LIVABLE WINTER CITY ASSOCIATION
ASSOCIATION POUR L'ANIMATION DES VILLES EN HIVER

Livable Winter NEWSLETTER

VOL 4 NO 1 FEBRUARY 1986

GRANDE PRAIRIE TO BE "DEMONSTRATION CITY" AT WINTER CITIES FORUM 86

To Livable Winter Newsletter:

"As a Regional Planning Commission based in the largest Canadian city north of the 55th parallel, we are always looking for information and perspectives on northern living. Unlike single resource towns, Grande Prairie (pop. 25,000) is unique in that it is not only the largest community in the Peace River region of Alberta, but it also serves a dispersed agricultural hinterland of an additional 50,000 persons.

"We would be very interested in developing a dialogue with similarly based communities around the world, particularly with regard to the following:

a) Future development and economic prospects;
b) Effect of fluctuating world economy on community;
c) Small scale attempts in the built form to make northern living more hospitable;
d) Promotion of social interaction in winter months."

David Bartley,
Director,
South Peace Regional Planning Commission,
200 Windsor Court,
9835-101 Ave.,
Grande Prairie, Alta., T8V 5V4

A "Small City Central Business District Workshop" to be part of Winter Cities forum 86 Feb. 15 to 19 in Edmonton Convention Centre will feature downtown redevelopment plans of Grande Prairie. This will be one of the sessions from 10 a.m. to noon Wednesday Feb. 19. The northern city received a special grant of $10,000 from Alberta Municipal Affairs dept., to make possible and provide the groundwork for this highlight session.

In early December a team including Ernest Balmer, president of Hallmark Hotels Ltd., Lawrence Alexander, Editor of "The Downtown Idea Exchange," New York, and Arni Fullerton, President of Winter Cities Conference Corporation visited Grande Prairie and interviewed some 100 persons including members of city council and of the civic administration, officers of the Downtown Businessmen's Association the Chamber of Commerce, also officers of various cultural associations, realtors, developers and others. They also participated in a lengthy open line show with the aim of trying to determine public attitude towards the downtown area and what types of improvements would be preferred by the citizens.

In January the team met in Toronto to prepare a series of recommendations for submission at the demonstration session and workshop to be included in the Forum. They also developed a plan for involving the workshop participants in dialogue with the officials of Grande Prairie as to plans for downtown redevelopment that could or should be pursued. The presiding panel will include the three "visiting experts" and Denis Poms, City Manager. In the audience will be at least ten representatives of Grande Prairie, including the mayor, councillors, planners and representatives of business organizations.

Grande Prairie is the hub of the lower Peace River region serving an area that includes eight towns, six villages, one county, two municipal districts and four improvement districts. ■

Finnish and Swedish Forum speakers at Toronto Chapter Post Conference Workshop

Six speakers visiting Canada in order to take part in Edmonton's Winter Cities Forum '86 will stop over for two days en route home to take part in a post conference workshop of Toronto chapter. The six are; Karl Rauhala of the Technical Research Centre, Helsinki; Jorma Manty of University of Tampere and Marikka Rimaaja of Helsinki City Planning and from Sweden, noted architects Peter Broberg and Boris Culjat and Ann Thulin, Broberg's assistant.

Jorma Manta will address a session Friday evening in the School of Architecture lecture hall at University of Toronto. Workshops will be held Saturday morning and evening, also at the U. of T. School of Architecture when the Scandinavian speakers will be joined by Canadian and U.S. speakers. These will include Michael Hough, author, lecturer and consultant; Charles Simon, architect and planner; Patrick Chen, Ottawa City Planner; Karl Knipfel and Dr. Michael Persinger, biometeorologist.

Fees will be $15 for members $20 for non-members to cover all sessions, as well as Saturday lunch. For information contact LWCA Office,
Suite 301,
250 The Esplanade,
Toronto Ontario
M5A 1J2.
Telephone:
416-863-1896

INNER FORUM
Your Handy Guide to Forum Highlights
Pages 5 - 17

Zepic and Pressman to Tour Norway

National President Xenia Zepic and Past President Prof. Norman Pressman have been invited by Norway's architects to give a series of lectures on the "Livable Winter City" theme in that country beginning Feb. 26. They will speak to students and faculty members at University of Trondheim and to architectural groups in Boda, Tromsoe, Hammerfest and Oslo.

Research and Resource Committee

As part of its initiative for 1986 LWCA national executive has created a new Committee, Research and new Committee, the Research and Resource Committee, which will be chaired by Grace Strachan who is currently employed by the Ontario Ministry of Municipal Affairs.

This committee has several long-term objectives the first of which is to establish a recognised resource centre containing information on all aspects of the livable winter city concept. This would include books, reports, periodicals, slides, videotapes and films which could be made available to researchers in the field. To achieve this objective we need, first of all, the resources and would like to ask Newsletter readers to help us by sending any of the above items that they may have available so that we can begin our collection. If you have slides or tapes which must be returned we have facilities for copying and a limited budget for purchasing printed material; however, we hope that readers will be generous and donate reports or research papers. We have at the moment, several slide presentations and arrangements can be made for copying these if anyone is interested in using them.

In addition to the resource material we will also need a permanent location and would appreciate any suggestions concerning a suitable home where space might be donated and some kind of supervision be made available.

Our second objective is to establish an on-going, cross-Canada network for those people interested in the various aspects of the livable winter city concept. The questionnaire, which is included in this issue of the newsletter, will form the nucleus of a clearing house for those people with similar interests. After the data has been analysed we will be publishing a membership directory which will include information on the background and areas of interest of our readers. Please be sure to fill in the questionnaire and return it to us as soon as possible.

Finally we hope to begin to make contacts at the international level in order to exchange information with other northern region countries as well as within Canada. This process is already well underway as you can see from the contents of the Newsletter.

If any readers have suggestions concerning the committee and its objectives or would be interested in working towards them by becoming a member, please contact Grace Strachan at 585-6247 (office), or 622-8098 (home) or care of the Livable Winter City Association. ■

Staying Warm in the Winter

Ottawa-Hull and Area LWCA chapter heard all about dressing properly and comfortably for winter at a panel and discussion Jan. 15 in a meeting room of Ottawa City Hall. Sheila Pepper, chapter chairman, presided.

Peter Ernerk of the Inuit Non-profit Housing Association described and demonstrated "Inuit Winter Clothing Ideas for Adaptation in Southern Canada;" Michael Harrison, Science Consultant, spoke of recommended types of clothing that could be used by "Children at School and Play in the City"; John Burke dealt with new ideas in clothing for sports and outdoor activities and John Harkness, engineer of the City of Kanata, described his experiences in "Travelling and Working Outside in the Coldest Winters."

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DIRECTOR OF HOKKAIDO'S "NORTHERN REGIONS CENTRE" URGES THE NEED FOR MORE EXCHANGES

By Sumio Hasabe, Managing Director
Northern Regions Center, Sapporo

Because of its severe climate, so different from other parts of Japan such as Honshu, it has been only 100 years since the development of the northern prefecture of Hokkaido has begun under government policies. Hokkaido, having been nearly untouched until then, quickly became developed by the people who moved from other parts of Japan. Presently Hokkaido has 5.7 million population. However, Hokkaido was left behind by the rest of Japan during the period of rapid economical growth and industrialization which started in the 1960's.

The Hokkaido government, in 1971, announced a long term comprehensive developmental plan and the "Northern Regions Exchange Plan" was included in it. This plan aims to free Hokkaido from being the underdeveloped and isolated area in Japan and to open the way for its unique development by promoting economic and cultural exchanges with countries or regions that have similar climatic conditions.

In response to this plan, a private-sector organization was created that had the aim of promoting international exchanges, also research studies and the setting up of an information center. In 1978, this body was reorganized as the Northern regions Center.

N.R.C. has become one of Japan's most active organizations in promoting international exchanges. It has 4,300 members including corporations and individuals. A principal objective is to "establish a more pleasant and affluent community by learning from each other, and cooperating among the Northern Regions and finally to improve the life and environment in Hokkaido as well as in other countries and regions that share severe climatic conditions."

The Northern Regions, in our interpretation, are not defined in specific geographical terms, but apply to those areas in the northern hemisphere with a cold climate and heavy snow fall. Areas with which Hokkaido has arranged exchanges so far include northern U.S. states, including Alaska, all Canadian provinces, Northern Europe, Siberia, Middle Eastern countries, the North Eastern provinces of China and others.

The concept of the Northern Regions Exchanges has covered such areas as peoples' day-to-day life, culture, sports, industry and the economy. Now, the idea of learning through international exchanges is well accepted by many Hokkaidans in various fields. Local communities are taking up the idea of seeking to learn from other northerners by participating in exchanges whenever possible. The total number of participants is very large.

Why has this idea become so popular? We believe it is because it has been demonstrated to have immediate and beneficial impact on day-to-day living and culture. International exchanges, as arranged at every possible opportunity, generate international friendships and understanding, and cooperation between northern regions and countries. All this in addition to solving problems related to severe climate and uncovering new and unsuspected opportunities. However, these benefits have still not been widely enough recognized to motivate the general public to understand and to join freely and eagerly into the activities.

I would like to outline some N.R.C. programs: Three major areas have been emphasized: 1) gathering and providing information about the Northern Regions of the world; 2) research into matters related to north living; 3) promotion of exchanges with other northern countries, states, provinces, cities and regions. Our "Centre" has organized international conferences, facilitated missions to and from overseas, arranged social gatherings and parties to encourage friendship at international events, arranged exhibitions and displays related to north living and presented numerous lectures, seminars and other events.

N.R.C. publishes a magazine, an English language newsletter, and various books and reports arising from our research activities. It has an extensive northern library and has a special department that gives language courses that are available to the public.

