

TO: CITY MANAGER

1996 JULY 17

FROM: DIRECTOR PLANNING & BUILDING

OUR FILE: 10.126
RZ#6/96

SUBJECT: SIMON FRASER UNIVERSITY OFFICIAL COMMUNITY PLAN

PURPOSE: To provide Council with a response to issues raised at the Public Hearing held on 1996 June 26 and a revised bylaw appropriate for Third Reading.

RECOMMENDATIONS:

1. **THAT** Council approve the amendments to Bylaw Number 10391 (Simon Fraser University Official Community Plan) arising out of the 1996 June 26 Public Hearing and as included in the amended Official Community Plan and shown in Attachment 1 to this report.
2. **THAT** Council approve the amendments to Bylaw Number 10392 (SFU Neighbourhood District P11 and P11e) arising out of the 1996 June 26 Public Hearing and as shown in Attachment 2 to this report.

REPORT

1.0 BACKGROUND

A Public Hearing was held on 1996 June 26 concerning **Bylaw Numbers 10391** (Burnaby Community Plan Bylaw 1987, Amendment Bylaw 1996), **10392** (Burnaby Zoning Bylaw 1965, Amendment Bylaw No. 31, 1996) and **10393** (Burnaby Zoning Bylaw 1965, Amendment Bylaw No. 32, 1996) concerning the "Simon Fraser University Official Community Plan" and its implementation. Second Reading was given to these bylaws on 1996 July 08 at which time, staff were requested to prepare a report on issues raised at the Public Hearing prior to Council's consideration of Third Reading on 1996 July 22.

The purpose of this report is to provide Council with the requested response and provide an amended Simon Fraser University Official Community Plan (SFU OCP) (*Attachment 1*) and SFU Neighbourhood District (P11) (*Attachment 2*) appropriate for Third Reading.

2.0 ISSUES RAISED

A number of individuals made submissions to the Public Hearing in relation to the SFU OCP. A number of these submissions were supportive of the Amendment Bylaw, while others raised issues for further consideration. A number of these were of a similar nature, and accordingly, staff have grouped issues into a number of categories for discussion purposes as follows:

2.1 Public Consultation Process

Issue Statement

The extent of public input in the SFU OCP development process.

Staff Comment:

Both the City and Simon Fraser University have undertaken extensive public consultation initiatives during the course of the preparation of the SFU Development Plan Concept and Official Community Plan.

As the first step in the SFU OCP public consultation process, a brochure was prepared which outlined the proposed OCP, invited comments, outlined sources of additional information and advertised the information displays and Open House. The brochure was distributed to all Burnaby libraries, recreation centres and community schools. A comment sheet was part of the brochure.

The availability of the brochure, all public meetings and information displays were advertised via the Burnaby News-Leader, the Burnaby Now and the Peak (the SFU campus student newspaper). Additional public notification was made through Public Service announcements on Rogers Channel 4 and press releases.

Staffed information displays were set up at Eatons Centre in Metrotown, Brentwood Mall, Lougheed Mall and Simon Fraser University. The display period commenced 1996 May 03 and concluded May 07, with each display lasting one day. An unstaffed display was set up in the lobby of Burnaby City Hall from 1996 May 09 to 1996 May 14. An Open House, with a full and thorough presentation from staff, was held on 1996 May 08 at the Confederation Community Centre, from 6:00 p.m. to 9:00 p.m..

Simon Fraser University conducted its public consultation process using the services of Marzolf and Associates. Information about the proposed development was made widely accessible. The Development Plan Concept and a variety of background papers were also available on SFU Facilities Management's Burnaby Mountain land use world wide web page on the Internet. An on-line questionnaire was provided and users were also invited to E-mail SFU Facilities Management directly if they desired.

A supplement to the Simon Fraser News outlined the Development Plan Concept and invited public comment. The supplement also invited interested individuals and groups to meet with members of the project team to discuss specific issues.

Two Open Houses were held on the Burnaby Mountain campus on 1995 November 27 and 1996 January 29. An evening Open House was also held at the Lochdale Community School on 1996 February 08.

Roger's Channel 4 program "Burnaby in Review" aired 1996 May 16 and featured representatives from the City of Burnaby, Simon Fraser University and the Burnaby Mountain Preservation Society. Viewers had an opportunity to call in and make comments and ask questions. This program was aired three additional evenings prior to the Public Hearing.

In addition, Marzolf and Associates sent press releases to a variety of publications and organizations prior to the City's Open House and mall displays. The Open House was advertised in the two Burnaby community newspapers and in the Lochdale Community School newsletter.

