Campus Master Plan:

Framework for Development

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University of Waterloo

Master Plan

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University of Waterloo Campus Master Plan

Credits

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We extend our very great appreciation to the many members of the University of Waterloo, who provided input and advice during the development of the Plan. We particularly note the *efforts* of the Building and Properties Committee of the Board of Governors, and the Senate Long Range Planning Committee, both of whose members spent many hours reviewing various aspects of the Plan.

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I. INTRODUCTION

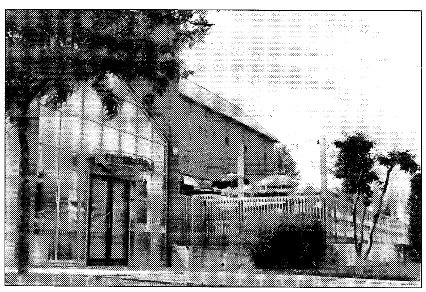
The University of Waterloo has commissioned a Campus Master Plan in order to provide a clear framework for the future development of the campus over the next several decades. This framework is intended to ensure that the qualities and academic mission of the South Campus are maintained and enhanced by the location and design of future buildings and landscaping. It is also intended to provide a detailed strategy for the long-term management of the North Campus, one of the University's most valuable assets, and to provide an improvement strategy for the existing South Campus. The Plan deals with the changing context of the University and its relationship to the dynamic City and Region that now surrounds it. Overall, the Campus Master Plan is intended to articulate new goals for the campus – particularly in the area of environmental stewardship – that will guide the University in its decisions for the future.

The Campus Master Plan is the result of a process of a consultant study with a significant component of public consultation. This process, initiated by the project team and the University Board of Governors' Building and Properties Committee, undertook discussions with representatives of the University community as well as with officials and elected representatives of the Kitchener-Waterloo area. The process has produced a set of planning objectives for the University which underlie the Campus Master Plan. Put in their most compact form, these objectives would commit the University to:

- the long-term development of the University lands in order to broaden University programs and strengthen the institution's *economic base;*
- the retention of this development under University control, primarily through leasehold, and;
- the establishment of an environmental basis for all planning and development decisions,

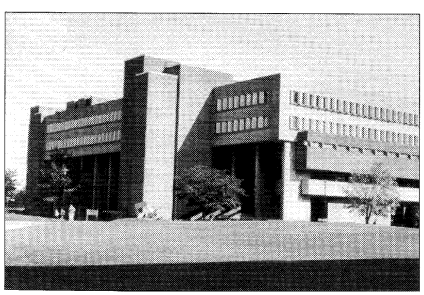
2. MAJOR THEMES

These objectives have been expanded and refined into four major themes. First, an environmental perspective involves a comprehensive ecosystem approach to master planning. Most significantly, the Plan recommends the creation of a permanent natural reserve along Laurel Creek and its utilization as a central spine linking the University with the Conservation Area and the City. Development parcels on the North Campus are to be arranged along lateral extensions of this reserve. On the South Campus, environmentally sound landscape maintenance practices are proposed.



Second, an open-ended framework for University growth signifies a slow, incremental process of University and related development based on sound building and landscape design practices within an integrated system of land management. The Master Plan provides the broad physical framework, identifying areas of permanence and of change, within which specific development projects are prepared. New University growth is largely restricted to infill on the South Campus, with the North Campus combining a natural preserve with urban mixed-use development on selected building parcels.

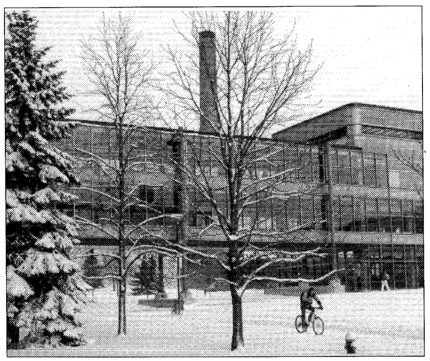
Third, these objectives lead to an enhanced relationship between the University and the City in which the University promotes a greater interaction with the surrounding community. The physical manifestations of this include bringing new campus development out to adjacent streets, and introducing new streets into the campus as well as pedestrian and bicycle routes.