To assist our work, a Northern Regions Exchange Foundation was established with the task of providing a sound financial base for N.R.C. activities.

A Message to LWCA

As is understood from the foregoing, the concept of N.R.C. is almost the same as that of the Livable Winter City Association. It is therefore a great pleasure for me to contribute this article to LIVABLE WINTER NEWSLETTER. In concluding my article, I would like to say the following to readers of LIVABLE WINTER NEWSLETTER, and sincerely hope that some activity to make winter cities more livable will also be initiated in the regions where the readers live.

Houses, clothing, food and the environment, which are the living conditions directly related to the lives of people, are always challenged by nature. That is to say, they are always tested for improvement. I believe all northern countries and regions are continually striving to improve these conditions and to meet the challenges of nature. This of course, is especially true in the northern hemisphere with its strong leadership in scientific technology and industry.

The scientific and technological approach may be one of the solutions to the problem of improving our lives in northern regions. However, it is evident that the culture which the nations and the regions have fostered over the years can provide us with a more effective solution.

The best way to improve living conditions in the northern regions may be through international exchange which brings about mutual cultural stimulations in northern communities. It is not unrealistic to think that someday many organizations, groups and individuals will take the initiative in exchange activities in both private and government levels.

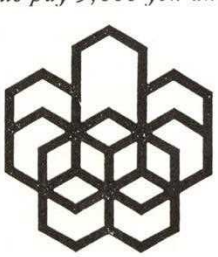
There may well be times when free exchange is hampered by friction or rivalry between northern states and countries. However, I believe, we shall have an easier time to break

down barriers that may arise once we have established a bond of friendship through exchanges. I suggest that universities and research institutions, as well as private research organizations, find their international partners and promote free exchange of information, material and researchers.

I would like to see and would urge a continuous effort to expand the circle of exchanges in the Northern Regions.

(Editors Note: The wide range of N.R.C.'s exchange activities is indicated in outstanding quality booklets and other literature we have recently received. To list a few of the international meetings it has sponsored: "Hokkaido-Swedish Industrial and Cultural Co-operation Conference" (1979); "Northern Regions Women's Interchange Conference" (1980); Northern Regions Marine Accident Prevention Conference" (1981); "International Conference on Interchanges in Northern Regions," and "International Symposium on Scandinavian Interiors" (1982); Symposium on the Northern Regions Economic Exchange," and "International Symposium — Hokkaido Foreigners' View" in 1983.

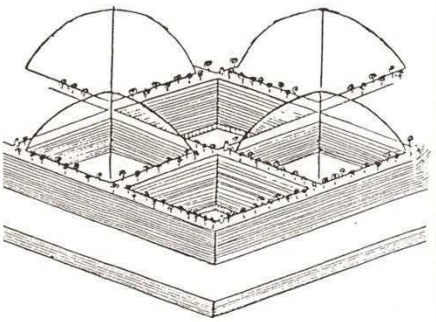
Financial support for N.R.C. is widespread Mr. Hasabe told a UNESCO-MAB Northern Science Network Conference in Alaska: "We are supported by membership fees of 1,800 corporation members and 2,400 individual members which accounts for 40 percent of our annual budget of 160,000,000 yen (approx. $1,100,000 C.) Fifteen percent is a subsidy from the government of Hokkaido; 45 percent comes from revenues produced by N.R.C. projects." Total funds invested by the Northern Regions Exchange Foundation now exceed 500,000,000 yen. Through its English language NEWSLETTER, N.R.C. solicits memberships from around the world. Institutions or corporations pay 10,000 yen annually (about $70 Canadian); individuals pay 5,000 yen annually.)



Symbol of Northern Regions Centre

BUILDING A SHELTERED CITY

Prof. Anatole Beck, of Mathematics dept., University of Wisconsin-Madison, has forwarded to Livable Winter City Association his concepts of an integrated structured city he proposes could be built in "The Upper Midwest, America's equivalent for Siberia." The specific location he proposes is at the point on the Red River where Fargo, N.D., stands opposit Moorhead, Minn.



Detached buildings, he points out offer a very high ratio of surface to volume and "the winds act efficiently to cool them when outdoor temperatures are low." He notes that "the privacy ostensibly obtained by this arrangement is illusory . . . a foot or two of sound-absorbing material creates more privacy than even twenty feet of grass and driveways." Large buildings lose heat less easily in winter and gain it more slowly in summer than small ones. "Integration of functions magnifies the size of the buildings which we can comfortably occupy."

Beck proposes a checkerboard arrangement with glass dome piazzas alternating with areas open to the sky. "A glass dome to cover a square of about 350' on one side is well within the reach of current technology." Separating the open spaces, whether glass-covered or open to the sky, would be residential or commercial buildings shaped as walls. Schools natural areas and transportation would be integrated in each nucleus consisting of a number of squares which would be planned for a population of about 3,500. Larger buildings would serve as "downtowns" in the nuclei.

Beck has thought through his plan in considerable detail. One feature sees the city expand in a predetermined manner as population increases. As for covering the cost, "Experimental farms are run by states and the Department of Agriculture . . . similarly we could have urban experiments. If it turned out that people are unwilling to adopt this mode of life, even at the cost of spending ever greater proportions of their incomes for fuel, or even abandoning the upper midwest, then that is worth knowing."

For more information write to Prof. Anatole Beck, Mathematics Dept., Van Vleek Hall, 480 Lincoln Dr., Madison, Wis., U.S.A. 53706.

FIRST INTERNATIONAL CONFERENCE ON LIGHTWEIGHT STRUCTURES

The first International Conference on Lightweight Structures will be held August 24 to 28, 1986 in a major hotel-conference centre in Sydney, Australia. The conference follows on a research program sponsored by the German Research Council and conducted at University of Stuttgart under the direction of Frei Otto a world-known engineer and leader in the technology of lightweight structures.

The prospectus mentions Canada's "work on large climate envelopes, utilising membrane structures ('meta structures') for townships in harsh climates." Arni Fullerton, president of Winter Cities Conference Corporation, Edmonton has been asked to give a paper based on his work designing membrane domed structures. Other Canadian liaison persons are Prof. Cedric Marsh, Montreal and Vera Straka, Toronto.

The prospectus also cites Australian examples of lightweight structures: "Yulara Tourist Resort, a large new tourist resort and village in Central Australia where membrane structures are used for climate control, and Expo '88, Brisbane, where approximately 30,000 m² of shaderoofing are being built." The Conference is sponsored by Lightweight Structures Research Unit, University of New South Wales. For information write Unisearch Ltd., P.O. Box 1, Kensington NSW, 2033, Australia.

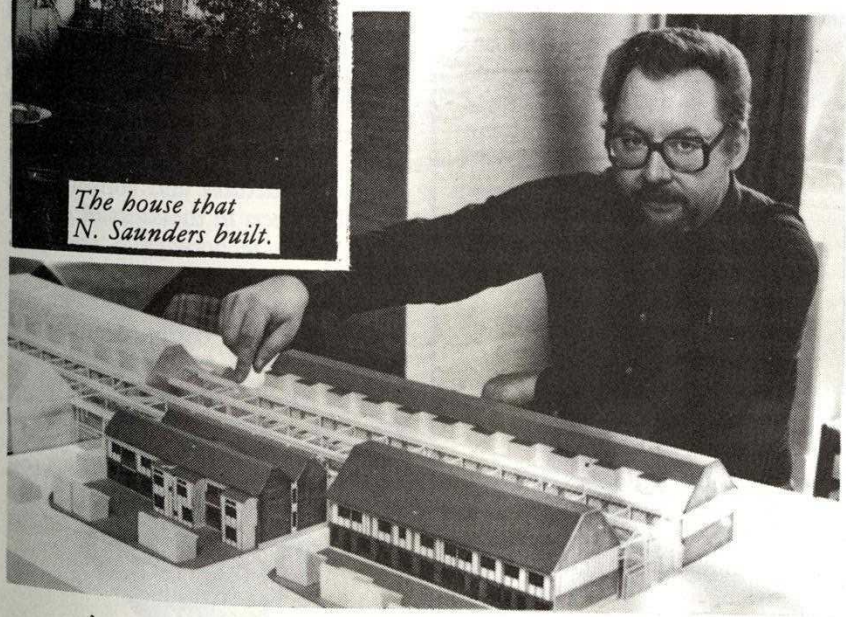
WINTER CITIES FORUM 86

INNER FORUM

AT A GLANCE

West Edmonton Mall

The house that N. Saunders built.



The Green House Street

COMMUNITY EVENTS PROGRAM HIGHLIGHTS

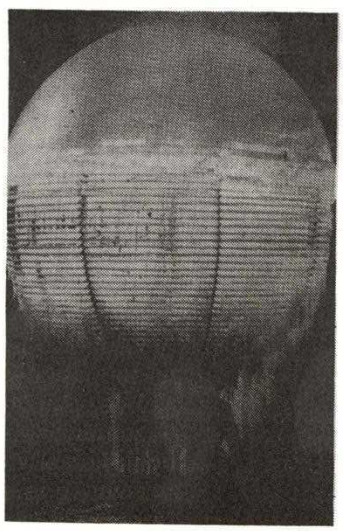
Historic Cold Weather Clothing Exhibit
Edmonton Convention Centre,
Feb. 15 to 19 — 9 a.m. to 9 p.m.

Fashion Shows
Edmonton Centre
Feb. 14, 7 p.m.
Feb. 15, 1 p.m. and 3:30 p.m.

Winter Works Exhibition
Edmonton Art Gallery, and
Children's Art Exhibition
Edmonton Art Gallery
Feb 15 to 19—10:30 a.m. to 8 p.m.