2.2 Stream Stewardship

Issue Statement

The necessity of storm water and sediment control measures, proximity of development adjacent to waterways and stream enclosures and diversion.

Staff Comment:

The City is fully cognizant of the environmental sensitivity of its waterways. To this end, the City has through its policies, bylaws and actions taken significant steps to protect and enhance our natural environment.

In the case of the SFU OCP, the crux to watercourse and storm water management is the preparation and approval of a Watercourse and Stormwater Management Plan. This Plan (as required in the OCP) is to be prepared in conformity with Department of Fisheries and Oceans regulations and policies and to the approval of the City **prior** to any residential development. Issues to be addressed in the Watercourse and Stormwater Management Plan include:

- ▶ maintaining pre-development stormwater runoff rates, volumes and seasonal variations to maintain existing downstream hydrologic patterns;
- ▶ maintaining pre-development water quality to ensure downstream aquatic life is not adversely affected;
- ▶ potential development of a detention pond system within the Ring Road on University property that effectively addresses runoff rates and quality;

- ▶ a strategy for management of the existing watercourses within the Ring Road, including the identification of watercourses which are to be enhanced or improved, as well as any minor watercourses for which diversion, culverting or enclosure is proposed.

The SFU OCP also calls for siting and design of development to be consistent with the concept of Stream Stewardship, as set out by the Department of Fisheries and Oceans and the Ministry of Environment in the Stream Stewardship and Land Development Guidelines for the Protection of Aquatic Habitat documents.

It has also been stipulated that building setbacks of 30 m (100 ft.) are to be provided to top of bank for major watercourses. The building setback can be reduced to 15 m (50 ft.) from top of bank for minor watercourses. A proposed amendment to the OCP allows localized variation based on special ecological circumstances. The definition of major and minor watercourses will be determined through the Watercourse and Storm Water Management Plan.

2.3 Building Height and Form

Issue Statement

Building forms and their visibility from locations off mountain.

Staff Comment:

SFU has committed to create a “world class” development that will “meet the test of urban sustainability”. While the SFU OCP does provide maximum density and height regulations, there is full latitude for SFU and their architects to seek truly unique site planning and building design solutions that reflect the opportunities and constraints offered by the site.

It is recognized that should SFU pursue a 10 storey building(s) as one component of a residential neighbourhood, it could be partially visible from some parts of the City and the Region. However, the SFU OCP recognizes that view studies should be pursued when development sites are planned in order to utilize tree retention and planting in bands to attempt to retain the forested appearance of the mountain top as much as possible.

It should also be noted that the conveyance and dedication of the 820 acres of parkland below the Ring Road to the City will permanently protect the forested landscape of the majority of the mountain for generations to come, both within Burnaby and adjacent areas in the region. Also of relevance to this issue is the fact that the existing P6 (Regional Institutional District) zoning presently permits, without rezoning, building heights up to 121.39 feet, which is in excess of the height permitted under the proposed P11 District.

2.4 Geotechnical Assessment

Issue Statement

The geotechnical ability of the area to accommodate buildings ten storeys in height.

Staff Comment:

Golder Associates Ltd., the geotechnical consultants to SFU on this project, have advised that the subsurface conditions on top of the mountain are such that building construction of the nature contemplated in the SFU OCP (including a ten storey residential structure(s)) will not be an impediment.

2.5 Forest Lands and Wildlife Habitat

Issue Statement

Reduction in forested lands and associated loss in wildlife habitat.

Staff Comment:

It is recognized that the OCP, if fully developed would displace existing forested lands. However, such also would be the case if the lands within the Ring Road were developed under the existing P6 (Regional Institutional District) zoning. The prevailing P6 zoning provides for the development of a range of university and other uses (including hospitals, prisons and reformatories) within the Ring Road area without rezoning or special environmental safeguards provided for under the proposed SFU OCP. As previously stated, the proposed arrangement with SFU would see the City gain ownership of the 820 acres of treed area outside of the Ring Road owned by the University. These lands are to be dedicated as permanent parkland for present and future generations.

While recognizing the development potential of the lands, the proposed OCP commits the University to the principle of retaining and incorporating significant trees into site planning and servicing at an early stage. Subdivision and PPA applications are to be accompanied by topographic surveys showing significant trees. The proposed OCP stipulates that no clearing of trees or regrading is to be pursued prior to approvals being granted.