Finally, all of these objectives strive to reinforce a strong sense of place. Based on the existing character of the University, the proposed development emphasizes the distinctive features of the campus, both natural and man-made, within the University's tradition of innovation and excellence. On the South Campus, improvements include building infill, landscape upgrading and new pedestrian connections, while on the North Campus, the emphasis on Laurel Creek and its adjacent wetlands is augmented by highlighting within the development parcels the existing landscape pattern of topography, woodlots and hedgerows.

3. DEVELOPMENT CHARACTER

Maurice Green



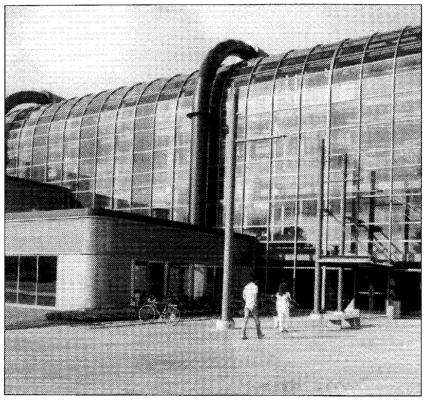
Once development occurs, the North Campus becomes a series of urban neighbourhoods centred on a major open space. Laurel Creek's surroundings are expanded, new wetlands and woodlots created, and water quality greatly improved, The watercourse and wetlands become both a regional open space and a University park, but the primary emphasis will be on research. This new environmental reserve will include a variety of research centres for the University and other compatible institutions as well as an interpretive program.

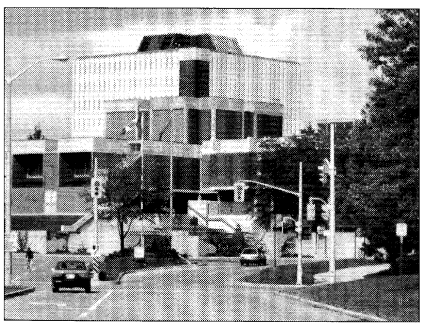
The most important innovation, however, is the expanded Laurel Creek's role in providing a prototype of environmentally sound urban development, with on-site treatment of stormwater runoff and, potentially, sewage treatment and power generation. New buildings and landscape can be integrated with the adjacent environmental reserve to maximize the ecosystem benefits. Research and development buildings, general office development, a hotel/conference centre and housing could be developed (where possible all under leasehold) in order to augment University programs and provide needed meeting and residential facilities on campus. Existing agricultural uses are retained until required for development but could also be upgraded for use by University departments. Interim use as market gardens and orchards is also feasible. The entire setting becomes an ongoing experiment in land stewardship, developing environmental management strategies which can have wide application elsewhere and make the University an international leader in this field.

The South Campus retains its best features and can be upgraded to handle the long-term needs of the University itself. New University buildings should be constructed on existing surface parking lots, within a ten minute walking radius of the Dana Porter Library. At current rates of demand, the University has up to a 100 year supply of development land on the parking lots and other South Campus sites. The open, pleasant atmosphere of the current campus would be retained by ensuring that new development is of an appropriate scale and form.

Landscape maintenance practices should be changed to encourage ecological approaches, with self-sustaining, naturalized landscapes as well as formal ones. The banks of Laurel Creek should be naturalized to help improve water quality. A variety of open spaces should be created, from small sun traps to large commons, linked together as part of a comprehensive system of well-lit, weather-protected pedestrian walkways. Pedestrian safety should be improved by providing both shared and separated pedestrian and cycle paths within fewer, more clearly-defined major routes.