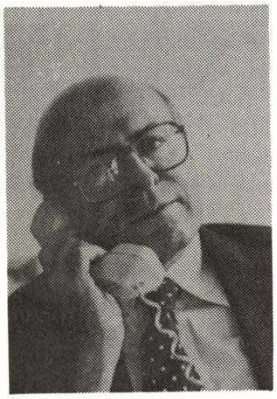
Miniature Winter Village Display
Centennial Library
Feb. 14 and 15—9 a.m. to 9 p.m.

5 k.m. Fun Run
Hawrelak Park
Feb. 16—9:30 a.m. to 11:00 a.m.



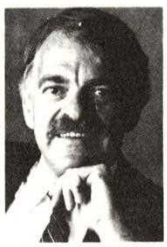
Ice Sculpture

SPEAKER AUTO BIOGRAPHIES



Alexander, Laurence A.

A licensed professional planner (New Jersey), Mr. Alexander is a consultant in urban planning and development and founder of three periodicals on downtown development and urban research. He is president of Alexander Research and Communications, Inc., is listed in "who's Who in Consulting" and works internationally on urban and downtown projects.



Balmer, Ernest L.

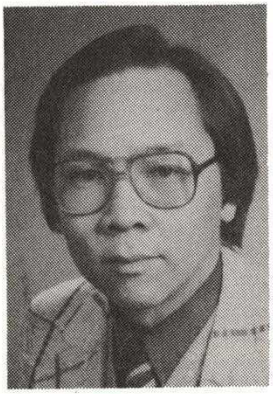
Mr. Balmer's background is in business-mortgage financing, real estate development, hotels and investments. One of the companies he heads, Hallmark Hotels Limited has, over the past 15 years, specialized in researching and developing new ideas for accommodations for those who live and work in resource communities.

Bender, Tom

A registered architect (Oregon), Mr. Bender is past editor of the journal *RAIN,* a national U.S. publication on solar energy, energy conservation and low-energy technologies. He is the author of *Living Lightly, Environmental Design Primer, Building Value* and *Rainbook.*

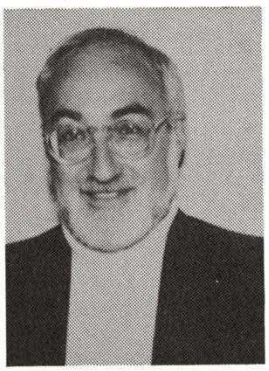
Broberg, Peter Olof

Peter Broberg is an architect and Doctor of Technology. He is the founder and leader of the Foundation for Industrial and ecological Building. Mr. Broberg is perhaps best known for his projects combining living and working under glass covered streets and courtyards.



Chen, Patrick D.

Past President of the Livable Winter Cities Association, Mr. Chen received degrees in architecture and planning from McGill University and the University of Ottawa. As an urban planner with the City of Ottawa he initiated urban design controls dealing with micro-climatic conditions as they affect pedestrians.



Hanen, Harold A.

President of Harold Hanen and Associates, Mr. Hanen is an architect and planner. His firm has been involved in many projects, among them the award wining + 15 pedway system in Calgary.

Happold, Harold

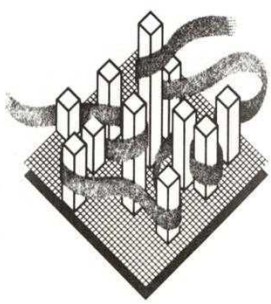
Professor Happold, Bath University, is a structural engineer with an international reputation. During his career he has been associated with an impressive number of award winning projects, perhaps the best known of them being the Sydney Opera House. He founded Buro Happold, consulting engineers, in 1976 and since then the firm has been involved in projects around the world, including the Winter Olympic Stadium in Calgary, and study on a 36 acre roof for the oil sands area in Alberta.

Hough, Michael

Michael Hough is a landscape architect and special consultant to his firm, Hough, Stansbury and Associates Limited. His practice covers a wide range of interests from urban design and research to resource management in both Canada and abroad. An Associate Professor at York University, Toronto, he is the author of *City Form and Natural Process*, published in 1985.

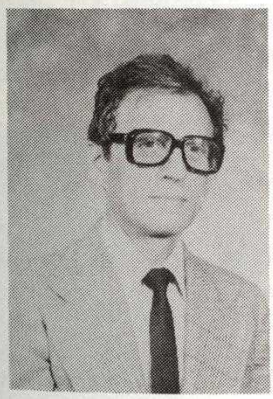
Lange Leland

Mr. Lange is President and General Manager of Enercon Consultants Limited, a firm specializing in research design and engineering of energy efficient housing systems. The company has designed over 100 energy efficient structures and consulted to several projects in the areas of energy conservation technologgies and programs.



Lu, Weiming

An urban planner/designer educated in china and the u.s., Mr. Lu received the quadrennial Presidential Award for Design Excellence in 1985. He is nationally known in the U.S. for innovative work in Dallas, Minneapolis and St. Paul, particularly in downtown revitalization, historic preservation, urban design and public/private partnership. Currently he is Executive Director of the Lowertown Redevelopment Corporation in St. Paul, a project to redevelop lowertown, a 180 acre urban area on the edge of downtown St. Paul.



Matus, Vladimir

Mr. Matus is an architect and urban planner with degrees from Prague and the University of Toronto. He has a strong interest in environmental design, is a member of the Livable Winter City Association and the author of several reports and studies related to energy, architecture and urban and regional planning.

Thorvaldsson, Thorvaldur S.

Mr. Thorvaldsson is an architect and Director of Reykjavik's Town Planning Office in Iceland. He has also lectured at the Reykjavik University.

McNulty, Robert H.

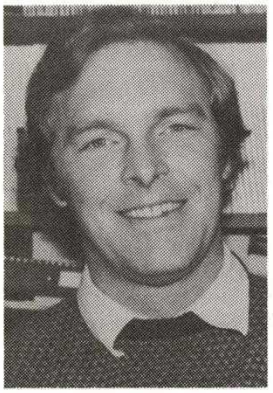
Robert McNulty is President of Partners for Livable Places, a nonprofit Washington, D.C. -based coalition of 800 organizations and individuals concerned with economic health and quality of life. Partners' interests include developing marketing strategies that give city centers a competitive edge against suburban shopping malls. An accomplished public speaker and author, his articles and letters have appeard in *Fortun* magazine, the *Christian Science Monitor*, the *Washington Post* and others.

Nelson, Thomas Morgan

Professor and Chairman of the department of Psychology, University of Alberta, Dr. Nelson is an author of many papers on psychology. He is internationally recognized in his field and listed in "World Who's Who in Science" and "American Men of Science", among others. Professor Nelson is a member of the Board of Directors of the Winter Cities Corporation 1986.

Oberlanders, H. Peter

Dr. Oberlander is Professor of Regional Planning and Director of the Centre for Human Settlements in the Faculty of Graduate Studies at the University of British Columbia. He has an international reputation in planning and development, having consulted and been advisor to government in Ghana, Nigeria and Israel. He has represented Canada as a member of numerous Canadian delegations to international sessions on human settlements.



Oborne, David John

Dr. Oborne is a Lecturer in Psychology, University College of Swansea, United Kingdom. He has authored many papers and acted as general editor of a series of books titled *Psychology and Productivity at Work.*

Pepper, Sheila

A charter member, and Ottawa Chapter chairman, of the Livable Winter City Association, Mrs. Pepper is a recreational planner. She has spoken on winter recreation facilities at several national and provincial conferences.

Persinger, Michael A.

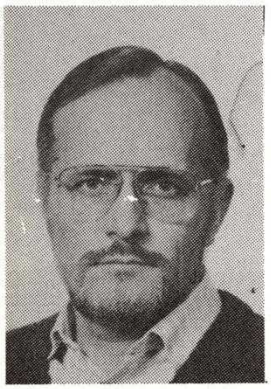
A professor of Psychology at Laurentian University, Sudbury, Dr. Persinger has researched the effects of weather on behaviour. He is the author of five books, the most recent being *The Weather Matrix and Human Behaviour.*

Skarstein, Ole Bernt

Mr. Skarstein is an architect and planner. His firm, Nord-Norsk Plangruppe, was formed to do planning projects in the northern parts of Norway.

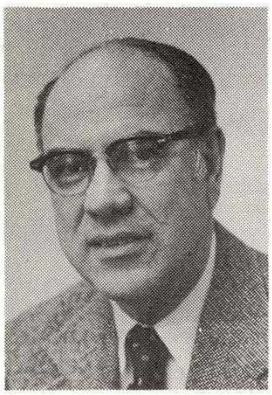
Phillips, David W.

A climatologist with Environment Canada, Mr. Phillips specializes in the practical application of climatology to the design, construction and operation of buildings.



Rauhala, Kari

Mr. Rauhala is an architect and a senior research scientist at the Technical Research Centre of Finland. He specializes in urban planning and the impact of climate on building design and energy costs.

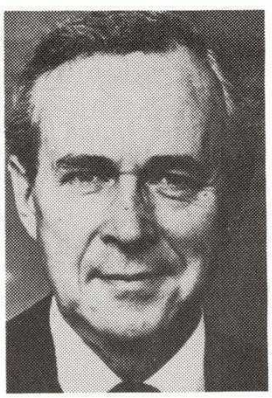


Rogers, Dr. William C.

Dr. Rogers is author of over 85 articles and several books, the latest of which are *Global Dimensions in U.S. Education: The community* and *The Winter City Book.* He has a doctorate in Political Science and International Relations from the University of Chicago and was Director of the World Affairs Center. He has been a leader of study groups in Central Europe, the Soviet Union, Egypt and at the University of Geneva. At present, he is a consultant with the Minnesota International Center and President of World Trade Week, Inc.