Under the proposed OCP, the University will also be required to conduct a raptor and heron nest survey to ensure that Section 35 of the Wildlife Act is not contravened and that the status of Hutton's Vireo be determined. Furthermore, the proposed OCP requires that SFU submit a Watercourse and Stormwater Management Plan prior to any residential subdivision. This plan will identify watercourses and associated leave strips that will be preserved and become part of the tree preservation areas.

To date there have been no rare and/or unique vegetation or wildlife vegetation habitat found within the Ring Road that cannot be found elsewhere on Burnaby Mountain. The mixed deciduous/coniferous forests in the northeast section of the plan are similar to the forests found along the north and east sides of Burnaby Mountain outside the Ring Road. The predominantly deciduous forests in the area of the proposed south neighbourhood can be found to the south and west of the Ring Road as well as the proposed 28.7 acre Naheeno Park area. The 820 acres of future park area will ensure that the preservation of more extensive stands of forests with complexity and wildlife habitat similar to the forests found within the Ring Road.

2.6 Traffic

Issue Statement

Adequacy of the road system to accommodate the level of proposed development.

Staff Comment:

The analysis of future traffic volumes showed that the internal road network proposed to serve the expansion of SFU and the housing development provided sufficient capacity to accommodate travel needs without significant traffic congestion during peak periods. The recent development of the Broadway Connector and the Burnaby Mountain Parkway supplements Gaglardi Way in providing upgraded arterial capacity from the west, east and south up to the Ring Road. The "ring road" concept allows trips to and from SFU and the development areas to be distributed more evenly over the network without having to travel through the internal road system.

On the supporting arterial network which will accommodate traffic to and from SFU, the intersection of University Drive and Gaglardi Way is a potential capacity constraint in the road network. Traffic analysis however concludes that the intersection can accommodate future traffic with some improvements over time to add left turn capacity. In the longer term, it is recognized that future improvements to the provincial highway system, including the intersection of Lougheed/Gaglardi and the Burnaby Mountain Parkway may be required to serve a growing regional population including development within the Ring Road.

The upgrading of transit services is foreseen to accommodate the growth anticipated by the development plan. New express bus connections to other areas of the region are planned by BC Transit beginning with the provision of an SFU to downtown express bus service as part of the North Burnaby Service Changes proposed for implementation in December. The growth of population within the Ring Road will also support transit by generating higher transit ridership in the contra peak direction. Future connections to the proposed Lougheed-Broadway Light Rapid Transit facility will also be of assistance in servicing this area.

Cycling will occupy a more important role in the future for trips to and from the University as cycle facilities are improved on roads accessing SFU including the Burnaby Mountain Parkway and Broadway Avenue. The development of a university community within the Ring Road will also promote cycling for shorter distance internal trips as bike routes are planned to link residential enclaves and the main campus areas.

2.7 Future Public Input

Issue Statement

Expressed desire for the public to have opportunity for future review and input as the non-university development proceeds.

Staff Comment:

A fundamental point of departure for Simon Fraser University in discussing the possible conveyance of the parklands outside of the ring to the City of Burnaby was the pursuit of a development plan concept that was based on a pre-zoning approach. Such an approach is intended to provide the degree of certainty to the University that the densities proposed in the development plan concept can be realized, recognizing that it may be a number of years before residential development proceeds, should the university choose this course of action. Accordingly, there will not be a series of rezonings and the requisite Public Hearings associated with the incremental residential development on the subject lands. To address this situation, the SFU OCP contains a series of administrative procedures involving the subdivision and preliminary plan approval processes that will need to be addressed at the time the development lots are created. The procedures involve more detailed consideration of issues such as watercourse and stormwater management, sediment control, tree retention, school and neighbourhood park sites, sanitary sewer and water supply provisions, roadway and pedestrian ways, etc.

As part of the preparation of these detailed proposals relating to the future development of the subject lands, the University has committed to include a public consultation process prior to submitting plans to the City for Preliminary Plan Approval. They have further committed that comments from the public on those plans, both written and verbal, will be submitted to the City in support of the Preliminary Plan Approval application. These commitments have been noted in the SFU OCP.

It should also be noted that as part of the subdivision approval process, the Approving Officer has the opportunity to receive input to assist his deliberations particularly on matters of technical elaboration.

3.0 SFU PUBLIC HEARING SUBMISSION

At the 1996 June 26 Public Hearing, Simon Fraser University suggested certain minor specific word changes to more accurately reflect the intent of the Memorandum of Understanding and the SFU Development Concept. Staff have reviewed each of these and consider them to be of a "housekeeping" nature. These changes have therefore been included in the amended SFU OCP which has been included as *Attachment 1*.