4 ACCESS

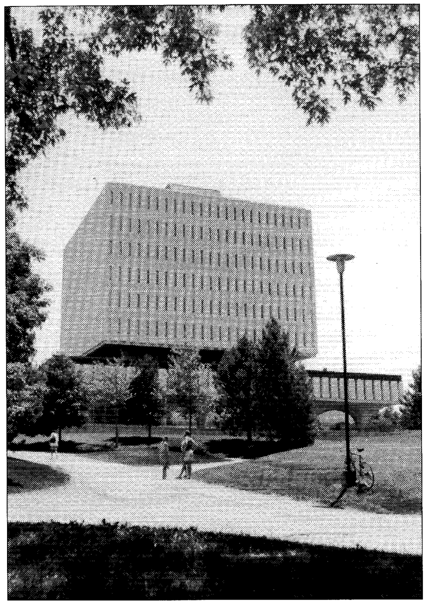


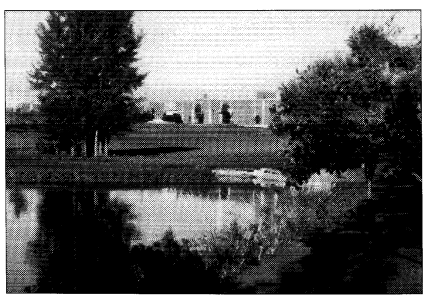


Maurice Green

Dependence on the automobile for access should be lessened by provision of more facilities on campus, such as housing and retail, provided primarily in new buildings along Columbia and University. Better transit, pedestrian and cycle links to the surrounding neighbourhoods could help phase out some current parking usage in order to provide building lots. Parking should continue to be provided, in lots, as part of new buildings and on-street, but within an overall pricing policy which helps subsidize other forms of campus transit.

Through traffic and service access to the University could be accommodated by several proposed road improvements. The proposed Westmount extension is re-examined and, subject to discussions with the Region and the City regarding the current right-of-way, a possible shift westwards is suggested to an upgraded Fischer-Hallman which would swing around the west edge of the North Campus. This arterial road would be designed as a parkway, following the findings of an environmental audit and taking advantage of the fine natural setting. In this way, the North Campus can be reunited as a neighbourhood, the wetlands can be expanded without interruption and Westmount can become a street. Elsewhere on the North Campus, a new pattern of neighbourhood streets and blocks can allow easy local access without encouraging through traffic. On the South Campus, the intention is to better integrate the campus into the City without significantly increasing through traffic on any one route. The ring road could eventually be linked to the North Campus by an extension of its western arm and, ultimately, a new north-south through street could replace the railway tracks. New streets from the ring road to Phillip would also help dilute traffic at the current campus entrances.





Implementation of the Master Plan begins with the University preparing a detailed implementation strategy, assuming University control over property through leaseholds with reversionary clauses and, possibly, limited sales, with performance clauses. All development, however, is based on an environmental audit of the campus which will determine detailed land management and development guidelines. In turn, discussions with the City and Region will ensure the integration of the Master Plan within the Laurel Creek Watershed Study and the City of Waterloo Official Plan and Zoning By-law. Development should be initially managed by the University administration but consideration should be given to the creation of a University Development Corporation to undertake long-term property management. Government funding for research and prototypical development projects should be pursued from the start.

Several projects can be undertaken immediately. The University should immediately begin the detailed inventory and analysis of the North Campus as part of a comprehensive environmental audit. Watercourse rehabilitation could proceed as soon as this audit was completed and a long-term watercourse management plan established. Building projects begin with detailed sector plans for each proposed development area. These plans, incorporated into early development calls, include detailed development guidelines for buildings and landscapes and include an assessment of environmental issues, as appropriate. Initial building projects could include a new bookstore and visitor centre, potentially as part of a “gatepost” building at one of the campus entrances; a new Engineering and Earth Sciences building, on the B1 parking lot; a more modest version of the Student Life Centre, as part of the creation of a new “campus common” on the open space south of B.C. Matthews Hall; an addition to Optometry, extending out to Columbia to establish a street frontage; and, lighting and landscaping improvements to the four main pedestrian routes into the campus.

Figure 1 shows the overall image for the North and South Campus which the Master Plan intends to develop.

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