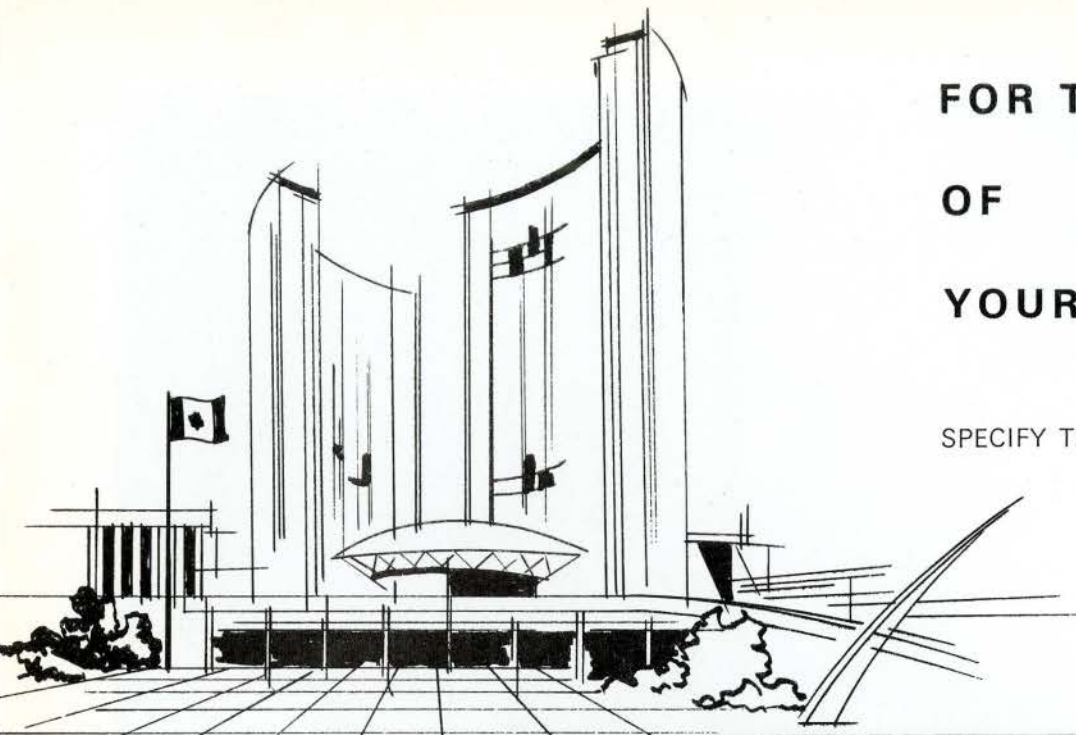
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# Perspectives

## From RAIC Headquarters

Joseph Pettick, RAIC representative to the Union Internationale des Architectes, reports that 18 members of the Institute participated in the recent UIA Congress in Paris. James W. Strutt (*F*) and John Lovatt Davies (*F*) were the other voting delegates. Over 2,000 architects attended, representing 72 nations. One of our participants, Dr Thomas Howarth (*F*), delivered a paper on architectural education in Canada, which was very well received.

The new UIA President, succeeding Sir Robert Matthew, is Eugene Beaudouin, of Paris, France. Vice-Presidents are Da Silveira, Brazil; Cedercreutz, Finland; Kitsikis, Greece; Maekawa, Japan. The new Treasurer is Gontran Goulden of England. Other members of the Executive represent Roumania, Netherlands, Switzerland, Czechoslovakia, Belgium, Mexico, Russia, India, Israel, China, Austria, Poland, Argentina, and the United States of America.

THE MASSEY MEDALS FOR ARCHITECTURE 1964 Exhibition will continue on tour under the auspices of the National Gallery of Canada during the coming season. The schedule follows:

1965

October 1 to October 24—Faculty of Architecture, University of Manitoba, Winnipeg, Man.

November 5 to November 28—University of Toronto, School of Architecture, Toronto, Ont.

December 3 to December 27—School of Architecture, McGill University, Montreal, P.Q.

1966

January 7 to January 30—Memorial Gallery, Memorial University of Newfoundland, St. John's, Nfld.

February 11 to March 6—Beaverbrook Art Gallery, Fredericton, N.B.

March 18 to April 17—New Brunswick Museum, Saint John, N.B.

April 29 to May 29—Ecole d'architecture, Université Laval, Québec.

Another RAIC Exhibition, HISTORIC ARCHITECTURE OF CANADA, is also touring under the National Gallery's auspices. Schedule follows:

1965

August 27 to September 19—Vancouver Public Library, British Columbia.

October 1 to October 24—Winnipeg Art Gallery, Winnipeg.  
November 5 to November 28—Norman Mackenzie Art Gallery, Regina, Sask.

December 3 to December 27—Toronto Public Library, Fine Arts Gallery, Toronto, Ont.

1966

January 7 to January 30—School of Architecture, McGill University, Montreal.

## Du Siège Social De l'Institut

M. Joseph Pettick, représentant de l'Institut à l'Union internationale des architectes, nous annonce que 18 membres de l'Institut ont participé au récent congrès de l'Union internationale à Paris. Les autres délégués avec voix délibérative étaient M. James W. Strutt (*F*) et John Lovatt Davies (*F*). L'assistance était formée de plus de 2,000 architectes venus de 72 pays. Un de nos participants, M. Thomas Howarth (*F*), a présenté un document très apprécié sur la formation des architectes au Canada.

Le successeur de sir Robert Matthew comme président de l'Union internationale est M. Eugène Beaudouin, de Paris (France). Les vice-présidents sont MM. Da Silveira, du Brésil, Cedercreutz, de Finlande, Kitsikis, de Grèce et Maekawa, du Japon. Le nouveau trésorier est M. Gontran Goulden, d'Angleterre. Les autres pays représentés à l'exécutif sont la Roumanie, les Pays-Bas, la Suisse, la Tchécoslovaquie, la Belgique, le Mexique, la Russie, l'Inde, Israël, la Chine, l'Autriche, la Pologne, l'Argentine et les États-Unis.

L'exposition MEDAILLES MASSEY EN ARCHITECTURE, 1964, continuera durant la prochaine saison sa tournée sous les auspices de la Galerie nationale du Canada. Le calendrier est le suivant:

1965

1er octobre au 24 octobre—Faculté d'architecture, Université du Manitoba, Winnipeg (Man.)

5 novembre au 28 novembre—École d'architecture de l'Université de Toronto, Toronto (Ont.)

3 décembre au 27 décembre—École d'architecture de l'Université McGill, Montréal (P.Q.)

1966

7 janvier au 30 janvier—Memorial Gallery, Memorial University of Newfoundland, Saint-Jean (T.-N.)

11 février au 6 mars—Beaverbrook Art Gallery, Fredericton (N.-B.)

18 mars au 17 avril—New Brunswick Museum, Saint-Jean (N.-B.)

29 avril au 29 mai—École d'architecture, Université Laval, Québec.

Une autre exposition de l'Institut, L'ARCHITECTURE HISTORIQUE DU CANADA, poursuit également une tournée du pays sous les auspices de la Galerie nationale du Canada. En voici le calendrier:

1965

27 août au 19 septembre—Vancouver Public Library, Colombie-Britannique

1er octobre au 24 octobre—Winnipeg Art Gallery, Winnipeg  
5 novembre au 28 novembre—Norman Mackenzie Art Gallery, Regina (Sask.)

3 décembre au 27 décembre—Toronto Public Library, Galerie des Beaux-Arts, Toronto (Ont.)

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February 11 to March 6—University of New Brunswick, Fredericton, N.B.

The Royal Canadian Academy of Arts 86th Annual Exhibition will be held in the Art Gallery of Hamilton, November 12 to December 12, 1965. The exhibition will reopen at the Winnipeg Art Gallery from February 1 to 21, 1966. All Canadian architects are eligible to submit work for consideration by the Jury of Selection, which includes Leonard E. Shore (*F*), Chairman, John Bland (*F*), and Richard E. Bolton (*F*).

The Alberta Association of Architects promises to host the best RAIC Assembly ever, in June 1966, at Jasper. The Host Committee has already initiated planning, under direction of Ken Bond and John McIntosh.

The AAA Council has appointed a special committee to study the need for a School of Architecture in Alberta.

Further on advance Assembly preparations, the Ontario Association of Architects has already formed its Host Committee for the 1967 Assembly in Ottawa, and the committee has held its first meeting under leadership of George Bemis and D'Arcy Helmer. Moreover, a large block of rooms has been reserved at the new Chateau Champlain, in Montreal, for a post-Assembly tour to EXPO '67.

Speaking to a Kiwanis Club in Montreal recently, EXPO's Chief Architect Edouard Fiset (*F*) told of plans for some of the pavilions. "Architecture", he said, "is a means through which the nations of the world can reveal their moral character, their aspirations and their achievements. . . . We may expect that one of the tangible results of EXPO '67 will be the influence of these architectural ideas on the quality and application of the science as it applies to both government and private buildings in Canada."

One of Ottawa's striking sights is the fountain in the Garden of the Provinces, designed by Montreal architect Norman Slater. Recently, a jury chaired by I. M. Pei, selected a fountain design by Oskar Stonorov, FAIA, as the sculpture to grace a new plaza in the heart of Philadelphia. Titled "Rites of Spring", it will be the largest bronze fountain sculpture in the world.

Buckminster Fuller will deliver the keynote address at "Vision '65", a congress sponsored by the International Center for the Typographic Arts. Place: Southern Illinois University, Carbondale, Ill. Dates: October 21-23.

Of the 18 Fellowships to post-graduate students in Community Planning awarded by Central Mortgage and Housing Corporation for the academic year 1965-66, two go to architectural students: Charles H. Wakelin, UBC, and Terrence P. Morris, U. of Toronto.

Mr Wakelin is a native of New Zealand and graduate of Auckland University College. Mr Morris is a native of Southern Rhodesia, and graduate of the University of Cape Town.

Ian R. MacLennan (*F*) has been appointed a Vice-President of CMHC, responsible for its urban development activities and for coordinating and directing activities of the engineering and construction division, the urban renewal and public housing division, and the architectural and planning division. Samuel A. Gitterman, Ottawa architect, has been appointed a member of the CMHC Advisory Group.

1966

7 janvier au 30 janvier—École d'architecture, Université McGill, Montréal

11 février au 6 mars—Université du Nouveau-Brunswick, Fredericton (N.-B.)

18 mars au 17 avril—Dalhousie Art Gallery, Université Dalhousie, Halifax (N.-É.)

L'Académie royale canadienne des arts tiendra sa 86e exposition annuelle à la Galerie des arts d'Hamilton du 12 novembre au 12 décembre 1965. L'exposition sera ensuite présentée à la Galerie des arts de Winnipeg du 1er au 21 février. Tous les architectes canadiens ont le droit de soumettre des oeuvres à la considération du jury de sélection qui comprend MM. Leonard E. Shore (F), président, John Bland (F) et Richard E. Bolton (F).

L'Association des architectes de l'Alberta nous promet une assemblée annuelle sans pareille en juin 1966 à Jasper. Le Comité d'accueil, dirigé par MM. Ken Bond et John McIntosh, a déjà commencé ses préparatifs.

Le conseil de l'AAA a chargé un comité spécial d'étudier le besoin d'une école d'architecture en Alberta.

Au sujet des préparatifs en vue d'assemblées futures, mentionnons que l'Association des architectes de l'Ontario a déjà constitué son Comité d'accueil pour l'assemblée de 1967 à Ottawa. Celui-ci a tenu sa première réunion sous la direction de MM. George Bemis et D'Arcy Helmer. De plus, on a retenu un bon nombre de chambres au nouveau Château Champlain, à Montréal, en prévision d'une tournée de l'EXPO '67 après l'assemblée d'Ottawa.

Dans une allocution récente au Club Kiwanis de Montréal, l'architecte en chef de l'EXPO, M. Edouard Fiset (F), a parlé des plans de certains pavillons. "L'architecture, a-t-il dit, est un moyen qui s'offre aux pays du monde de révéler leur caractère moral, leurs aspirations et leurs réalisations. . . Nous pouvons espérer que l'un des résultats tangibles de l'EXPO '67 sera l'influence de ces idées architecturales sur la qualité et les applications de la science que nous pourrions trouver dans les édifices tant gouvernementaux que privés au Canada."

Un des ornements les plus frappants de la ville d'Ottawa est la fontaine du Jardin des provinces, oeuvre de l'architecte montréalais Norman Slater. Tout récemment, un jury présidé par M. I. M. Pei a choisi une création d'Oskar Stonorov, FAIA, pour orner une nouvelle place publique au coeur de Philadelphie. Cette fontaine intitulée "Rites of Spring" sera la plus grande fontaine en bronze sculptée au monde.

M. Buckminster Fuller prononcera le discours-thème à "Vision '65", congrès patronné par le Centre international des arts typographiques. Ce congrès aura lieu à la Southern Illinois University, Carbondale (Ill.) du 21 au 23 octobre.

Des dix-huit bourses d'études post-universitaires en architecture paysagiste accordées par la Société centrale d'hypothèques et de logement pour l'année scolaire 1965-1966, deux sont décernées à des étudiants en architecture, MM. Charles H. Wakelin (U.C.-B.) et Terrence P. Morris (U. de Toronto). M. Wakelin est né en Nouvelle-Zélande et diplômé de l'Auckland University College, alors que M. Morris est natif de la Rhodésie du Sud et détient un diplôme de l'Université du Cap.

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**CANADIAN MADE FOR THE CANADIAN TRADE**

Two new CMHC panel exhibits have recently been announced: "The Urban Scene-Planning and Design", and "Housing the Elderly". Arrangements for showing may be made with any CMHC office.

The Canada Labour (Standards) Code, given final ratification at Ottawa in June, specifically exempts as "employees" the medical, dental, architectural, engineering and legal professions. Representations to this effect were made by the RAIC and the other professions concerned.

George W. Peck has been appointed Chief of the Hospital Design Division, Department of National Health and Welfare, Ottawa—succeeding H. Gordon Hughes (F), who retired recently.

Dr Robert Legget, Head of the Division of Building Research, NRC, is taking on two big assignments. Recently elected President of the ASTM (American Society for Testing Materials), he has just been made President of Le Conseil International du Bâtiment during its biennial congress in Copenhagen. RAIC is a member of CIB, and was represented at Copenhagen by Toronto architect J. G. Wasteneys.

Alan Gowans, an expatriate Canadian who is widely known for his scholarship in the history of architecture, is the winner of the Alice Davis Hitchcock Book Award for 1964. His work: "Images of American Living, Four Centuries of Architecture and Furniture as Cultural Expression". Selection was made and announced by the Society of Architectural Historians.

Despite postal difficulties, orders are coming in fast for "Planning to Build?". The new brochure is intended for use by our members in contacts with clients. Please send in your order now for the quantity you require—while they last.

A lively new film on home improvements has been produced for the Federal Department of Labour and will be of interest to architects. Entitled "Why Wait for Spring?"—colour, 22 minutes. Available from National Employment Service offices.

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M. Ian R. MacLennan (F) accède au poste de vice-président de la SCHL, chargé du développement et des travaux urbains, de la direction et de la coordination des travaux de la Division du génie et de la construction, de la Division du renouvellement urbain et de l'habitation publique ainsi que de la Division de l'architecture et de la planification.

M. Samuel A. Gitterman, architecte d'Ottawa, devient membre du groupe consultatif de la SCHL.

La SCHL vient d'annoncer la préparation de deux nouvelles expositions sur panneaux. Il s'agit de "Le décor urbain—Urbanisme et architecture" et de "Logement pour les personnes âgées". Ceux qui désirent présenter ces expositions peuvent s'adresser au bureau de la SCHL.

La Code du travail du Canada, ratifié à Ottawa en juin, exclut expressément des catégories "d'employés" les médecins, les dentistes, les architectes, les ingénieurs et les avocats. Ces exclusions avaient été demandées par l'Institut et par les autres professions en cause.

M. George W. Peck vient d'être nommé chef de la Division des plans d'hôpitaux au ministère de la Santé nationale et du Bien-être social à Ottawa. Il succède à M. H. Gordon Hughes (F), qui a pris sa retraite.

M. Robert Legget, chef de la Division de la recherche en bâtiment au Conseil national de recherches est chargé de deux lourdes tâches. Quelque temps à peine après avoir accepté la présidence de l'ASTM (American Society for Testing Materials), il a été élu président du Conseil international du bâtiment, au récent congrès biennal de ce dernier à Copenhague. L'Institut est membre du Conseil international et était représenté à Copenhague par un architecte de Toronto, M. J. G. Wasteneys.

M. Alan Gowans, Canadien expatrié très connu pour ses études en histoire de l'architecture, est le gagnant du prix du livre Alice Davis Hitchcock pour 1964. L'oeuvre qui lui a valu cette distinction est intitulée "Images of American Living, Four Centuries of Architecture and Furniture as Cultural Expression". Le choix a été fait et annoncé par la Société des historiens de l'architecture.

Malgré les difficultés postales, les commandes nous arrivent nombreuses pour "Si vous bâtissez..." Cette brochure est destinée à aider nos membres dans leurs relations avec leurs clients. Veuillez commander immédiatement le nombre d'exemplaires dont vous avez besoin, pendant qu'il en reste.

Le ministère du Travail vient de produire un film très vivant sur l'amélioration des maisons. Ce film, d'un vif intérêt pour les architectes, est intitulé "Pourquoi attendre au printemps?" Il est en couleurs et d'une durée de 22 minutes. On peut se le procurer aux bureaux du Service national de placement.

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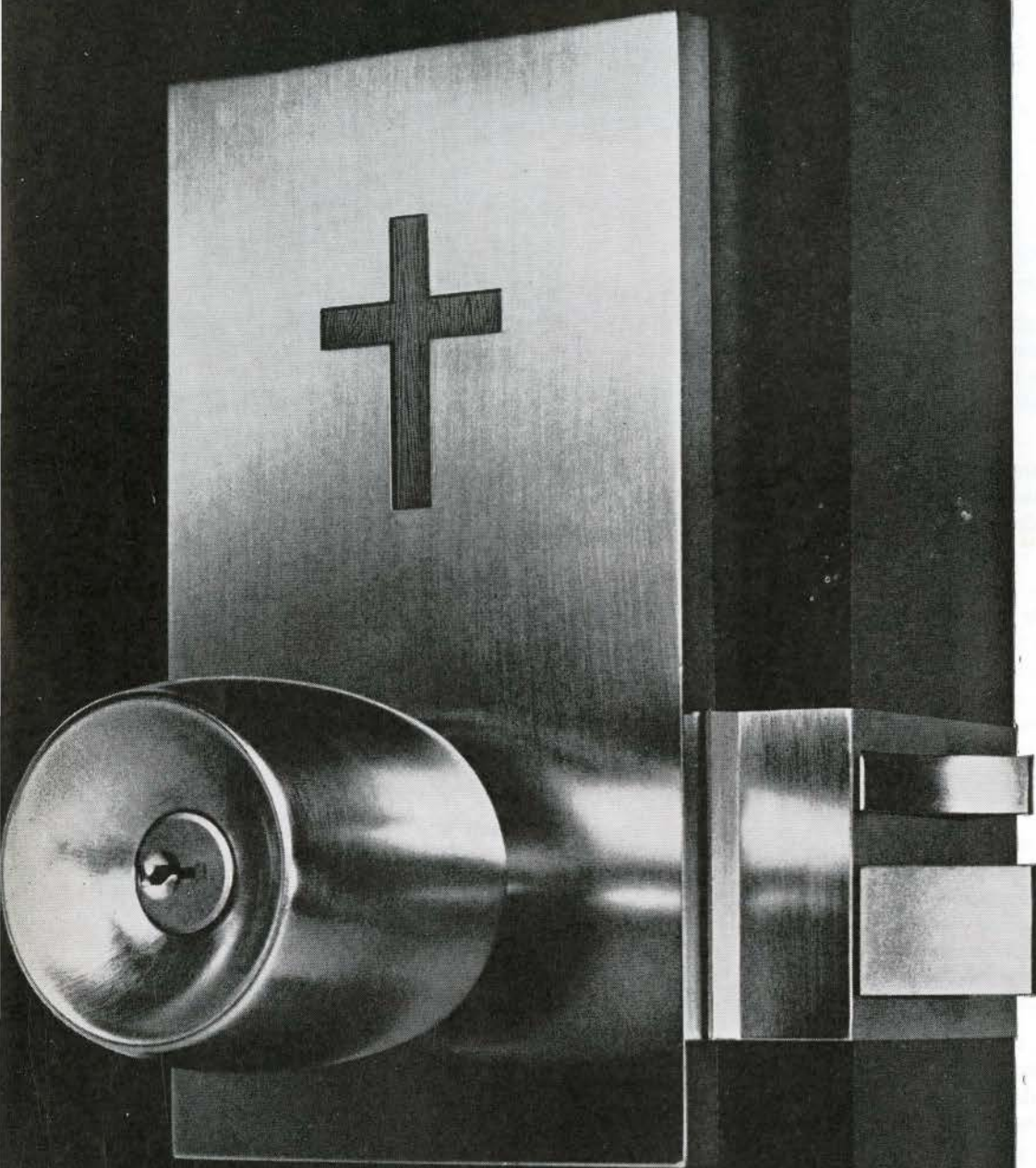
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# Montreal . . . Achievement and Faith

by Anita Aarons, ASTC (Sculp)

## Fountains? To be or not to be

Twelve months ago competitors were sending in entries for one of the best organized and widespread competitions in Canadian art circles—The Monuments-Fountains contest of the City of Montreal. Excellent brochures and documentation of sites, with particulars of locations and dimensions, were provided to interested competitors. The prizes offered were many, twenty in all, and handsome. The result promised to be exciting and Montreal would become the richer by many fountains. In September 1964, announcements were made that several prizes had been awarded; first prize \$4,000, to Arthur Price, Cyrille, Ontario; seven second prizes of \$1,000 each to Merton Chambers, Toronto; Dupuis and Mathieu et Maurice Lemieux, Montreal; Robert Oldrich (two), Calgary; Roland Lavoie, Montreal; Patricia Fulford, Newmarket, Ontario; Gordon Hammond Smith, Arundel, Quebec. Twelve other prizes went unawarded. The jury comprised C. A. Boileau, P.Eng., director of public works; Dr David C. Carter, director of the Montreal Museum of Fine Arts; Edouard Fiset (*F*), chief architect for the Canadian Corporation for the 1967 World Exhibition; Francis J. Nobbs (*F*), representing the Province of Quebec Association of Architects, and Maurice Raymond, director of studies at the Ecole des Beaux-Arts de Montréal.

I went to Montreal to review the exhibition of prize-winners and was enthusiastic enough to try to arrange a showing of the models and drawings in Ontario. However, I waited. The reason given

for not awarding the remaining prizes, "the designs did not conform to the rules of the contest", in my opinion was hardly valid on close comparison with the winning entries. Fair enough, if entries were not up to standard or too many provided for the same situation, but this did not appear so to the outside observer. I became suspicious and on making further inquiries could find no evidence that any of the projects or, at the most, very few, were ever to be built. In such competitions artists are persuaded to devote their time, talent and money to produce actual projects, partly because they are lured by the prospect of a few dollars prize money, but more in the hope of erecting real and lasting work in a community, thus adding to their experience and professional stature. Failure of the competition sponsors to have the winning entries executed results in an impossible feeling of frustration for the artist. I cannot speak too harshly of organizations, with confessedly large funds at their disposal, hoodwinking artists into participation where either the terms of the contract are not carried out or there is failure to make frank admittance *publicly* that the competition has been less than successful and the funds then publicly diverted to a known and relatively similar purpose. In this case the competitors produced quite good, if not memorable, solutions to the problems, which would have been excellent starting points, for we need fountain experience. All competitors, if they were fully informed (which they are not), must be both disappointed and angry at the

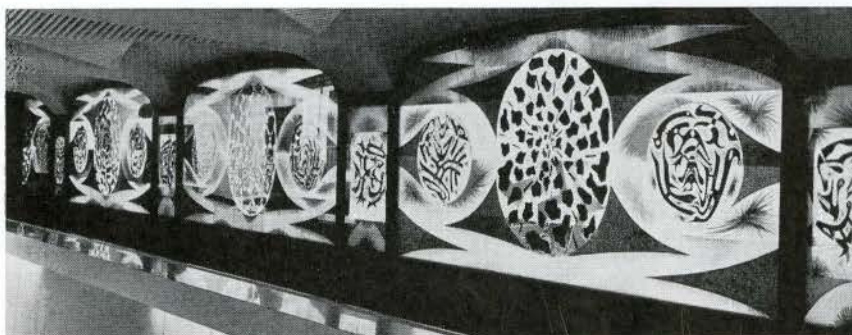


"Not Even a Sparrow Falls"  
Arthur D. Price

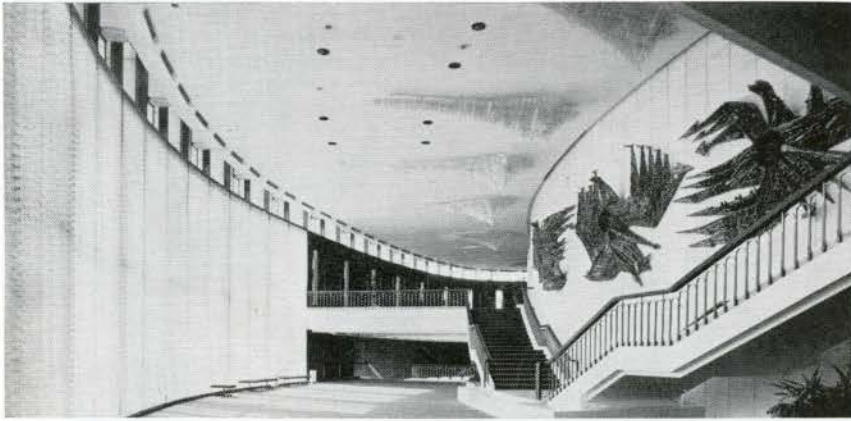
negative outcome and at being gulled into entering an empty competition. In other respects I congratulate the organizers on an excellent job well done and much needed; other cities could well follow suit. Australia has a successful "Fountains" Committee for Sydney. If the judges were looking for novelty and "handsprings for EXPO 67" they should have so stated and not asked for sensitive, permanent design for specific sites. The outcome I can only regard as thoroughly evasive and dishonest until I hear that some of the projects have been commissioned for 1967, or an announcement of what has happened to the \$12,000 prize money as yet not awarded.

## Place des Arts

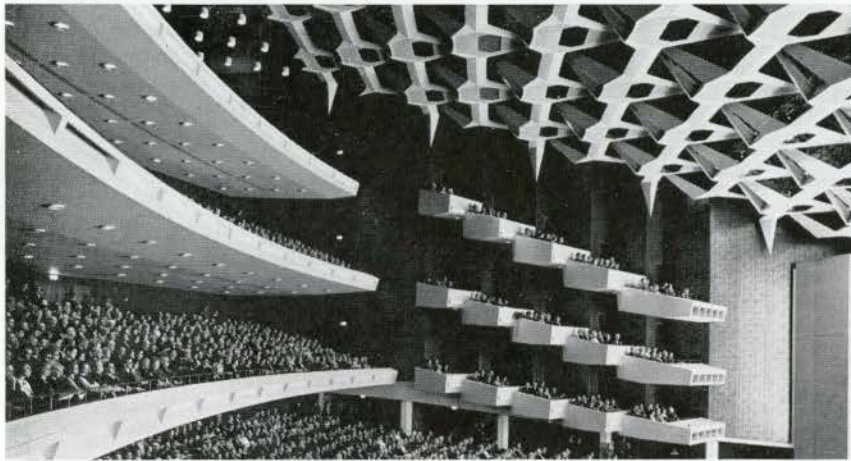
In contrast, Place des Arts Montreal, well known and frequently reviewed (*See Journal RAIC, November 1963*), stands as a monument to faith. An exciting building, it is a constant reminder to the community that a world exists outside the mundane and specific. The works of art, not all as well integrated as they might be, are worth-while in themselves and have added stature and maturity to most of the collaborators. The artist's purpose would hardly have been served as well if any of the works had been briefly housed in a temporary exhibition. The many thousands continually becoming familiar with the presence of art have been granted permanent and casual access.



Pellán's Illuminated Mural, Place des Arts, Montreal



Above: Archambault's Flying Forms in glass chandeliers, Place des Arts,  
Below: Those "bird forms" in the Auditorium Ceiling.




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Archambault's "Les Anges Radieux" lives and breathes each day, spreading its wings in free and unconfined space. How much better the work is here than in an art museum. Had the Fountains Committee had faith in their prize winners they may have seen a development as remarkable as Bonet's, from the initial panel to the final statement in his ceramic excursions at the Centre. Pellán's mural illuminates the living walls, creating its own eternal day; tapestries and other visual enjoyment intensify the aesthetic experience of the occasion. Here, all the arts combine to the pleasure of mankind. Even a critic does not expect perfection; but what indeed is left if the promoters have no faith in their project?

Mutual faith and enthusiasm are very evident in Place des Arts, from the designers to the well-educated guides, who delight in sharing their pleasure and pride with the tourist. Incidentally, the "bird form" motif, which must have been engendered in the architect's mind and spirit, persists throughout and, I believe, not always intentionally. The chandeliers could be construed to have origin in the forms of Archambault's sculpture, but this was not so; they arrived out of sensitive experiment with the architect.

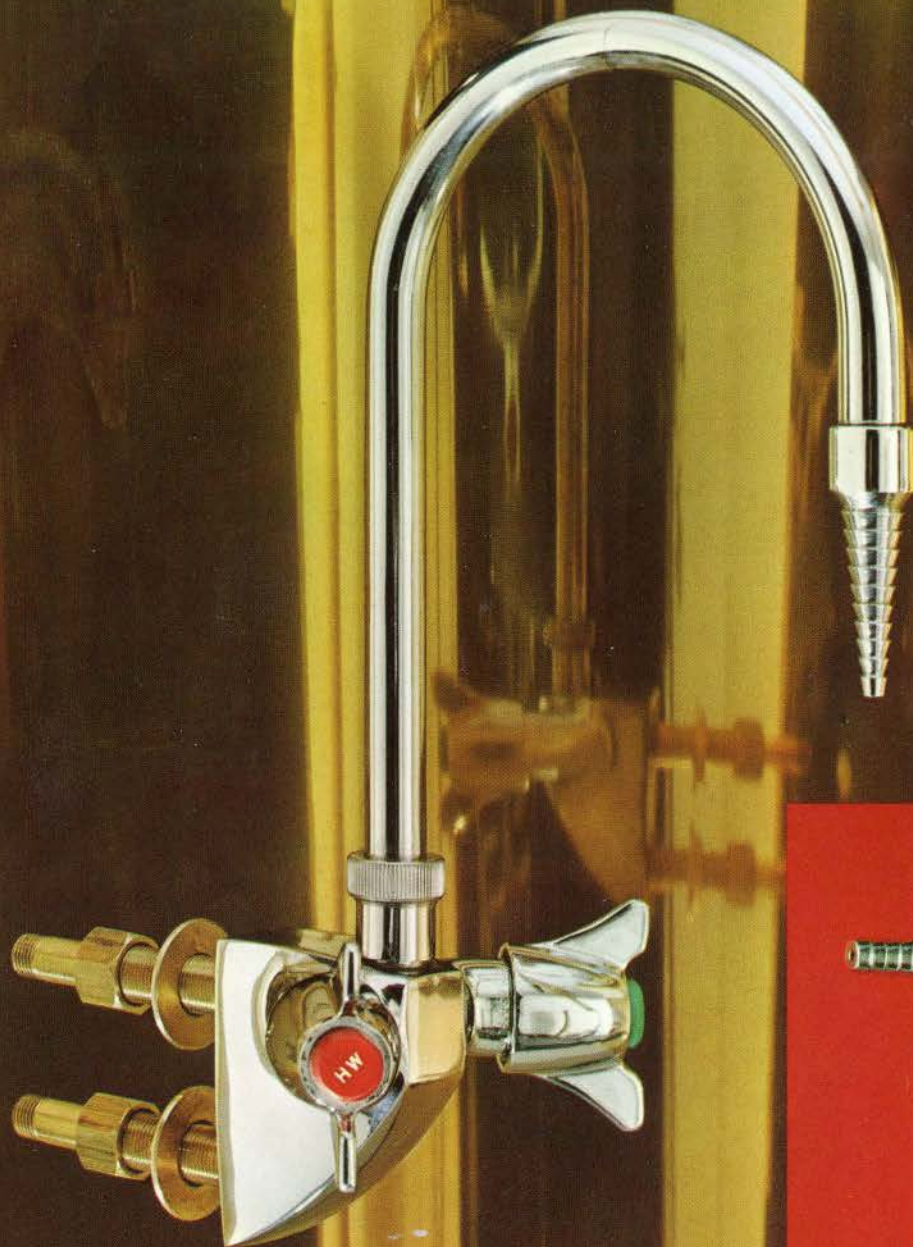
So it is with the metaphysics of art production. Some delightful and happy coincidence can come out of unplanned but responsive action. Total result is not always the outcome of logic and deliberation. Sensitivity responds to sensitivity and faith and confidence breed positive contribution in a community. Without this, no community can transcend from trial and error to maturity.