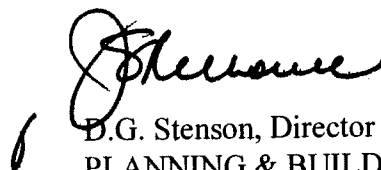
One requested change to the SFU Neighbourhood P11 District that has been accommodated is the "retail sale of used books" given that this is a legitimate and necessary use within the university environment. This change has been incorporated in *Attachment 2*.

4.0 PREREQUISITES FOR REZONING REFERENCE 6/96 (BYLAW 10393)

Council, at its meeting 1996 May 27 established the following as prerequisites to the completion of the rezoning:

- a. An exchange of letters between Simon Fraser University and the City confirming understandings regarding the terms of the Simon Fraser University Official Community Plan.
- b. Provision of a statutory right-of-way for public vehicular and pedestrian access on the Ring Road corridor.
- c. Provision of a statutory right-of-way to provide public pedestrian access over the existing trail down from the Ring Road east of the existing gasoline service station.
- d. Execution of subdivision plans and related documentation for creation of the Simon Fraser University parcel generally within the Ring Road.
- e. The approval of the Ministry of Transportation and Highways to the rezoning application.

These items will be finalized prior to Reconsideration and Final Adoption.


D.G. Stenson, Director
PLANNING & BUILDING

JSB:BLS/db

cc: City Clerk
Director Engineering
Director Finance

ATTACHMENT 1

SIMON FRASER UNIVERSITY OFFICIAL COMMUNITY PLAN

Note:- [] (square brackets) indicates existing wording in SFU OCP recommended for deletion
i (underlined and italicized) indicates recommended new wording

1996 JULY 16

1.0 INTRODUCTION

1.1 THE ROLE OF THE S.F.U. OFFICIAL COMMUNITY PLAN

- 1.1.1 The Simon Fraser University Official Community Plan comprises part of the Official Community Plan for Burnaby.
- 1.1.2 This Plan provides for the University's institutional needs as well as for non-University development within the Ring Road, and is intended to form the basis for rezoning of lands within the Ring Road to permit leasehold subdivision for development of market housing.

1.2 BASIC PRINCIPLES OF THE PLAN

- 1.2.1 To identify environmentally sensitive areas and to protect ecosystems and ecological functions.
- 1.2.2 To identify areas within the Ring Road that are potentially suitable for both University and non-University uses, including combinations of uses where desirable.
- 1.2.3 To define a potential mix of housing, commercial services, support services, and facilities that will serve both the University and non-University communities.
- 1.2.4 To determine development types, forms, and densities that respect and complement the natural heritage of Burnaby Mountain.
- 1.2.5 To maintain development flexibility for the University.

2.0 LAND USE AND DEVELOPMENT

2.1 OVERVIEW

- 2.1.1 A general outline of land use and development accommodated by the Simon Fraser University Official Community Plan is illustrated in *Figure 1*.
- 2.1.2 The Plan provides considerable development flexibility. This is to accommodate the University's desire to have the option of developing either market housing or University uses in the areas defined as potential Residential Neighbourhoods, without a need for Plan amendments, rezonings or Public Hearings.
- 2.1.3 Property used for non-university purposes will become subject to property taxation, utility user fees and other applicable charges as development takes place. Taxable occupiers of property not used for university purposes will be subject to these charges in the same manner as other Burnaby taxpayers.

2.2 UNIVERSITY ENCLAVE

- 2.2.1 The University Enclave area of approximately 81 ha (200 acres), which includes existing University development, is to be used only for University development, which currently totals about 2.75 million square feet of floor area, and is expected to double to 5.5 million square feet over the long term. Fulltime equivalent student enrollment (FTE) which is currently 15,000 is expected to increase to 25,000.
- 2.2.2 University development includes student housing, which currently accommodates 1,400 residents. This is expected to quadruple to about 5,600 residents over the long term.
- 2.2.3 Two University Enclave development sites are provided outside the Ring Road to the north, encompassing firstly the existing Diamond Club, and secondly the existing gas station site and an adjacent development area to the east.
- 2.2.4 University uses may also be developed as an alternative to residential development within the potential Residential Neighbourhoods, subject to the Core Residential concept outlined in Section 2.5.

2.3 DISCOVERY PARK

- 2.3.1 The existing Discovery Park research developments in an enclave totalling about 5.3 ha (13 acres) are to remain under their existing CD Comprehensive Development District zoning (see *Figure 2*).
- 2.3.2 Additional research uses could be developed on the remaining undeveloped previously defined Discovery Park sites to the west of the existing developments, subject to CD rezoning. This would preclude, however, development of the South Residential Neighbourhood.
- 2.3.3 An area northeast of the existing Discovery Park development, comprising an East Neighbourhood Residential Swing area, is also defined for potential research use development, subject to CD rezoning.