Rohles, Jr., Dr. Frederick H.

Dr. Rohles is the Director of the Institute for Environmental Research and holds a joint appointment as Professor of Mechanical Engineering and Psychology at Kansas State University. A world renown expert on human thermal comfort and environmental ergonomics, he has consulted for the U.S. Department of Energy, the Oak Ridge National Laboratory, Delco, Ford, 3M, Mitsubishi Electric Corporation in Japan and others. Besides holding various Fellowships, he has written over 150 technical papers. Dr. Rohles is a recipient of the Raymond F. Longacre Award, presented annually by the Aerospace Medical Association.



Rohmer, Richard

Mr. Rohmer, from Toronto, is a celebrated Canadian author of fictional works such as *Triad, Exoneration* and *Ultimatum.* He has originated proposals of development of Canada's mid-north and organized a major study of "The Mid-Canada Corridor".

Royle, Jack

Mr. Royle has over 50 years experience as reporter, editor and publisher. He is the founding father of the Liveable Winter City Association and the co-host of the Winter Cities '86 Forum. He will be leading the team who will put together the daily "Forum Newsletter" and he is one of the Symposium's rapporteurs.

Saunders, Norman B.

Mr. Saunders, from Weston, Massachusetts, is an inventor and engineer. His many areas of expertise include mathematics, computers, physics, mechanical engineering and human comfort. He built one of the first generation of modern houses that are totally heated and cooled by simple, inexpensive, natural features. He is a consultant to architects and builders of solar heated buildings, a circuit engineering consultant and holds eight patents with more pending.

Thorbjarnarson, Thordur T.

Mr. Thorbjarnarson is the City Engineer and Director of Public Works in Reykjavik, Iceland. He has worked as a civil engineering consultant, and was Director of Reykjavik's Municipal Equipment Pool and Municipal Contracts Administration.

Skvaril, Joseph

Mr. Skarvil is president of Joseph Skvaril Architect Ltd. and Joseph Skvaril Planners Ltd., located in Edmonton. His background includes architectural, urban planning and development projects in Canada, Sweden, Czechoslovakia, the United States, Japan, West Germany, Romania and Bulgaria. He has invented a new expandable structure system and also a highly economical system of transportation of expandable structures. Besides lecturing at various universities he holds patents in Canada, the United States and has patents pending in Australia.

Zepic, Xenia M.

Originally from Yugoslavia, Xenia Zepic is a planner and urban designer with the Toronto Metropolitan Planning Department. She has lectured around the world on urban development for Winter Cities and is president of the Livable Winter Cities Association. She is also one of the Symposium's rapporteurs.

Thulin, Ann Livingstone

Ann Thulen, originally from California, is now a Swedish citizen with her own company, Teknik & Teckning, associated with the Landskrona Group. Her background is in architectural and furniture design. She is presently doing doctoral studies in the Department of Architecture at Lunds Technical University and is involved in the development of a new building material.

Wang, Lawrence C.H.

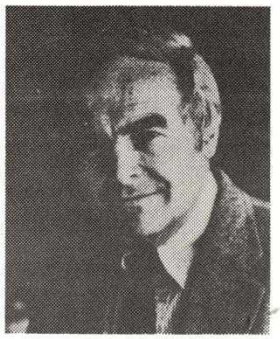
Dr. Wang is a Professor of Zoology at the University of Alberta. He has been a speaker at over 20 symposiums and universities in North America and Europe. His research has concentrated on survival and adaptation in cold climates.

Watkins, Susan M.

Susan Watkins is an Associate Professor of Apparel Design at Cornell University in New York. Her research has included protective clothing for fire fighting, coal mining and ice hockey. She has written several articles on apparel design and lectured throughout the United States. Her book *Clothing: The Portable Environment* was published by the Iowa State University Press in 1984.

Zahorchak, Michael G.

Mr. Zahorchak is author of *Climate - The Key to Understanding Business Cycles, The Art of Low Risk Investing* (2 editions) and *Favorable Executions - The Wall Street Specialist And the Auction Market.* He was formerly a Vice-President of the American Stock Exchange. He has held a variety of positions on Wall Street and in the business community, including securities and portfolio analyst at Merrill Lynch. He has been a speaker at numerous conferences and made guest appearances on radio and television shows, including the Today Show with Barbara Walters.



Zeidler, Eberhard H.

Mr. Zeidler, architect, engineer, educator and artist, is internationally known for his large-scale, innovative building designs. A principal of Zeidler Roberts Partnership/Architects in Toronto, his major projects include Toronto's Ontario Place and Eaton Centre. The recipient of more than 60 awards and a guest lecturer throughout the world, he is currently a Visiting Professor at the School of Architecture at the University of Toronto.

Forum Mobile Tours

TOUR #1
WINTER CITIES SOLUTIONS $20.
Sunday, February 16, 1000-1630 hrs.
An all day tour to show some unique winter cities solutions. Attention will be drawn to utilization of garden spaces, indoor and outdoor recreation and entertainment. Facilities to be visited are: Muttart Conservatory, Kinsmen Recreation Centre, Alberta Public Works Supply and Services Building, Fort Edmonton Park, Hawrelak Park, and Space Sciences Centre. Lunch is included.
Tour Chairperson: Michael Sandford

Tour #2
DOWNTOWN EDMONTON WALKING TOUR $5.
Monday, February 17, 1500-1700 hrs.
A spectacular view of downtown Edmonton from atop the A.G.T. tower, also a trip on the City's modern light rail system. Other points of interest will be the pedway system, shopping centres, outdoor pedestrian malls and will conclude at a year 'round indoor garden.
Tour Chairperson: Dennis Freeman

Tour #3
WEST EDMONTON MALL $5.
Monday, February 17, 1800-2200 hrs.
An evening visit to the "Eighth Wonder of the World", including a reception hosted by West Edmonton Mall, and a tour of the mall.
Tour Chairperson: Molly Smith

Tour #4
THE UNIVERSITY OF ALBERTA RECREATION AND HEALTH $5.
Tuesday, February 18, 1400-1700 hrs.
Tour hosts from each facility will be available so specific questions can be addressed. At the hospital, tour delegates will be divided into small groups, each led by a tour leader. The architect of the health facility, E.H. Zeidler, will be on hand to answer questions.
Tour Chairperson: Gary Norbom

Tour #5
INNOVATIVE HOUSING FACILITIES $5.
Wed. February 19, 1930-1200 hrs.
Visits to two medium density developments - St. Andrews Centre (seniors housing) and Hub Mall (student residences) - and the Edmonton Energy Centre, to see both specific responses to climatic problems and a presentation on energy management issues.
Tour Chairperson: Brian Oakley

Tour #6
MIXED USE PROJECTS $5.
Wed. February 19, 1400-1700 hrs.
A tour of two award winning buildings in St. Albert, The St. Albert Provincial Building and the St. Albert Civic Centre. Discussion and refreshments will follow and St. Albert Civic Officials will be on hand to participate.
Tour Chairperson: Eric Batty

ALL YEAR CITIES AND HUMAN DEVELOPMENT

A lecture for the LWCA conference, Edmonton 1986 av Peter Broberg, Architect, Dr. of Technology.

Toward the end of the 19th century the concept of biological evolution spread through the western world. The concept soon had such a colossal influence on western thinking that it became usual to consider evolution as a synonym for biolgical development. The evolution of man has, however, continued long after the weakening and decline of biological advancement. This is occuring through a technological development which began slowly with the appearance of a culture-society and increasingly has advanced into a technic-society. The steps in this technic-evolution can today be clearly seen and it is quite apparant that urban building must be integrated into the process. Man's culture-technical possibilities are embodied in the act of city building.

Technic increases and strengthens man's characteristics so the city as a bearer of large scale technic must as a direct extension also be given "human" goals. One of the most important of these is protection from unpleasant environment. This protection must aim to create as wide spread and volumnous areas as possible that can be used for individual and community activities. Man has with the aid of different technologies step by step increased his control over his nearest environment - even climatically - and we stand now at the beginning of a process of including our cities in this climatic evolution. This must be seen as one of man's most important steps forward toward a truly civilized society.

HEAT STORAGE, QUALITY, TRANSFER, AND CONTROL

By Norman B. Saunders, P.E.

So we have the two heat stores, a warm and a cool, to call upon to maintain a near uniform house temperature. The most economical method seems to me to be to use air to move the heat. In a superinsulated house for those regions between which air can flow freely the temperature at any level is very nearly at least as high as that of any space below and no more than slightly higher than that of any space above. Hence we can store warmth above and coolth below without resorting to any internal airtight shells. Further, to heat any level we need only to move heat from above and dump it on the ceiling of the level we wish to heat. The warm air will distribute itself over that ceiling, deliver its excess heat to that ceiling, and only upon having lost that excess heat drop below the air dams to complete its circuit. We thus have the comfort and economy of a radiant ceiling with response time of but a few minutes while using low grade heat as the energy source.

Since it is wasteful to allow the living space to overheat, the input that could cause overheating needs to be captured for other use. This is done by pulling air from the ceiling of the highest level we wish to cool where the excess heat is absorbed and then blowing the warmed air down into the cool store.

The vertical ducts should be large and continuous from floor to floor and hence are a problem in room arrangement and to have two is expensive. My most recent patent 4,552,205 explains how to combine the two functions into one duct.

In the States and such southerly regions the best source of the extra heat to be stored is the sun. In the north it is more likely off peak power. Where it is the sun, the solation can be allowed to enter directly or the house cooling system can be adapted to expedite the movement of the heat from the collection area to the warm store. Details can be found in my various patents.