#### Little Fleas and Greater Fleas

Last, but not least, amongst the many forms plaguing the profession to be filled in and filed to provide information to create well paid clerical and administrative liaison jobs for non-artists, the most amusing one of the year arrived from the office of *Canadian Art*. Extensive and exhaustive, five pages of questions directed to the artist on his thoughts and desires on "Art Criticism"! The flea consults the dog! Shall he have big fleas or little fleas, erudite fleas or "spiv" fleas?

Criticism is one of the great parasites of modern society. At best it disturbs and keeps the lazy dog awake when not fully occupied. A good strong flea can survive, but now and then the irate canine vigorously scratches his parasitical lodger from the parent body into the dust, there to find fresh host or die. The day when the flea seeks qualification to harass and bite and live on the life-blood of the host is too full of ironic humor to be taken too seriously.





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# News

## RAIA President visits Canada

The RAIC had a distinguished visitor recently in the person of Gavin Walkley, FRAIA, FRIBA, President of the Royal Australian Institute of Architects. Mr Walkley was on a globe-circling tour, in the course of which he participated in the Commonwealth Association of Architects meeting at Malta and in the IUA Congress at Paris.

Mr Walkley was greeted on his arrival in Ottawa, July 25, by the Executive Director. He was entertained the next day by James W. Strutt (F), the RAIC Honorary Secretary, and visited the National Capital Commission for discussions with the Chairman, Gen. Findlay Clark, and the General Manager, Eric W. Thrift (F). Subsequently, he visited the Division of Building Research, NRC, to meet Director Robert Legget (Hon. F) and architects Stirling Ferguson, Murdoch Galbreath, Max Baker and Kirby Gardens, who conducted him on a tour of the laboratories.

At Central Mortgage and Housing Corporation, he was welcomed by Vice-President Ian MacLennan (F) and Humphrey Carver, chairman of the Advisory Group. Mr Walkley is also President of the Planning Institute of Australia, and he enjoyed a discussion of town planning problems over dinner with these two gentlemen and Peter Dobush (F), Chairman of the Canadian Council for Urban and Regional Research.

Proceeding to Toronto on July 27, he was entertained there by officers of the Town Planning Institute of Canada, by William N. Greer, Chairman of the *Journal* Editorial Board, Walter B. Bowker, Managing Editor, and Prof. A. J. Diamond, Associate Editor. At the School of Architecture he was welcomed and shown around by Professors Andrews and Diamond.

John Lovatt Davies (F), RAIC Past-President, greeted Mr Walkley on his arrival in Vancouver, July 28. The next day he was taken on a tour of the city by Warnett Kennedy, AIBC Executive Director, and met President Ronald Nairne.

In a letter of appreciation to the Institute, Mr Walkley expressed the hope that our two Institutes might be brought together through reciprocity of membership and through further visits in both directions. *Fred W. Price*

## TORONTO CHAPTER OFFICERS

Blake H. M. Tedman, of Fisher, Tedman, Fisher & Glaister, is new chairman

of the 300-member Toronto Chapter, Ontario Association of Architects.

Others elected: Vladan Milic, of Gordon S. Adamson & Associates, vice-chairman; John S. Shaw, of Architects Partnership, as immediate past chairman; Langton C. Baker, of Pentland, Baker & Polson, John J. Farrugia and John S. Sullivan as new members of the executive. K. D. Bindhardt, of Bindhardt & Cheney is the continuing member of executive and J. A. Mathews, of A. D. Margison & Associates is secretary-treasurer.

## CSLA APPOINTMENT

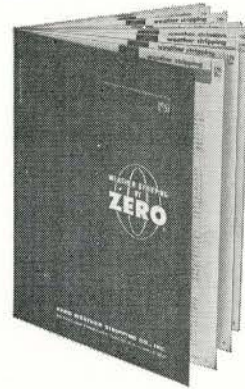
The Canadian Society of Landscape Architects has appointed Mrs. Cynthia Steer to the position of Executive Secretary. Mailing address is Box 3304, Postal Station "C", Ottawa.

## ARCHITECTS REQUIRED

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(News continued on page 71)

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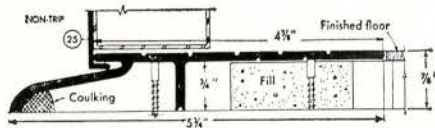


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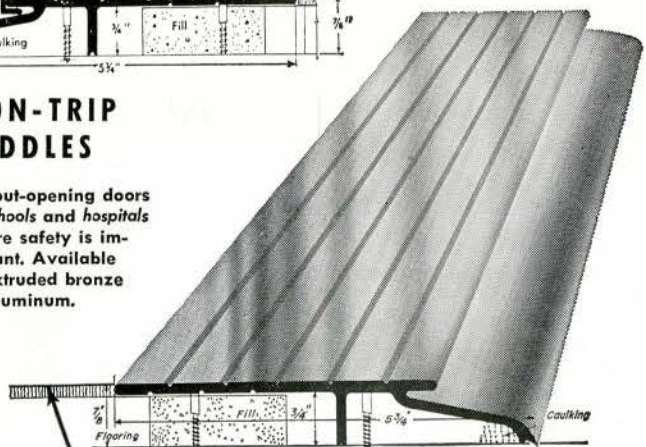
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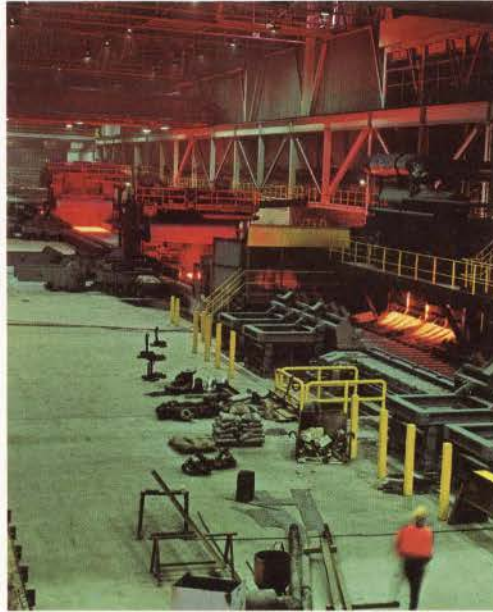
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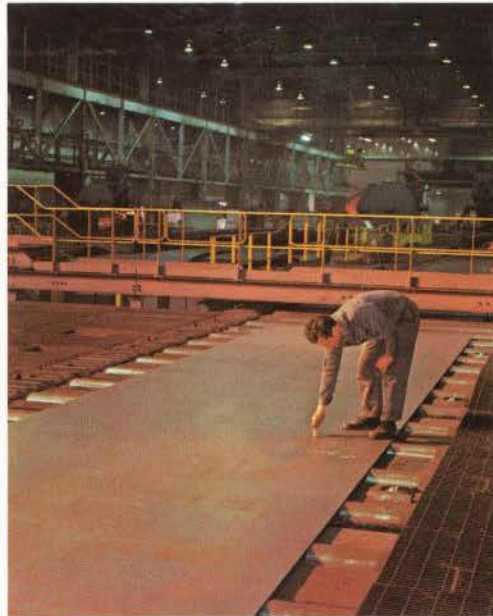
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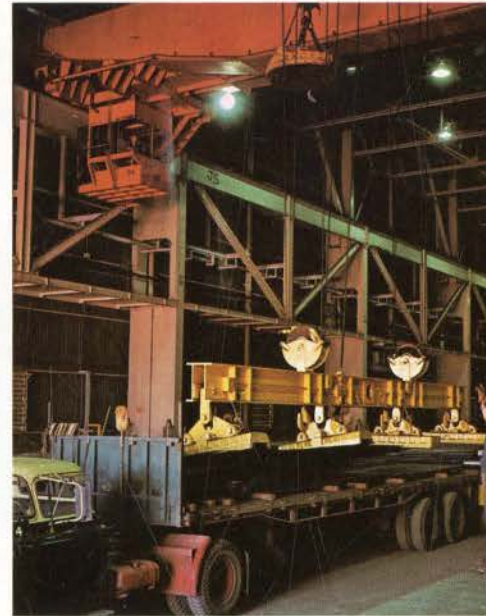
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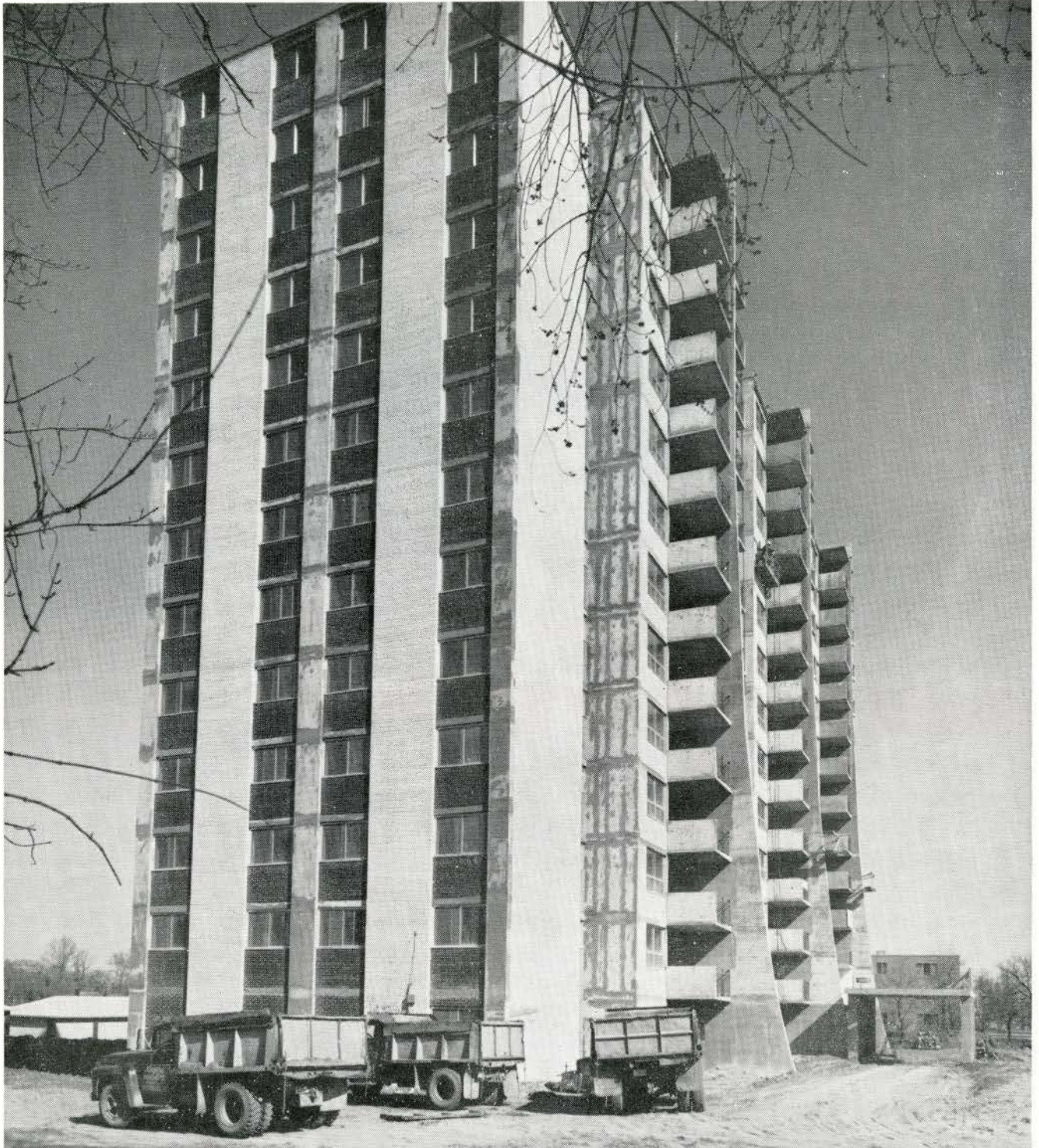


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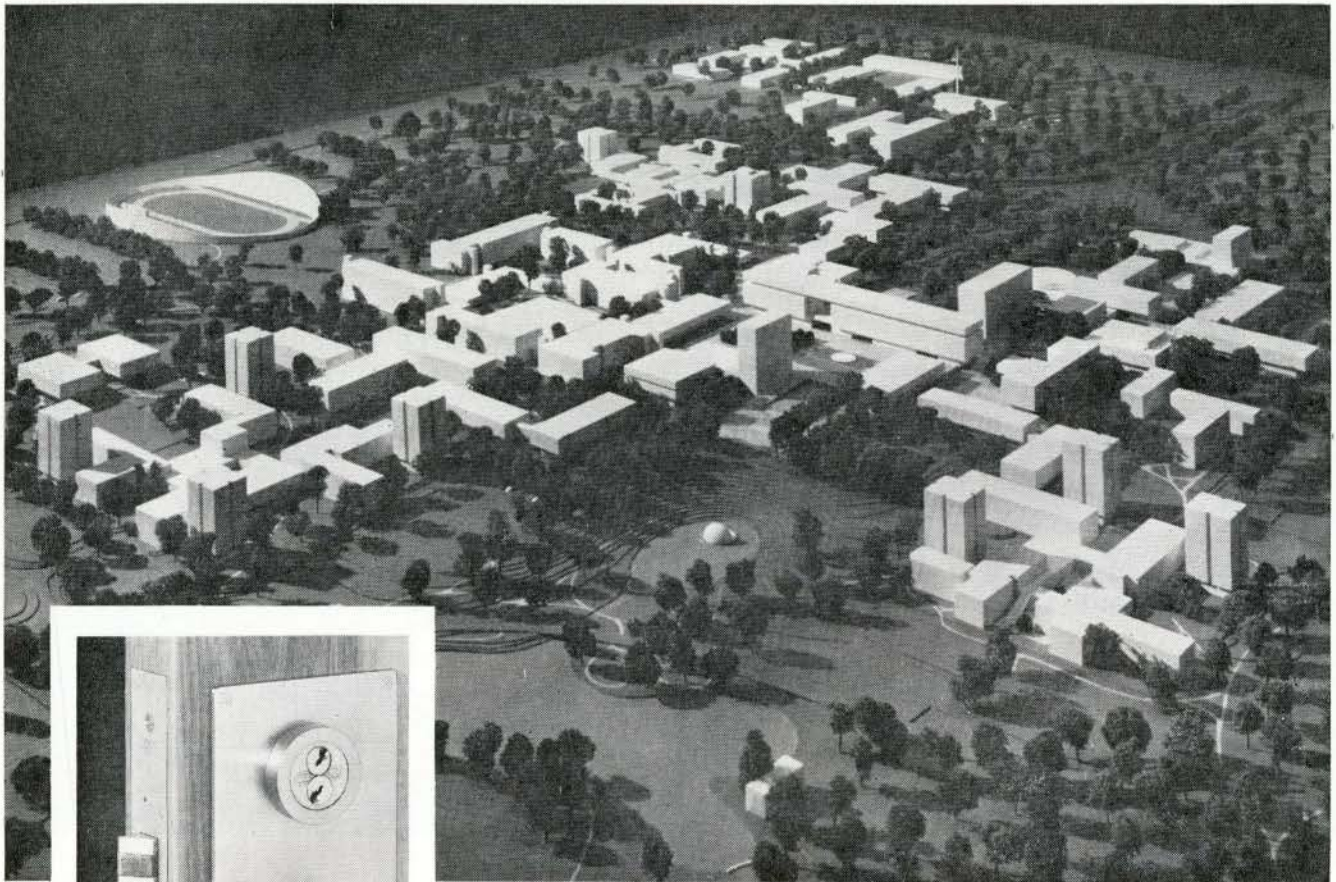
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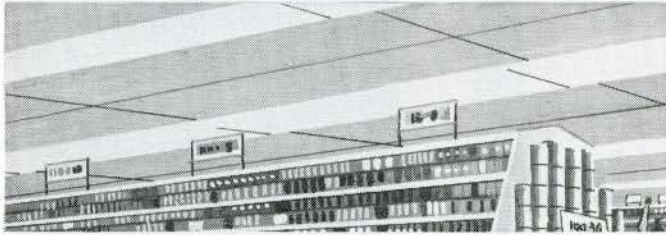
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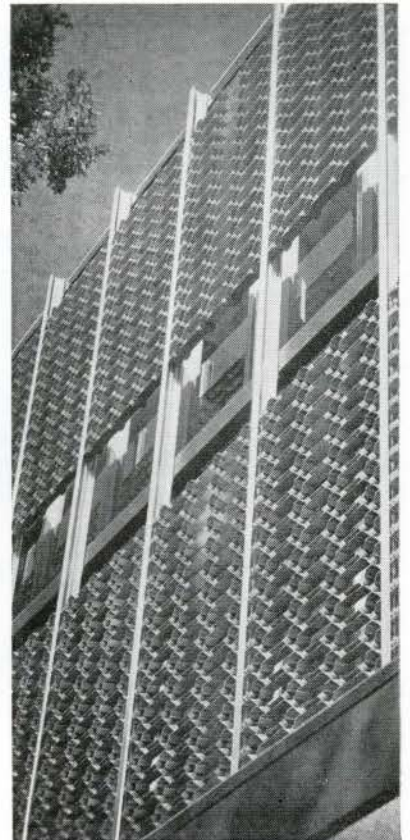
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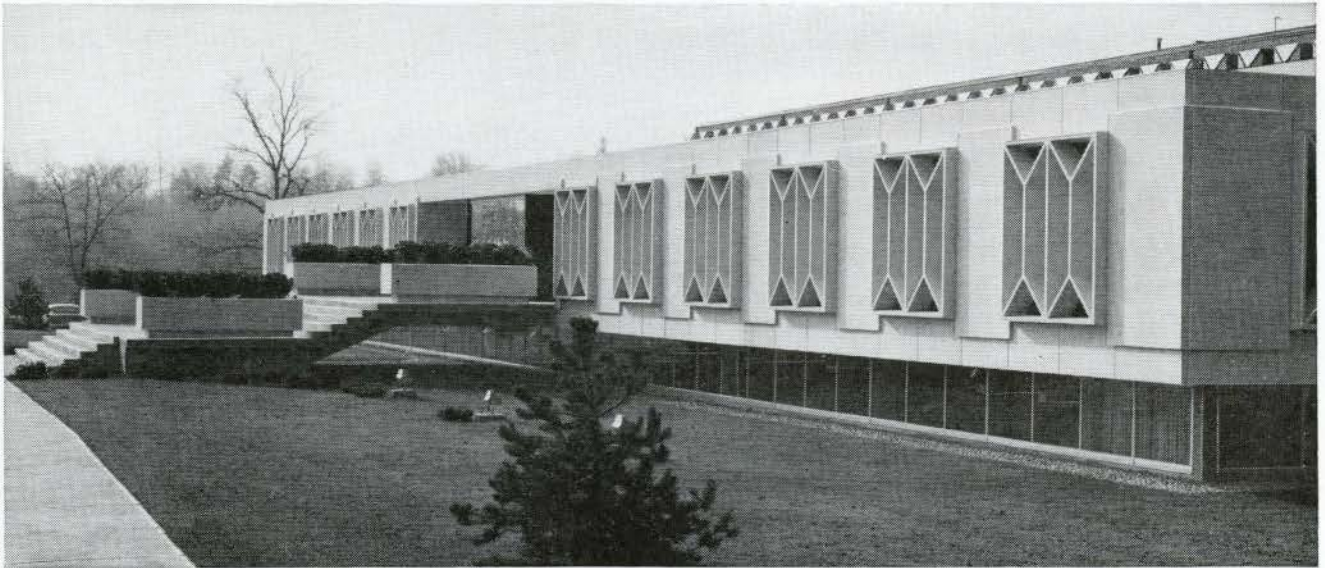
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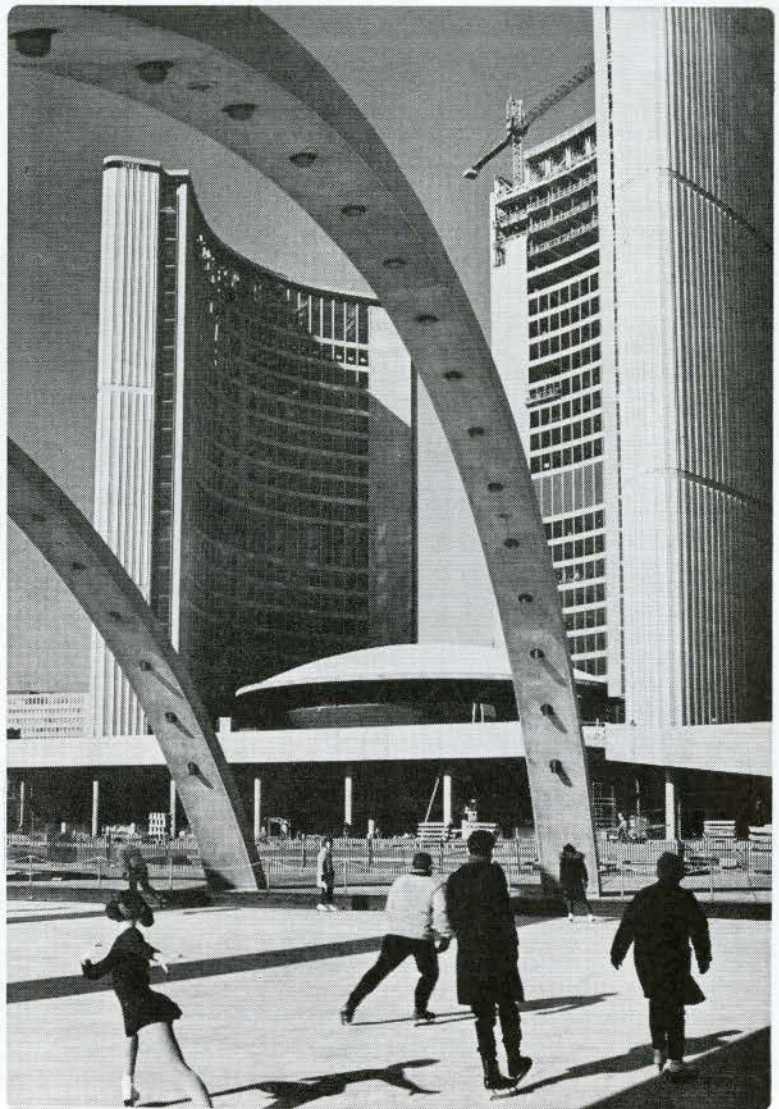
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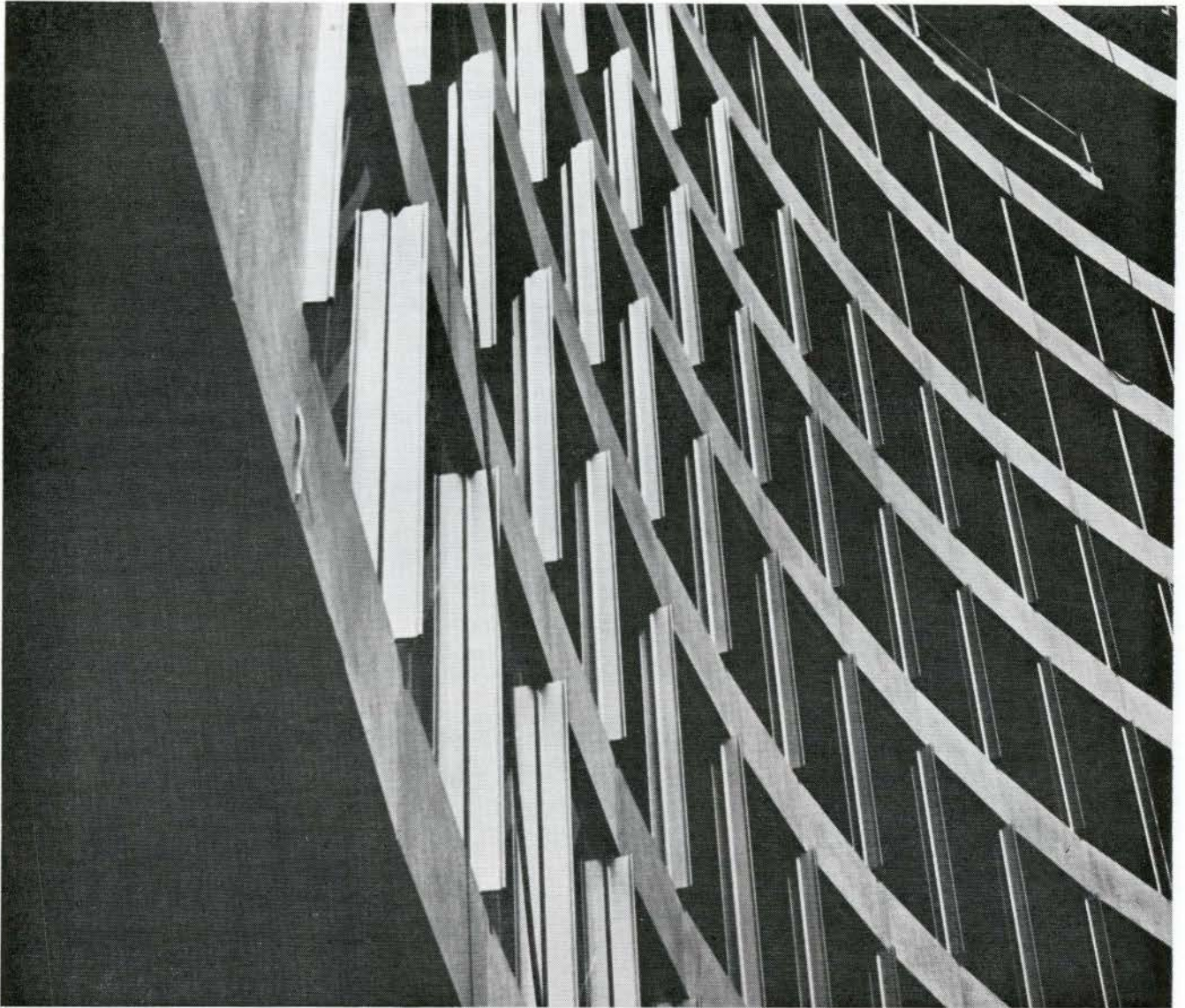


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# Toronto City Hall

## Part I: Civic Design

*Associated Architects and Engineers*

*Viljo Revell*

*John B. Parkin Associates*

*Consultants*

*Structural: Severud-Elstad-Kueger-Associates, New York*

*Mechanical: Jaros, Baum & Bolles, New York*

*Lighting: Richard Kelly, New York*

*Acoustics: Professor V. L. Henderson, University of Toronto, Toronto*

*Landscaping: Sasaki Strong & Associates Limited, Toronto*

*General Contractor: Anglin-Norcross (Ontario) Limited*

The examination of a major building project such as the new city hall can appropriately be made from two points of view — on the one hand by viewing the building itself, and on the other hand by viewing the building as part of a larger context, the surrounding city.

The *Journal* will therefore present the critique in two parts, the first in this issue dealing with the City Hall in the context of civic design and the city; the second to follow in March, when a detailed criticism of the building will be published.

While it is possible for individual critics to assess the architectural merit of the building, it was felt that a panel, representative of the professions involved in urban design, could more properly examine the civic design aspects.

They included a planner, Sam Cullers, of the Metropolitan Planning Commission, a landscape architect, Richard Strong, and architects Jean Louis Lalonde and Joe Baker of Montreal, Irving Grossman and John Andrews of Toronto. The moderator was the associate editor of the *Journal*, Jack Diamond.

The topics discussed by the panel were those raised by the conditions of the competition and the jury report; in addition, the conditions themselves were examined, the panel now having the advantage of hindsight.

The following is a résumé of the report of the jury in two parts. The first is the majority report, submitted by William Holford, C. E. Pratt, Ernesto N. Rogers, Eero Saarinen and Gordon Stephenson. The second is the minority report, submitted by Gordon Stephenson and William Holford.

### A Résumé of the Report of the Jury

#### *Majority Report*

The preamble to the jury report consisted of general comments about city halls.

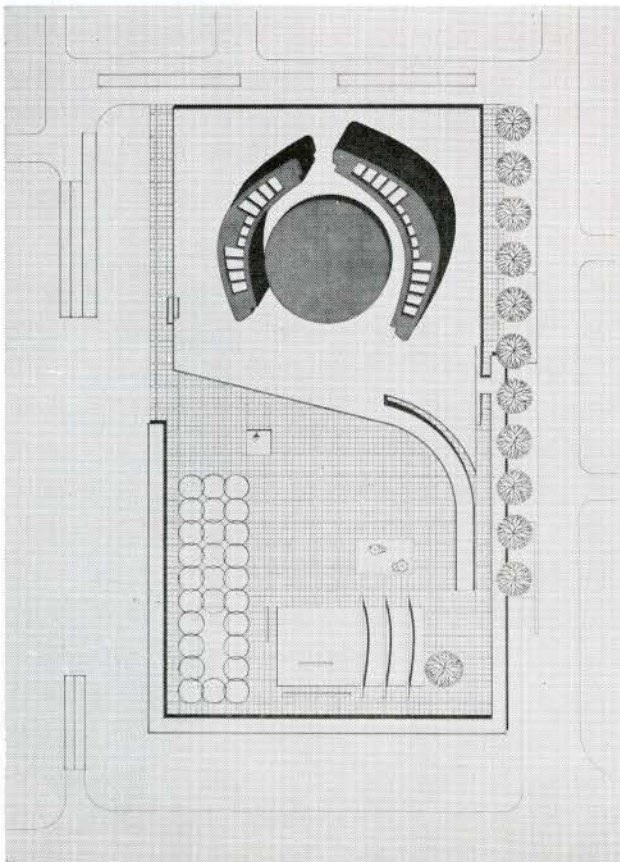
The conditions of the competition stated that the new city hall should likewise proudly express the function of a centre of civic government, and provide continuity to democratic tradition. The jury placed emphasis on this view of a city hall. It also felt that the building should bear a significant relationship to the surrounding city, which would have a varied silhouette. The categories of design approaches rejected by the jury as solutions to this problem were either via similarity to surroundings or by physical dominance, *eg*, a soaring tower.

The device felt to have the best potential answer was a relatively low building of dignity placed on a civic square, in contrast to its background. In this way it was felt the city hall could be distinctive. The winning scheme, the jury felt, met this answer admirably. Further, it took advantage of the continuity of the square with the open space in front of Osgoode Hall, encouraging extensions to University Avenue. This would enhance Osgoode Hall by creating space around it, and make possible development of a mall to the north.

The composition, it was felt, clearly expressed the major functions of civic government, displayed by the three main elements — administrative towers, public foyers and a council chamber. These symbols stood out clearly in the urban landscape. The square was carefully shaped and enhanced by the enclosing arcade which gives both shelter and definition. The jury's opinion was that the two office towers would be superb aesthetically, their carefully related curves achieving balance, strength and dignity.

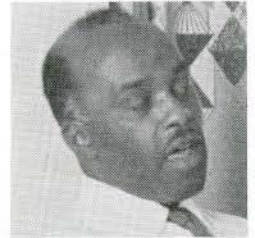
#### *Minority Report*

The major reservations expressed in the minority report were about the suitability of this monumental design for the site prepared for it, and as an answer to the requirements of the administrative program, which would call for flexibility.



The minority also expressed reservations about the design of the north side of the building, which they felt shut out the city on that side. This would not, as was desirable, spark off a number of surrounding projects, leading to significant and necessary renewal in that part of the city. It was felt that the city square was somewhat stark, and would not attract citizens of all ages and interests.