2.4 NAHEENO PARK

- 2.4.1 The forested ravine and watercourse area popularly known as Naheeno Park has been identified as the most ecologically significant area within the Ring Road, and is to be maintained as a natural undeveloped park area.
- 2.4.2 Within Naheeno Park are watercourses which are tributaries of Eagle Creek and Silver Creek. The Eagle Creek Ravine is located on the west side of the park and is the area's dominant feature. There are two [branches] tributaries of Silver Creek on the east side of the Naheeno Park area. In order to enlarge the potential Residential Neighbourhood or University development area to the east by approximately 0.85 ha (2.1 acres), the lower portion of Silver Creek's easterly [watercourse] tributary, below the utility right-of-way, is to be diverted into the western channel. The western branch is currently not an active stream and will require specific engineering and enhancement measures to address hydraulic, sediment and debris loading on the stream as it develops. The proposed diversion connecting the east and west [branches] tributaries of Silver Creek will be an open channel below the right-of-way with a natural, vegetated character similar to the existing streams in the area. The proposed diversion has been endorsed in principle by Department of Fisheries (DFO) staff and the University's environmental consultant.
- 2.4.3 The area of Naheeno Park is 12 ha (28.7 acres). The west and east boundaries of Naheeno Park are located 22.5 m (74 ft.) from the top of the bank with the lower east boundary based on the proposed diversion noted above. Any adjacent site development will be setback a further 7.5 m (26 ft.) from these boundaries for a total setback of 30 m (100 ft.) from top of bank.

- 2.4.4 An improved pedestrian/bicycle trail is to be developed along the utility corridor through Naheeno Park to link the east and west portions of the South Residential Neighbourhood. The trail will be 4 m (13 ft.) in width and will include bridges or open arch structures over the Eagle and Silver Creek[s] tributaries. Although the trail may also provide for occasional service vehicle access for the utilities located within this corridor, no road is to be developed through Naheeno Park.

2.5 RESIDENTIAL NEIGHBOURHOODS

- 2.5.1 Two market Residential Neighbourhoods (South and East) totalling up to approximately 65 ha (160 acres) in area can be potentially be developed within the Ring Road (see *Figure 3*). A total of up to 4,536 housing units [could] can be developed in the two Neighbourhoods. Either one, or both, or neither Neighbourhood at the option of the University may be developed for residential uses, as an alternative to University use.
- 2.5.2 A Core Residential area is defined within each Neighbourhood, and if residential uses are pursued within that Neighbourhood, there is a commitment to develop the entire Core area as a Residential Neighbourhood with at least 1,000 housing units to ensure a viable critical mass of units and residents for the Neighbourhood. Conversely, expansion of University development into the defined Core area would preclude development of that Residential Neighbourhood. The Core area for each Neighbourhood includes a school/park site as a central element. Adjacent the Core Residential areas are Swing Residential areas which could either enlarge the Residential Neighbourhood or be developed for University uses (or in the case of the East Neighbourhood for mixed University/residential uses, or research use subject to rezoning).
- 2.5.3 The existing undeveloped Discovery Park area forms part of the South Neighbourhood Core area, and termination of the existing lease arrangements for this area, as well as release of the associated conservation area restrictive covenant, will consequently be necessary if the South Neighbourhood is to be developed.

2.5.4 South Neighbourhood Statistics

Estimated Residential Development Site Area

Core	16.2 ha (40.0 acres)
Swing	<u>3.6 ha (9.0 acres)</u>
Total	19.8 ha (49.0 acres)

Floor Area Ratio

With underground parking 0.7 to 0.9
With surface driveways 0.45 maximum

Maximum Unit Density

With underground parking . . . 75 units/ha (30 units/acre)
With surface driveways 30 units/ha (12 units/acre)

Maximum Building Height

4 storeys or 16.5 m (54.1 ft.)

Maximum Lot Coverage

0.30

Maximum Unit Count

Core 1,214
Swing 273
Total 1,487

2.5.5 East Neighbourhood Statistics

Estimated Residential Development Site Area

Core 8.7 ha (21.6 acres)
Swing 11.6 ha (28.6 acres)
Total 20.3 ha (50.2 Acres)

Floor Area Ratio

With underground parking 1.1 to 1.7
With surface driveways 0.45 maximum

Maximum Unit Density

With underground parking . . . 150 units/ha (60 units/acre)
With surface driveways 30 units/ha (12 units/acre)

Maximum Building Height

10 storeys or 33.5 m (110 ft.)