You may ask what good is the heat that you have put into the cool store, it is of too low a grade (below house set point) to be us use in heating the house. That is correct. However, it is of great use in reducing heat loss from the living areas. Firstly, having the space under the

floor just below (most of the year it is just above) the desired set point reduces the downward heat loss without need for insulation in the floor. But more importantly the cool store is at a temperature well above that of the entering winter ventilating air. Hence it can be used to preheat that air.

This may seem to be an unduly fancy heat exchanger. However it has an extra property: the heat is stored at one time and used later. It turns out that some of the heat stored in October is used in the critical months of November and December and may not be used until the next year.

Better control of ventilation is likely the next step for those who have reached the state of the art of building energy efficient houses. The old leaky house was well ventilated in spring and fall. It has been made stuffy at those times by tightening it up to reduce winter loss. The problem is worse than you might think because not only is the outside air cold but the cold air is pushed harder because of the greater temperature difference between inside and out and the entering air is more dense. For a crack, heat loss varies roughly as the square of the temperature difference, for a hole as the 1.5 power.

The best publicized solution to this problem is to use an air to air heat exchanger with air movement controlled by a humidistat. I have gone well beyond that but since my description has been mostly confined to patent disclosures I have not as yet found out how to get the ideas across clearly. The first point to note is that in a not overheated house man's first requirement is to have the excess carbon dioxide removed which requires well under three litres of fresh air a second. The next that there is a large reservoir of air in the house and that for something such as formaldehyde a radon the number of air changes a day is the important point, not the number per hour. In moist climates the outside air temperature typically cycles through ten kelvin a day. Hence by bringing fresh air in during the warmth of the day in winter we can cut the heat loss incurred by as much as thirty percent. In more tropical regions or in the summer the major air change is best carried out in the early morning so as to reduce the cooling load. My controllers are designed principally for use in the states and hence must provide both functions. They also provide for continuously variable fan speeds and automatic adjustment of the set points to the season. I have been supplying such controllers simply because there is as yet no other source for such sophisticated devices at a reasonable price for the home owner.

The fresh air is brought in at ground level, lower if not more costly, and dumped into the cool store. My general design is to have the ducts from baths, laundry, and kitchen come from near floor level so as to exhaust the cooler air and have them leave through the east gable as near to the peak as practical. Then when it is below freezing out the fresh air fan shuts down allowing the residual air leakage driven by the thermal head to supply the ventilation. The open vents near the peak put the neutral pressure point high since the design calls for an air movement operated shutter on the fresh air fan which makes the total inlet opening smaller than the exit opening. Thus when it is so cold out that moisture entering the walls from the house would be a problem, most of the house is under negative pressure and it is the outside air that is entering the walls. On the other hand when it is warm out the basement area is under positive pressure thus reducing the flow of ground gases and vapors into the house.

Fans in the individual exhaust ducts are likely unnecessary and wastefull of electricity. Except when it is bitter cold the fresh air fan pushes air out through these openings as fast as the individual fans would, does so continuously rather than intermittently, and uses less electricity to do so. The controller seldom runs all three fans at once, sometimes runs none, and uses an average on the order of 100 watts distributed between them. The fans and ducts are chosen to minimize the total of first and operating cost and hence are oversized by former design rules which were based upon lowest cost to the vendors rather than the user. ■

DEVELOPING AN URBAN VILLAGE

By Weiming Lu

An urban village is being designed and built in Lowertown/Saint Paul ...through public/private partnership of city government, state & federal agencies, the private sector, and the non-profit Lowertown Redevelopment Corporation (LRC)

After 7 years of effort: $350 million in investments were generated in the area, 4000 jobs created, city's tax base broadened, and over 1400 housing units provided for various income levels. Projects include a major shopping center, offices, new hotel, YMCA Farmers Market, restaurants, theatres, and a host of other amenities. Every dollar the LRC invested in Lowertown has attracted $30 in additional public and private investment.

LRC was established in late 1978 by a $10 million support commitment from the Knight Foundation. LRC's mission is to carry out the City's revitalization through creative urban design and use of private foundation resources.

Lowertown is an area of fine old buildings, neglected riverfront, vast parking spaces, and abandoned railroad yards. For decades, it suffered from deterioration and disinvestment.

1) LRC, as an *urban development bank*, has helped to fill the gap in financing. It has provided front-end expenses, loans, and loan guarantees to a number of projects.

2) Functioning as a *design center,* it has helped the City to develop a plan or the area, set design guidelines for various projects, and participated in the active design review process with developers.

Lowertown's program has many unique aspects: It utilizes public/private partnership rather than heavy reliance on federal subsidies; maximizes leverage of public investments; stresses sensitive rehabilitation rather than massive-scale urban renewal; strives for energy conservation; creates affordable housing for all income groups; minimizes the displacement of people and businesses; and creates a district where the arts may flourish, rather than diminish during the redevelopment process. Above all, LRC is interested in building a lively, colorful community, rather than merely financing projects.

Creating a livable winter city through retrofitting of buildings, district heating, skyway system, atriums, winter garden, and protection of solar accesses where feasible, is part of our overall development objective.

The progress achieved in Lowertown's redevelopment demonstrates that America's newest frontier may well be in its central cities. Public/private partnership is workable with strong leadership, financial commitment, and competent management capacities at hand. Federal agencies, including HUD, NEA, and others are invaluable partners in this community building. Visionary urban design, however, ultimately determines the quality of such a community effort. ■

Mayor Itagaki, Sapporo, Japan

THE SAPPORO INITIATIVE

Japan's northernmost big city is determined to make itself into a model for other northern cities while also giving strong leadership to the northern community of states and peoples.

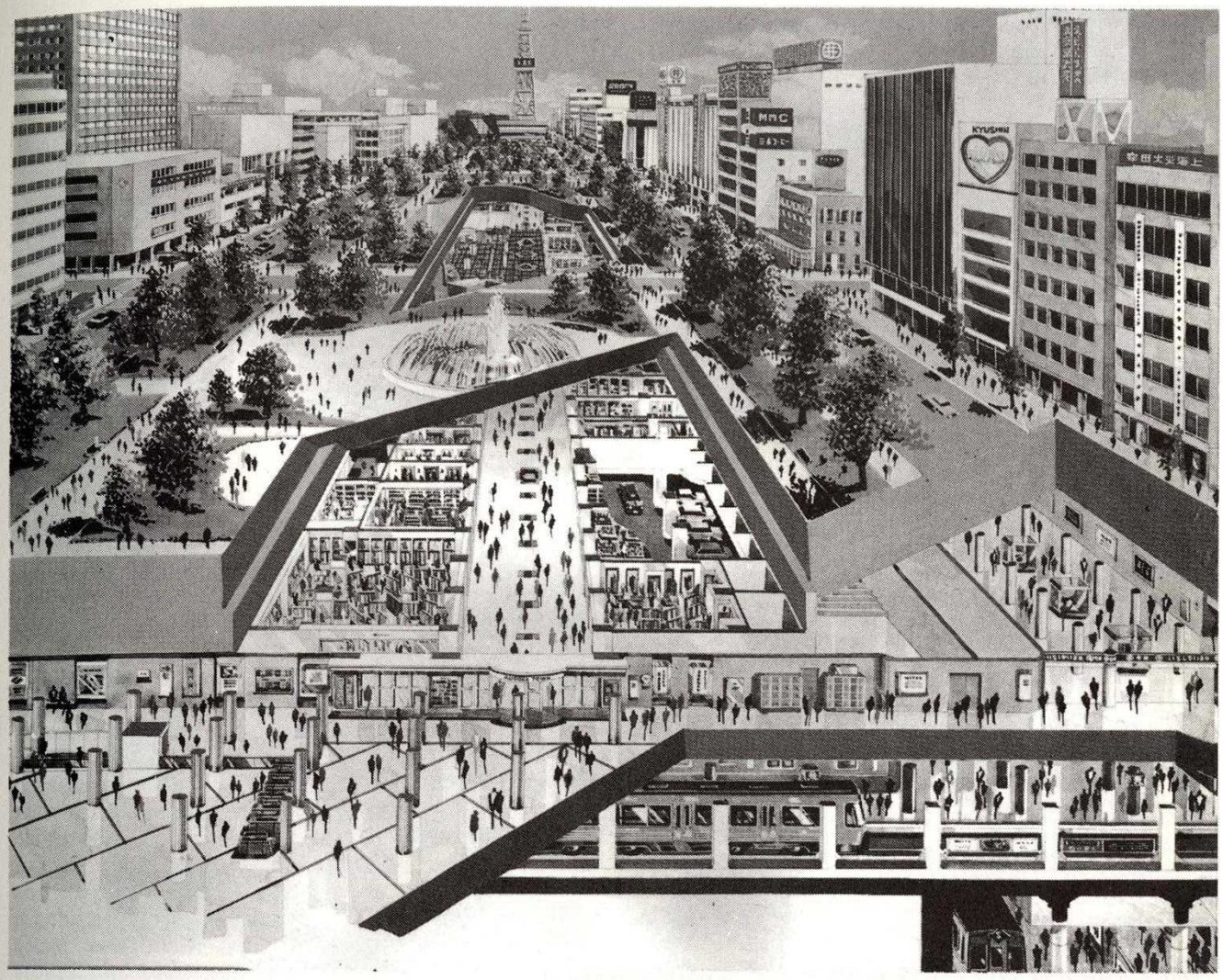
For more than 15 years, Mayor Takeshi Itagaki, the Forum's Keynote Speaker, has agressively proclaimed the necessity for the world's northern regions to join together in their own self interest since their severe climate creates unique problems and opportunities not experienced in the world's far more populous warm climate regions.