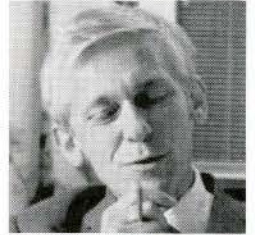
*Samuel Cullers*



*Richard Strong*



*Jean-Louis Lalonde*



*Joseph Baker*



*Irving Grossman*



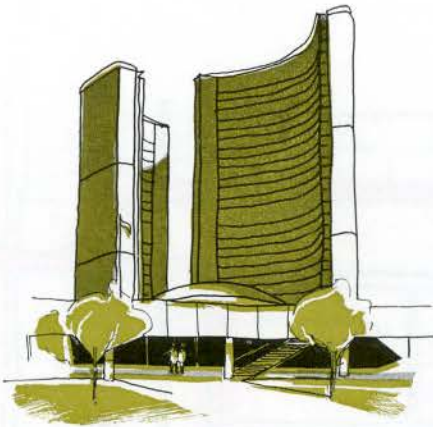
*John Andrews*



*Jack Diamond*



Drawings by John Hall and Andrew Volgyesi, City Hall photographs by Roger Jowett.



## Panel Discussion on the Civic Design Aspects of the City Hall

Two of the reasons held by the jury to be highly important were, 1) to have a building that would proudly express its function as the centre of civic government and 2) a building that would be expected to spark off a number of surrounding projects.

CULLERS: Whether or not we may quarrel with this architectural form, I feel it has given the people a unique symbol to which they can point. In the minds of the people of Toronto it does express this function of a city hall. About the second point, that it would be expected to spark off a number of surrounding projects, I have my doubts. I think that many of the surrounding projects were already on the books. In other words, I think the city hall as a concept did not in itself generate this redevelopment.

DIAMOND: Do you think any building could do this?

CULLERS: I think this was hoped for, but it is a far-fetched hope that one building by itself could affect the social, economic and other forces which operate within the community.

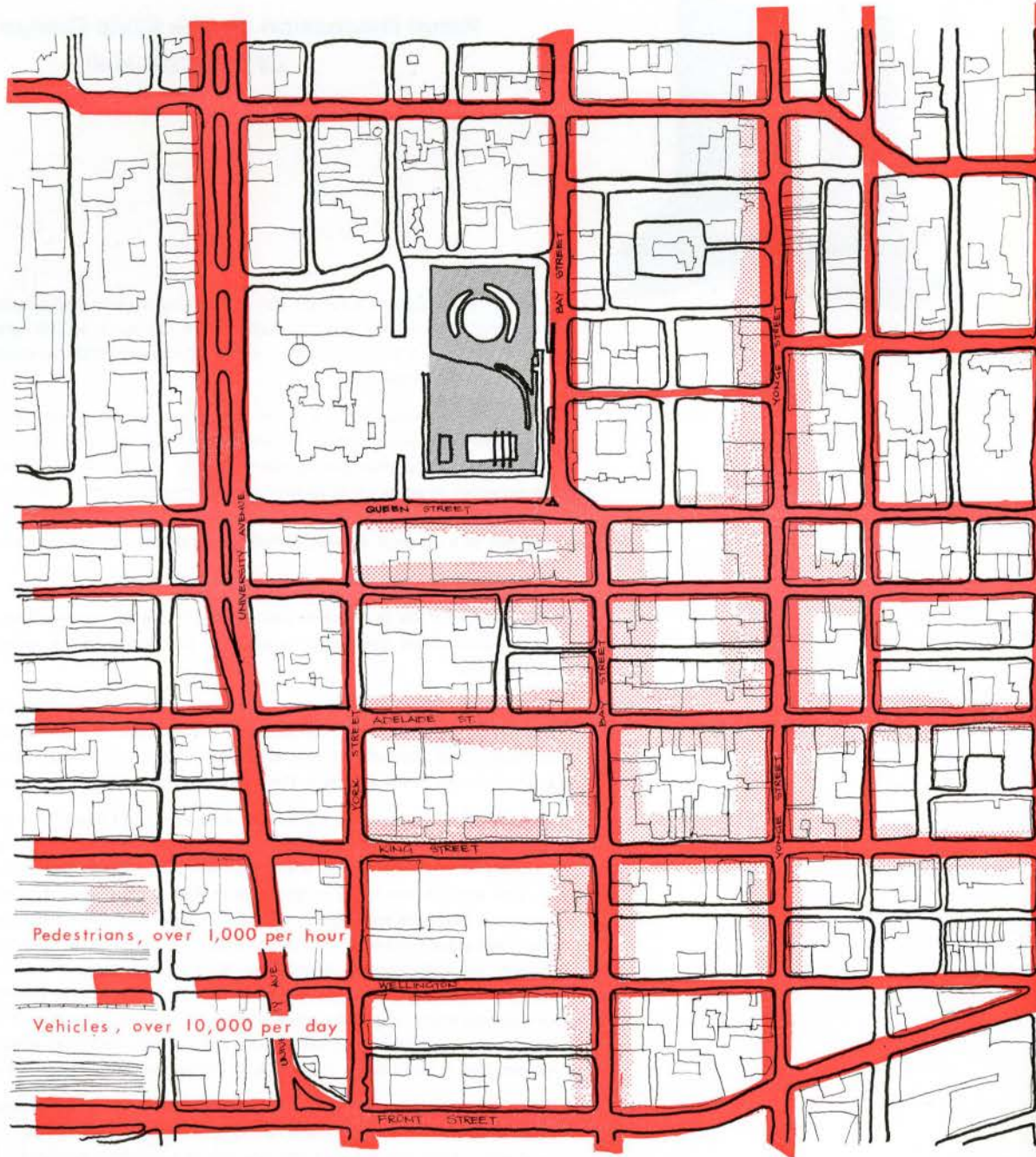
ANDREWS: I think the program had basic faults and the building which resulted reflects the program. For example, the program did not require consideration of the influence of subway stops, and other forces directing people and traffic. If such considerations had been included in the program, then very likely your question would be unnecessary.

LALONDE: I'm inclined to agree with Andrews, but I don't think that "city hall" is something of a nature in itself to draw people. It is not a "generating" type of structure. In the old days, when we didn't have the problem of democracy, city hall was something fenced in. You were almost lucky to get in. And then democracy came, and now we say, 'well, everyone has to be welcome in city hall'. By building a city hall, we then think that this in itself will attract crowds. This is not true. You get crowds in shopping centres, you get crowds in entertainment areas. You might get crowds if you have other generating structures around a city hall. Probably Toronto's City Hall is located where it is because of the possibility of getting crowds from University Avenue and Yonge Street. It won't itself spark surrounding development, but development will give it use if development comes. But it can't spark it because it doesn't of itself attract people in large numbers.

ANDREWS: I think you disagreed, not agreed with me Lalonde, because if it, in fact, had been sited in such a way to take account of the two major poles — University and Yonge — it would reinforce the idea of a city hall as a building involved with the city.

GROSSMAN: It seems to me the Hôtel de Ville was usually situated in an important plaza or with important buildings, the important fact not being the design, but the public space. In Toronto it was felt that by creating a space in an appropriate way, it would make the properties around it more valuable, and this would generate the development we are discussing. It's really the public space that was stressed as being the generator the city hoped for.

DIAMOND: The question, of course, was aimed a little differently. We know that these may be the objectives, but how does the panel feel about the city assisting these aims? Was this site, as opposed to any other, the one to achieve the objectives?



BAKER : Can we know that? Any city hall placed in a run-down area in Toronto could not but help start up new development. Something's going to happen because of city hall.

DIAMOND : Why?

BAKER : Because you've created something to which it must respond. There could have been, say, just three stories of nondescript building, but now neighboring development must respond to city hall in a prestigious way.

LALONDE : The only way I think it could spark off development would be if developers could use all of the surrounding land, putting up large buildings, very high buildings, if you like. The Square would then be used as the open space for these buildings. This is the only reason I can see for developers to go to the city hall area instead of somewhere else.

DIAMOND : Does the provision of public open space generate intense, high yield development? Do developers care if open space is created, or do they care about market potential resulting from numbers of people in an area? You see, we say there is a response, but we're talking as architects. To which influence do businessmen respond?

CULLERS : I think it's the second point. I'd say it's traffic and people that generate business. To modify my previous statement, I think city hall and its open space have created additional pressure on the south side of Queen Street. The city hall was probably put where it is because of development to the east, rather than causing this development.

LALONDE : The site seems to be a natural link between University Avenue, a business area, and Yonge Street, a commercial area. Queen Street would be used by people moving between these two areas at lunchtime. Because of activities on either side, development will occur on the link between. Now, one side of this link is the city hall square, we have to ask what kind of development was envisaged for the south side of Queen Street at the time of the competition.

DIAMOND : The competition did not offer any information on this point, but in my opinion open space destroys the continuity and density on which commercial development depends.

ANDREWS : I don't think it right to criticize the program because it did not specify what sort of growth was required when there was no comprehensive plan for the city and its growth.

STRONG : I think the fact that Toronto City Hall is one of the few city halls in the world which is a symbol, no matter whether as architects we agree with the solution or not, has created some sort of civic pride. I think it is stimulating growth, not necessarily from the commercial point of view, but just from the fact that Toronto has really taken this thing as a symbol, and said 'Now here it is, let's do something with it'. I don't think anyone can foresee what will happen, but I feel that it's going to affect what does happen in this area, perhaps in quality, if nothing else.







**We now have to accept, as the competitors did, the choice of the site. Does the panel think the scheme, with the requirements mentioned, and in the given environment, has and will achieve the objectives stated in the competition — a proud civic symbol and an effective influence on surrounding development?**

**LALONDE:** I don't think the solution helps the city. One improvement would be, instead of having the Simpson project in the form of a 33-storey tower, to have a horizontal development crossing Queen Street, in the form of a covered pedestrian shopping mall or arcade. I'm sure that this would be a most lively part of Toronto at lunchtime. People would therefore forget that this was a formal public meeting place, but just go there because of its interesting activities.

**ANDREWS:** I think the city hall will generate very little new development because of the way it is located on the site. It will just generate tremendous pressure, if anything, for the re-development of the Osgoode Hall site. The square won't work as long as it is something people go to instead of through. You may have odd things like a skating rink, but the novelty will wear off.

**GROSSMAN:** That's a strange thing to say.

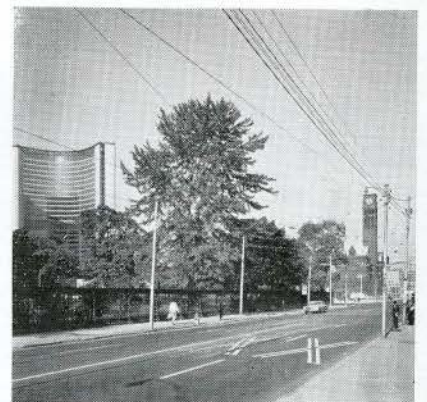
**LALONDE:** No, it *is* very artificial, I agree.

**GROSSMAN:** People keep asking for more activity, for public spaces in which to meet. I don't think the novelty will wear off.

**ANDREWS:** The point is, that we have to put public spaces in convenient places, then they'll work. I think, at the moment, this one is inconvenient, and I think the only reason it's being used is that it is the only public open space downtown. Presumably, more of these will come, and they may come in more convenient places. When that happens, you'll find that Osgoode Hall, the old city hall, and the new city hall will not in themselves be strong enough magnets to draw people to the square.

**GROSSMAN:** Lalonde, you are familiar with the competition entries, did most of the people who submitted entries place their main building at the northern end of the site?

**LALONDE:** There was no choice, it was programmed.





DIAMOND: The garage requirement only asked for about 1,200 cars. The winning scheme made 2,400 parking places possible, and that's why the city hall is so far back on the site. But had Revell not provided the possibility of this additional parking, the building could have been further forward on the site.

GROSSMAN: Did the other solutions locate their buildings north of the north line of the present city hall?

ANDREWS: Yes, because that was the north line of the underground parking garage, the structure of which would not take more than a three-storey building.

GROSSMAN: Which means that no matter which scheme was chosen, there was always an open space at least as far north as the north line of the city hall.

ANDREWS: Unless you put a three-storey building on it.

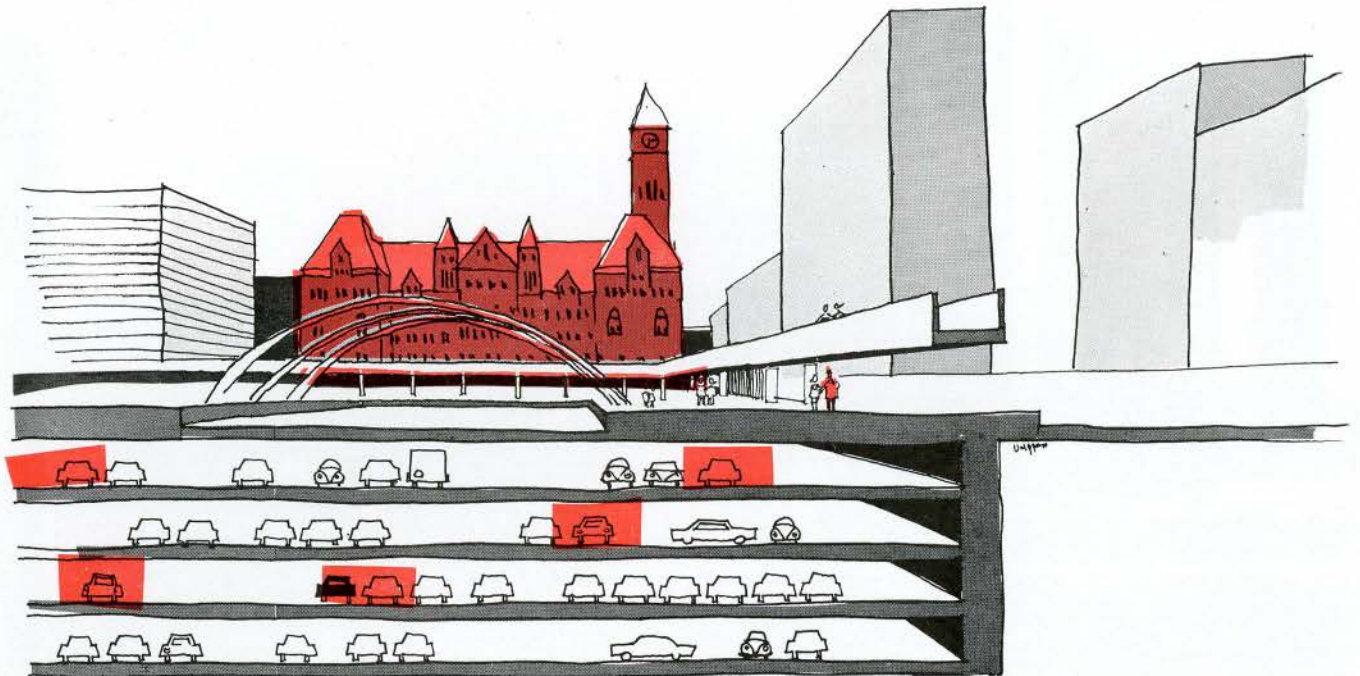
STRONG: Cullers, you said that the architecture didn't solve the problem of stimulating development, and I wonder then, can architecture do this? I doubt it. I think it is function, which is given in part of the program, and the configuration of the building that is the architect's concern. Whether it's located here or there doesn't make much difference. But if a change *is* forced on Osgoode Hall, it would seem that the city hall is influencing the surrounding area, whether for good or bad.

ANDREWS: I'm not really talking about the sculptural form of the building. I'm talking about the organization of the building on the site, and basically where the site is located. It was stated in the program that Osgoode Hall and the old city hall were to be preserved, but the new city hall development appears to be exerting pressures to the contrary.

BAKER: I think that quite often in international competitions, some competitors are of greater calibre than those who draw up the program. This is one of the drawbacks of competitions, that the people who actually work on the problem cannot frame the program. The result would be quite different if the people who actually build the development were in on the formulation of the program. They then might have decided that certain things were necessary on that site, other than a city hall. In this case the action necessary to create a dynamic urban environment could have been provided.

STRONG: I don't agree. I don't think it is the role of the architect to formulate the program.





BAKER : But an architect, if he feels strongly that the program is not correct, should voice his opinion, and this would be reflected in the design which evolves.

ANDREWS : Strong, I don't think you could be more wrong. I think this is what is absolutely wrong with architecture today, and why we've got such a mess. It's because of the way programs are written. They don't relate space to use. The client says what the uses have to be, but the translation of that use into a spatial requirement *must* be done by someone who is trained to do it, and this is the architect. And he should be involved right from the start in the formulation of the program. The program should pose the problem and not solve it. And I think that this particular city hall program solved a lot of problems in a preconceived way.

GROSSMAN : Let's go back to the original question. I would like to ask a question. It was pointed out that because of the garage, the city hall would have to have been set back on the north end of the site, and that there would have to be some type of public space in the foreground. Presumably, the people doing the programming felt, at that time, that Osgoode Hall would remain and the old city hall would remain. Hence the big public square would set off both Osgoode Hall and the old and new city halls. Now you're saying that because there is a very large, attractive space, there is pressure to re-develop old city hall and Osgoode Hall sites. But that will happen elsewhere in the city. Every building is subject to these pressures. If there is an old building, and there is a nice space, the pressures are double. But that's not a criticism of the site.

ANDREWS : Let me put it this way. I definitely criticize the selection of the site because that open space is not the result of pressure in the city for an open space. It's the result of a bloody parking garage existing underneath, on top of which you couldn't build. Now that to me is an ass-backwards way of getting an open space. This is not a position where you need an open space. If you get an open space as the result of a parking garage, in order to make it viable in civic terms, it then begins, itself, to exert further pressures elsewhere.

LALONDE : I don't think that open space can be thought of as linking two functions in a city structure. They are places where you would go because there is something beyond to which you want to go, or there is an atmosphere there that causes you to stop or rest for a few minutes. But public space can't constitute a link between one place and another. I think that Place Ville Marie has shown that very well. There is a big open plaza, and everyone walks under it, because the activities are under it. People will use the south side of Queen Street if something happens there. They won't walk through the city hall square.



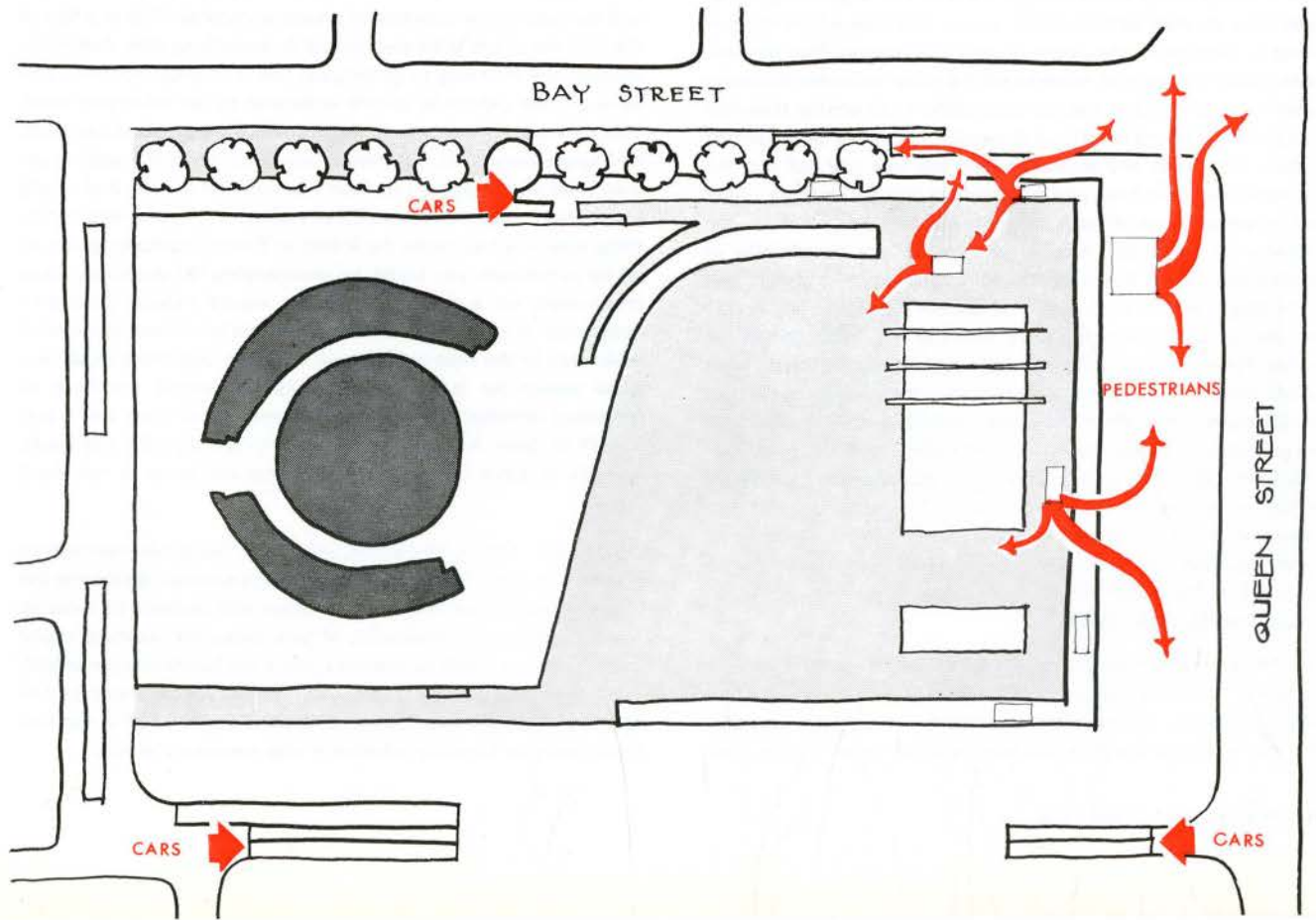
The introduction of a major scheme of this kind into an existing city structure obviously is of great importance. In addition to the new building, there is a parking garage for 2,400 cars; and a new spatial dynamic set up by the site-planning, for example the ceremonial way, and the spatial connection with Osgoode Hall. Does the panel feel that this has keyed in with an existing pattern, and one that caters for change and growth? It is of interest to note here that the announced intention of the sponsors was to preserve the old city hall as a magistrate's court.

GROSSMAN: It's a very big question. We have to go back to Lalonde's remark about Place Ville Marie, and it occurred to me that the difference between this square and Place Ville Marie is that you're going to have 2,400 cars parked there, which could mean as many as 5,000 people coming out of the various exits of the garage during a day.

LALONDE: When you have a public garage underneath a square, you force people to come out at specific points and they walk across the space or along the edge of it and through the adjacent buildings. In Place Ville Marie all the activity is underground, and there is a way but no reason to come up because the surface exits don't lead anywhere except to the plaza. Osgoode Hall and the old city hall are to stay, so in effect this whole discussion is about the area to the north and the area to the south, and this is precisely the point. It means that we have put the city hall in the wrong place if it was intended that it should spark off growth.

GROSSMAN: The question I would like to raise in a way is related to this. I wonder if there isn't a built-in contradiction in the program. The program asked for a building that would stimulate future growth and be a strong, unique symbol. But by being unique it makes it harder for future developers to relate to it. It seems to me the better answer would have been a quiet, restrained building so that anything could happen around it. You now have to tone down the other buildings around.

DIAMOND: Grossman, you posed the question about the physical properties of the building on a very architectonic level. I want to ask this: apart from the architectonics of a scheme, should we not examine the relationship of this complex to the Toronto-Dominion Bank, the Simpson Tower, the re-development to the north and south, and the existing city pattern, as it was, and as it is projected? In this way we can see development as a reaction to other forces, rather than seen as a reaction to architecture. I'm sure that you will agree that there are few developers who would react to architecture. Architects do, but does the city, and do the forces of the city react in this way?





**CULLERS:** What impresses me about this problem is that so many unknowns are built into the program. The complexes that you mentioned and the Eaton's proposal, are projects I would like to have seen or see even today, as parts of a plan for central Toronto, which would relate these various elements in a planning sense more than an architectural sense, to see how this whole thing is going to function as the centre of civic and metropolitan government; how it's going to relate to all the other elements in downtown Toronto. And this has not been done. I can see the potential here for many strong functional dynamics. I'm struck by the strong vertical lines north and south between the new city hall and the Toronto-Dominion Bank and the potential here for creating a new axis on which some of these elements can be hung. I can see the potential of University Avenue; I can see the possibilities in refurbishing Queen Street as another strong design element. But these things are not here, and they are not expressed, so far as I can see, in any downtown plan. Nothing ties these things together; hence I see the difficulty of the architects, and others, who framed the original competition program in trying to come up with something which would make sense, working as they did, without the guidance of broad, basic planning policy. This was not available then and is still not available today. As a planner it's difficult for me to evaluate the city hall project in the absence of this framework. Now I would like to ask this: we have dynamics set up by the building, the ceremonial way, the parking garage, and the open space, the existing movement in the city — how do these things relate to each other?

**LALONDE:** I think that this goes back to the first sentence of the question, "the introduction of a large scheme into an existing urban structure". The existing city structure was on the way out. One has to assess the potential development, which I think, was

not assessed properly in the program. Whether it will follow correctly from the new city hall, Toronto still has to find out.

**GROSSMAN:** If we assume that the development around this building or anywhere downtown is done by private enterprise, it will be done in the interests of private enterprise. This is a fact of life. The city might wish they would do something else. And in my opinion, the only way to accomplish this is through bonuses. You have to offer carrots to private enterprise to get what you want. There are certain elements in the city hall, such as the upper deck, and upper pedestrian walkways, which to me in themselves are weak and meaningless. They don't do much. If the city had strong leadership and really wanted these elements to evolve into something else — for example, be linked to Eaton's complex going to go up to the east, you could, by encouraging the developer, have cross-overs on a major scale. This would reduce pedestrian congestion at street level. Once started, this could lead to elevated walkways to the next project, and the next, and there must be a good reason for it. For example, Eaton's would not think of providing elevated connecting walkways unless there was a real benefit in them. A great deal depends on the way the city leads, and the bonuses or encouragement that are given in real, hard terms.

**ANDREWS:** I think, Grossman, that really this is the main reason why this building failed in the civic design context: it requires the city to provide such things as bonuses and controls in order to make it ultimately successful. If you make the existing upper pedestrian way viable by bonuses, and if we follow this precedent, you'll then have an upper pedestrian deck over the entire city of Toronto because it has been built around the city hall in the first place, without knowing whether it was necessary or not.

GROSSMAN: I think the architects could be given the credit of anticipating an upper level pedestrian way to take people off crowded streets, and this could generate into something more positive. The growth of the city, it seems to me, is a series of sequential decisions made in relation to what exists. And all you have to do is, aside from general planning and leadership, (which we all agree is missing here) is to realize this. *Each person is faced with a condition that exists when he has to build something new.* Some do it poorly — some do it well.

BAKER: I disagree with John Andrews on this criticism, that this is a building that made bonuses necessary to spark development. Accept that we have a private enterprise society, and accept that we want to have master planning. Bonuses and incentives to private enterprise are an integral part of our society, and every building in the development of our city is going to come out of this business of strong master planning, by receiving incentives and concessions.

ANDREWS: I think that bonuses and concessions are only an integral part of our society because we fail to set the thing up in the right way in the first place.

DIAMOND: Actually, I don't think you two are in disagreement. You are merely confusing terms. You both agree that you need to have an incentive to which private enterprise will respond. You may be disagreeing on what these incentives ought to be.

BAKER: I accept the fact that we have a private enterprise system which doesn't want to give government the ultimate control to direct and locate buildings.

DIAMOND: Do you think that in the political-economic-social system we have, government should exercise entire control?

BAKER: Well, you must have a master plan. You must know where you're going, and then you apply these incentives to make it move. Isn't the important thing here the kind of master plan? Rigid density and zoning controls, or a dynamic system responsive to demands of the market?

CULLERS: I think that's important. This is one of the criteria for

evaluating a master plan. A master plan which is adequate should have in it from the beginning an understanding of the economic structure of the community. A plan is not a static document. It should be a statement of policy firmly and precisely stated, but one which is capable of change.

GROSSMAN: By whom?

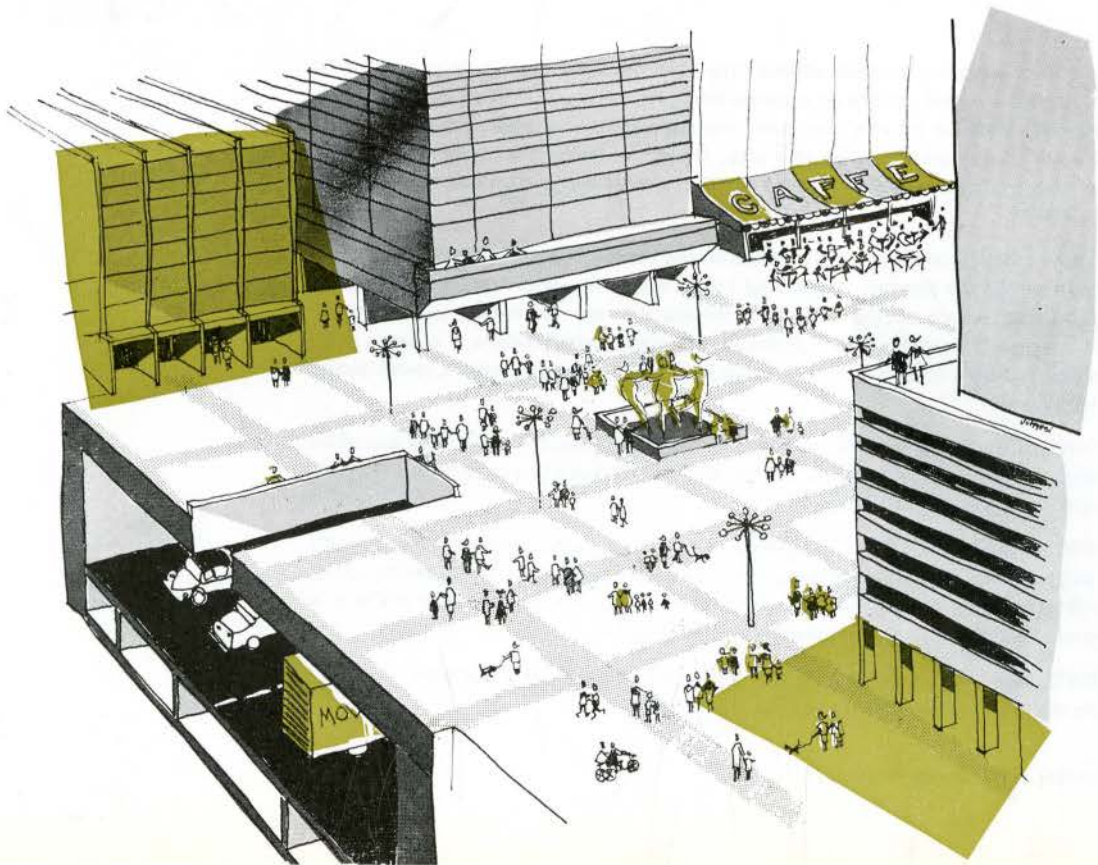
CULLERS: By policy-makers.