Maximum Lot Coverage

0.35

Maximum Unit Count

Core 1,312

Swing 1,737

Total 3,049

2.5.6 Residential Development sites will be coterminous leasehold parcels, so that ownership is retained by the University.

2.5.7 The University, in consultation with the City, will prepare and adopt guidelines for residential development, to ensure a high quality of design and development, and to maintain the quality, consistency and integrity of the University's architectural environment.

2.6 SCHOOLS

2.6.1 A school site with an area of 2.8 ha (6.9 acres) is provided within the Core area of each Residential Neighbourhood (see *Figure 4*). At the time of the first subdivision for residential leasehold parcels within a neighbourhood, a coterminous leasehold parcel will also be created for the school site, and a lease at no cost (or registered agreement to lease) will be provided to the School Board.

2.6.2 The actual size and configuration of the school site parcel, and associated neighbourhood park, will be based on the demonstrated feasibility of developing the required facilities, taking into account enrollment projections and the topography and natural features of the site.

2.6.3 If it is determined by the School District that a school site is not required for school purposes, it is to revert to the University for residential development.

2.7 PARKS

2.7.1 Naheeno Park, in addition to being an ecologically important natural area, will provide an important passive recreation resource to the residents of the proposed Neighbourhoods. At the time of the first subdivision for a residential leasehold parcel, a coterminous lease over Naheeno Park will be provided to the City at no cost.

2.7.2 Neighbourhood park sites (see *Figure 4*) located and sized as follows are also to be provided to the City on a coterminous leasehold basis at no cost at the time of initial residential subdivision within a Neighbourhood:

- ▶ adjacent South Neighbourhood School 2.0 ha(5.0 acres)
- ▶ in South Neighbourhood Core Area (south-west) 0.61 ha (1.5 acres)
- ▶ adjacent East Neighbourhood School 0.57 ha (1.4 acres) or 2.0 ha (5.0 acres) if subdivision of the East Neighbourhood precedes subdivision of the South Neighbourhood (to be reduced subsequently if subdivision of the South Neighbourhood proceeds).

2.7.3 The City is satisfied that sufficient parkland is set aside and secured for park purposes within the proposed Residential Neighbourhood subdivisions to meet or exceed the contribution that would otherwise be required under the Parkland Acquisition Levy. Consequently, the Parkland Acquisition Levy will not apply to [residential] development within the two Neighbourhoods.

2.8 COMMUNITY FACILITIES

2.8.1 The University commits to developing one furnished childcare facility within each Neighbourhood, with capacity based on one space per 40 residential units, to a maximum of 60 children.

2.8.2 The University commits to providing at no cost to the City a site for a City fire protection facility when required.

2.8.3 The University has committed to making every effort to provide residents of the Residential Neighbourhoods with reasonable access to the University's Library and Recreation Services on a user-pay basis, subject to the priority that must be accorded to the University community.

2.8.4 The City will construct and operate community facilities including parks, playfields and recreation facilities within the Neighbourhood Parks to be provided by the University.

2.9 COMMERCIAL SERVICES

2.9.1 Commercial development to serve the University and residential communities is to be located at the east end of the University's main axis adjacent the East Neighbourhood.

2.9.2 Total commercial floor area should be 10,000 to 20,000 m² (110,000 to 220,000 sq.ft.). The commercial development should consist of retail, personal service and office uses servicing the day to day needs of residents of the Neighbourhoods and members of the University Community. Mixed use commercial development also incorporating University uses or offices, or student or market housing, may be

feasible. Relocation of the existing gasoline service station to the identified commercial area, subject to appropriate design considerations, is encouraged.

- 2.9.3** The commercial development should be designed as a primarily pedestrian-oriented area with strong links to the University and residential pedestrian and bicycle networks. Vehicular interference with pedestrian movement is to be minimized.

3.0 ENVIRONMENTAL CONSIDERATIONS

3.1 INTRODUCTION

- 3.1.1** Subdivision, servicing, site planning and design for development within the Ring Road is to be sensitive to the existing natural environment including topography, watercourses, significant trees and wildlife habitat.
- 3.1.2** Subdivision and Preliminary Plan Approval applications are to be accompanied by topographic surveys showing watercourses and significant trees, and no clearing of trees or regrading is to be pursued prior to the approvals being granted. Watercourse protection, tree retention and other environmental issues will be addressed at the time of subdivision and again in more detail at the time of Preliminary Plan Approvals.
- 3.1.3** Siting and design of d[D]evelopment is to *[comply]* be consistent with the City's planning and design principles for Environmentally Sensitive Areas.