Thus he fostered and assisted the holding of numerous international conferences and exchanges, and in 1983 called the First Northern Intercity Conference to permit representatives of northern cities to explore all aspects of the livability and viability of cities and communities in the winter latitudes. This was followed by a second similar conference this year with a third already announced to be hosted by Edmonton in 1988 in conjunction with a large exhibition and international meeting of northern specialists.

But Sapporo has also made giant strides in making itself into a model for other northern cities as the illustrations on these pages indicate. Sapporo has placed great emphasis on the importance of both long range and short term planning as indicated in the excellent booklet (in English) "City Planning for Sapporo", recently published. Wrote Mayor Itagaki in his foreword:

"Over one hundred and ten years have passed since Sapporo was founded. During this period the city of Sapporo has made remarkable progress, establishing itself as the hub city of the northern region of the Japanese archipelago. In consequence of its outstanding development as a city, Sapporo today is looked to as an ideal model for other major cities to follow.

The City of Sapporo has been developing the city under a series of consistent urbanization plans since its foundation. Presently, we are improving the city to become a key municipality in northern Japan based on the New Long-Term Comprehensive Development Plan. We have also been enforcing a variety of policies not only in road paving and water service and sewerage systems (whose full coverage in the urban area will



be completed soon), but also in the construction of the extended part of the subway and the elevation project of a part of JNR Hakodate Trunk Line. Thus, we aim to create a humane and comfortable environment in the city by improving fundamental services.

Among our many policies, "the neighborhood district plan", the first of its kind in Japan, is being observed closely by other cities. A neighborhood district is the basic unit where residents enjoy a comfortable living environment and pursue their daily activities on foot.

The cooperation and participation of all the citizens will enable the city to carry out an urbanization plan both appealing and attractive to our citizens. Therefore, it is my sincere hope that all of us work together to make Sapporo the most comfortable, charming and livable city in Japan.

The city originally enacted the Long-Term Comprehensive Development Plan in March, 1971, with a target completion date of 1990.

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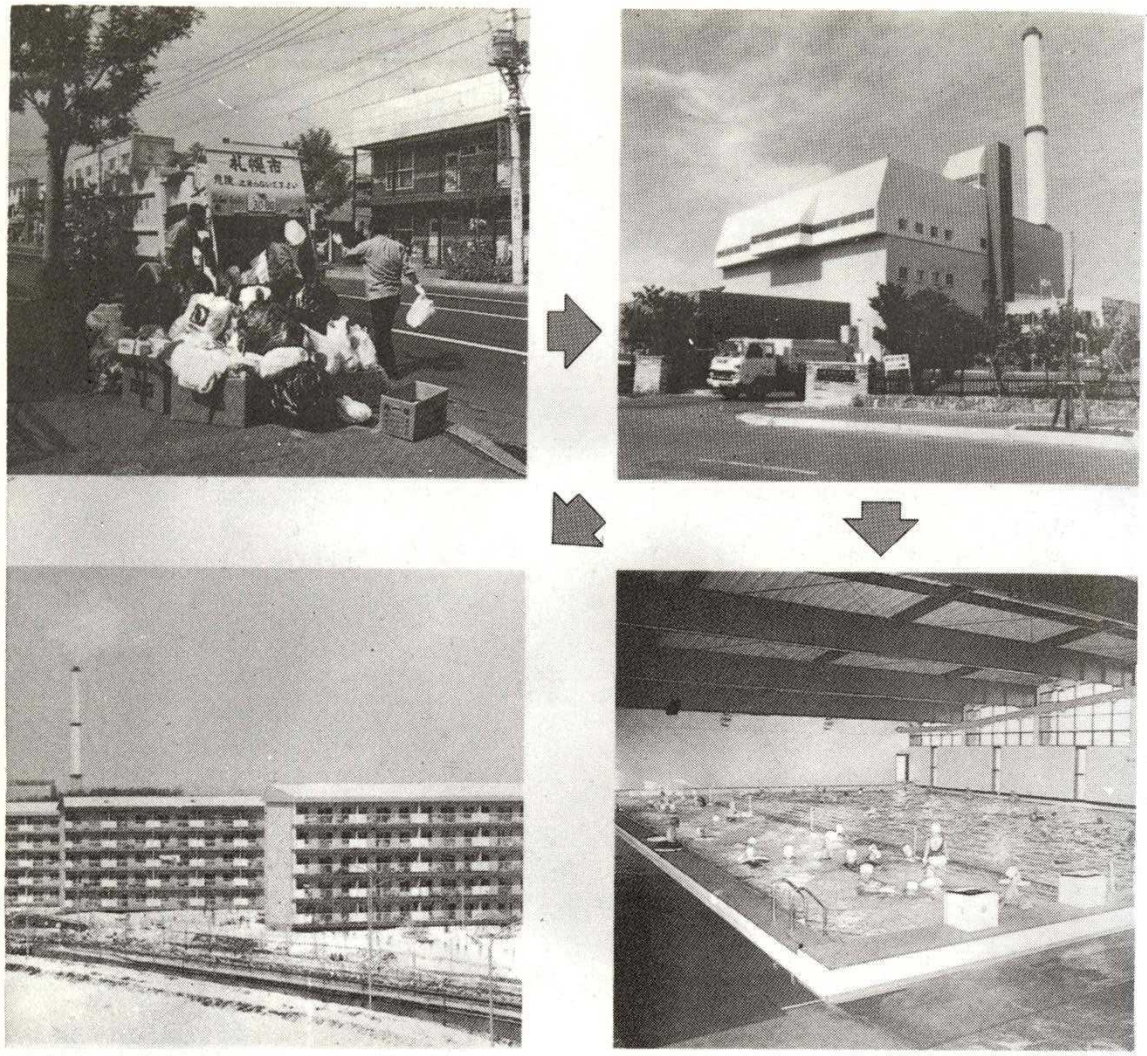

Sapporo is proud of its "Life Environmental" facilities—collected garbage is disposed of at incineration plants and the residual heat is utilized for swimming pools and heating services.

However, due to the drastic changes in our country's social and economic structures and as a result of citizens demands, the City moved to re-establish the Plan in December, 1976, and renamed it the New Long-Term Comprehensive Development Plan with a target completion date of 1995.

This new plan aims to develop Sapporo as a "key city in the northern regions" and "a city which offers an attractive urban living environment for the modern age." These two targets form the principle ideas for the future of the city.

In reviewing the old plan, due consideration was given to the importance of stability and livelihoood of each citizen. Therefore, we replaced the policies for stabilized economic growth and the preservation of natural resources.

The following five goals were established to promote urban planning and to realize the above-mentioned aims:

(1) **Development of a proper-sized city in harmony with the natural environment**

(2) **Development of a rich and cultural city with vital urban activities managed regionally**

(3) **Development of a city which values the identity of its individual citizens**

(4) **Development of a city where a comfortable winter life may be secured**

(5) **Development of a city in which citizens cultivate a strong sense of community and participate actively in urban affairs."**

Mayor Itagaki and a team of representatives from Sapporo are presenting detail on how these objectives are being tackled at the Edmonton Forum. First emphasis has been and continues to be that the citizens are well informed of all measures being taken and involved and consulted to the greatest possible degree. The citizens have responded by endorsing the programs put forward by the city in the following declaration:

"We, the citizens of Sapporo, where the chimes of the Clock Tower can be heard, declare: We shall work hard and build a prosperous city. We shall keep our skies, streets, grass and trees clean. We shall obey laws and make our city a pleasant place for all. We shall make our city a happy place for our children who will build the future. We shall raise our cultural standard through cultural exchange with the people of the world." ■

EDMONTON LWCA CHAPTER FORMED

Rationale Foresees Northern Research Centre

As residents of Canada's northernmost metropolis, Edmontonians enjoy a unique climatological experience. The summers are typical of higher altitude prairies with mild temperatures, moderate rainfalls and plenty of sunshine. But the winters appeal more to the true northerners. There are periods of truly arctic weather lasting up to three weeks at a stretch with crystal clear skies, fresh clean snow, and invigorating temperatures hovering around -30 degrees Celsius. During these periods the centre of the city is often shrouded in ice-fog, adding a mystical atmosphere to the winter experience. There are also many days of moderate to mild winter temperatures and clear sunny skies.

Another factor contributing to Edmonton's status as a Winter City is its isolation from major geographical features. The Rockies are a four hour drive from the city and major bodies of water are even further. This has led to a certain social, cultural, and economic self-sufficiency in Edmonton. This is evidenced by the active performing arts and sports groups. In addition, Edmonton is the home of Canada's second largest University and a number of research institutions.

The Edmonton perspective is also enhanced by the city's traditional role as the "Gateway to the North". Although this role is decreasing with the advent of jet travel, there are still many social and business ties with the Arctic areas of Canada. These contacts are a constant reminder of the city's position as a northern (winter) city.

Obvious manifestations of this urban north experience are a number of community events with winter themes, headed by the International Winter Cities Conference. Edmonton is also developing a unique winter architecture as exemplified by the University of Alberta's Hub Mall, Walter C. MacKenzie Health Sciences Centre and the controversial West Edmonton Mall. The development of recreational facilities, both indoor and outdoor, has paralleled the growth of the city. An example is the North Saskatchewan River Valley (Capital City Park) with its system of trails, facilities and activities which can be enjoyed year-round.

Considering this perspective, it is obvious that Edmonton should have a chapter of the Livable Winter Cities Association. The following sections deal with the specifics of such a chapter, taking into account Edmonton's position as a northern metropolis.

ACTIVITIES

The objectives of any organization can only be accomplished through specific actions and activities.