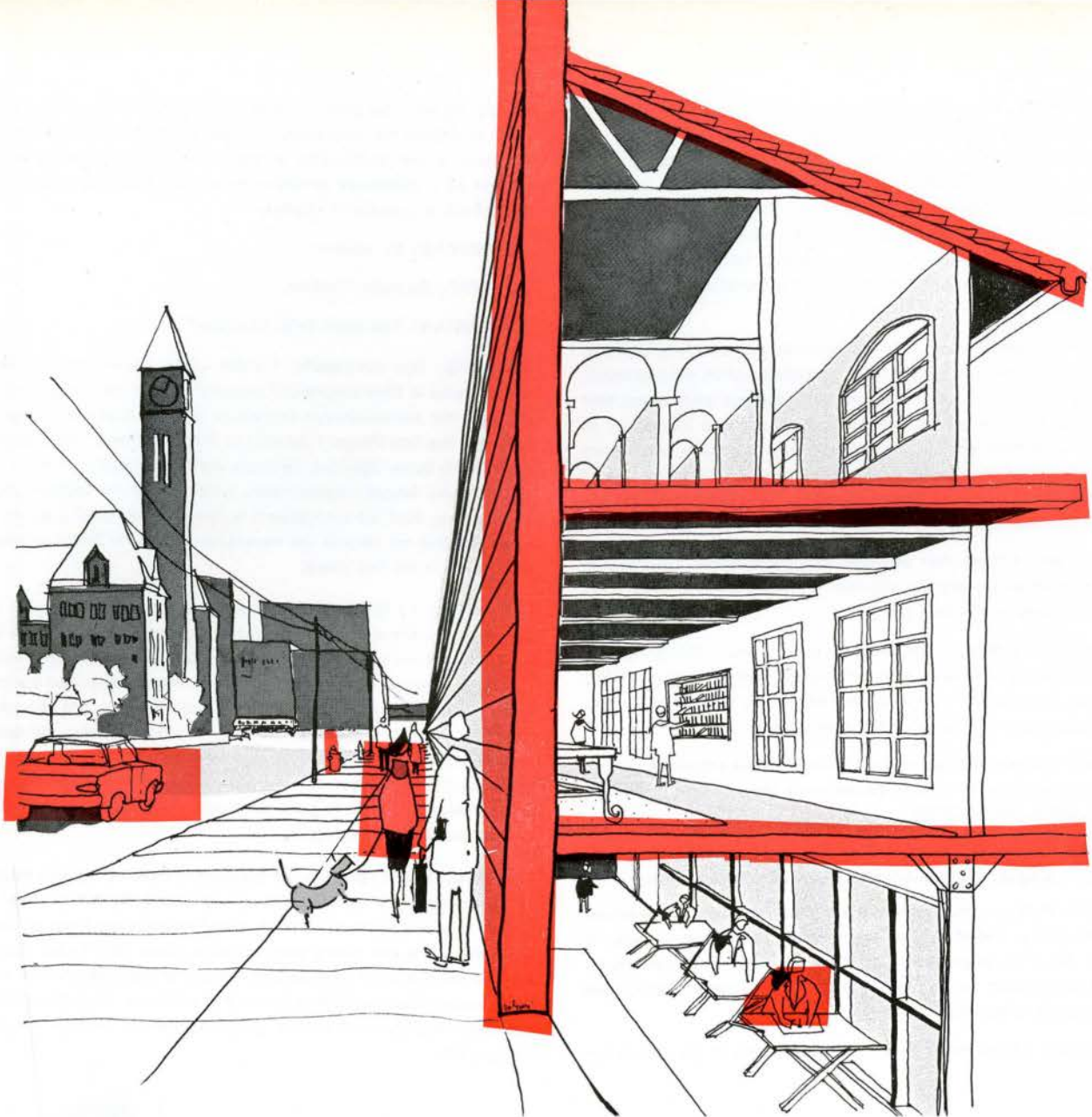
GROSSMAN: You mean legal changes?

CULLERS: Not necessarily, I think we're becoming confused about terms in their theoretical description of what a plan should be, and the administrative procedure by which plans change. I separate the two things. I would say that it is 'magic' we exercise today with these bonuses, because we're developing policies on density and height requirements which have no factual basis whatsoever. And we recognize this fact and this is why we have bonuses. But we should ask ourselves what's the harm of these two floors in the first place.

DIAMOND: I'd like to summarize this discussion. Don't we all agree that without controls we'd have chaos? Therefore, we all agree that public authority should have the power of intervention. What we disagree about is the form that intervention and control should take. Some say that the economic base is not the only criterion and that we ought to consider public welfare, because they see these two things as being in conflict. Ought there not be some kind of development where the intervention would be one which helps both private gain and public welfare? What we want is the means of achieving this.

CULLERS: Could I give you an example of what I think you mean. In Connecticut, a developer was convinced by his planner it would be good business, though initially more expensive, to save the trees on a site rather than bulldoze them off. Today those houses are the most high-valued houses in the area. People will pay through the nose just to live in this area now. So I don't think the two objectives of private gain and private welfare are incompatible.





One of the criticisms levelled at the city hall, seen as the nucleus of a civic centre, is that it is incapable of change and growth; and that to maintain the preferential position of the city hall, controls on surrounding development would have to be exercised by the city. Does the panel feel that this would hamper the market reaction it was hoped would be generated by the city hall project?

ANDREWS: I think it was wrong to proceed on the basis that controls were going to be necessary to make the concept viable. And I think this is the whole problem. The south side of the civic square should be free to develop the way the market and economic analysis demand. If it needs to be brothels, then it ought to be brothels. If it needs to be office space, it ought to be office space. But it certainly shouldn't have a seven-storey height restriction.

DIAMOND: How would you have generated the kind of development that would be compatible with an over-all scheme, if there was one? Would you think this is properly the concern of a competition program?

ANDREWS: Yes of course. The first problem to me is that it's the wrong site, because it's a site incapable of achieving the second of the two objectives — the sparking off of surrounding developments. Obviously, if you want to do this, you select a site that is capable of sparking off as much development as possible.

DIAMOND: Would you comment on one of the other points in this question — one not yet really discussed — and that is, change and growth?

ANDREWS: We can no longer afford to build things that can't be added to, and the design and the architecture of the city hall preclude any possibility of growth. Vertical growth would be difficult and ridiculous, because the way in which this building is said to proudly express the function as the centre of civic government is by its specific design; and if it's right as a symbol now, how in the hell can it be right if you add another ten floors? This is changing the proportion, and the proportion must be one of the significant things in selecting a design as a symbol.

BAKER: On the subject of growth, we just have to cast our minds back to 1958, when the competition was held. Neo-classical was in vogue at that time and practically all the finalists fell into this category — static shapes which really weren't capable of change. Eero Saarinen was interested in this form at the time. I think they're going to be short of space in a very short time, so that any change would have to take place pretty well right now. No, I don't think it's going to change and grow.

LALONDE: I think that the whole question of allowing for growth relates directly to the architectural solution. I don't think it should allow for growth. Growth nowadays, in any case, need not mean increasing personnel. It can be changed to automation. It's about time the city hall authorities started getting rid of some of the clerks and getting some machines instead. It's degrading work anyway, and a machine can do it more effectively. I'm sure the space in the structure is only good for the next ten years, and it would be a good thing if in ten years a good architect would re-locate those functions capable of automation. When we think of building controls around the structure, we think of keeping the value of this particular architectural solution. Because of these unknowns, this fence of an elevated walkway was built; quite an ugly fence. But when you're within the confines of this fence, you find it such a strong element that anything can happen outside it. You can have forty stories and three stories next to it, and you couldn't care less, because this line is there, and you're within its confines. Therefore, I think controls are not required.

ANDREWS: You can't convert the existing space, designed for people to one for machines. The space for a machine is totally different to the space for people. The one thing we do know is what sort of space we *will* need in the future. This is why a system which does not predetermine future change and growth is valueless.

BAKER: The machines would be located in an IBM centre anyway, which could be somewhere else.

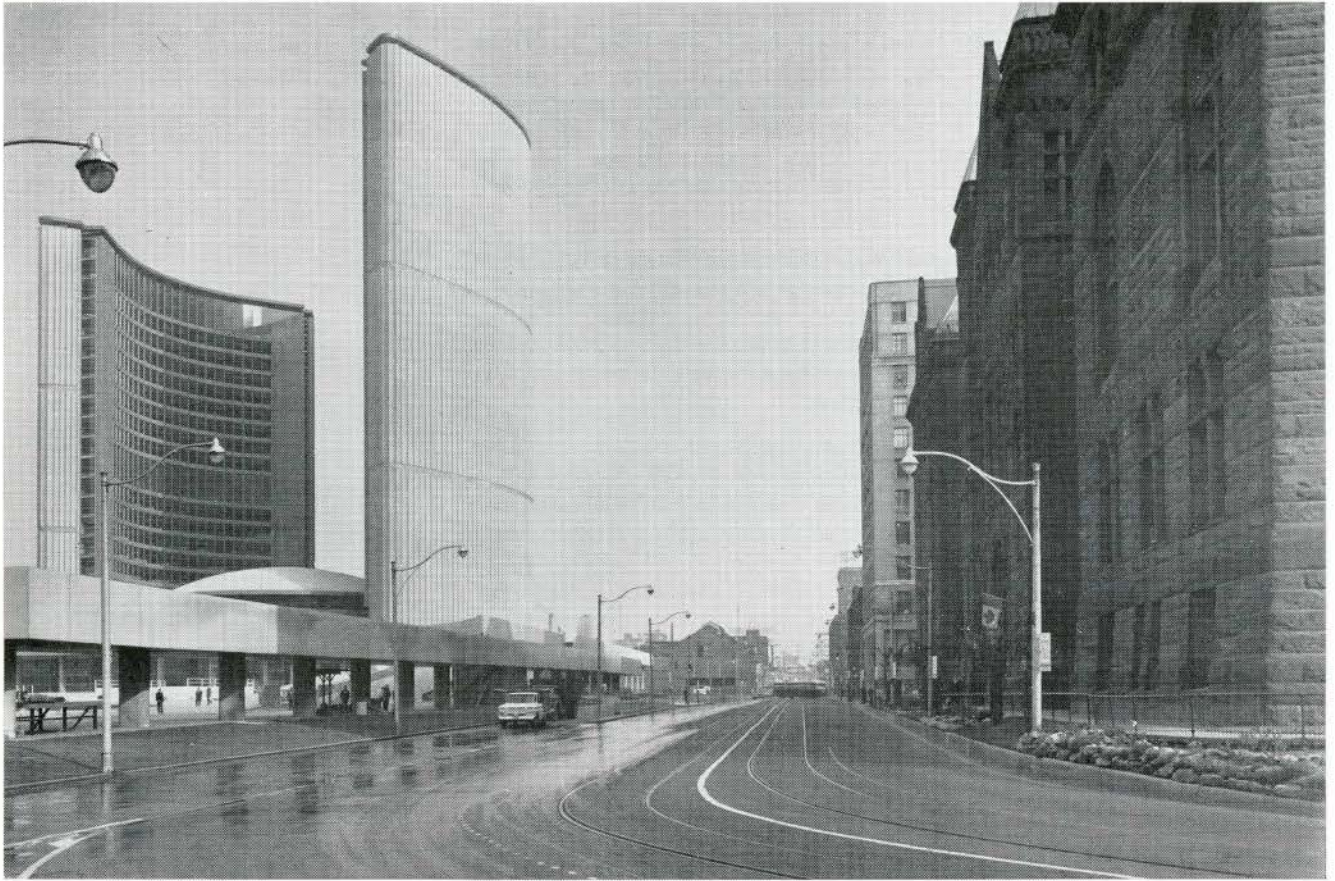
ANDREWS: Fill the city hall with concrete and leave it as a symbol.

DIAMOND: Frank Lloyd Wright said that Toronto had put up monumental tombstones and had buried its future. However, I think this is a good time to talk about the upper pedestrian walkway around the square.

LALONDE: This morning, a guide showing us around the building, told us that people complained that they couldn't see the city hall from the street. They had to go under the 'fence'. It's a horizontal construction on stilts. I wish someone would either demolish it or really fence the city hall in so that you could go through the 'fence', and then discover the city hall. There would then be the element of surprise and discovery which is so important in our lives. The design is like an *esquisse*, it is not worked out.







CULLERS: My point relates to space in a little different context. Space itself is only a fraction of the equation. With most of the outstanding plazas and city places that so impress with their architectural merit, the secret is the 'wall', the enclosure.

LALONDE: The old city hall is quite beautiful. It's a building we all enjoy and it is destroyed by this new thing.

CULLERS: One thing about the old city hall is that it terminates the downtown Bay Street vista. You can see the old city hall. There is no place where you can get the same kind of view of the new city hall.

LALONDE: Well, there could be one from the civic square if the 'fence' was not there. You can't enjoy the city hall unless you're right on top of it.

ANDREWS: Doesn't that then go back to the first question. If this thing is to be a symbol, it is on the wrong site. You can't get far enough away from it to appreciate it.

DIAMOND: Can you ever do that in a modern city?

ANDREWS: No. That's why there is no question in my mind that the idea of a city hall as a physical symbol is ridiculous.

BAKER: I have heard that Revell wanted to cut off the project from the rest of the city because he didn't know what the surroundings were going to be like. So he built this walkway around to block out the city. But in this it is a failure; when you're inside, it really doesn't cut off the city. But I wonder if Revell had something else in mind; if his promenade had been conceived as a kind of market place something like Helsinki, because a market place is a good thing to have around public buildings.

DIAMOND: Suppose a lot of activity was wanted at an upper level. People would still have to get up to that upper level. But the

garage is placed underground, and people don't walk up stairs unless they have to. Department stores understand this. If they want to sell at upper levels, escalators, which are expensive, are installed.

LALONDE: If there is something that attracts them, people will go up. I don't agree that people won't go up.

DIAMOND: Doesn't this contradict your earlier statement about the square? That the square had to be on an axis of movement if people were going to go there; that is, they wouldn't go to the square for the sake of the square?

**It has been said that architecture is the expression in physical terms of the socio-political context of the time. With this in mind, what do the members of the panel feel about the contemporary concept of a city hall as a symbol?**

BAKER: Does one know about the city halls of Paris, London, or Rome? If the building is to be a special building, it should have a distinctive character, but not necessarily something which identifies it as a city hall. It could be an important building, a foreground building. It doesn't have to be a funny building to be special, and this one is a funny building. I didn't realize it till this morning when I was up inside the 'shape'. It made me think of the kind of monuments that Mayor Jean Drapeau has been putting up around Montreal, where the shapes are arbitrarily chosen. I think our symbols should be real architecture, foreground architecture, but not architectural sculpture.

DIAMOND: In the comparatively recent past, building symbols have been self-consciously chosen. We ought to have a longer historical perspective, and see the way in which public spaces have evolved on an empirical basis. The Forum wasn't conceived by the architect as a 'nice shape', it evolved because of a certain

kind of activity that was a function of that society. The fact is, we now have television and other forms of communication not known before. We very rarely get large crowds standing in front of an orator. So we have to define what the function of the city hall is in our society, and what is then the physical counterpart. Perhaps it is not a building at all, as we have known it.

BAKER: That's quite true. The city hall program was framed with reference to all city halls that have gone before, chiefly, I think, English city halls where you have this great hall where you pay your taxes. And the public is supposed to react to these lofty surroundings by feeling 'I am a little bit of the city, because I'm paying my taxes in this wonderful place'. Now we pay our taxes by mail.

DIAMOND: Isn't this a legacy from the 'City Beautiful' movement of the 'thirties, which created buildings of unapproachable monumentality? Is this monumentality consonant with the democratic idea that the citizen ought to be involved in the process of government?

ANDREWS: The only thing that is important in the city hall is the Council Chamber, the rest is a glass-enclosed office building.

LALONDE: I agree that architecture is the expression in physical terms of the social and political context of the time. But I think you should say 'was', I think the contemporary concept of city hall as a symbol is not true. The mayor is a man whom you call by his first name. He's not a god in the cathedral. So this great symbol does not make sense anymore. City hall should now be part of the city itself. It could be a building anywhere.

GROSSMAN: Why don't you just rent one?

LALONDE: Oh, you rent space if you want to, and this is where council meetings would be held. I think there's more respect at the moment for the president of a commercial company and more decorum in the board room of the Sun Life Company than there is in city hall.

BAKER: I think the idea to rent space a terrible one. I think we do deserve a public building.

LALONDE: Sentimentality! That's not the real concept of the city hall today.

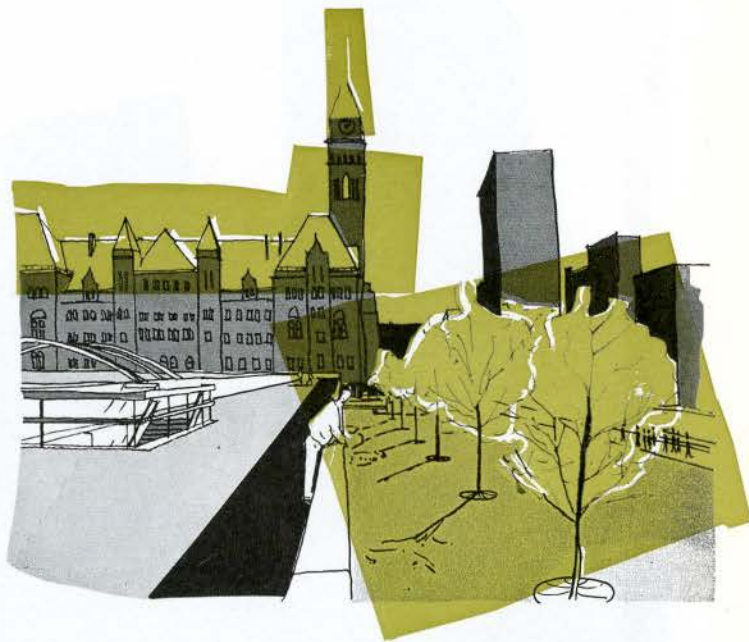
BAKER: It should be more integrated with the city. I think it's wrong to set them apart.

DIAMOND: Perhaps you would rather have had the question phrased this way: 'should we not have the thing itself and not its symbol?'

BAKER: Yes.

ANDREWS: What we actually should have is a very elegant TV studio.

STRONG: I think the symbol is important, and I think it's been proven that it gives more status to the civic government than anything that's happened in Toronto since heaven knows when. I think it's important also that this is a distinguished symbol of architecture. It was an incentive to do something. It gave the architect more opportunity to experiment than if it had been a mundane functional job, as was originally proposed. I feel it is a fantastically important building, and I think it is important that it is a symbol of government, especially with our emphasis on commercialism today. The fact that the *Journal* has invited us here today to discuss it for the record is itself significant in this respect.



BAKER: When this design was first published I remember seeing it as a small model, very glossy and sheer, and beautiful, and I thought things would never be the same in Toronto after it was built. I thought it was a real advance because it was going to change almost the whole nature of architecture. This is what shocks and disappoints me today, to see this building, which fails on two counts; first, it isn't particularly a fine building — and this is a personal view — and second, that rather than advance architecture, it's going to set architecture back and return architects to the classification of dreamers and dilettantes; people not concerned with reality of building, but with making funny shapes and finding uses to go on inside them.

CULLERS: Think about function vs symbolism. To me they're two completely different things, and each one has its own validity. To cite two examples: The Citadel in Cairo has a certain functional validity, but an awful lot of it is symbolic. The Taj Mahal is a crypt, a very beautiful architectural treasure. The architect didn't have to use all that marble and all that space just to put the Maharanee in the ground. Functionally, it doesn't make sense.

BAKER: Are these really analogous to the city hall?

CULLERS: I'm trying to get at whether or not the symbolic value of a building supersedes, in certain cases, its functional role. Sometimes you have to sacrifice function in order to achieve the ultimate in symbolic value.

BAKER: Someone said that there is science — the real thing, and there is science fiction, which isn't. Now there's architecture and

architectural fiction. I think this building falls into the category of architectural fiction.

GROSSMAN: I want to say this in defense of the symbolic approach. We must be careful to define the difference between the symbolism and pictorialism. If you treated the office element of the city hall in a purely functional way, you would have to end up with a building exactly like other office buildings because there is an optimum ratio of floor space and elevators to envelope. Yet this is talking pure economics. The moment you introduce symbolism the issue becomes clouded, because symbolism is only subjectively meaningful. I think that the bulk of this building is essentially office space. You could easily rationalize an efficient and very ordinary office building. Look at the example of the Toronto Dominion Bank. Why not have that with a clamshell, or what have you, for the symbol of the Council Chamber?

ANDREWS: I think this point goes way beyond the Toronto Dominion Bank. Revell is streets ahead of that. He recognized the problem of an east or west sun, so he put a blank wall on one side. He used one tower to shade the other.

GROSSMAN: The wrong one.

ANDREWS: No. He did a very careful study and mechanical investigation of the orientation of the towers in relation to their exposures and to each other. I think he's taken the office building a long way past the two-dimensional concept like the Toronto Dominion Bank, which disregards the architecture of orientation.





## Flashings for Membrane Roofing

by M. C. Baker

UDC 69.024.3

Successful flat roof systems and roofing membranes are usually possible if building science principles are understood and applied to design and construction. Difficulties occur, however, when the designer fails to appreciate the necessity to detail the complete waterproofing system. The details of interruptions and terminations of the membrane at ancillary features are of such particular importance that their selection and manner of construction should not be left to the discretion of a material supplier or a tradesman at the job site.

In Canada, as in most other countries, faulty flashings at interruptions and terminations of roofing membranes are a frequent source of roof leakage. It is clearly a design function to study the exterior surfaces of a proposed building to determine the location, materials to be used, and the details of installation for all flashings. A clear understanding of the function of flashings, the forces to which they are subjected, and the limitations of the materials commonly used, is necessary for successful design. This Digest describes flashings for flat roofing and some of the required ancillary building details.

### Function of Flashings

A flashing is a building device used to prevent water from penetrating the exterior surface of a building element or to intercept and lead water out of it. Several types of flashing are used at terminations and interruptions of roofing membranes, some capable of holding and others of shedding water. The complete roofing membrane might be considered a large flashing designed to hold water while it flows slowly to the drainage system. When ancillary building elements penetrate or intersect the roof and rise above it, one method of maintaining the water-holding capacity of the mem-

brane is to turn it up around the element. This turned-up continuation of the roofing membrane is a base flashing, and is usually applied in a separate operation.

Penetrating or intersecting building elements can be expected to move in relation to the roof. It is difficult to predetermine the magnitude and nature of these differential movements, but it is entirely necessary that they be considered in the design of the flashing detail. If connected to the element, the base flashing must be capable of bridging any cracks that may form and of withstanding differential movements. Materials commonly used for flashings are not capable of providing a reasonable service life under those conditions, however, and it is wise to make some other provision for movement. The base flashing can be kept free of the penetrating or intersecting element and given separate support attached to the roof.

The top of the base flashing and the space between the base flashing support and the penetrating or intersecting element are exposed to weather penetration and must be protected by a flashing to shed water. This is a counter flashing, which is attached to the penetrating or intersecting element and overlaps it but is free of the base flashing. Base and counter flashings are illustrated in Figure 1; they are the two basic flashings used in detailing junctions between roofing and ancillary building elements.

Variations of the basic roof flashings are necessary in relation to roof eaves, and certain wall flashings are required to tie in with the roof flashings when walls extend above the roof plane. It is not possible in this Digest to list all cases where special attention to detail is required, but representative cases are pre-

DRAWING LEGEND

- ① COPING
- ② THROUGH-WALL FLASHING
- ③ RAIN SCREEN
- ④ STRUCTURAL AIR TIGHT WALL
- ⑤ COUNTER FLASHING
- ⑥ CURB
- ⑦ CANT
- ⑧ BASE FLASHING
- ⑨ BUILT-UP MEMBRANE
- ⑩ INSULATION
- ⑪ ROOF DECK
- ⑫ EAVES FLASHING AND DRIP
- ⑬ GRAVEL STOP
- ⑭ MEMBRANE EAVES FLASHING
- ⑮ FASCIA
- ⑯ BLOCKING WHERE NECESSARY
- ⑰ FLEXIBLE MEMBRANE
- ⑱ AIR AND VAPOUR BARRIER
- ⑲ LOOSE LOCK OR DOUBLE LOCK JOINT
- ⑳ ROOF PENETRATION (PIPE, BOLT, ETC)
- ㉑ BITUMINOUS MASTIC
- ㉒ BOTTOMLESS FLANGED METAL RETAINER

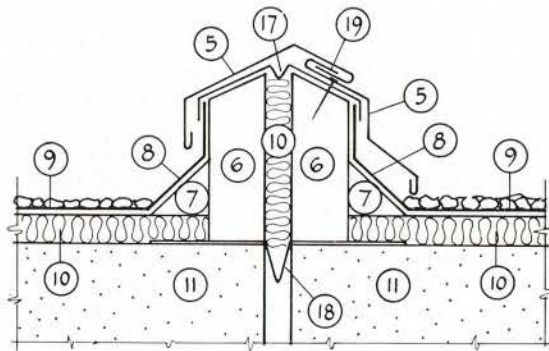


Figure 5 Movement joint

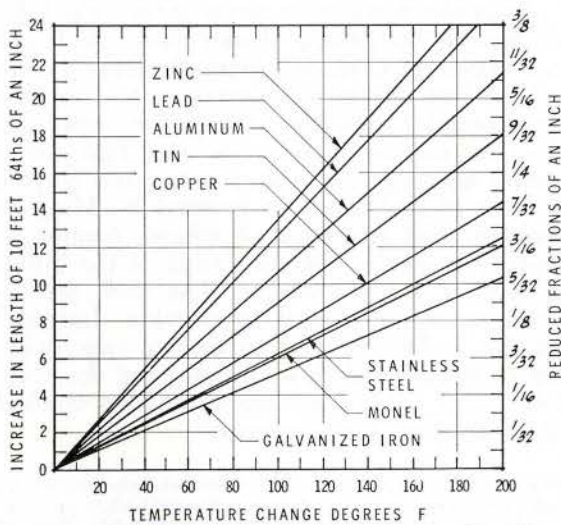


Figure 6 Thermal movement for 10-foot lengths of commonly used flashing metals

penetration into the walls it is necessary to use a through-wall flashing immediately under the coping, although this can be avoided if the coping is designed as a counter flashing to shed water, allow for expansion and contraction, and keep water out at the joints. Caulking compound cannot be depended on to keep joints watertight, because hardening and movement soon crack it open.

Water that penetrates the top of the parapet wall or the wall surfaces will flow downward under the influence of gravity; and unless it is led out of the wall before reaching vulnerable areas it can penetrate the roofing system. A through-wall flashing overlapping the counter flashing will accomplish this. Through-wall flashings at the roof slab edge or spandrel beam may also be required, depending on the wall and roof details as indicated in Figure 3.

A parapet wall employing open rain screen principles for the design of the exterior cladding (CBD 40) is also indicated schematically in Figure 3. The parapet in this case becomes a double rain screen wall. This means a wall in three parts. The centre portion is structural and must be air-tight so that pressure equalization can be achieved across the rain screen on each side of it. It may be observed that the metal wall covering frequently used on the roof side of the parapet can act as the rain screen if a ventilated air space is provided behind it, according to open rain screen principles.

Perimeter Eaves Flashing

Many architects have eliminated parapet walls from their architectural planning, and all walls of their buildings are covered by the main roof. This can simplify the perimeter flashing details, since in the simplest form the membrane can be turned down over the eaves to shed water and no counter flashing is required. In practice, the eaves detail is complicated by other requirements such as the need to prevent water, bitumen or roof surfacing materials from spilling over the eaves. The designer will usually also want a neater architectural finish than that provided by the edge of the roof flashing. This can be provided with reasonable certainty of freedom from trouble if proper detailing is carried out according to the principles indicated in Figure 4. Using this sort of detail the drip edge, gravel stop, architectural finish, or combination as required, is kept free of the roof membrane and eaves flashing. This allows completion of the roof membrane before it is necessary to apply the finish flashing, and allows as well for movement of the flashing due to temperature changes separate from that of the roof membrane.

sented that illustrate the use of basic flashings and some special installations.

### Small Projecting Elements

Careful consideration should be given in the design of a building to limiting the number of penetrations through a roof. If mechanical equipment must be placed above the roof, structural platforms should be detailed for it to stand on. Where there is no alternative to carrying structural members through the roof, where it is necessary to provide structural anchors for equipment mounted on the roof, or where pipes and ducts penetrate, it becomes necessary to detail and apply flashings according to the principles already explained.

On very small pipes, ducts or other projecting elements the separate support for the base flashing is often not used. Instead, metal or plastic flanged sleeves attached to the roofing at the flanges take their place. These are usually satisfactory, but they may require frequent maintenance. A flanged sheet metal support surrounding the penetrating item can be used to carry the base flashing up around it. Counter flashing can be provided by a cover attached to the penetrating item. In practice the support is referred to as a pan, because it is usually filled with soft bitumen. The detail, if properly made, can perform satisfactorily without bitumen, but it is customary and desirable to use weather-sloped mastic filling as a secondary deterrent to water penetration. The detail is illustrated schematically in Figure 2.

### Intersecting Wall Flashings

Walls rise above the surface of the roof at penthouses, skylights, chimneys, equipment housings, parapets and similar building features. Base and counter flashings are used at all such walls according to the principles already described. In addition, some walls require flashings selected in relation to the wall design. It is important that such wall flashings be tied in with the roof flashings if a successful junction of roof and wall is to be achieved.

Experience from field investigations indicates that many apparent roof leaks can be traced to faulty wall flashings. The designer will be aware of the means necessary to control rain penetration of walls (CBD 40), and where partial or through penetration is possible through-wall flashings have to be provided to lead water out of the wall. Because they are exposed to extremes of weathering on both sides and top, parapet walls extending above the roof will usually be subjected to the most severe weathering.

The joints for copings of preformed units frequently used at the top of parapet walls are vulnerable to rain leakage. To prevent water

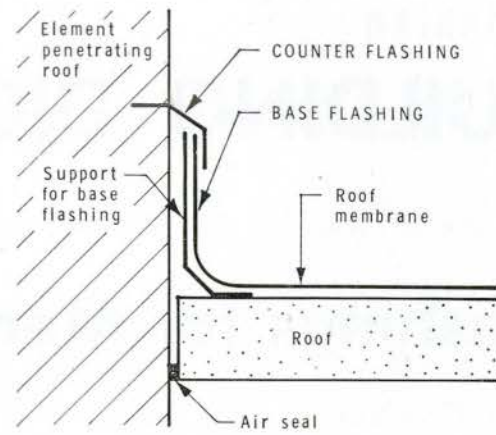


Figure 1 Basic flashings

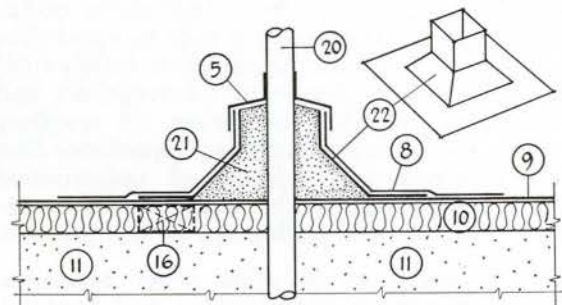


Figure 2 Projections through the roof

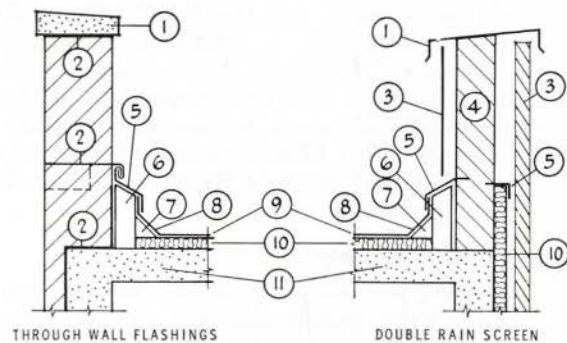


Figure 3 Parapet walls

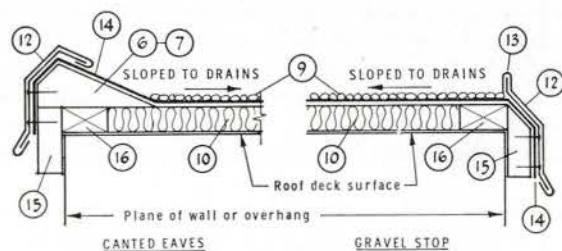


Figure 4 Finish at roof eaves

## Movement Joint Flashing

Movement joints are devices or details designed to allow for movement in adjacent parts of a building system resulting from expansion and contraction due principally to changes in temperature. Movement joints are deliberate discontinuities in the system where adjacent parts are separated and a covering designed to allow movement is provided to keep water out of the separation. Treatments that provide for movement by a fold in the roofing membrane are not always completely successful because they are vulnerable to damage and deterioration. The most satisfactory detail is thought to be one where adjacent edges of the separated membrane are turned up against supports that move integrally with the portion of the system to which they are attached. The supports must be detailed so that they do not constitute thermal bridges (CBD 44). Base flashings and counter flashings are provided, as is indicated in Figure 5. Such upstanding supports are easily handled architecturally when there are parapet walls, but may present a challenge to the designer for roofs with overhanging eaves.