3.2 WATERCOURSES

- 3.2.1** Siting and design of d[D]evelopment is to be consistent with the concept of Stream Stewardship, as set out by the Department of Fisheries and Oceans and the Ministry of Environment in the Stream Stewardship and Land Development Guidelines for the Protection of Aquatic Habitat documents.
- 3.2.2** Watercourses are to be managed in accordance with the Watercourse and Storm Water Management Plan referred to in Section 4.5. In general, existing watercourses are to be protected and maintained in an open, natural condition. Any proposed diversion, culverting or enclosure of minor watercourses is to be addressed on a comprehensive basis in this overall Management Plan prior to detailed subdivision planning, servicing design, and site planning within the Residential Neighbourhoods.
- 3.2.3** Building setbacks of 30 m (100 ft.) are to be provided to top of bank for major watercourses. The building setback can be reduced to 15 m (50 ft.) from top of bank for minor watercourses as determined through the Watercourse and Storm Water Management Plan, with consideration of localized variation possible based on special ecological circumstances.

- 3.2.4 Sediment control programs will be required prior to any site clearing, grading, development or servicing works being commenced.

3.3 TREES, VEGETATION AND WILDLIFE

- 3.3.1 While recognizing the development potential of the lands, t[T]he principle of retention of significant trees is to be incorporated into subdivision layout servicing designs, and site planning at an early stage. Subdivision and Preliminary Plan Approval Applications should incorporate commitment to preservation of specific significant trees or treed areas. It is understood, however, that much of the existing forested area within the Residential Neighbourhoods will be cleared as development proceeds.
- 3.3.2 When development sites are planned, view studies should be pursued in order to utilize tree retention and planting in bands to attempt to retain the forested appearance of the mountain top as much as possible. It is recognized however that the proposed Residential Neighbourhood developments will be visible from parts of Burnaby.
- 3.3.3 In the vicinity of the two development sites outside the Ring Road, as noted in Section 2.2.3, the University will also own an area of land for view management purposes. This is to allow tree management for preservation of existing views as well as localized enhancement. The University has committed to manage this area sensitively, and to maintain existing groups of and particularly significant individual specimen trees, and to avoid clearcutting. Around other parts of the Ring Road the University's narrow strip of ownership outside the road is simply to allow the University to maintain the road and associated services, including management of overhanging or hazardous trees.
- 3.3.4 Native plant materials should be used in landscaping of development sites. Integrated Pest Management principles should be incorporated into landscape design.
- 3.3.5 Prior to more detailed planning for Residential Neighbourhood development an intensive raptor and heron nest survey needs to be undertaken during the spring season before leaf-out [in accordance with] to ensure that Section 35 of the Wildlife Act is not contravened. [Development in the vicinity of active raptor nests will require a specific management plan.] Status of [the western screech owl and] Hutton's vireo on the site should also be determined.
- 3.3.6 A stream survey of tailed frog tadpoles is recommended, with any relevant information utilized as an input into the Watercourse and Storm Water Management Plan referred to in Section 4.5.

4.0 SERVICES

4.1 INTRODUCTION

- 4.1.1 At present the Ring Road and the roads and service infrastructure within it serving the University and Discovery Park [Place] are owned and maintained by the University and Discovery Park. If Residential Neighbourhoods are developed within the Ring Road, however, it is intended that, in general, the roads and servicing infrastructure serving market residential development sites would be built to City standards by the University as a condition of subdivision, and would subsequently be owned and maintained by the City.
- 4.1.2 Since the market residential development sites are to be leasehold parcels, the University and City have agreed that upon termination of the residential leases and reversion of the land to the University, the former residential roads and service infrastructure should revert to University ownership and maintenance at no cost to the University.

4.2 ROAD, PEDESTRIAN AND BICYCLE NETWORKS

- 4.2.1 Provision of roads, sidewalks and other pedestrian and bicycle facilities within the Ring Road is to be consistent with the principles, policies and standards of the Burnaby Transportation Plan, as well as with the Circulation Concept illustrated in *Figure 5*.
- 4.2.2 Residential road rights-of-way are to be dedicated, with road and sidewalks constructed by the University to City standards which take into account topography and permit flexibility as a condition of subdivision for residential purposes, with the understanding that upon termination of the residential leases, the roads are to revert to the University. Statutory rights-of-way or easements will be required to ensure public access over existing University roads where required.
- 4.2.3 The pedestrian and bicycle modes of transportation are to be promoted and facilitated within the Ring Road through the provision by the University of sidewalks, bicycle and pedestrian path networks (generally on statutory rights-of-way) to City standards as a condition of subdivision. Bicycle parking facilities are to be provided within developments. Pedestrian facilities should provide for access for the mobility impaired.
- 4.2.4 Public transit is to be facilitated through the design of development and roads, and through the provision of pedestrian facilities which support transit usage and provide convenient and safe pedestrian access to existing and potential transit stops.