The founding committee for the Edmonton Chapter has identified a very ambitious project as our major focus. This project would see the formation of a research institute focussing on the challenges of human settlements in northern climates, with particular emphasis on large urban centres. Edmonton is already a major centre for research on other major topics related to the northern experience. Some of the institutions involved in this research are:

- **The University of Alberta:**
  Every department of the social, natural and applied science faculties, as well as the education and medical faculties are involved in research and teaching specific to the northern experience.
- **Boreal Institute for Northern Studies (and the related Boreal Circle Society):**
  Acts as a clearing house for the widest possible range of studies on arctic and sub-arctic topics. The institute acts as a sponsor for conferences on northern topics while the Boreal Circle Society sponsors talks and panel discussions on current northern issues.
- **C-FER, Canadian Frontier Engineering Research:**
  An industry funded agency associated with the University of Alberta doing research on the engineering aspects of resource development in remote areas.
- **Northern Forest Research Centre:**
  A federal government agency specializing in forestry research.
- **Alberta Research Council:**
  A provincially funded agency doing research on a broad range of subjects, many of which are specific to northern climates. One of the more interesting subjects is an organic additive to improve artificial snow making.
- As the seat of the Provincial government, as well as a regional centre for Federal government agencies, Edmonton serves as the base for a number of offices collecting scientific data, including Canadian Wildlife Service, Arctic Weather Central and the Environmental Protection Service.

With such a wide base of research effort into northern concerns, it would seem natural to have a Canadian centre for research into the "urban north" located in Edmonton.

The initial step could be the establishment of a Winter Cities library in one of the existing northern libraries. Acquisition of the initial works to start the library could be the focus of a funding drive by the Edmonton chapter.

As the centre become established, major undertakings, such as permanent accommodations and hiring of a Director could be initiated by the chapter.

These plans are ambitious. However, Edmonton has always been a city with grand visions. The creation of an International Research Centre is a realistic goal and the Edmonton chapter can provide the initiative.

COMMUNITY ACTIVITIES

On a smaller scale, many activities can be intiated which will be similar to those pursued by other chapters, but with a uniquely Edmonton character. Most of these programs will revolve around increasing public awareness of the LWCA and issues related to the northern urban experience. An outline of these activities follows:

- act as a support group to the Winter Cities International Conference series in Edmonton
- study Edmonton and surrounding communities to identify unique opportunities and solutions to the challenges of human settlement in the north.
- serve as a regional chapter for northern communities unable to support a local chapter (LWCA has already received letters from the cities of Grande Prairie and Fort McMurray)
- promote public awareness and participation in LWCA objectives through media publicity and sponsorship of community events
- sponsor specific projects in the

Edmonton area which will materially improve the winter urban environment.

The City of Edmonton is going through the formative phase of a major downtown revitalization. Recognition of the challenges and opportunities of our northern climate is central to these plans while civic support for a local chapter is almost certain. The City of Edmonton is co-host to the Winter Cities '86 Conference, together with the national body of LWCA. The Government of Alberta has made conscious efforts to improve the Provincial Legislature grounds during the winter season, indicating a new awareness of the special nature of Canada's northern-most provincial capital.

These activities make it clear Edmonton is ready for a Livable Winter Cities chapter.

Prepared by:
Eric Jokinen
Michael Sandford

EDMONTON LWCA CHAPTER FORMALLY ORGANIZED JANUARY 29

With 16 founding members, Edmonton Chapter of the Liveable Winter City Association was organized Jan. 29 at a meeting at Winter Cities Forum 86 offices in Edmonton.

The new Edmonton Chapter joins chapters in Ottawa and Toronto to give the association a cross-Canada base and structure. LWCA members in Fort McMurray and some other centres are considering the formation of local chapters.

Founding officers of the Edmonton chapter are: Eric P. Jokinen, president; Arni Fullerton, first vice-president; Debby Kronewitt Martin, secretary/treasurer. Other charter members are: Kees Prins, Edmonton Planning Dept.; K. Singh, Edmonton Planning Dept.; G. Dejenka, Architect; Don Grimble, Land Use Planning Group; Bill Hume, Environment Canada; Brian Eldred, Architect and President of the Royal Architectural Insitute of Canada; Peter Ind, Public Works Canada; Mary Cameron, President, Winter Cities Conference Corporation; Denny Thomas, Lawyer; Spence Montgomery, Jerry Wright, University of Alberta, and a representative to be appointed by Alberta Dept. of Public Works Supply Services.

Three committees were formed: Promotions Committee, Michael Sandford, Chairman; Special Projects Committee, Arni Fullerton, chairman and a Membership Committee with the chairman to be appointed.

It was resolved that President Eric Jokinen and Secretary/Treasurer Debby Kronewitt Martin would undertake to have the chapter registered with the Alberta Government under the Non-Profit Societies Act. Michael Sandford undertook to review the bylaws of Toronto and Ottawa chapters with a view to working up a version suitable for the new Edmonton chapter. Jokinen and Martin were also appointed signing officers.

The new chapter immediately applied for recognition by LWCA National Executive as part of the national organization.

Official address of the LWCA Edmonton Chapter is in the Winter Cities '86 Offices at 9722 - 102 Street, Edmonton, Alberta.

LETTERS . . .
LETTERS . .

Finds NEWSLETTER Helpful

"Congratulations on the continuous improvements to your NEWSLETTER. Having recently moved from Canada's "banana belt" to a northern prairie city (Saskatoon) I do indeed ***feel*** *the need for and appreciate LWCA's efforts.*

"At Meewasin we are constantly struggling with the amelioration of the outdoor climate to improve four season use and to make contact with the outdoors more meaningful. Your publication is very helpful."

Bela Barabas,
Design and Development
Co-Ordinator,
Meewasin Valley Authority
345 3rd Ave. S., Saskatoon,
S7K 1M6

Learned About LWCA Through O.A.L.A.

"I read about your organization in a recent issue of Ontario Association Landscape Architects Newsletter and I would appreciate any additional information you could send me.

"In particular I would be interested in information on how to join the association, a reference list of information now available and any upcoming conferences which might focus on "Livable Winter Cities".

Sue Montgomery,
Box 404, Teeswater, ON.
NOG 2S0

(Ed. Note — Glad you asked—see page 1 for item on "post-conference workshop" on the theme, "Design Challenges for the Livable Winter City," to be held under auspices of Toronto LWCA chapter at University of Toronto School of Architecture, Feb. 21 and 22. A reference list such as you mention is not available but steps to prepare such a list are being taken.)

"L'art mural est un excellent moyen de contribuer a l'animation des villes en hiver."

"C'est dans le cadre de l'Année internationale de la Jeunesse (1985) que j'ai conçu et réalisé un triptyque mural basé sur la thématique de l'Année internationale (PAIX, PARTICIPATION, DEVELOPPEMENT). MURMURE 85 est un projet qui a pris une ampleur inespérée puisqu'il m'a permis de démontrer à toute la population de l'OUTAOUAIS les effets bénéfiques du mur peint dans l'environnement urbain.

"L'hiver est une saison à valoriser. Elle donne un cachet particulier aux villes nordiques, surtout celles où les aménagements paysagers sont omniprésents. Malheureusement, beaucoup de villes prennent une allure désolante et déprimante l'hiver. Tout est gris et malpropre. Cela peut avoir des effets désastreux sur l'industrie touristique et certainement sur le moral des gens qui y habitent. *continued page 18*

Livable Winter

THE "NORTHERN DIFFERENCES" FACTORS IN "NORDIC PERSONALITY" ARE TO BE RECOGNIZED AND CHERISHED

By Cezar Heine, B.A., M.D.,M. Div., Lutheran Medical Services, Inuvik

I. What Constitutes An Integrated Community?

Any western and free society still orders itself into the institutions of family, labor, state (the smallest unit being a village or hamlet), and the church (referring only to organized groups, and not to the general prevalent belief of the society). This societal structure serves as a means for people who live together in the same area to function and communicate as one unit for common goals. This structure also provides social roles in accordance to what the society believes social and individual fulfillment and goals are.

Each institution is autonomous, which means that each fulfills a unique function which cannot be fulfilled by the others in the society. Each institution provides a unique social role, and an integrated community offers its members the four social roles.

Each community is subject to the forces of integration and disintegration. The signs and forces of disintegration are: 1) One institution not respecting the autonomy of, but trying to take over the proper function of, another; for instance, the government taking over the upbringing and direct sustenance of a family; or the state or political organizations operating businesses. 2) One institution demanding of its members too high a proportion of their time and energy, thus not allowing a normal involvement in other roles; for instance, the employer imposing work hours, shifts and conditions which are against accepted health rules and which prevent its employees from taking part in and fulfilling their roles as husbands and wives, parents, community and church members. 3) Individual members of the community not taking part in the four institutions; for instance, a biological father not taking care of the mother and child.

Integration (versus disintegration) of a community is a matter of balance amongst the institutions. A well-integrated community is one which provides for and permits its members' involvement in the four institutions, and one in which its members take an active part in each of their social roles.

Because each institution has its time requirements and work load, these will have to be integrated with the same needs of the other institutions, thus eliminating conflicts. This integration and synchronization enables the largest possible number of community members to participate in the respective institutions, which depend for their existence on group involvement. So an integrated community means also a common synchronization of the clock (schedule) of each of the four institutions. This means that a community runs by a social clock.

One can easily visualize how one institution is unable to provide, or is ignorant of, social clocks (a good example is labor), and thus institutes schedules (a clock) of its own which are destructive of the clocks of the other institutions. When social synchrony (co-ordination of the activities of social institutions) is made very difficult, then the question arises as to whether the group of people living in the same area is a community at all, or is just an outpost (part of a community institution from somewhere else, e.g. Calgary, a province or Canada), such as the C.F.S. base in Alert, or the Tuk or Beaufort base for the oil industry.