## Selection of Flashing Material

A similar amount of labour is involved for the installation of all the commonly used flashing materials, and repair of leaking and deteriorated flashings can be expensive. For this reason first cost of material should not greatly influence the choice. Selection should be made on the basis of suitability to the particular application and exposure. Flashings should have a service life at least equal to the assemblies into which they are built. Flashing materials include bituminous felts, glass fibre fabrics, a variety of metals, and newer materials such as vinyl, neoprene and butyl rubber.

Base flashings are required to be flexible for moulding to the supports, compatible with the roofing membrane, resistant to sagging and slipping, and highly resistant to weather. Bituminous felts are the usual choice for use with bituminous roofing because of compatibility, but they are not sag resistant and there is danger of bitumen flow and slippage in hot weather. Flashings formed by the use of open-weave glass fibre fabric embedded in and surfaced with a bitumen emulsion are light in weight and answer all the requirements of the base flashing. Where application limitations due to temperature and weather pose a problem, bituminous mastic can in some cases be used as a substitute for emulsion. The flashing

bitumen must, however, be compatible with the bitumen used for the roofing membrane.

Vinyl, neoprene, butyl rubber and such new flashing materials were developed for special applications in relation to corrugated and other overlapping type roofing materials. Although not initially intended to replace conventional bituminous flashings, they are receiving considerable use as base flashings. Flexibility, ease of moulding, and application in one ply are known advantages, but adequate field performance history is not yet available on most types. Resistance to cracking from brittleness in cold weather, deterioration from ozone and sunlight, and compatibility with other roofing materials are the main factors requiring consideration.

Metals are not suitable as base flashings because they are generally too rigid and difficult to bond to membrane materials. Expansion and contraction characteristics as indicated in Figure 6 also tend to separate them from roofing materials. The rigidity of metal is generally an advantage for use as counter flashing and eaves flashing, where the material is required to hold its shape. Galvanized iron, copper, and aluminum are the usual choices, with lead, zinc, terne, monel and stainless steel used to some extent. Vulnerability to atmospheric pollution, staining of contiguous materials from water wash, and expansion and contraction characteristics are some of the factors governing the choice of metal.

The usual choice for through-wall flashing is metal or metal foil bonded to fabric, asphalt, or paper. Metal should be deformed or ribbed, or applied in a stepped manner to achieve better bond in masonry walls.

## Summary

Examples have been given of the principles to follow in the design of roof flashings. It has been recommended that base flashings are to be kept free of items penetrating a roof; that metal counter flashings are to be separated from the roofing membrane; and that metal counter flashings are to shed water and be free to move at end joints to prevent buckling or breaking. The flashings, of course, cannot be divorced from the over-all design of the building wall and roof systems. The roof, for instance, must be sloped to provide drainage, and the walls designed to control rain penetration. Because of this, all details of the complete water control system should be worked out by the building designer.

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The minority report entered by two members of the Jury, Holford and Stephenson had reservations about the north side of the building. They felt that the blank concrete walls would shut out the city and have an adverse effect on development to the north. Does the panel think that the form of a building, rather than the movement of vehicles and people and the commercial aspects, existing and potential, affect development in general, and is this specifically true in the case of the city hall?

CULLERS: I don't think the blank walls are really important. The dynamics of movement, the vehicles, the people, the market conditions, will affect what is going to happen to both north and south of the city hall.

ANDREWS: It is not the superstructure — which could be 50 or 100 stories high — that will have an effect, but the two-storey podium at ground level, to which people will react. I also think that the placing of the building, its particular form and the fact that it almost closes on itself, precludes the possibility of a public open space on the north because of the shadow. So to this extent it does have an influence, but it wouldn't influence the type of building that might be developed there.

STRONG: There certainly could be a park on the north side.

ANDREWS: I am assuming that an open space is something that people want to use. An open space in the city is probably more important in a cold climate than a hot climate, something you want to use in good weather, and in this location there would be a shadow on it for a considerable period of the day.

CULLERS: Would it not be better if the towers had been designed so that people could move north and south between them?

LALONDE: I don't think these blank walls are aggressive in any way. Because of their curvature, they make the shadow change constantly.

ANDREWS: I think it's very well thought of in terms of the shadow. The fluting on the blank tower surfaces makes them more alive.

GROSSMAN: This large building sits on a rather smooth pedestal, and I find it difficult to find the entrance. I think that when there's no punctuation to mark the entrance, you don't expect to be allowed in, somehow. There is no architectural expression of welcome. I think that's one of its weaknesses.

BAKER: I agree with that. There's no sense of entrance, or sense of approach. We were asked to say what we mean by 'urban design'. It seems to me that urban design falls roughly into two categories: one, the business of manipulating exterior space and volume in the picturesque way that Camillo Sitte described; the other is the approach which recognizes the motor age, and the ways in which people move around rapidly. And it seems to me the real failure of this building is that it is a building of category two set in a situation of category one. It fails in category one because it cannot be approached. It is a building to look at, which might look fine on a site such as in open country adjacent to an expressway where the traffic sweeps around it and sees it at different perspectives.

CULLERS: I agree, there's no place you can drive by the city hall and see the whole thing. If you're on foot, you're overwhelmed by it; all you see is the detail.

GROSSMAN: Place Ville Marie, you know, is bigger, yet it is

easier to penetrate. It also establishes a human scale by providing small structures around, so that whenever I go by that building, never feel overwhelmed by it.

Would the panel comment on the quality of the public spaces in the scheme in particular, and in general on the suitability of open squares in the Canadian climate; further on the square as a viable form of city "place" in the 20th century.

STRONG: The fact that you can't see this whole building is a good quality in the centre of the city. Unlike Place Ville Marie, I think it has a definite front, and if it's exciting enough, you wonder what happens around the back. Then you walk around the back and look at it. The problem of the square is that there is not a great deal of reason to go to it, which I think was a neglected condition in the program. But the idea of a square, I think, is good. The success of it is dependent upon what happens around, which we as yet don't know. I don't like the quality of the space as it is; I think it's hard, and trying to be something that it isn't. A park would be much more successful. As to the suitability of the square in Canada, I think a square which has a function is good, but it does require people. It also requires trees. In the Canadian climate, at this time of year, it's marvelous to be in an open place, just to sit. I believe that architects think of the open square as an architecturally beautiful space rather than as space in which people might like to spend a few hours. The city hall square is a good example. I think this was done from an architectural point of view, and is a complete mistake. To rationalize it, I think they proposed two elevated connections across Queen Street.

GROSSMAN: Before we leave this question of the landscape, I'd like to ask Strong a question; if you look at the site plan, almost the same area of potential landscape is on the upper podium as on the square. Yet looking at it yesterday, there seemed to be very little use for the upper deck, except, I understand for ceremonial processions. Is there a plan to develop the upper level into something that the public will want to go to, or is it just going to sit there?

STRONG: It's going to sit there. The only proposal that was made was for some stupid planting, but no provision was made for the weight factor. Therefore, you can't possibly put anything there that's big enough to be in scale.

GROSSMAN: That's a terrible loss, because there's a lot of space there which, again, with a different type of a plan, could have been made use of. If nothing else, people working in the towers, instead of going down on to the square, which is very public, could emerge at the upper level and sit there on the benches, with planting and landscaping, looking down on the city around them.

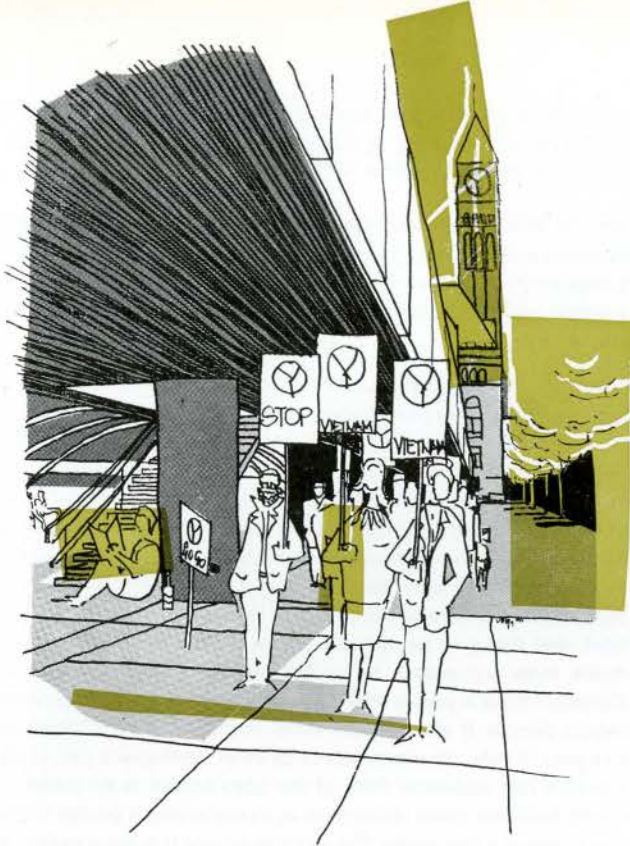
LALONDE: I think that the square is probably what is valid about Place Ville Marie. It has a variety of things happening; it's a very pleasant space. There is nothing interesting in the huge city hall space.

ANDREWS: You can't plant anything on top of the garage, and the visual aspects are important because people will look down on the square from the surrounding high buildings.

GROSSMAN: Not only that, but when you cover the ground with grass, put benches there, and small shrubs, it becomes a good place to be and generates activity. The fact that the podium is now a dead space, to be used for ceremony only, I think is terrible.

LALONDE: The guide who took us around this morning said she liked skating on the square in winter.





GROSSMAN: The rink was heavily used last winter.

ANDREWS: That's only a part of the square.

STRONG: My opinion is that it's too stark and bare, even if you have people who just come there to sit.

DIAMOND: In the winter?

STRONG: No, a square in Canada in winter is just dead. Other than skating, there's just nothing. But you can really enjoy it in the spring.

DIAMOND: What do you think of some form of square that would be useful in the winter — it might not be this form of square at all — but something out of which you could get twelve months' use?

STRONG: Well, I don't think we have an answer for that in the city.

CULLERS: What about proposals for the Toronto waterfront? There are even proposals for swimming pools. This to me is irrational. Why on the lake front, when they can build swimming pools anywhere?

BAKER: We have a short summer and we have a long winter, but so do the people of Scandinavia. Yet they have public open spaces, and we need them too.

LALONDE: Open spaces, in our climate require only protection against wind, because we have sunny winters. Place Ville Marie is impossible in the winter, not because the sun is not there, but because of the wind.

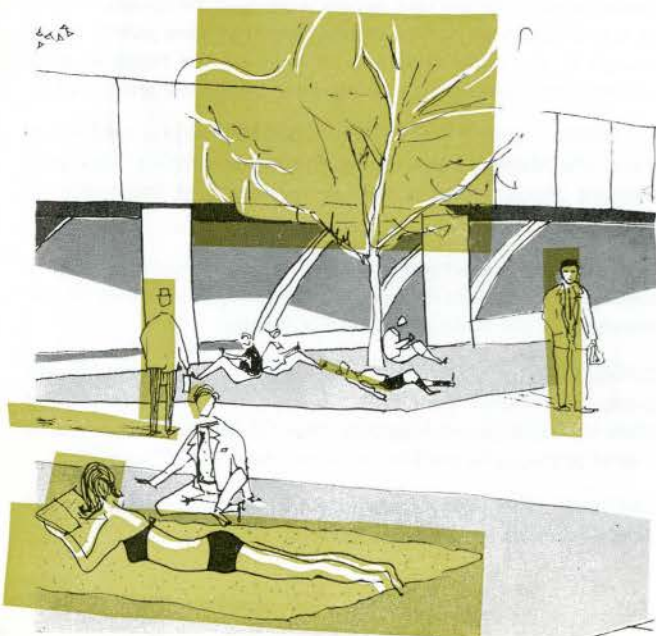
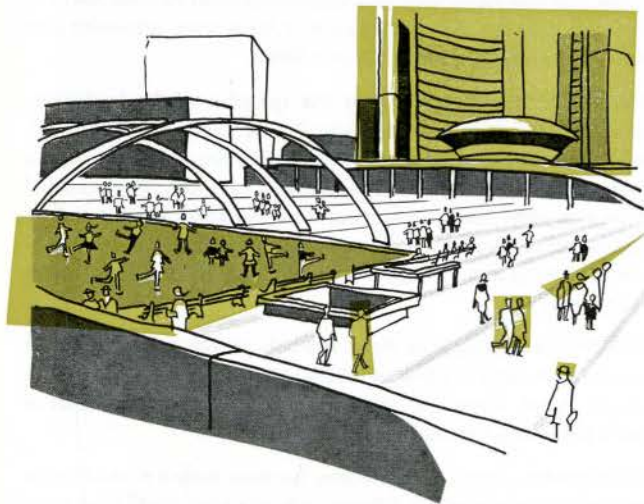
GROSSMAN: Various city hall events require open space for public assemblies — space which is quite different from a park in which to relax — for example, to receive the hockey team when they win. Broadening the scope of activities for the square, sponsored by the city, like a painting exhibition or folk dancing, would be terrific if they caught on.

DIAMOND: Don't you think the key to this is in the catching on?

ANDREWS: I think you should have people going there without a program.

**In conclusion, I'd like to spend a short time on the subject of competitions themselves. It would be interesting to get a reaction from each one of you.**

BAKER: There are two points about competitions which I would like to discuss. One is the nature of competitions and how they might be run in the future; learning from this one and from what we have talked about. The other is about competitions as they have been run. The city hall is the result of the way in which competitions are organized at present. This was a world-wide competition with many entries. The judges were faced with an impossible task, and I think the failure of this one is in that impossible task. Four men must select a winner from about 500 entries. That's a very large number of plans to assess in a relatively short space of time, and this I think invites the submission of an easily identifiable form, something that may be grasped quickly by someone sampling through the entries. The pressure of time also invites emphasis on an over-simplified solution, which might just be the competitor's realization that the judges haven't time to go into things too deeply. It also rules out the scheme which is complex. This hinders the judges from seeing all the answers that the building provides. In other words, the contestant plans something easily graspable. I think this is what has happened here. The winning solution is a very simple idea, very clear. Blown



up into a building, it does not follow through. The type of competition which I think has more promise is the competition for an architect rather than for a building. I don't know how you would organize such a competition, but it could perhaps be in two-stages. A group of architects is selected to formulate the program with the administrative bodies concerned. The final stage of the competition is for the design of the building itself. The purpose of competitions, I think, is to give an opportunity to someone who would not get the opportunity otherwise, to design a building of some importance.

**ANDREWS:** I think two things should be remembered about competitions. First, any competition is only as good as the jury, so obviously one of the vital things is the selection of the jury, and this makes me suspicious of competitions to start with. The second is that competitions ask only for the solution to a building problem. This eliminates the architects from the most important part of the design of the building; the formulation of the program. I'm also strongly against two-stage competitions. If you have competitions, they should be on the basis of concept only, and the actual development of this into a building is something that takes place once the architect has been selected. And then he is associated with the client, and the solution can develop from there.

**GROSSMAN:** Why don't you have a competition based on asking architects to send in their work? Pick your architect from that, and give him the problem.

**CULLERS:** Most of the criticism of competitions is that the problem has never been fully designed — the objections should be clear.

**LALONDE:** I always enjoy competing. It is fun and a big challenge. But competitions are really false; the problem is that the architects' concern is for a beautiful façade, but I know of one case, the UNESCO building, which was not a competition. The program was written by a professional program-writer with the help of an architect, and it was a rotten program. In any case, the competitor comes to analyze the program and we all have different ways of analyzing and we all get different answers. I also know that solutions sometimes come before you analyze the program.

**STRONG:** I think the solution that we usually have is the result of a political decision. The interesting thing about a competition to me is the program. When I said I didn't think the architect had to be involved with the program I didn't mean this precisely; I meant that to apply to square footage. But in the Toronto City Hall competition, the design result had to be a sculptural one. It could not be anything else because the head jurist, Saarinen, was known all over the world for the beautiful sculptural buildings he produced. The jurists knew nothing about Toronto, they knew little about the problems we spent this day discussing. The jury system as now set up is wrong, but I still think competitions are good, and they're good for architecture, and I think this building is good for architecture, whether it's successful or not successful.



## Toronto City Hall

The Architects' Statement on the Competition,  
the Construction and the Structural Solution,  
by John B. Parkin Associates

The regulations of the competition required that the winner, if not a member of the Ontario Association of Architects, associate himself with a member, and in October, 1958, Viljo Revell entered into a partnership with John B. Parkin Associates of Toronto. The partnership carried out all the architectural and engineering work required to produce the final contract drawings and specifications. Tenders were called in June, 1961 and on September 13 the contract was awarded to Anglin-Norcross (Ontario) Ltd. on a tender of approximately 23 million dollars.

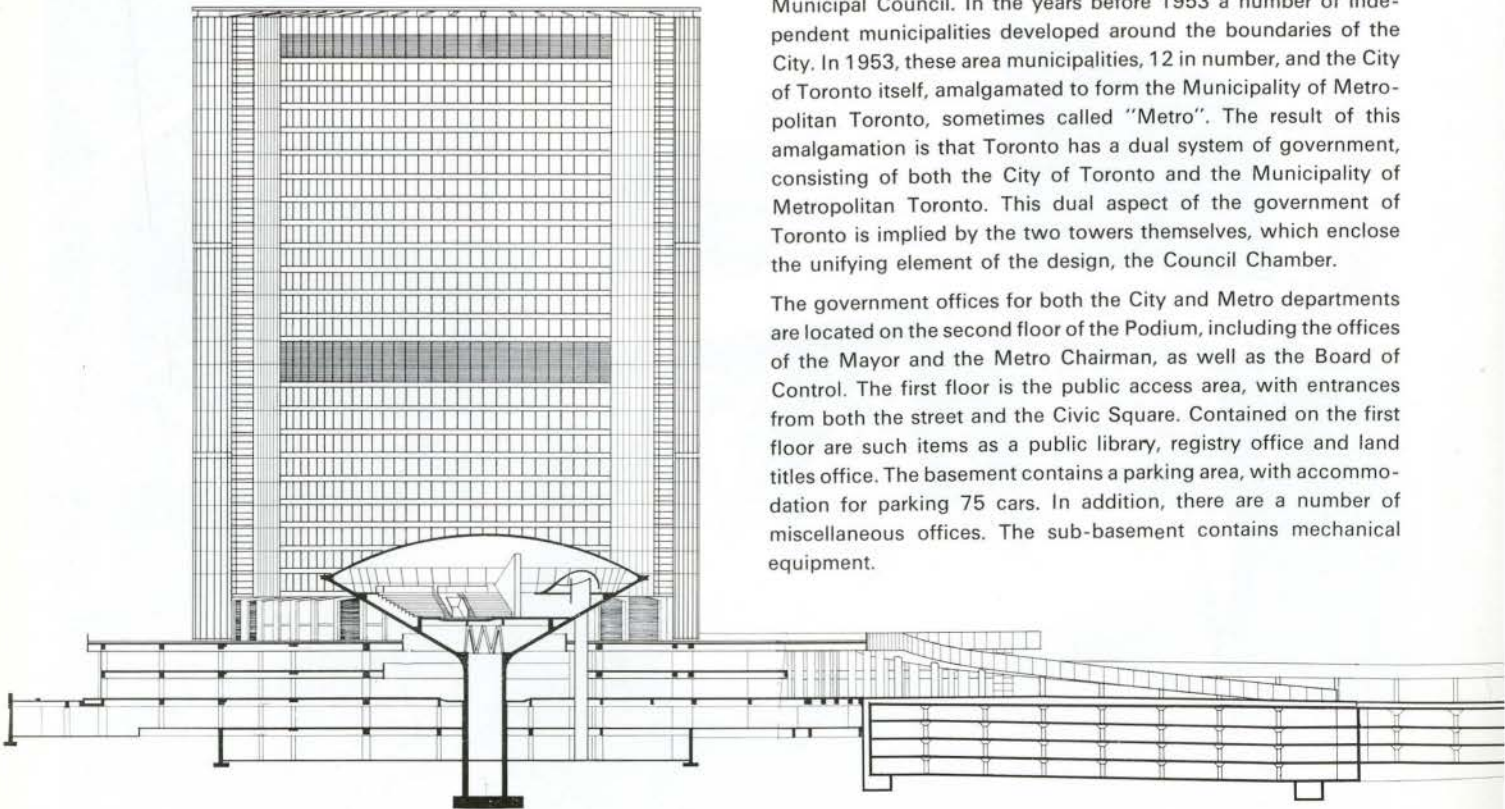
The new city hall is located at the North West corner of Bay and Queen Streets, immediately west of the old City Hall. There are four main elements in the design: the Civic Square, the Podium, the Council Chamber and the Office Towers. The two crescent-shaped Office Towers enclose the low, dome-roofed Council Chamber, and these three structures are superimposed on the Podium. The Civic Square, located in the South portion of the site, forms a forecourt to the City Hall. It contains a reflecting pool which is used as a skating rink in winter. Three precast arches span the pool. These arches contain lights on the underside, both to enhance the beauty of the reflecting pool and to provide illumination for night skating. The Civic Square is connected to the building by an elevated walkway, surrounding the square on three sides, and connected to the South East corner of the Podium. The floor of the Civic Square is composed of precast concrete paving slabs. Beneath the Civic Square is an underground public parking garage, operated by the City.

### Podium

The Podium is two stories in height above the street level, and in addition, contains a basement and sub-basement floor. The construction of the Podium floors is for the most part a system of reinforced concrete joists supported by reinforced concrete beams and columns.

The allocation of space in the City Hall relates closely to the system of government in Toronto. The urban heart of the Metropolitan area is the City of Toronto, which is governed by a Mayor and Municipal Council. In the years before 1953 a number of independent municipalities developed around the boundaries of the City. In 1953, these area municipalities, 12 in number, and the City of Toronto itself, amalgamated to form the Municipality of Metropolitan Toronto, sometimes called "Metro". The result of this amalgamation is that Toronto has a dual system of government, consisting of both the City of Toronto and the Municipality of Metropolitan Toronto. This dual aspect of the government of Toronto is implied by the two towers themselves, which enclose the unifying element of the design, the Council Chamber.

The government offices for both the City and Metro departments are located on the second floor of the Podium, including the offices of the Mayor and the Metro Chairman, as well as the Board of Control. The first floor is the public access area, with entrances from both the street and the Civic Square. Contained on the first floor are such items as a public library, registry office and land titles office. The basement contains a parking area, with accommodation for parking 75 cars. In addition, there are a number of miscellaneous offices. The sub-basement contains mechanical equipment.



### Council Chamber

At the North end of the Civic Square, enclosed in the towers, is the low, dome-roofed Council Chamber. The Mayor or Metro Chairman and the corresponding Councillors sit in the Council Room in a slightly sunken area in the centre of the Chamber. Around them and at a higher elevation is a semi-circular spectators' gallery. Behind the Mayor is a curved dividing wall, on which is mounted the crest of the City. The wall separates the Council Room from the second story Members' Lounge and Kitchen. At the second floor level is located the Gallery Slab, behind the public seating gallery; and the Members' Lounge, behind the dividing wall. In the centre of the Members' Lounge is a small kitchen, which is covered by a shell-like plastered ceiling. Beneath the kitchen is an executive elevator which transports the executives from the parking area in the basement of the Podium to the Main Council Floor.

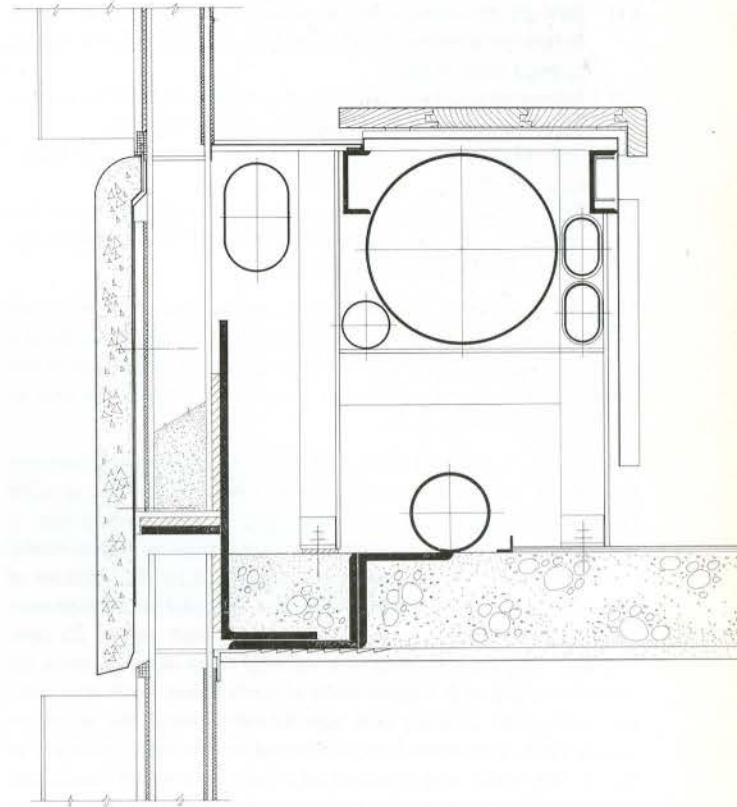
The structure of the Council Chamber consists essentially of three portions. The first is the roof, which is a reinforced concrete dome with a prestressed ring beam, supported on inclined precast concrete struts. The second is the main body of the structure, an inverted cone with two prestressed ring beams. The generator of the cone is inclined at an angle of 30° to the horizontal. This cone is supported by the third portion of the structure, a cylindrical reinforced concrete shaft which passes down through the Podium to a foundation on shale. The radius of the mid-surface of the dome slab is 150 feet, and the plan diameter, measured to the outside of the ring beam, is 155'-3". The thickness of the slab varies from 4½" at the top to 10" at the edge. The perimeter ring beam of the dome is prestressed by means of eight circumferential post-tensioning cables, and the magnitude of the force in these cables is such that the resultant reaction is directed axially along the supporting struts. These struts are pin-connected at each end, are inclined at 30° to the horizontal, and are arranged in a zig-zag pattern around the circumference of the ring beam, thus providing torsional resistance in order to withstand unsymmetrical loading.

The core slab is 18 inches in thickness, and is stiffened by means of two prestressed ring beams, one at the upper edge of the cone, and a second at its mid-height. The former is prestressed with five circumferential cables, the latter with three. In addition to these beams, there is a third ring beam at the junction of the cone and the supporting shaft. This beam is subjected to radial compression as a result of the nature of the superimposed loads, and hence does not require prestressing.

The cylindrical supporting shaft is designed for the applied axial compression and bending moment, and rests on a rectangular footing which is keyed and dowelled into solid shale. Because of the unbalanced dead and live loads within the council chamber, the footing is located eccentrically with respect to the shaft.

### Office Towers

Enveloping the Council Chamber are the two curved towers. Structurally, each of the two towers consists of a convex curved reinforced concrete wall referred to as the "back wall", and an interior line of columns. Each floor is supported on the back wall, and cantilevers beyond the columns to the glass line on the concave face of the towers. The length of the East Tower, measured



along the centre-line of the back wall, is approximately 325 feet, and the corresponding length of the West Tower is approximately 255 feet. The back walls of the towers are faced with precast concrete panels, themselves faced with strips of Botticino Marble. These provide insulation for the walls, and at the same time, a pleasing visual relief to the continuous expanse of concrete. The West Tower contains 20 floors plus a mechanical room at the top, and rises to a height of 260'-6" above the first floor or street level. It has an intermediate mechanical floor at approximately the mid-height of the building, and the other floors contain offices for the many City and Metro departments.

The East Tower contains 27 floors plus an upper mechanical floor, and extends 326'-6" above the street. It also has an intermediate mechanical floor, and on the other levels are located the remaining City and Metro offices. The East Tower is considerably larger than the West Tower but the two are similar in design and construction. The structural framing system of a typical East Tower floor consists of a continuous one-way reinforced concrete slab, six inches in thickness. This slab is supported by radial reinforced concrete beams which span from the back wall, over the interior columns, and cantilever 15'-7" beyond the interior face of the columns. The thickness of the back wall is 18 inches, and the column dimensions are 24 inches by 78 inches. The beams, which are 24 inches wide, taper in depth from 9 inches at the end of the cantilever to 36 inches at the face of the column.

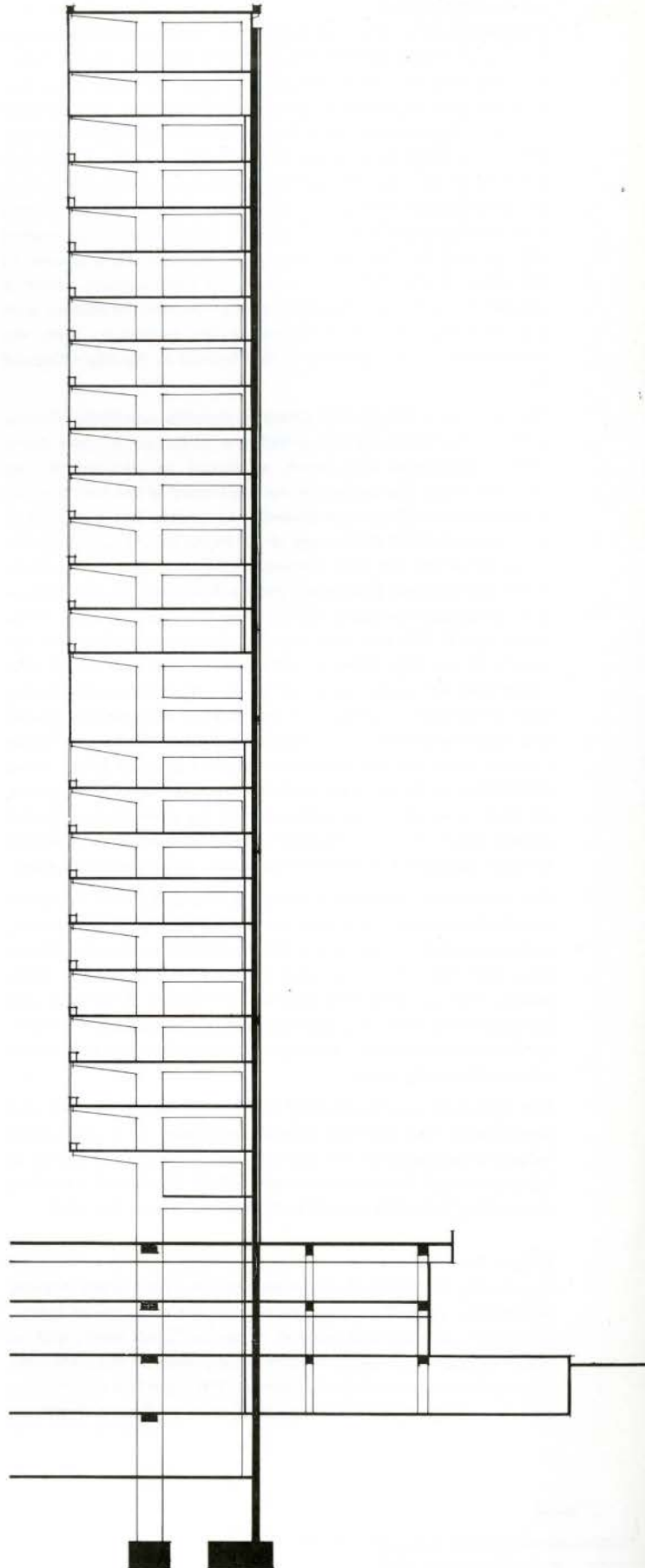
For design purposes, the towers were considered to be vertical cylindrical shells reinforced by a series of transverse diaphragms (the floor slabs) and also reinforced by longitudinal columns or buttresses. The presence of these reinforcing elements transforms the classical cylindrical shell into an orthotropic shell structure subjected to the action of vertical (gravity) forces and horizontal (wind) forces. The towers were analysed according to the theory of Vlasov, making use of the following assumptions:

- (1) Straight elements of the shell normal to the middle surface before deformation are straight after deformation and do not change their length.
- (2) Normal stresses acting in planes parallel to the middle surface may be neglected in comparison to other stresses.
- (3) The middle surface of the shell is inextensible in the transverse direction.
- (4) Due to the presence of the rigid horizontal diaphragms, the contour of the shell remains unchanged, so that the transverse bending strain equals zero.

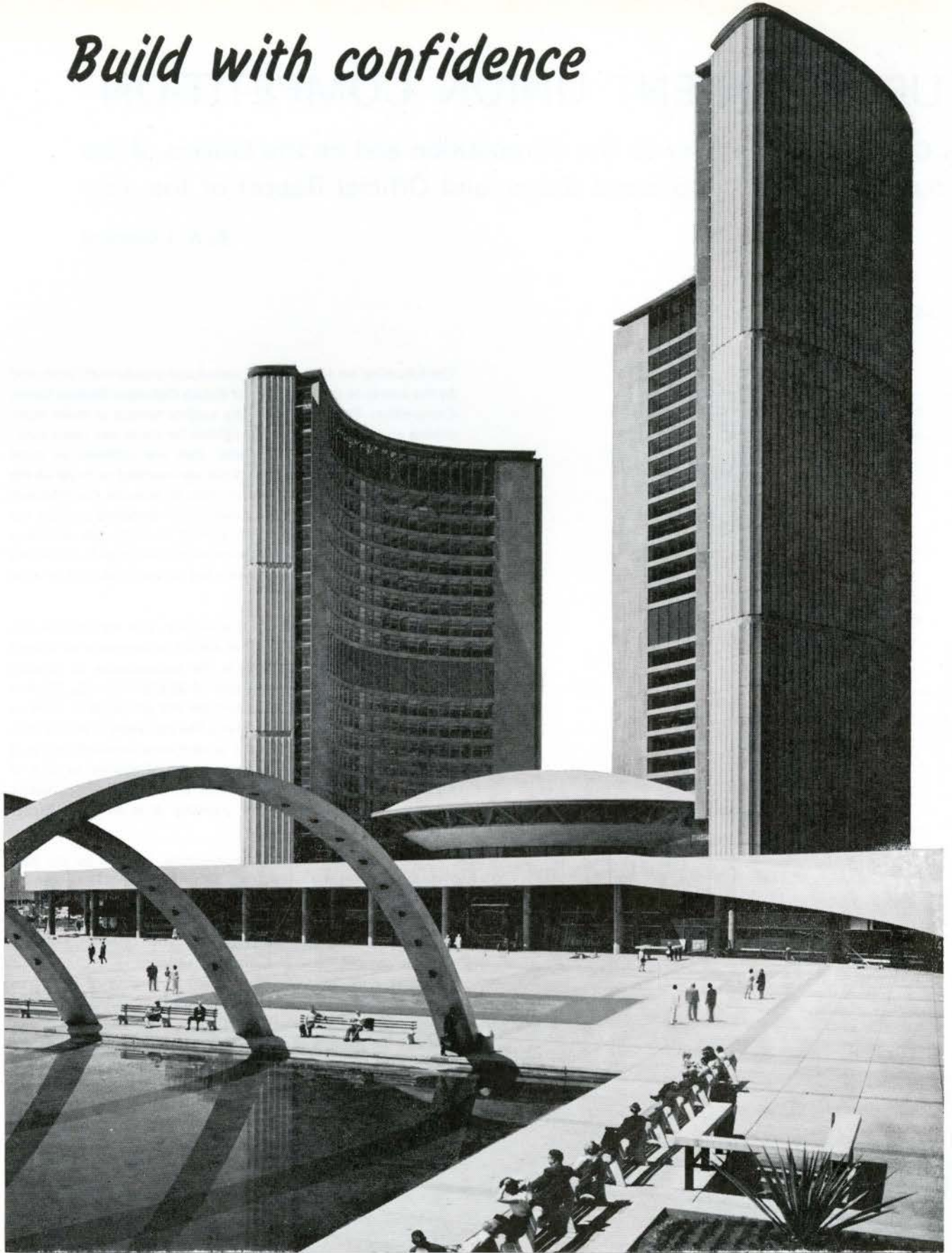
The normal stresses, that is, stresses acting normal to the cross section of the tower, have a non-uniform distribution under the action of live load and dead load. The maximum magnitude of the normal gravity stress is 700 p.s.i. and occurs in the back wall at the mid-point of its length.

Because of the unusual shape and height of the towers, it was not possible to predict the magnitude and distribution of the wind loads which might occur. Accordingly, it was decided that it would be necessary to conduct wind tunnel tests on a scale model of the structure. These tests were carried out by the Institute of Aerophysics of the University of Toronto. A model for the tests was constructed of mahogany, to a scale of 1 inch equals 23 feet. Pressure taps were located in horizontal rows at three levels on both the inside and outside walls of each tower. Each row contained 20 static pressure taps, spaced evenly along the arc of the tower. These taps were then connected to a multiple-manometer board. The model was mounted on a circular plywood base plate, and was placed in the wind tunnel at varying angles to the direction of flow, in order to obtain the critical wind directions. The most critical wind direction was found to be approximately parallel to the tangent at the mid-point of the wall length. In order to convert the wind tunnel tests results to design pressures, an assumed wind velocity distribution was used based on information obtained from the National Research Council which varied from 110 miles per hour at the top of the tower to 60 miles per hour at the bottom. This produced a maximum wind pressure of 31 pounds per square foot, and a maximum suction of 72 pounds per square foot, and created torsional moments on the towers. The torsional moments per foot of height at the top and bottom of the East Tower were 810 ft kips and 200 ft kips respectively.

If the towers were constructed as free standing shells from the foundation to the roof, the horizontal deflection at the top would be excessive. In order to reduce the deflection to within tolerable limits, and at the same time to limit the maximum stresses, the East and West Towers were connected together by the Podium Roof or third floor slab. The assumed boundary conditions for this combined structure were that the back wall of each tower was fully fixed at the base, where it was keyed and dowelled into solid shale, and in addition, that fixity against torsional rotation was provided at the Podium Roof. The shear stresses in the back wall were calculated separately for tangential, normal and torsional components of the most critical wind loading condition. The maximum intensity of the combined shear stress caused by the wind is 125 p.s.i. In addition the wind loading creates normal stresses across the section of the tower. The principal cause of these normal stresses is the resistance to torsional warping which is provided by the rigid connection at the base. The calculated maximum normal stress, caused by the combined effects of gravity and wind loading is 1220 p.s.i. This maximum stress occurs at the end of the East Tower.



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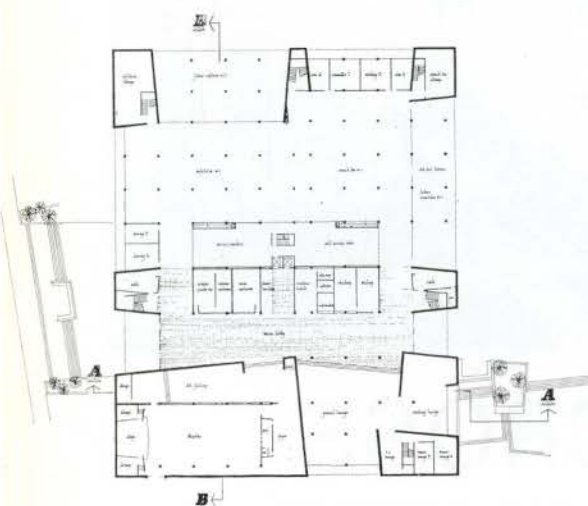
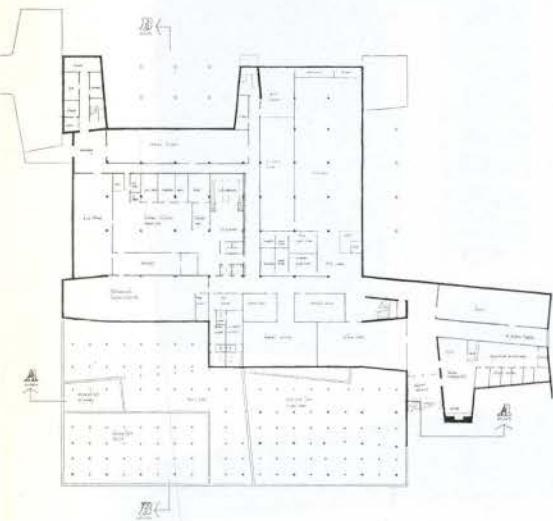
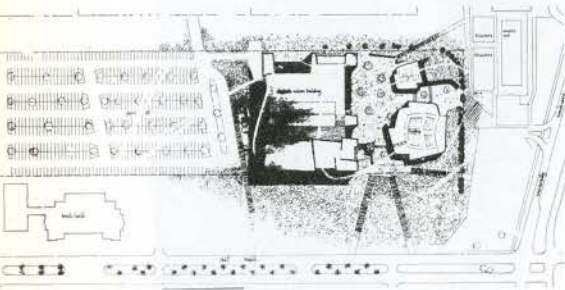
IN BUILDING CONSTRUCTION

# UBC STUDENT UNION COMPETITION

## A Critical Commentary on the Competition and on the Entries of the Four Finalists in the Second Stage, and Official Report of the Jury

By A. J. Diamond

### FIRST PRIZE: KENNETH SNIDER



The following are some general remarks on architecture, prompted by the entries to the University of British Columbia Student Union Competition. The vastness of the subject tackled in these comments, and the limited space available for them, has made oversimplification necessary. However, they are proffered as some basis for criticism. The criticisms are not intended to cover all the points which might be made, or even to evaluate the schemes. They are rather an attempt to isolate some problems properly the concern of architecture. It is an attempt to begin the necessary process of providing a *lingua franca* for those architects concerned with the Towers of Babel constructed by the confusion of aims in design today.

Architecture is not art, nor is it a science: it is architecture, the thoughtful making of spaces that are the environment for human action. This declamatory tone is the consequence of viewing the submissions to the University of British Columbia Student Union Competition, which in fact are not untypical of work in any North American city at this time. The definition of architecture given is further elaborated in the general remarks which follow. It is an effort to consider architecture's own discipline, to rid it of either the functionalism or esthetics of other fields of creative work, whether engineering or painting. It is an effort to see architecture itself.

The foundation of a rational architecture, inspired by the now debased tenet of the modern movement, functionalism, seems to have been forgotten. It is true that the modern architecture of the twenties and the thirties itself succumbs to the temptation of theories of vision and the effects of other disciplines — there was an appearance of industrialised architecture, which was in fact only a machine esthetic. It never in truth was functional. Nonetheless the attempt to grasp the problem of building in this century was well founded. Like Violet le Duc, we too are necessarily in the process of a rediscovery of the universal aspects of architecture: necessary in order to make general views and rational criteria possible. For it is not form on its own, but the make-up and reason for form that should be our concern. To lack this interest, to have a painterly view, is romantic. Architecture cannot find fulfilment in romanticism, because it, architecture, is in the end concerned with reality.

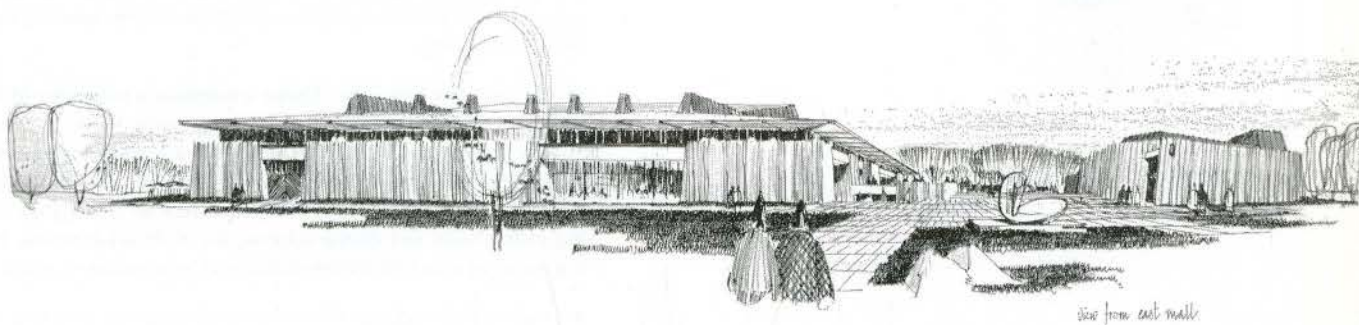
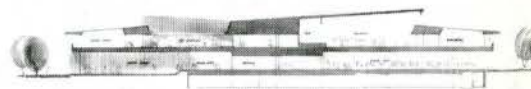
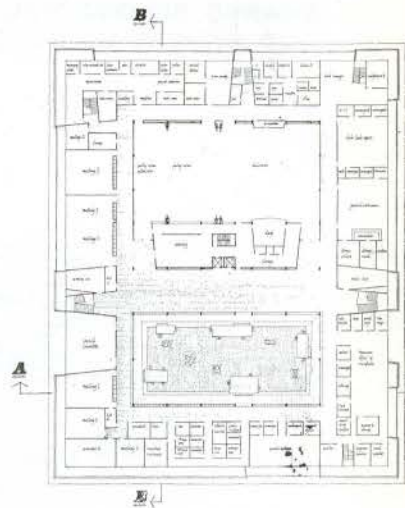
Two kinds of anti-rationalism now prevalent can be broadly classified: false simplicity and false complexity. In the first "purity" is achieved by largely ignoring problems to be solved, and like Mies's work, borders on the diagrammatic. The second, perhaps a reaction to the sterility of the architecture of exclusion, becomes willful and picturesque. The architect can be selective in *how* to solve a problem, but not which *aspects* of a problem to solve. The solution must be the result of problem and programme, and not the whim of the author.

Designing may take talent, but programming requires genius. Perhaps the most formative element in the creative process is the recognition of which essences of a problem have priority of interest, and thus will determine the appropriateness of a solution and its character. The success as a solution will be dependent on the correctness of the judgment of priorities. The transformation of this prose to poetry, which is great architecture, is via the exploitation of these priorities: they become the generative elements of the building solution. It is in this use of the problem that the vitality and validity of the building resides. The affirmation of the complexities of a problem yield positive results, as opposed to a negative reduction whose residue is an abstraction. Paul Rudolf, whose reaction to the puritanical severity of Miesian architecture has made him guilty of picturesqueness, has nevertheless pungently pointed out that Mies's buildings are wonderful because they ignore many problems. This would seem to me to be a contradiction in terms. His esthetic theories are not consonant with reality: conflicting demands can be satisfied by the compromise of satisfying *no* demands (for example, by the provision of so-called universal space, which refuses to admit the asymmetry of circumstance: *i.e.* sun in the south). However, the satisfaction of varying requirements seems logically to be a more legitimate goal.

The categorization of space appropriately allows a diversity of structural solution, and hence an appropriateness of enclosure. Structure should be the sub-conscious of architecture, and be inherently bound up with the differing volumetric and lighting considerations. This contradicts undifferentiated spatial continuity and the inside-outside orthodoxy — an esthetic borrowed from cubism and a gospel expounded by Gideon, blindly followed by a generation of unquestioning architects. The tendency to erase articulation of place and occasion is essentially romantic. Perhaps even more important than this direct expression of volume, this genus of architecture allows the development of an architecture of connectivity, of growth as opposed to addition, which characterises the all-inclusiveness of modular building. It also postulates the rationale of joint. The jointing and openings of a structure thus understood avoid the arbitrariness of elements formed by composition alone.

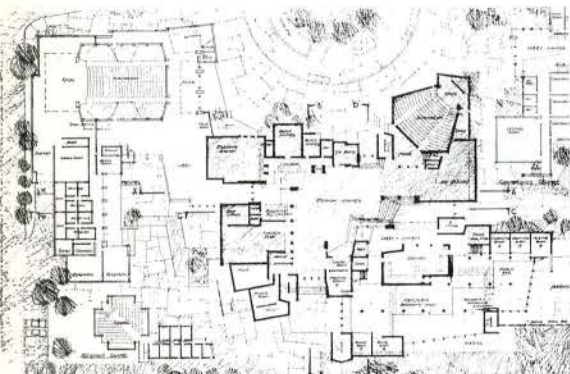
This in no way implies that axial planning, either static or dynamic, which is the formal result of an *esthetic* order of rationalism, is an answer. This attitude does not take into account choice, or growth. Points of entry and procedure in plan cannot be determined in this way. This is a repetition of 19th century Beaux Arts formality whose loss of contact with reality need not be further demonstrated. The evolution of plan should be from demand and circumstance, and one that takes account of random experience.

We can no longer say this *space* is out of proportion, or talk of balance in formal terms, or see circulation as a limited procedure.





## SHARED SECOND PRIZE: F. P. TOFIN AND ROBERT W. BAXTER



When we really design in terms of space, we look at architecture entirely differently; it is no longer deterministic. We can no longer have theories of vision with space. The discipline is of programme, space, and the containment of space. Progress should be measured by the equivalent emphasis accorded these factors. Extreme structural inventiveness is possible today, but neither the limitless structural possibilities, nor the competent employment of industrial techniques, necessarily implies good architecture.

In a competition the process of evolution of a programme is, in the main, settled. Nonetheless, the standard conditions are open to interpretation, and correctly each designer ascribes priorities of varying importance to the given factors. Presumably competitions are held to demonstrate judgment in the assessing of a programme, and the ability to conceive a building concept that is the counterpart to the organizational concept. If this is so, and it is believed that the specific circumstances and the detailed requirements of the client will further validate the solution by the architects' further accession to these demands, it is difficult to understand the necessity for a two-stage competition. For meeting the criteria here outlined, the two-stage competition goes too far: for showing drawings as representative of a *building*, it does not go far enough.

Notwithstanding this difficulty, caused by ill-defined criteria of judgment (concept or building), the task of the critic is to assess both aptness and insight of the concept, and the resultant physical solution. It is of interest to note the great variety of scale, mode and form of solution displayed by these competition entries.

The scheme placed first has no distinguishable organizational concept, and ventures no judgments on the genus of student union buildings. The direction of movement flows do not seem to have determined the location of entrances, and procedure does not seem an inevitable result of the forces existing on the campus or within the proposed building. Approximations only are made and not exploitation of prevalent factors. Both the schemes placed second do display such organizational concepts: the Tofin and Baxter scheme amalgamates the fragments of the building about a large central volume; from this central space arms of the building emanate. The Andrews and Thom scheme takes as its armature movement patterns, to which adhere the elements of the building. The location of each element in such a concept is then of first importance. To a degree this is successful, with the exception of the large auditorium. The meanness of the anti space is inappropriate and deviously gained for so major an element. In cases such as this, it would seem to be wise to vary programme limitations if they restrict an appropriate solution.

The scheme placed third hints at the understanding displayed in the previously discussed scheme, but what starts out to be a plan structure of some strength, dies in the whimper of a structural grid unrelated to its spatial context. An examination of the diagonal movement through the rectangular column spacing clearly demonstrates this.

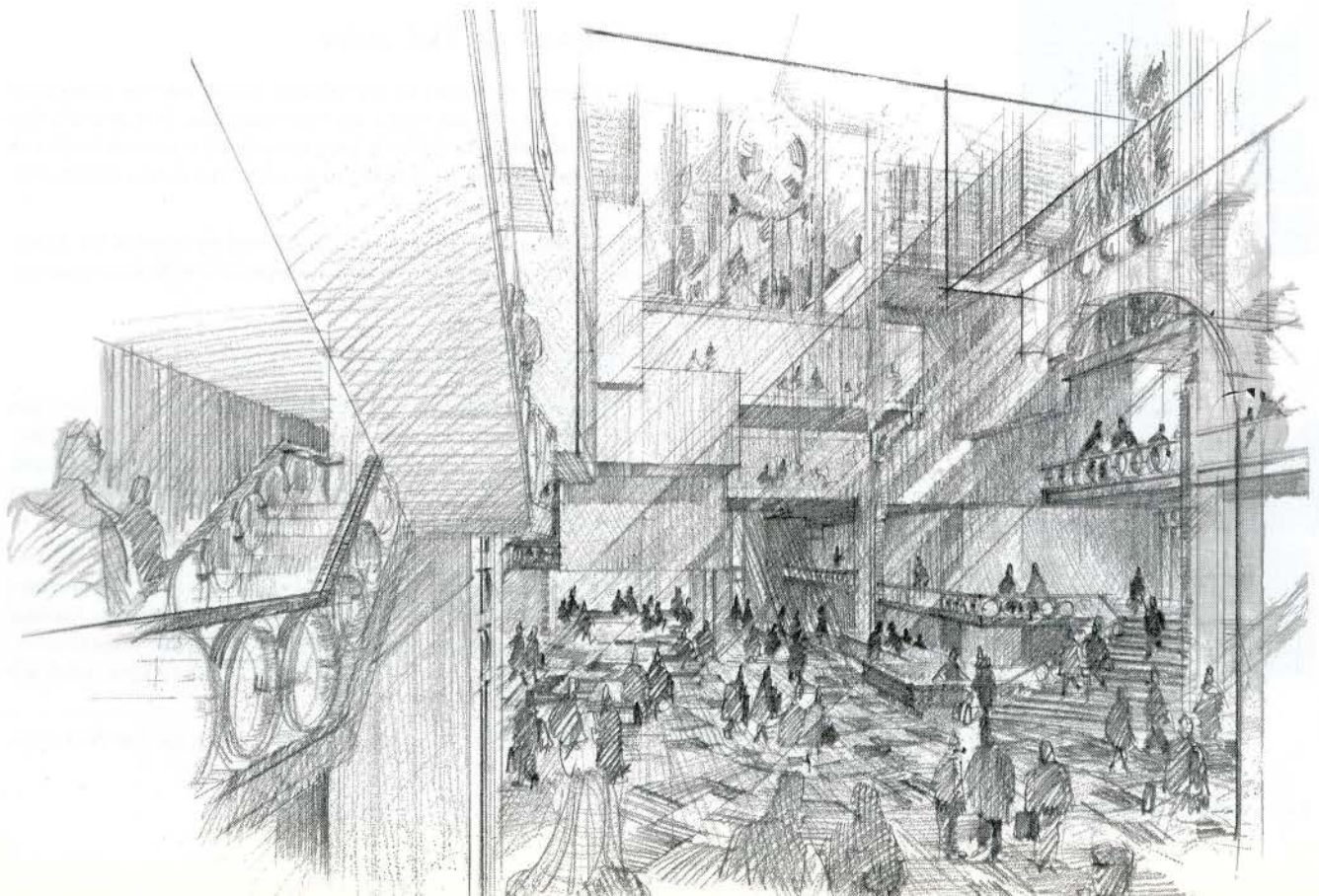
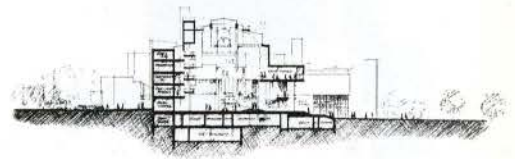
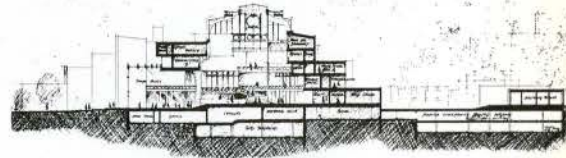
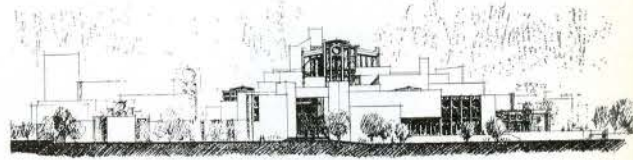
The Snider and Tofin and Baxter schemes are examples of false simplicity and false complexity respectively. The first relies heavily on the superficial order of façade and the consequent inconsistent suppression of volume and use, the second on plastic pictorial composition. In neither is structure an underlying order. But in the Tofin and Baxter scheme, for all its arbitrariness, there is a sense of structure differentiated and appropriate to place.

An aspect that requires much further discussion, one that is of

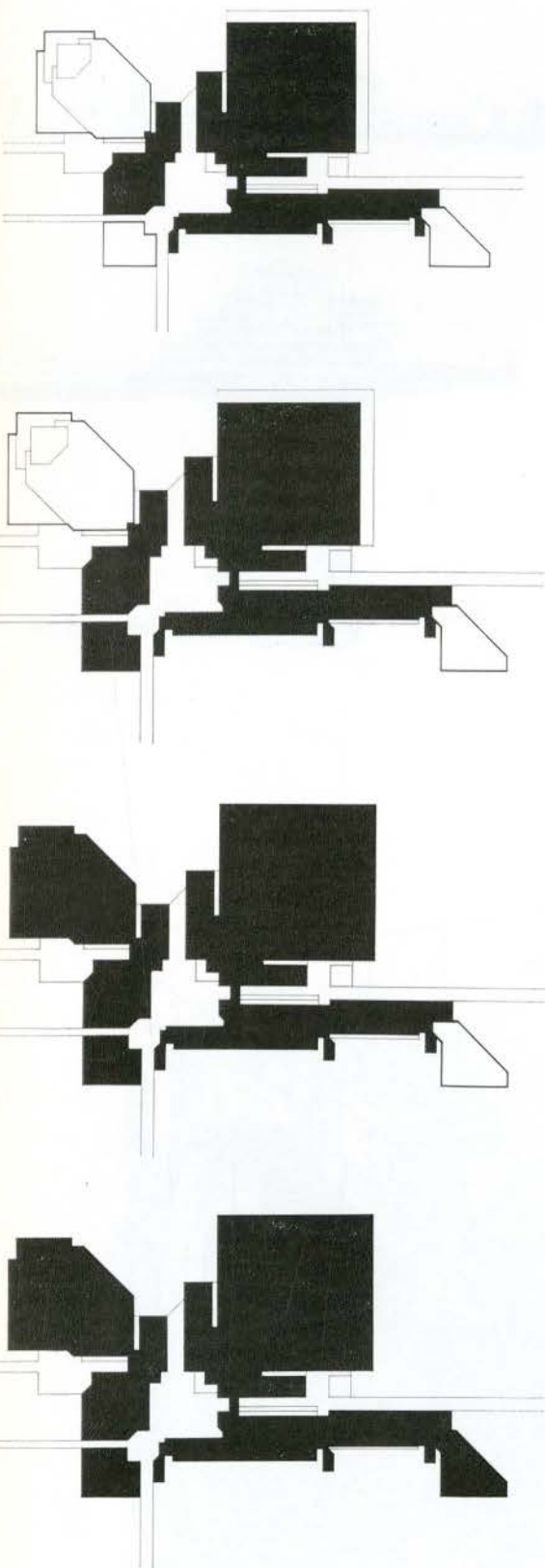
overriding importance now, is that of growth. Perhaps it is never fully recognised that urban spaces, and primitive building complexes which we admire have been in a process of evolution over a long period of time, and have often been shaped by an empirical process. The reason for the continued existence of the open space, or the building form, has had to be strong enough to permeate the common will to preserve it. At certain moments in time the spaces and forms come closest to satisfying needs. It is then that our appreciation of them becomes most acute, and we view the results as complete. This process has been feasible when we have had sufficient time. For the most part our own times' accelerated growth, the speed of building and the rate of obsolescence, have eliminated the empirical method of arriving at an optimum result. The necessity of providing instant finality in contemporary circumstances is a fact of life. The tendency has been to achieve this via compositional architecture. This reliance on plastic criteria is misplaced: the pictorial context has assumed high priority, out of keeping with the demands of a dynamic society. The capital city of Chandigarh is a glaring example of this: the tense balance, the sculptured artistry of Corbusier is superb; but it can admit no change, and assumes a god-like infallibility in answering needs. A more reliable way would be to discover the principal reasons for the viable existence of form and space and allow that formative element to condition related form and growth — at once cement and catalyst.

Of course architects are still concerned with a totality, a unity, with the "rightness" (in computer terms, correct fit) of a scheme. However, the conception now admits incompleteness in the sense that growth is possible. Growth is determined, but not circumscribed by the genus of the architecture of connectivity.

The form of growth proposed by the Snider scheme cannot really be called growth at all. The solution has been to design for the completed project through to the final phase, but to leave a portion out in the first phase. The final scheme fills in the void on the top floor. Addition of fragments to the Tofin and Baxter scheme cannot be called growth either: composition alone, and



## SHARED SECOND PRIZE: JOHN ANDREWS AND RON J. THOM



not an intrinsic system, would determine development. The Andrews and Thom scheme, on the other hand, has attempted to use the skeleton of circulation, itself an element of the architecture, as the framework to which growth is attached. It would have been of real interest to see this conception developed to the point where the method of jointing became an intrinsic part of the extension framework.

Each element of a building is subject to different demands. The structural incoherence on plan of the Thornton scheme is absent in the section. In the section the response to differing conditions has been indicated: The top layer of the horizontal elements has been exploited as one of different potential and function from the other interior layers. It has been used as roof, not floor, and used to admit light, being an external membrane. This, in addition, terminates the building in an organic way. The sensitivity to differences has been, however, somewhat obscured by the repetitive use of a structural shape in different circumstances. To do this is to achieve only a superficial unity: in contrast is the elegant disorder of the mass of the building. When viewed with the plans and sections in mind, the suspicion that this complexity has been contrived is hard to avoid.

Apart from the mechanistic considerations, and the fulfilment of the requirements of the programme, which, in a sense, is universal to any building, what, one must ask, should a student union achieve? Surely the salient feature of a student union building, more concentratedly so than for any other university building, is the maximisation of social contact possibilities. No less important than formal instruction is the value derived from the personal relationships formed at a university. This sense alone could have pervaded the design, have dictated the position, the relations of the parts within, and the devices employed in the movement systems of the building. What was done to solve this social requirement? The well-known slogan "Form Follows Function" can be reversed to make no less potent an aphorism, Function Follows Form. Skilfully handled spaces ordinarily accorded only cursory treatment can be used to evoke uses beyond their names on plan.

### REPORT OF THE JURY

The design submitted by Mr Kenneth Snider was the unanimous choice of the Board. Had it not been submitted, it is doubtful that the competition could have been considered a success insofar as no other scheme could have been presented to the clients with complete confidence.

The consensus of opinions of the architect members of the Board, on the four final submissions in Stage Two of the competition, can be expressed as follows:

#### **Scheme submitted by Kenneth Snider, 187 St. Mary's Road, Winnipeg 6, Manitoba**

This winning scheme took hold of an extremely complex program and resolved it in the simplest terms. Inasmuch as good architecture is the refinement of an idea, then this scheme is outstanding. Students will be able to use the building and always know where they are within it.

It fits the site well and has a pleasant harmonious relation to other buildings within the same visual range. However, the architect will have to be conscious at all times of problems of scale, not only relative to nearby buildings, but to retain the human-scale environment which was one of his major goals. In this respect, detail will be important.

The character of future academic buildings on the East Mall, lying

alongside the new Student Union Building, poses problems of great sensitivity for their architects. Mr Snider's scheme has been designed to be seen and approached between these future buildings without loss of impact or destruction of the character of the building. Indeed, the building has a character appropriate to a Student Union Building and looks equally convincing when seen at a distance, as a simple form, strong and confident, or when approached by way of intimate spaces between adjoining buildings.

The winning scheme is appropriate to today's technology in its planning and structure. It should be simple to build and seems capable of variation and flexibility within the overall structure.

On account of its simplicity in all the respects mentioned, structure, planning, and external expression, it should be capable of realization within the budget figure.

The character of the interior spaces was not too clearly shown on the drawings, but the Assessors were of the opinion that great possibilities exist to provide variety and texture and make a warm and comfortable building in a manner consistent with the external character. The indications were that this, too, was Mr Snider's attitude.

The Assessors wish to make the following suggestions to the architect and the Alma Mater Society.

(a) The charming second floor courtyard should remain as shown on the drawings and should not be converted to become a future conference centre. Would it be possible to relate the lower lobby to this courtyard?

(b) It was felt that the traffic loop requires further study and enlargement. They recommend an approach to the UBC Board of Governors for permission to extend the site boundary to make this possible.