The human organism is also subject to its own clocks, called the circadian cycles, which are subject to the biological 24-hour rhythms or activity/rest (sleep) cycles involving daily routines for normal health, such as regular meals, sleep, recreation and work. The human circadian cycles must be included in the over-all synchronization of the social clocks.

II. Why Must The Nordic Community Differ From The Southern?

More and more studies are emerging about the North and the circumpolar regions, identifying unique physical environmental factors operative in higher latitudes as stressors of their inhabitants. These include studies showing a distinct identity of the inhabitants. The findings now safely permit the advancement of theories explaining the relationships between the physical environmental factors and the northern (which includes Canadian) and arctic dwellers (AD).

All this is a way to make normal social and individual life possible. It does not involve cutting out any essential social aspects of human potential for growth and fulfillment.

This is how, in general terms, the northern society must differ from the southern one.

Need To Protect "Nordic Personality"

Nordic Personality: If the development and maintenance of an NP is a way to cope and survive in our harsh physical environment,

— if reserve (being reserved is not merely a racial vestige, but the opposite - evidence of successful adjustment and adaptation for survival,

— if nordic personal life styles, marked by attention to routines, are not unimportant but designed to conserve energy,

— then the community should begin or continue the search for its own identity, using the basic tool of research, trying to discover which nordic and aboriginal features have survival value. Through its existing nordic character and the power of social pressures, it should encourage a nordic character and become aware of the extent to which it imitates and envies southern ways and traits. Instead of ridiculing its nordicity (as in fact happens sometimes), it should consider the "southern identity" as harmful to northern survival. Resistance should be developed to the "southern identity" of southern newcomers. The southern newcomer should be made aware that resistance to becoming "reserved" operates unconsciously in any southern newcomer, and that conscious resistance to becoming reserved spells maladaptation and maladjustment sooner or later. Schools and other educational institutions, the electronic media with Canadian content (especially those such as Northland, Targravut, Inuvialuit Communication Society, Focus North), N.W.T. newspapers, our libraries, those courses on nordicity that are already nordic in character, should be especailly supported, utilized more, and increasingly developed and improved.

III. How Different Must A Nordic Community Be?

1. General and basic difference.

The arctic community does not

need to differ in its basic structure (of the four institutions) from the southern.

The AD, however, is further described by the term NP, which refers to a person adapted and adjusted to the unique arctic stressors. There is a (colloquial) word in common usage which also describes the adjusted AD: it is "reserve." It is the thesis of this author that the reserve of the AD (and any northerner, which includes all Canadians) doesn't, as is generally assumed, reflect primarily a racially, genetically conditioned characteristic, but a learned one (taught by the nordic culture, whose knowledge developed through the painful human process of trial and error throughout the centuries of living in the nordic regions). Simply put, reserve rather reflects the attempt of the AD to conserve his physical and mental energies which are already taxed by the physical environmental stressors. This attempt to conserve is reflected in the AD's reduced emotional investment and expression (affect), his mannerisms (motor output and behavior), the selectivity of his goals, and the number and extent of relationships. Because of the primary stress at the body (somatic) level, there is a shift of dependence for motivation to the mental (psychic) level.

Keeping in mind that the AD's reserve is determined by a need to conserve energy and that he relies more on his psychological motivations than on the physical (somatic), we see more readily how his social environment will be affected through him and in what way a truly nordic social environment will help him to maintain his NP for psychologic adjustment, and will help in his physical adaptation. Social factors acting at the psychologic level will play a particularly important role in coping in the North.

The basic social structure (labor, community, family, church) can, as stated before, remain the same. And, in fact, the Northerners can benefit from a clean definition (and circumscribing) of the extent of involvement in the necessary social relationships for a well-integrated community and an adequate personal fulfillment. They are given a clear direction (without the need for costly trials and errors) for the channeling of their energies.

The AD must live by following priorities, selecting and paying attention only to essential goals, and valuing living by choices. These all represent essential ways to eliminate waste of human resources. They are not an expression of any other ideolocigal trends (e.g. militaristic). So also a more disciplined life, uniform life style and following routines are essential, and not an expression of a mechanized society.

Now, maximizing the AD's available energies is not the only way to conserve energy. The other way is to decrease demands. The preceding ways serve to decrease demands, of course, but also a sheer decrease in work and effort in all areas of life is an important nordic way of coping.

The thesis of this author links two such nordic, or arctic, stressors with the distinctiveness of the AD: First, the distruptive nature of the sun's cycles on the human's own diurnal (circadian or 24-hour) cycles; and second, the increased intensity of cosmic radiation at the human cellular level. Together, the specific effects and the general stress produced by these stressors create adjustments that mark the inhabitant with a certain identity, called (by the author) nordic personality (NP). An AD with and NP is an adjusted individual who must remain so in order to cope in the North.

Now to answer the question asked at the beginning of this section: Any society is determined by its culture (e.g. history, race) as well as by its individuals. If these determinants have distinctive and unique traits (as they do in the nordic countries and regions), then their features will determine the type of, or will modify, the society. Since the nordicity and culture of the AD incorporate elements for survival, a nordic society must be and remain nordic to survive.

Writes Dr. Heine:

"I'm a worker-priest, dividing my time between General Practice Psychiatry and taking care of a Lutheran congregation here in Inuvik. I started North in Yellowknife in '71 and moved to Inuvik in '75. Even though I felt that the North was different and a stressful place to live, the search for the reasons didn't become a conscious endeavour to me and assume an important part of my enthusiasm until '79 when, in one medical text, I read how our hormones (especially melatonin) are controlled by the amount of environmental light. From then on, there was no stopping me in my search for its relevance to Arctic living. Since I was overworked already, my discoveries, even though exciting, were very slow in coming; so when I finally could take a sabbatical in '84-'85, I naturally elected to spend it in Finland, a nordic country, in the city of Oulu, the center for collating medical circumpolar research. It is there that I first formulated my theses on Nordic Personality and Arctic Syndrome. Will I continue to pursue the subject? That is a "foolish" question! I'm coming across more and more exciting material, necessary in the further elaboration or modification of my theses.

LETTERS . . .

LETTERS . .

Continued

"En faisant exécuter des oeuvres murales dans de tels environnements, on cré un impact important. Une murale aux couleurs chaudes ou une murale qui promouvoit les activités hivernales, ravivera des espaces délaissés et améliorera la qualité visuelle de l'environnement des villes en hiver.

"J'espère que le dossier que je vous envoir saura susciter votre intérêt que vous le transmettrez aux différents intéressés. En tant qu'artiste-muraliste, je suis très intéressé à exécuter des oeuvres murales qui contribueront à l'animation des villes en hiver."

Pierre Hardy,
Artiste-Muraliste
20 a De Lanaudière,
Hull, Qe. J9A 1N1

NEW TORONTO "SUPER SIDEWALK" WILL LINK DOWNTOWN WITH WATERFRONT

After spending millions on "super highways" for motor vehicles, Toronto is now constructing an arcaded "super sidewalk" that will serve among other purposes to make plain to pedestrians that they also are important.

Civic policy is to maintain balance between motor vehicles and pedest-

protected sidewalk. For the 100 metres beneath the viaduct the walk is enclosed by a glass wall and roof and ventilated to eliminate auto fumes.

The next southerly 100 metres is cantilevered along the side of the large postal distribution building. This section would have a glass roof

be strong enough to withstand heavy blows and abuse, and also to avoid collapse and shattering if broken. Roof gutters are required under municipal bylaws and needed to be specially extruded in order to clip on the edge of the glass. Portions of the walk are designed to be demountable in the event of future development changes.

The sidewalk beneath the arcaded section needed to be reconstructed at a cost of some $50,000 in order to provide drainage. Runoff collected in the gutters is funnelled to the centre posts and discharged through them into drains beneath. Other costs were similarly above expectation. Final costs for the complete 300 metres of specially constructed sidewalk run to $700,000 with the city paying $150,000, and Campeau putting up the remaining $550,000.

The project began in 1982 when Campeau Corp., approached the city urging the need for such a structure to link downtown with its new 1.5 million square feet development, Waterpark Place. When completed, this will be a multi-story mixed use development with offices in the upper levels and shops, restaurants and similar amenities on ground level. Several new highrise apartment buildings stand nearby and there would be a need for people to walk conveniently and comfortably to downtown and its network of underground promenades.

By coincidence, the city had already decided to do something for the pedestrians using the Bay St. viaduct beneath the railway tracks. For years these structures had been sprayed with slush by motor vehicles and chilled by funnelled winds.

Complicated agreements needed to be worked out with CN, the Post Office, Toronto Harbour Commission, Metro Roads and Traffic and various other agencies. Special lighting and

CONFERENCES . . . WORKSHOPS . . . PUBLICATIONS . . . RESEARCH AND RESOURCES . . . NETWORKING

The Livable Winter City Association, to be frank, needs your support and participation so that it can generate more activities such as those above. The bigger and better LWCA becomes, the faster the "winter city" idea will spread creating new industries and a host of opportunities for you and others. By working together we can build a promising and prosperous future in these northern lands. JOIN WITH US. If you are not already a member, SIT DOWN NOW AND COMPLETE AND RETURN THE FORM BELOW WITH YOUR CHEQUE. THEN BECOME ACTIVE IN LWCA. YOU'LL BE GLAD YOU DID. (OR—if you need more time and/or information to help you make up your mind—at least subscribe to this newsletter).

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TO: Livable Winter City Association
Ste. 301, 250 The Esplanade, Toronto, Ont.,
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Cheque herewith ☐
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The book, "Reshaping Winter Cities" ($12.95 plus $2 handling — $14.95) (Members $11 plus handling — advance payment required for book) ☐

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