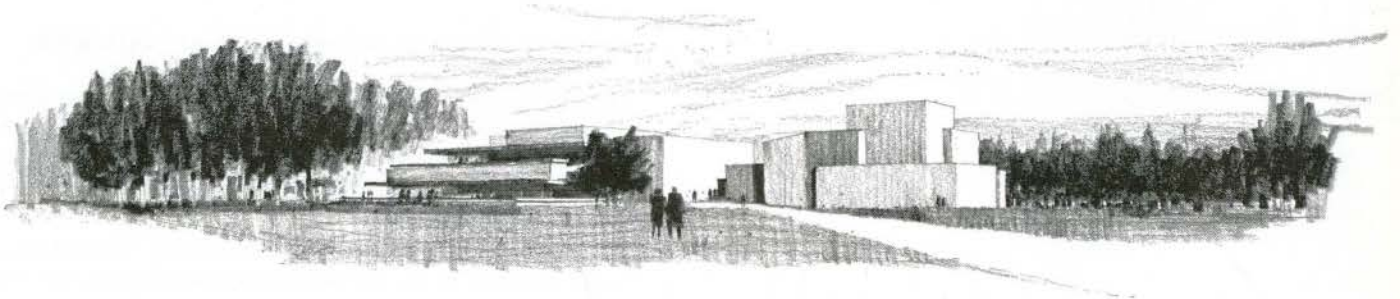
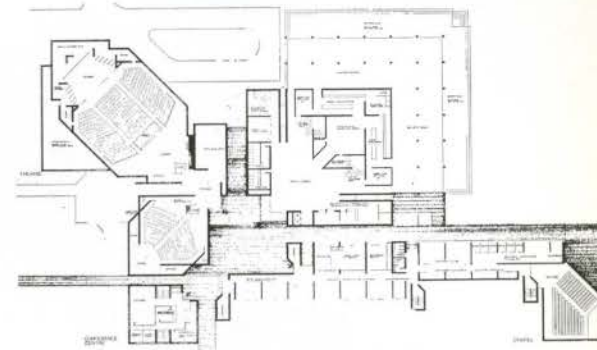
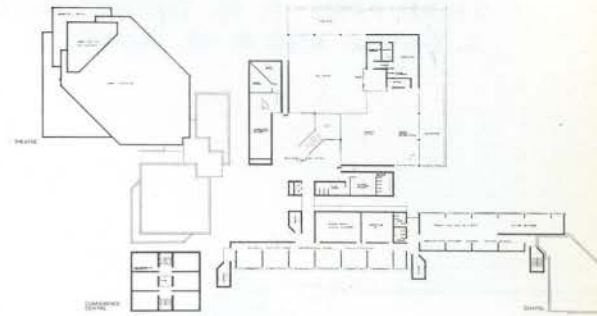
(c) Would it be possible to devise a covered approach to the theatre for parties arriving by car?

**Scheme submitted by John Andrews and Ron Thom  
47 Colborne Street, Toronto**

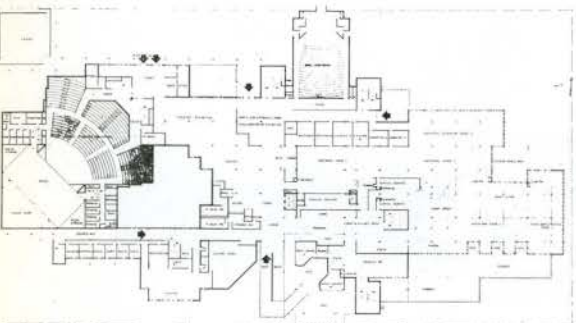
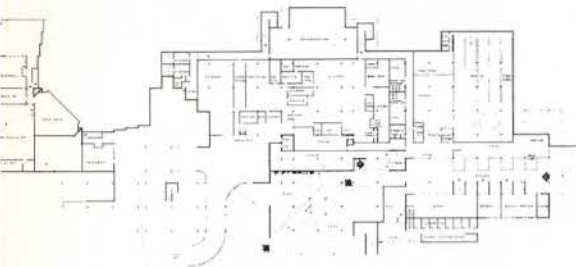
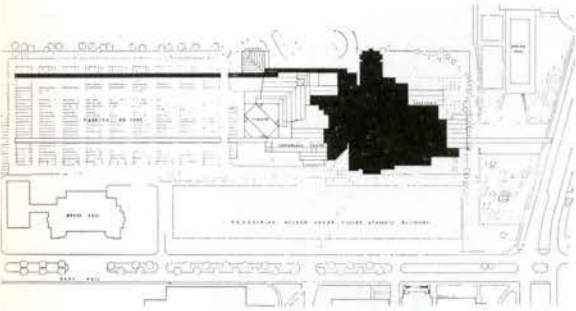
The Assessors took a chance when nominating this scheme for further development in Stage Two. The original concept of a shopping street on the campus — "Main Street UBC" — was one of the richest of all the submissions. However, in the second stage, this basic idea was lost rather than brought to fruition. The character of the street seemed to fade and even the cafeteria, which had looked so promising, lost some of its attraction.

Although the massing of volumes in exterior forms showed confidence, there seemed to be a confusion in definition of interior spaces and functions through introduction of angles and diagonals.

Most inexplicable of all was the poor standard of unfinished drawings which failed to convey the character of the building.



**THIRD PRIZE: P. M. THORNTON (F),  
A. GATHE, AND R. M. GARRETT**



**Scheme submitted by  
Peter Thornton, Asbjorn Gathe and Michael Garrett  
1520 Alberni Street, Vancouver**

This scheme was well presented in Stage Two but the beautiful model revealed immediately that the entire complex was too complicated for the "UBC-Scape". Plans, sections and massing of forms give an insistent impression of sophisticated confusion. The carefully considered "parts" of the building never assembled themselves into a convincing "whole".

The structural system improved from Stage One, but the experiment with diagonal circulation patterns moving people at an angle to the main structural pattern did nothing to help the scheme.

The architects seemed determined to obtain certain stylistic effects. Aesthetically, the placing of buildings so that one approaches the corners is almost without solution. What a pity that so much competence should have been directed towards the expression of arbitrary form.

**Scheme submitted by Frank Tofin and Robert Baxter  
815-G-Park Road, Richmond**

The initial concept was romantic, imaginative and spectacular. It conveyed an understanding of interior space and the psychological needs of the student at a university. The interior rotunda quite captivated the Assessors, who had no hesitation in nominating it for further development in Stage Two. However, they realized that in its practical aspects it required serious reconsideration, and asked the architects to face up to such important problems as fire regulations, confused structure, over-complication in planning and external expression. This advice was not taken seriously and, in Stage Two, the design had lost ground.

The early promise of rich environmental experiences was offset by the feeling that the architects had rejected the ideal of clarity of form and structure in favor of an unnecessarily confused romantic expression which does not seem appropriate as a direction for contemporary architecture and which would have assuredly exceeded the budget.

To summarize, the Assessors felt that the winner "stuck to his guns" during Stage Two and retained the astonishing simplicity of his initial concept.

The other three finalists failed to enhance their concepts or make significant practical gains. For the reasons given, it was not possible to place the runners-up in an order of priority.

The Assessors felt that the admirably detailed instructions contributed by the Special Consultant on facilities nevertheless had an inhibiting effect on competitors and did nothing to stimulate the creative instinct. It is hoped and expected, however, that the winning design can be improved in its functional aspects by the formidable body of specialized knowledge available through the Consultant on Student Union facilities.

**REPORT OF THE PROFESSIONAL ADVISER**

The decision to hold a competition reflected the convictions of the Alma Mater Society of UBC that the traditional concept of a "Union" might be replaced with a new or improved image. It was also an acknowledgment of the increased importance of student union life within universities.

Stephen Leacock of McGill University once wrote, "The real thing for the student is the life and environment that surrounds him. All

that he really learns, in a sense, he learns by the active operation of his own intellect and not as the passive recipient of lectures. And for this active operation what he needs most is the continued and intimate contact with his fellows. Students must live together, eat together, talk and smoke together. Experience shows that this is how their minds grow. If a student is to get from his college what it should give him, a life in common with other students is his absolute right. . . . A college that fails to give it to him is cheating him."

Authorization to proceed with a national competition and to appoint a Professional Adviser was passed by resolution of the Alma Mater Society, on June 13, 1963.

*The Board of Assessors* consisted of the following persons:

#### STAGE ONE

William W. Wurster, San Francisco  
Professor Henry Elder, Vancouver  
Professor James Murray, (F), Toronto  
Dean Feltham, Vancouver (Non-voting)  
Warnett Kennedy, Vancouver (Non-voting), Chairman  
George Parsons, Vancouver (Consultant on Costs)

#### STAGE TWO

Professor Henry Elder, Vancouver  
Professor James Murray, (F), Toronto  
Victor Steinbrueck, Seattle  
Dean Feltham, Vancouver (Non-voting)  
Warnett Kennedy, Vancouver (Non-voting), Chairman  
George Parsons, Vancouver (Consultant on Costs)

*Awards* were paid as follows:

STAGE ONE — Four Finalists received \$2,500 each.  
Two Honourable Mentions received \$500.

STAGE TWO — The winner received \$3,000 and the commission to carry out the work.

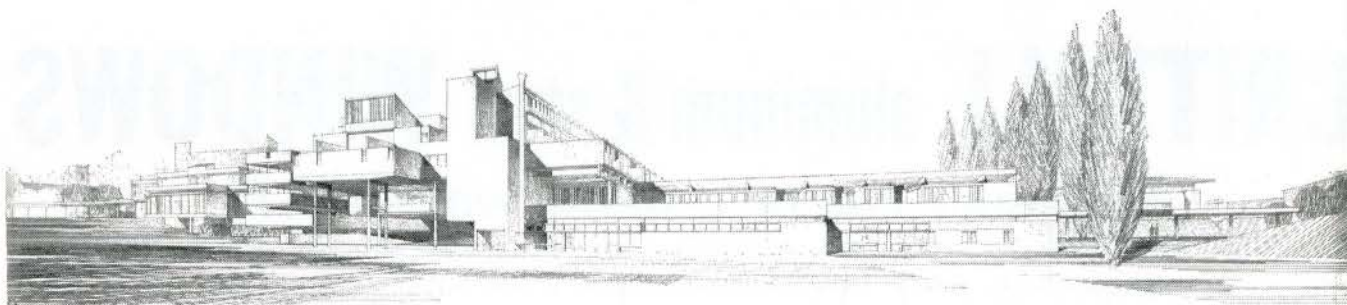
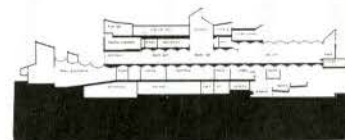
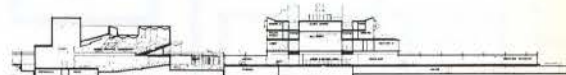
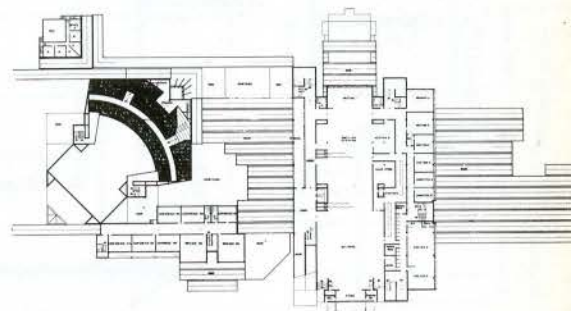
*Entrants*: Registrations totalled 248, of which 70 entered schemes in accordance with the Conditions. One competitor was declared ineligible at the outset, having submitted his drawings with firm name on the package, thus disclosing his identity.

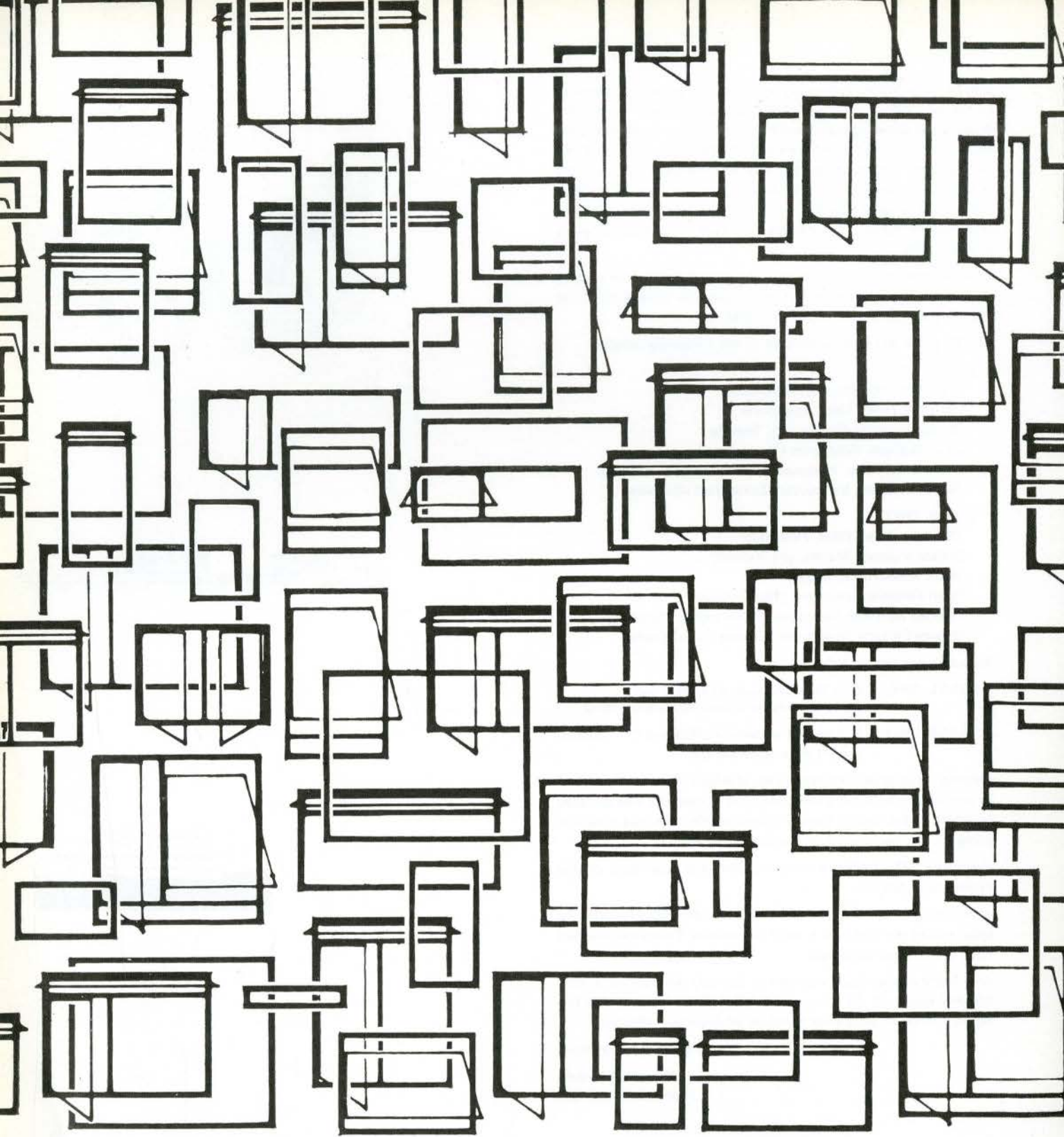
*Questions*: 41 questions were received and answered by the Professional Adviser.

*Publicity*: The results of the competition were widely reported on radio and in the press, as a result of releases. Technical Journals have given good coverage.

*The Royal Architectural Institute of Canada* will receive a confidential report on the Competition as such. It is hoped that this report will be of assistance to future professional advisers.

*Respectfully submitted,*  
*Warnett Kennedy,*  
*Professional Adviser.*





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Department of Public Works  
Design Awards for Architecture

Four architectural firms were honored this year for distinguished accomplishment in federal government buildings in the Department of Public Works' first program of Design Awards for Architecture. Professional Adviser of the RAIC endorsed Awards Program was John Bland (F). The jury consisted of Charles Elliott Trudeau, R. T. Affleck and Victor Prus. Submissions, to be eligible, had to be designed for the federal Department of Public Works and completed between January 1, 1960 and January 1, 1964. They were judged on the basis of the solution of the problem presented to the architect.

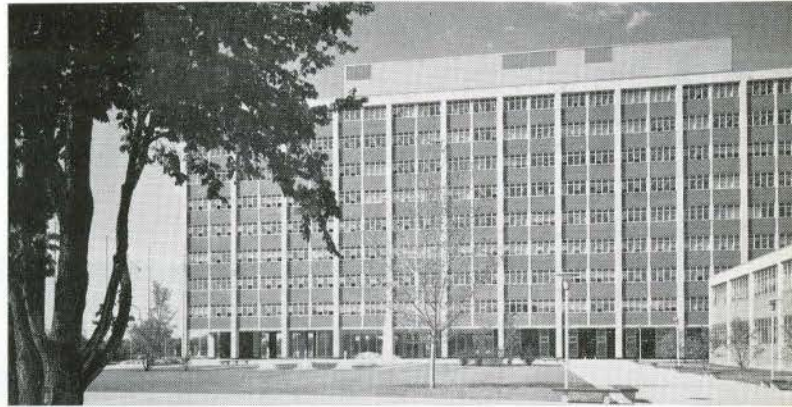
The four projects selected for awards were:

*Sir Alexander Campbell Building Complex, Ottawa*, Shore and Moffat and Partners, Toronto. Part of the Confederation Heights Development, the complex consists of one large building and two smaller ones. The Administration building, the largest of the three, has nine floors, a basement and includes file storage, a museum and philatelic display. The Financial Services building has two floors and a basement. The smaller building, one floor and a basement, houses the printing offices and receiving and storage space. In some locations tunnels provide underground passage between the Administration building and the development cafeteria.

*St Mary's Indian Residential School, Mission City, BC*, Gardiner, Thornton, Gathe, Vancouver. The school, designed to accommodate nearly 250 children, consists of a three-storey dormitory, a single storey school and refectory, a chapel and a gymnasium. The exterior walls are of reinforced concrete. The interior of the school and refectory section are masonry bearing walls with a roof of heavy timber glued laminated beams and planks. The chapel is integrated into the refectory section and extends above the low roofs. The gymnasium is located at the extreme western end.

*Fisheries Research Laboratory Building, UBC, Vancouver*, Thompson, Berwick and Pratt, Vancouver. The larger of the twin block structures houses on two floors the administrative and engineering offices, workshop areas, laboratories. The smaller block contains administrative offices for the International Fisheries Commission, a library and a lounge-lecture room. A glass enclosed bridge connects the two main buildings.

*Agriculture Laboratory Building, UBC, Vancouver*, Thompson, Berwick and Pratt, Vancouver. The building is made up of a three-storey laboratory unit, a two-storey administration wing and a connecting entrance lobby. The frame is of reinforced concrete. Columns, beams and slabs are used continuously throughout. Side faces of the office wing are sheathed in aluminium curtain walls with colored plate glass in spandrel areas.



*Sir Alexander Campbell Building Complex, Ottawa*



*St Mary's Indian Residential School, Mission City, BC*



*Fisheries Research Laboratory Building, UBC, Vancouver*



*Agriculture Laboratory Building, UBC, Vancouver*



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(continued from page 19)



**Peter Dobush, FRAIC, Montreal,** has recently been elected a member of the IUA Housing Commission. Mr Dobush is chairman of the Canadian Council for Urban and Regional Research and headed the 1960 RAIC-CMHC inquiry into the design of the residential environment.

**1965 Graduates in Architecture**

**NOVA SCOTIA TECHNICAL COLLEGE**

*Graduates:* Ernest Aubrey Clarke, Anthony Robert Cook, Peter Bruton MacDougall, Robert John Ojolic, Gino Anthony Pin.

*Scholarships and Prizes:* Ernest Aubrey Clarke, RAIC Gold Medal; Henry Drew Sperry, Weldon Scholarship.

**UNIVERSITE LAVAL**

*Graduates:* Benoit Bernier, Marcel Bilo-deau, Pierre Girardin, André Labbé, Jean-Guy Laroche, Pierre Larochelle, Raymond Levesque, Paul Melanson, Pierre Morisset, Emilien Vachon.

**ECOLE d'ARCHITECTURE, MONTREAL**

*Graduates:* Gilles Aubertin, Gilles Bonnetto, André Brouillet, Camille Chevalier, Claude Cofsky, Michel Durand, Claude Gagnon, David Guenette, Guy LaFleur, Roger Leblanc, Jean Lemieux,

Fernand Magnan, Laurentin Levesque, Emery Marcoux, Cyril Simard.

*Prix et Bourse:* Roger Leblanc, Médaille de l'IRAC; Fernand Magnan, Bourse de la Compagnie Pilkington Brothers Ltd.

**UNIVERSITY OF TORONTO**

*Graduates:* Nancy A. Armstrong, William E. Bennett, Garth L. Bent, A. Campfens, Frank C. Carter, R. Cragg, Joseph Dominik, B. L. Fair, Paul G. Harasti, Erdmann Knaack, B. H. Leonard, Walter J. Luciw, Terence J. McGowan, James McKeller, Peter D. McLaren, Catherine M. Macdonald, Zenon Mazurkiewicz, Nelson K. Pau, Robert J. Posliff, Mary M. Rose, Paul M. Skinner, R. E. Steele, C. Z. Tworowski, John A. Vanstone, Paul E. Vaughan, Donald A. Voisey, John G. Wanzel, H. P. Wakayama, George Fritzier.

*Scholarships and Prizes:* Frank C. Carter, Toronto Architectural Guild Medal (Silver); Catherine M. Macdonald, Anacanda American Brass Limited Scholarship; James McKeller, RAIC Gold Medal, Specification Writers' Association Scholarship in Architecture; V. Damanis, First Prize, Canadian Pittsburgh Industries Scholarship; J. Pacek, Second Prize, Canadian Pittsburgh Industries Scholarship; H. H. Dubbeldam, Central Mortgage and Housing Corporation Travelling Scholarship; P. Tarjan, American-Standard Products (Canada) Ltd. Scholarship.

**MCGILL UNIVERSITY**

*Graduates:* Arthur Beitel, David Bryden, David Caulfield, Christian Feise, Richard Follett, Harry Glassman, Harold Katzin, Nils Larsson, Peter Lui, Jean-Louis Robillard, George Schoenfeld, Douglas Steen, Simon Tang, Pierre Teasdale, Peter Terroux.

*Scholarships and Prizes:* Sixth Year: Arthur Beitel, Lieutenant Governor's Silver Medal, Turnbull Elevator Prize; Harold Katzin, Dunlop Travelling Scholarship; Pierre Teasdale, RAIC Gold Medal; Peter Terroux, Lieutenant Gov-

ernor's Gold Medal, McLennan Travelling Scholarship. Fifth Year: Paul Boudreau, Turnbull Elevator Prize; Richard Rabnett, Canadian Pittsburgh Industries Scholarship; Witold Rybczynski, Central Mortgage and Housing Corporation Travelling Scholarship. Fourth Year: André Clavel, Turnbull Elevator Prize; Ross Winter, Anglin Norcross Corporation Limited Prize.

**UNIVERSITY OF MANITOBA**

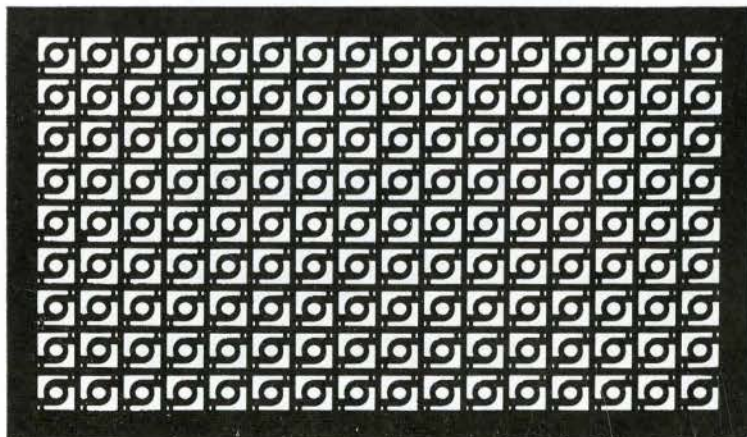
*Graduates:* Clarence Aasen, Stephen Chang, Cory Cunningham, Robert Frew, Rudy Friesen, Colin Gorrie, Gilbert Gregory, Robert Grossmann, Thomas Gunn, Joseph Hruda, Joseph Jarema, William Johnston, Donald Kerr, Larry Loh, Leslie Nemeth, Richard Purdy, Seiji Sakumoto, Lloyd Secter, Joseph Vaitkunas, Brian Woods, Walter Wright, Wayne Wright.

*Scholarships and Prizes:* David Hamilton, Manitoba Architects' Wives' Association Scholarship; Joseph Hruda, The University Gold Medal in Architecture; William D. Hurst, Central Mortgage and Housing Corporation Travelling Scholarship; Ihor Kotowycz, Saskatchewan Association of Architects' Scholarship; David Mesbur, Manitoba Association of Architects' Scholarship; Wallace Wight, Manitoba Association of Architects' Scholarship; Brian Woods, RAIC Gold Medal.

**UNIVERSITY OF BRITISH COLUMBIA**

*Graduates:* R. A. L. Balbi, H. C. Chalker, C. W. Craig, R. K. Everett, R. J. Fassler, F. B. Griblin, L. C. Haave, P. W. Harrison, Elizabeth E. Hys, D. G. Lane, C. R. Maconachie, M. C. Miller, A. D. Milne, D. Rapanos, K. M. Takeuchi, T. B. Green.

*Scholarships and Prizes:* C. J. Bowman, The Architectural Institute of British Columbia Book Prize; R. J. Fassler, RAIC Gold Medal; B. W. Thom, The Central Mortgage and Housing Corporation Travelling Scholarship; A. J. Watty, The McCarter, Nairne & Partners Scholarship.



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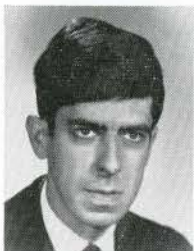
Gold medals were presented by the RAIC this year to leading students who graduated in 1965 from Canadian schools of architecture. The six medallists are:



*E. A. Clarke*

**Ernest Aubrey Clarke,**

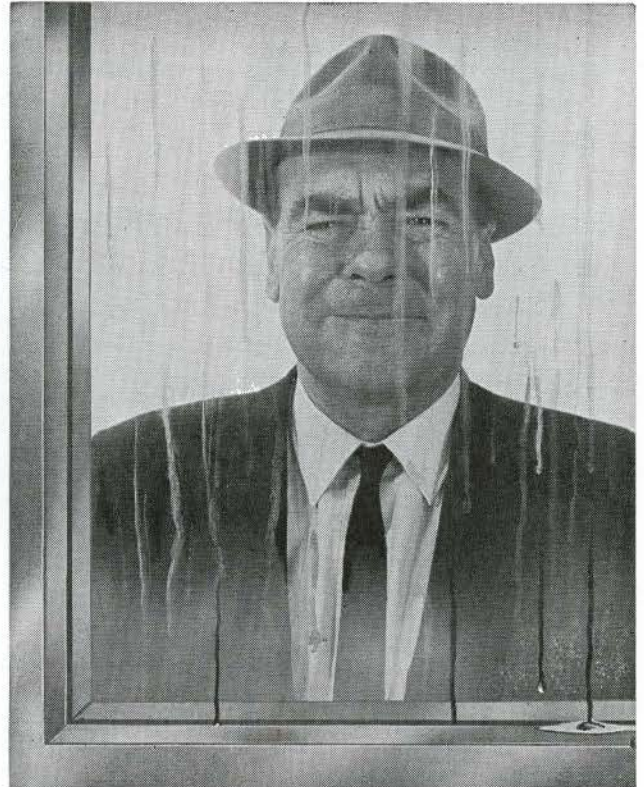
a member of the first graduating class of the School of Architecture, Nova Scotia Technical College, won prior to the RAIC award the 1963 Weldon Scholarship to attend the International Summer School in Oslo, Norway. Born in Centreville, N.B., Mr Clarke attended the University of New Brunswick for two years then transferred to the Nova Scotia Technical College for the final four years of the degree course in architecture.



*P. L. Teasdale*

**Pierre Lorrain Teasdale,**

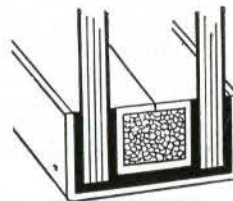
McGill University, graduated standing second in his class. Before entering his final year he was awarded the Garners Travelling Scholarship offered annually by the Central Mortgage and Housing Corporation. Born in St. Jérôme, P.Q., Mr Teasdale obtained his Bachelor of Arts from Collège Jean-de-Brébeuf, Montreal.



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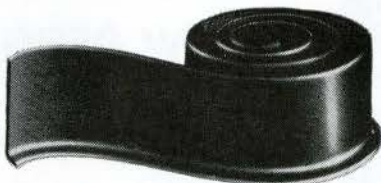


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R. Leblanc

**Roger Leblanc**

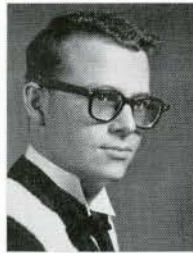
of Montreal, 1965 RAIC medallist from l'Ecole d'Architecture de l'Université de Montréal, in 1964 won the American Standard European Travelling Scholarship. Mr Leblanc received his Bachelor of Arts at the Externat Classique de Longueuil in 1960. He has made two trips to Europe, in 1962 and 1964.



J. McKellar

**James McKellar**

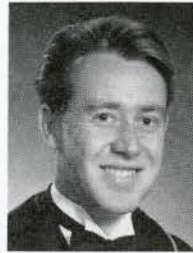
of Downsview, Ontario, of the University of Toronto, obtained honors standing in second to fifth years of architecture. Mr McKellar has won a number of awards in his undergraduate years, including the American Standard Scholarship, the OAA Exhibitors Prize and the Canadian Pittsburg Industries Scholarship (2nd) in his fourth year. This fall he will attend the University of Pennsylvania for graduate-studies in Urban Design.



B. E. Woods

**Brian E. Woods,**

University of Manitoba, has won various MAA prizes, a CPI Scholarship in design and CMHC Travelling Scholarship in 1964. Mr Woods obtained his primary education in Toronto and Islington, his secondary education in Vancouver. This fall he will begin graduate studies in Architecture at Princeton.



R. J. Fassler

**Rainer Just Fassler,**

born in Munich and presently residing in North Vancouver, is the 1965 Gold Medal winner from the University of British Columbia. He entered the Faculty of Architecture after three years in Arts and Science at UBC. During his undergraduate years he won the CMHC Travelling Scholarship (1964), the BA Paint Company Scholarship (1964) and the BC Lumber Manufacturers Association Prize (1963).

## Letters

*Allied Arts Editor,  
Journal RAIC/L'IRAC*

The desirability of a list of contemporary artists and their work such as you suggested in your recent article in the May *Journal* would have great value to this department and particularly to me in so much as it might relate to the utilization of the recent one per cent art content for federal government buildings. The availability of lists and the accuracy of them appears to be biased, depending on where the list is produced. If the *Journal's* record of contemporary work could avoid overtones of commercialization, which it should, I for one would be most gratified.

While I am in the process of writing, I should indicate a great deal of pleasure in your addition to the *Journal*, and would like to voice my encouragement in the work you are attempting to do.

*J. A. Langford, Chief Architect,  
Federal Department of Public Works,  
Ottawa.*

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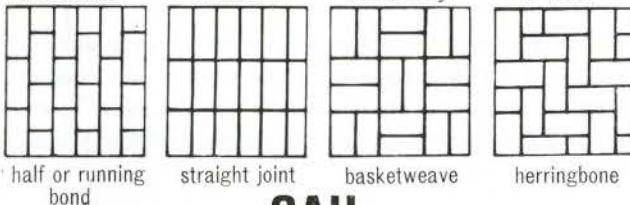
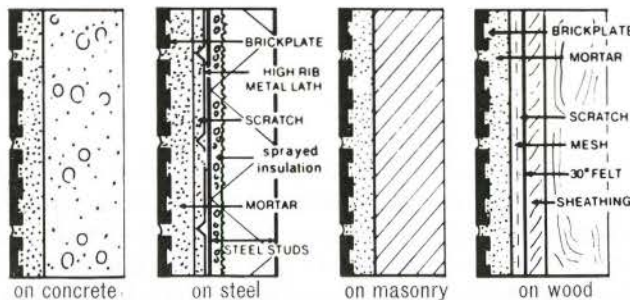
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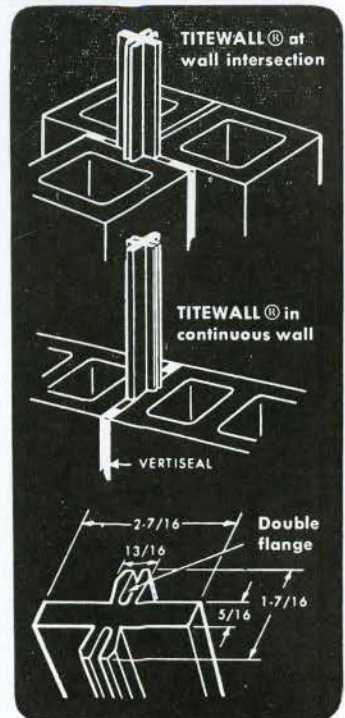
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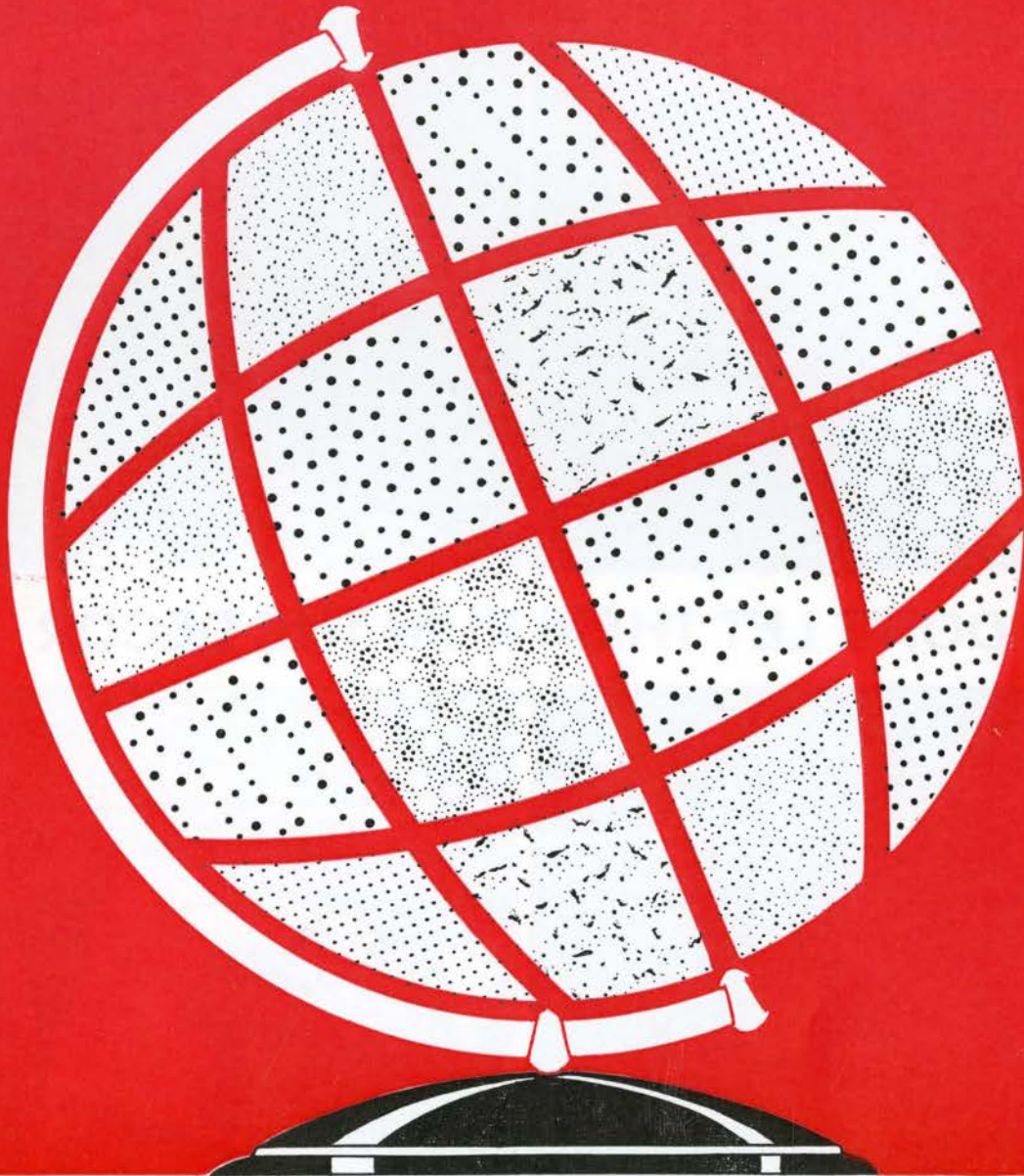
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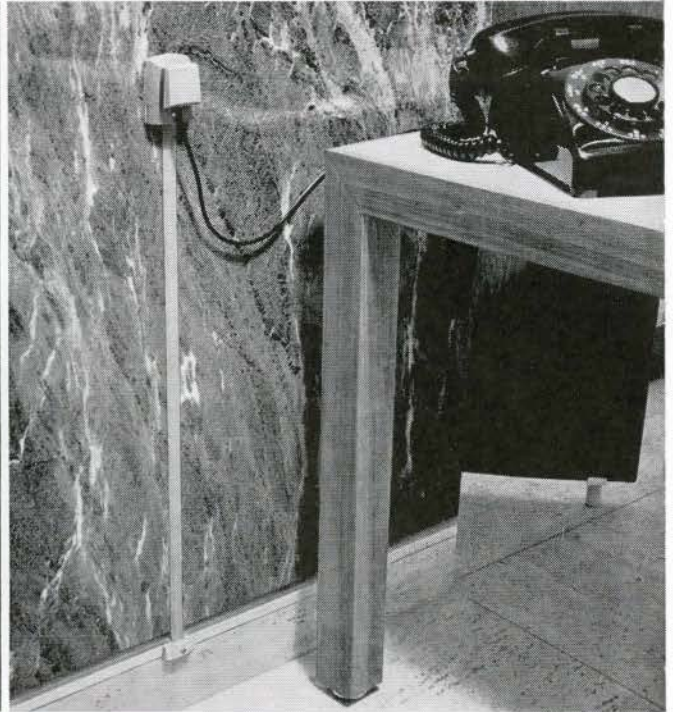
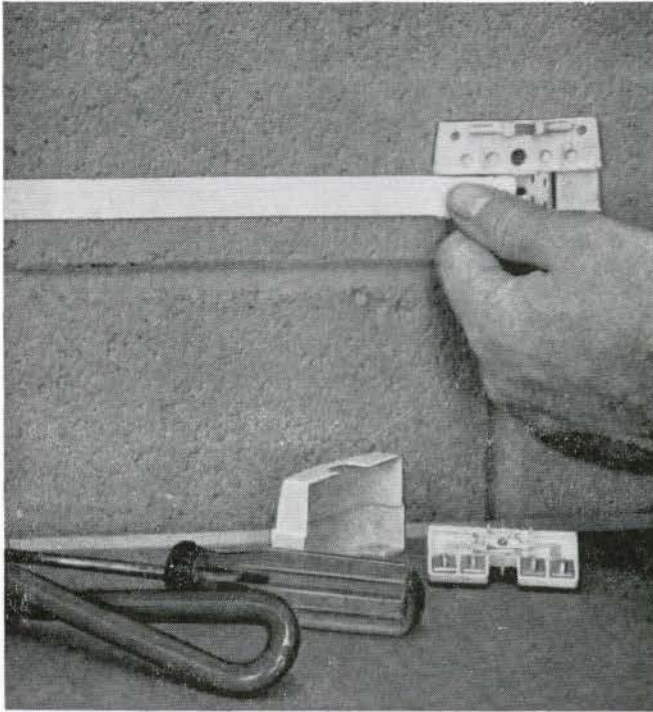
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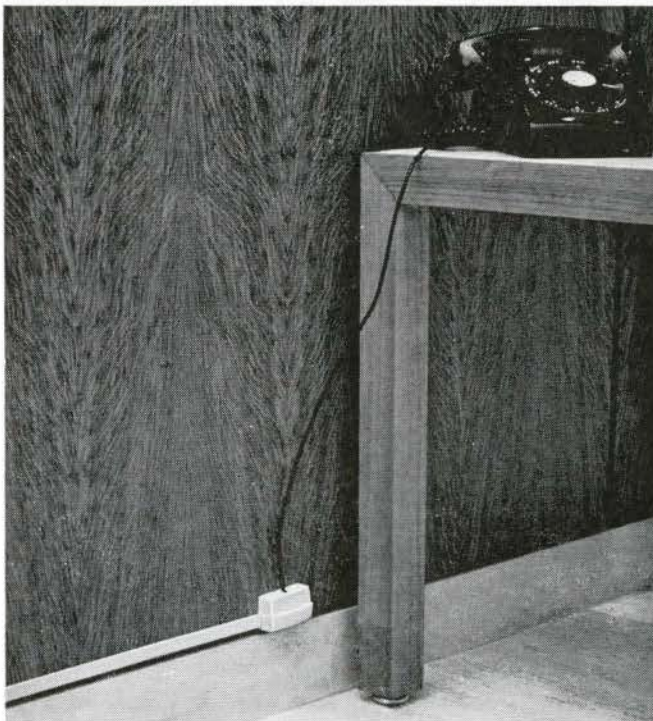
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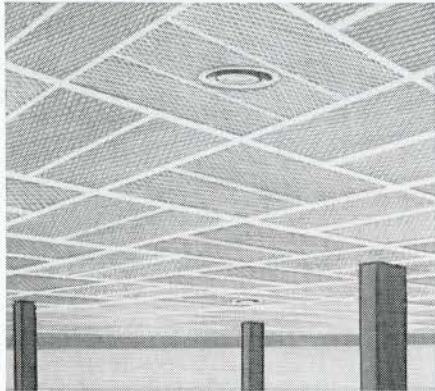
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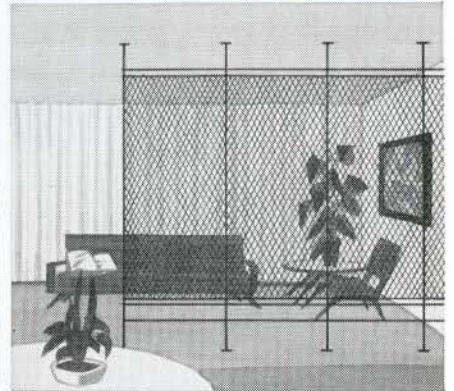
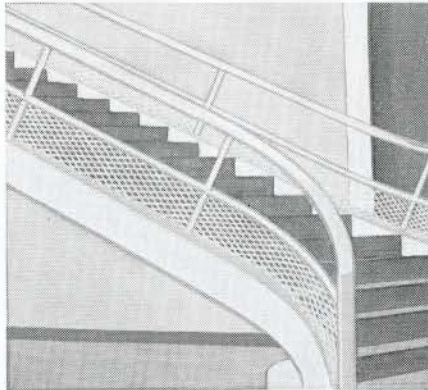
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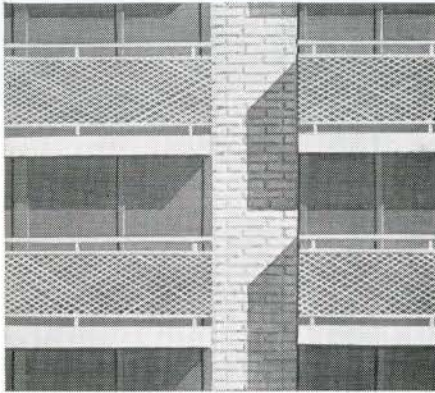
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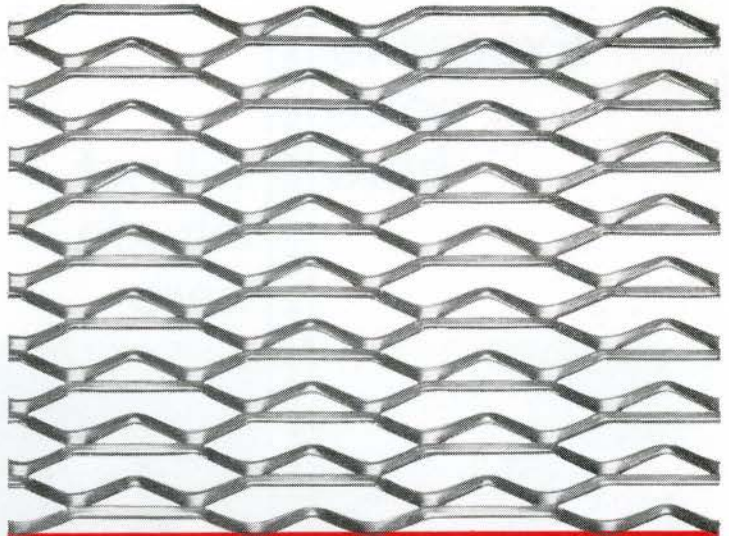
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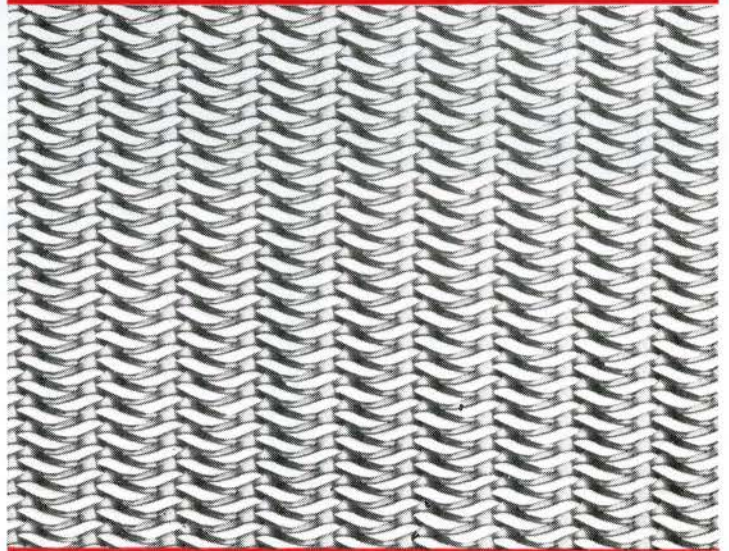


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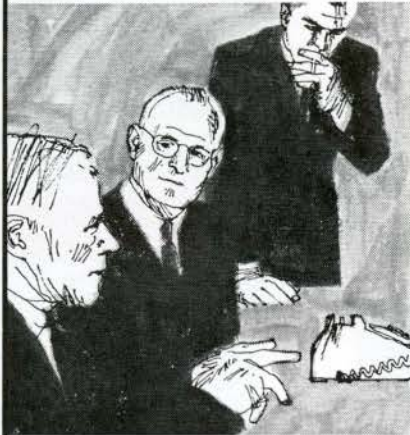
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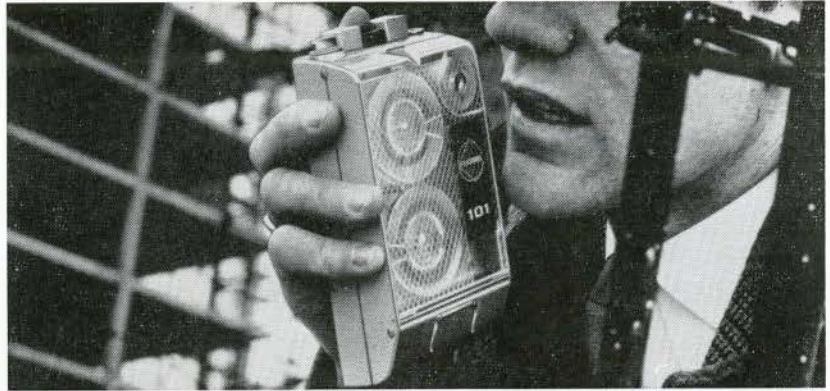


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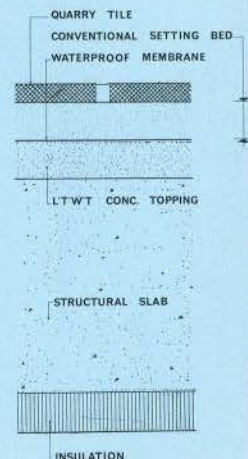
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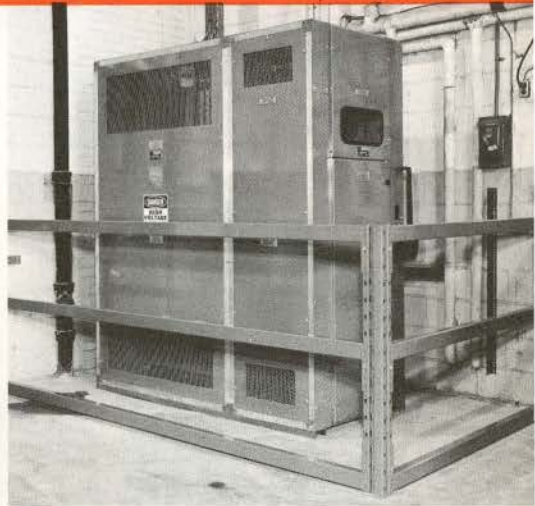
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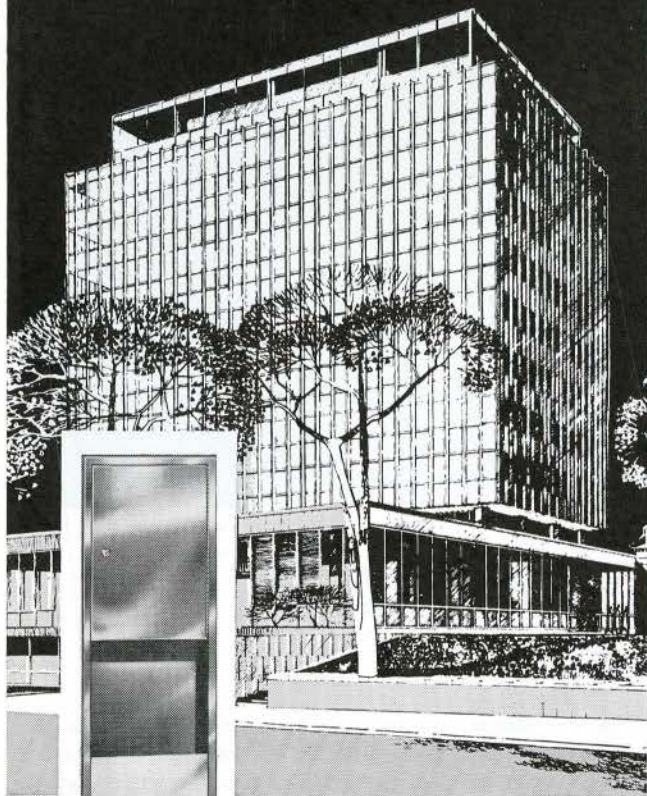
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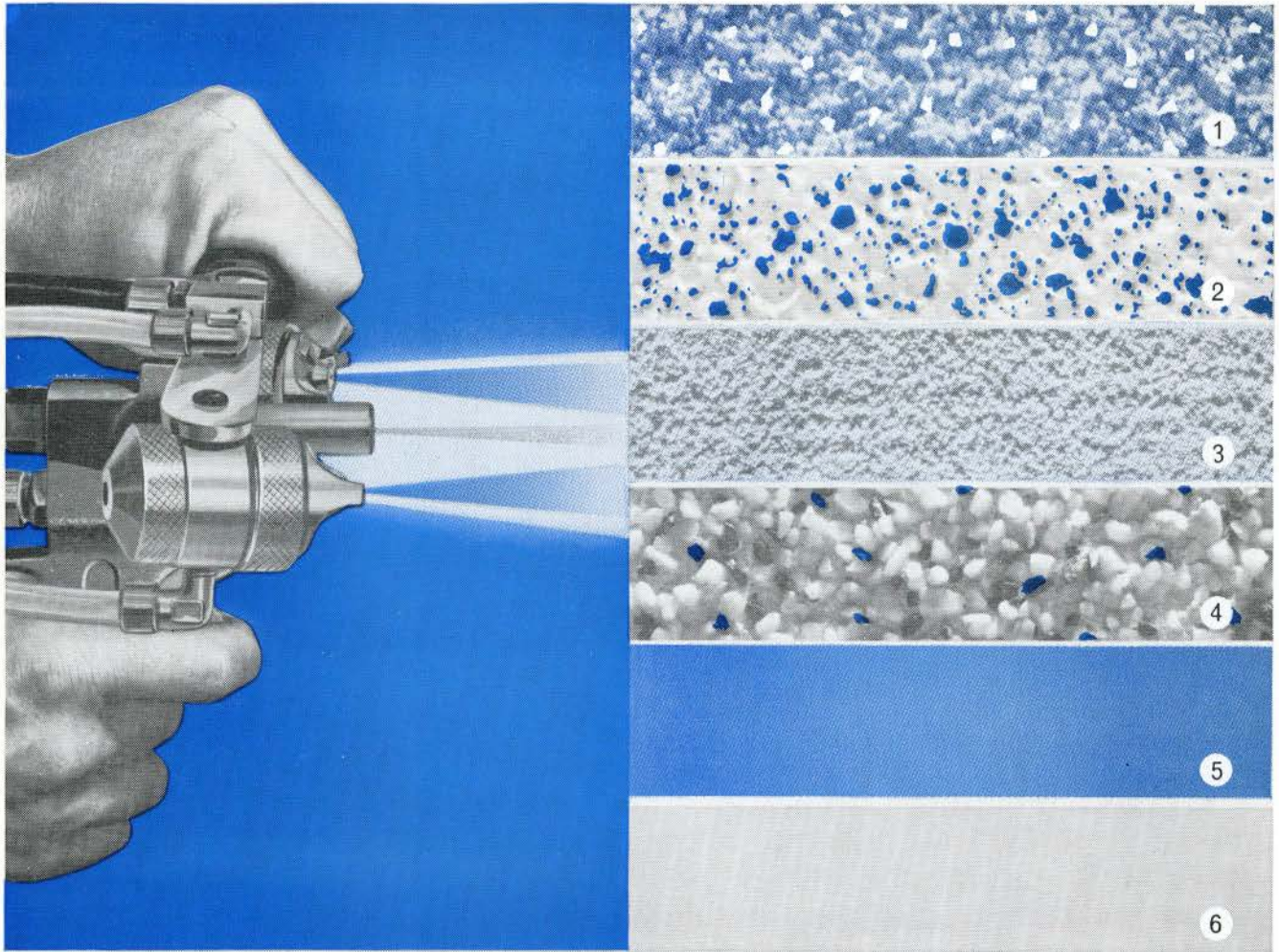
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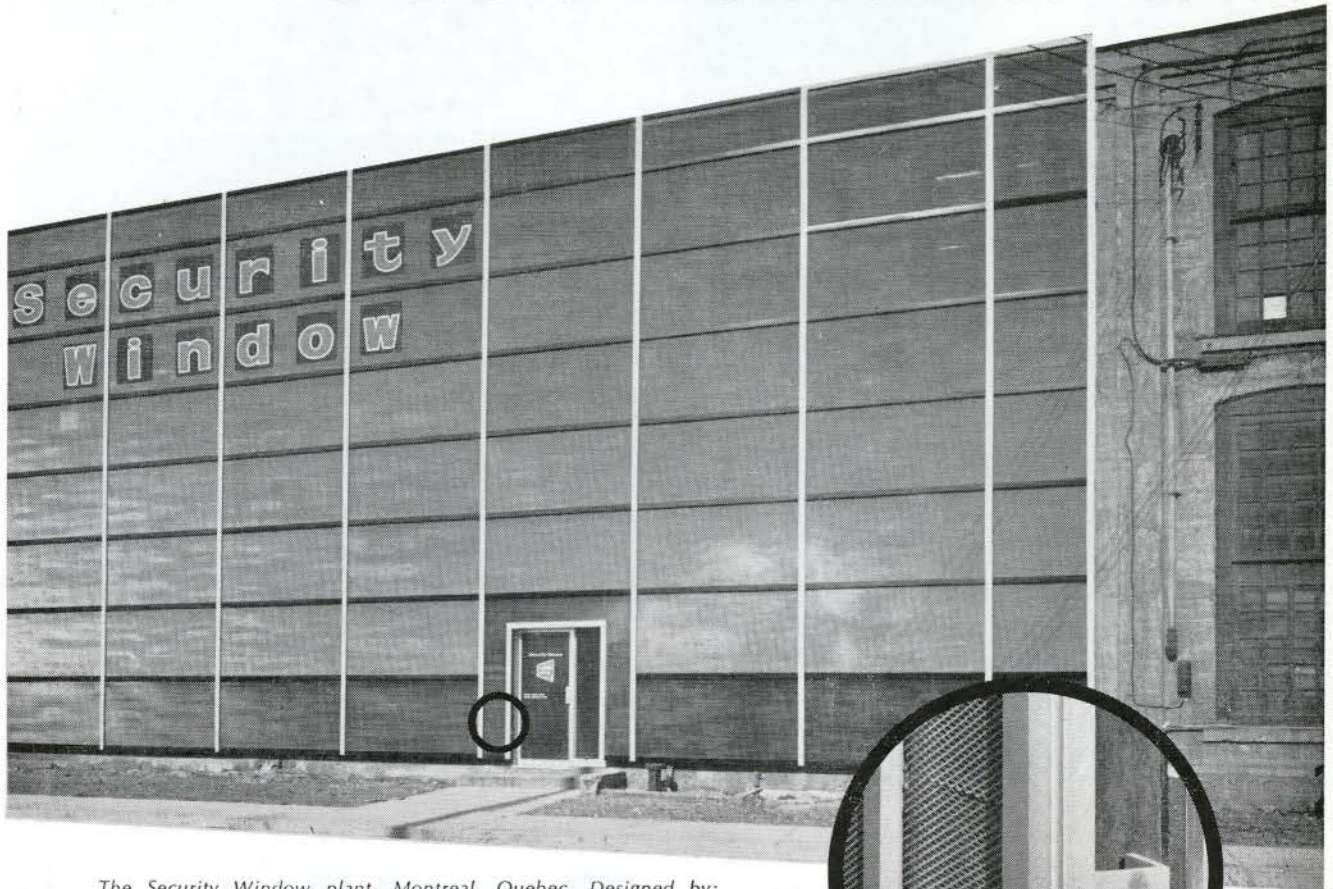
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## INDEX TO ADVERTISERS

<i>Page</i>	
12	Alku Plastic Limited (B1)
75	Anaconda American Brass (B2)
59	Anglin-Norcross Ont. Ltd (B3)
91	BB Chemical (B4)
93	BB Chemical (B5)
IFC-3	Beer Precast Limited (B6)
76	Blok-Lok Limited (B7)
29	Canada Cement Co. Ltd (B8)
18	Canada Metal Company Limited (B9)
77	Canadian Celotex Cweco Industries Ltd (B10)
68	Canadian Crittall Metal Window Ltd (B11)
79	Canadian General Electric Co. Ltd (B12)
92	Canadian International Paper Co. (B13)
34	Canadian Rogers Eastern Ltd (B14)
27	Canadian Westinghouse Co. Ltd (B15)
10	Cape, E.G.M. & Co. Ltd (B16)
11	Centennial Commission (B17)
OBC	Les Fenêtres Clerk Ltd (B18)
84	Consolidated Mining & Smelting Co. of Canada (B19)
28	Construction Specialties Ltd (B20)
71	W. E. Dillon Company Limited (B21)
28	Dominion Sound Equipments Ltd (B22)
89	Domtar Construction Material Ltd (B23)
32	Dow Chemical of Canada Ltd (B24)
92	EBCO Manufacturing Company (B25)
74	A. Faustin Company Limited (B26)
84	Ficord (B27)
76	Gail International Canada (B28)
83	Gemlite Limited (B29)
22	Hydro Electric Power (Ontario) (B30)
33	International Hardware Co. of Canada (B31)
14	International Hardware Co. of Canada (B32)

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See index at left for key numbers

B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15 B16 B17  
 B18 B19 B20 B21 B22 B23 B24 B25 B26 B27 B28 B29 B30 B31 B32  
 B33 B34 B35 B36 B37 B38 B39 B40 B41 B42 B43 B44 B45 B46 B47  
 B48 B49 B50 B51 B52 B53 B54 B55 B56 B57 B58 B59 B60 B61 B62  
 B63 B64 B65 B66 B67 B68 B69 B70 B71 B72 B73 B74 B75 B76 B77

### Product information

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22  
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 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

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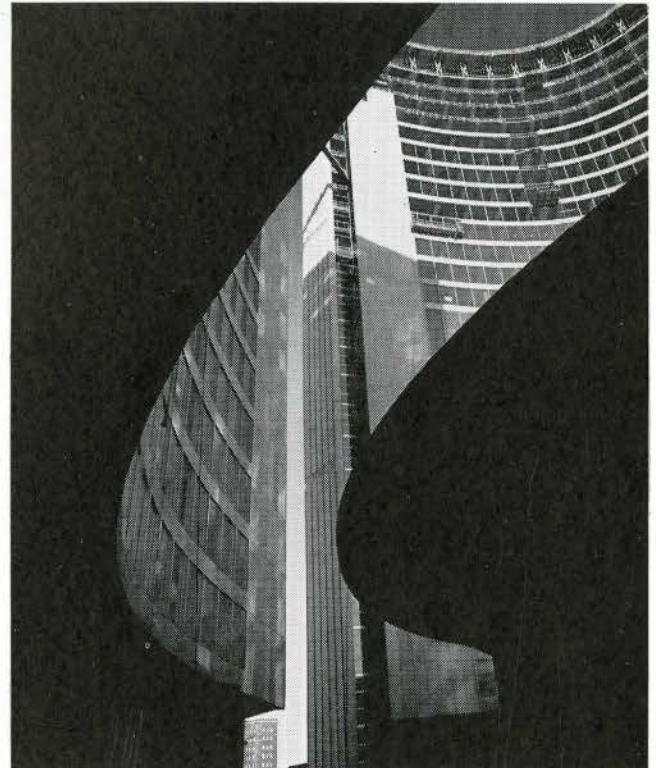
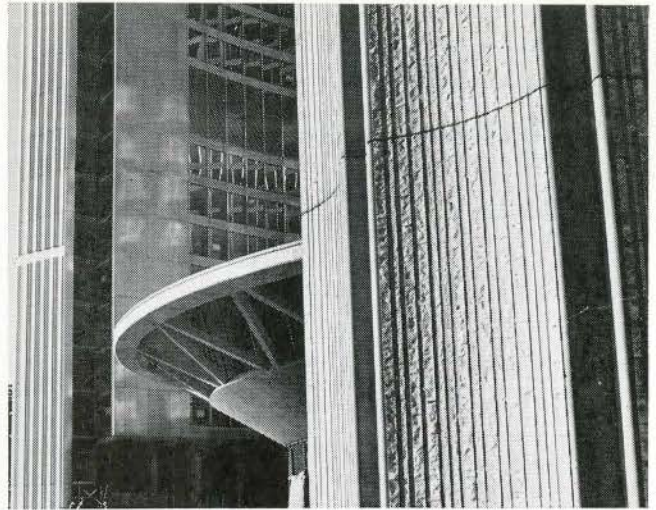
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- 29 International Steel Company (B33)
- 23 Kalwall (Canada) Ltd (B34)
- 35 Knoll International Canada Ltd (B35)
- 92 R. Laidlaw Lumber Co. Ltd (B36)
- 16 Lord Simcoe Hotel (B37)
- IBC The Master Builders Company Ltd (B38)
- 72 H. J. Miller Enterprises Limited (B39)
- 78 Minnesota Mining & Mfg Co. of Canada Ltd (B40)
- 85 Minnesota Mining & Mfg Co. of Canada Ltd (B41)
- 4 Natco Clay Products Limited (B42)
- 73 Otis Elevator Co. Ltd (B43)
- 80-81 Pedlar People Limited (B44)
- 8 Pilkington Glass Ltd (B45)
- 70 Plywood Manufacturers Association of B C (B46)
- 87-88 Redirack Industries Ltd (B47)
- 94 Reynolds Extrusion Co. Ltd (B48)
- 25-26 The Rolscreen Company (B49)
- 72 Sealite Glass Limited (B50)
- 84 Sheridan Nurseries Limited (B51)
- 20-21 The Steel Co. of Canada Ltd (B52)
- 86 Sweets Catalogue Services (B53)
- 7 Terrazzo Tile & Marble Association (B54)
- 90 Tone Craft Paint & Varnish Co. Ltd (B55)
- 31 The Tremco Manufacturing Co. (B56)
- 13 Universal Sections & Mouldings (B57)
- 17 Wallaceburg Brass Limited (B58)
- 84 Windsor Hotel (B59)
- 24 Yale & Towne Inc. (B60)
- 19 Zero Weather Stripping Co. (B61)

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