- 4.2.5 The City will provide snow clearing of dedicated residential streets within the Ring Road on the same basis as within other residential neighbourhoods in the City. If a higher level of service is desired by the University, the University will pursue supplemental private arrangements at its cost.

4.3 WATER SUPPLY

- 4.3.1 The City supplies water to the University's water distribution network and water tower storage reservoir.
- 4.3.2 Provision of a water supply system for residential sites to City standards will be a condition of subdivision creating residential development sites. It is recognized that the issue of water capacity will need to be addressed. The residential water supply system, including any required supply improvements outside the Ring Road, is to be constructed by the University to City standards, and owned and maintained by the City for the duration of the residential leaseholds.

4.4 SANITARY SEWER COLLECTION

- 4.4.1 Provision of a sanitary sewer collection system for residential sites to City standards will be a condition of subdivision creating residential development sites. This sanitary sewer system is to be constructed by the University to City standards, and owned and maintained by the City for the duration of the residential leaseholds.

4.5 WATERCOURSE AND STORMWATER MANAGEMENT

- 4.5.1 The University is to prepare a Watercourse and Storm Water Management Plan in conformity with DFO and City regulations and policies, to [be approved by DFO and] the approval of the City prior to any residential subdivision.
- 4.5.2 The Watercourse and Storm Water Management Plan is intended to allow land development in accordance with this Plan to proceed within the Ring Road while protecting the environmental resource values of the downstream watercourses; i.e. Stoney Creek, Eagle Creek and Silver Creek. Issues to be addressed include:
- ▶ maintaining pre-development stormwater runoff rates, volumes and seasonal variations to maintain existing downstream hydrologic patterns
 - ▶ maintaining pre-development water quality to ensure downstream aquatic life is not adversely affected
 - ▶ potential development of a detention ponds system within the Ring Road on University property that effectively addresses runoff rates and quality
 - ▶ a strategy for management of the existing watercourses within the Ring Road, including the identification of watercourses which are to be enhanced or improved, as well as any minor watercourses for which diversion, culverting or enclosure is proposed.

- ▶ impacts originating from the University's lands on the north face drainage area (re: fisheries impacts and slope stability)
- ▶ all relevant environmental issues discussed in Section 3.0.

4.5.3 The Watercourse and Storm Water Management Plan is also to address the issue of whether it would be practicable for the City rather than the University to accept ownership and responsibility for any of the stormwater facilities serving residential development sites, for the duration of the residential leaseholds. Provision of all required facilities by the University will be a condition of subdivision.

4.6 SOLID WASTE COLLECTION

4.6.1 Solid Waste Collection and recycling for the Simon Fraser University Residential Neighbourhoods is to be provided on the same basis as for other multi-family residential neighbourhoods.

5.0 ADMINISTRATIVE PROVISIONS

5.1 ZONING

- 5.1.1 This Plan is intended to form the basis for rezoning of land within the Ring Road so that University, residential, commercial, school and park development in accordance with this Plan can proceed without further rezonings and Public Hearings.
- 5.1.2 Research use (Discovery Park) development will continue to require Comprehensive Development rezoning.

5.2 SUBDIVISION

- 5.2.1 Detailed Neighbourhood planning including environmental considerations and addressing servicing and community service issues will be pursued by the University in consultation with the City in advance of any subdivision application for a Residential Neighbourhood.
- 5.2.2 Subdivision Applications shall be consistent with this Plan, and include:
 - ▶ topographic survey showing watercourses and significant trees
 - ▶ preliminary proposals for watercourse protection and tree retention, and any other relevant environmental issues
 - ▶ servicing proposals
 - ▶ community service proposals addressing neighbourhood parks, school sites and childcare facilities.
 - ▶ development guideplan for the Neighbourhood showing proposed general forms of development and statistics for each proposed parcel.

- 5.2.3 Subdivision approval will be conditional upon provision of servicing infrastructure, community facilities, and school and park sites as outlined in this Plan.

5.3 UNIVERSITY PUBLIC CONSULTATION PROCESS

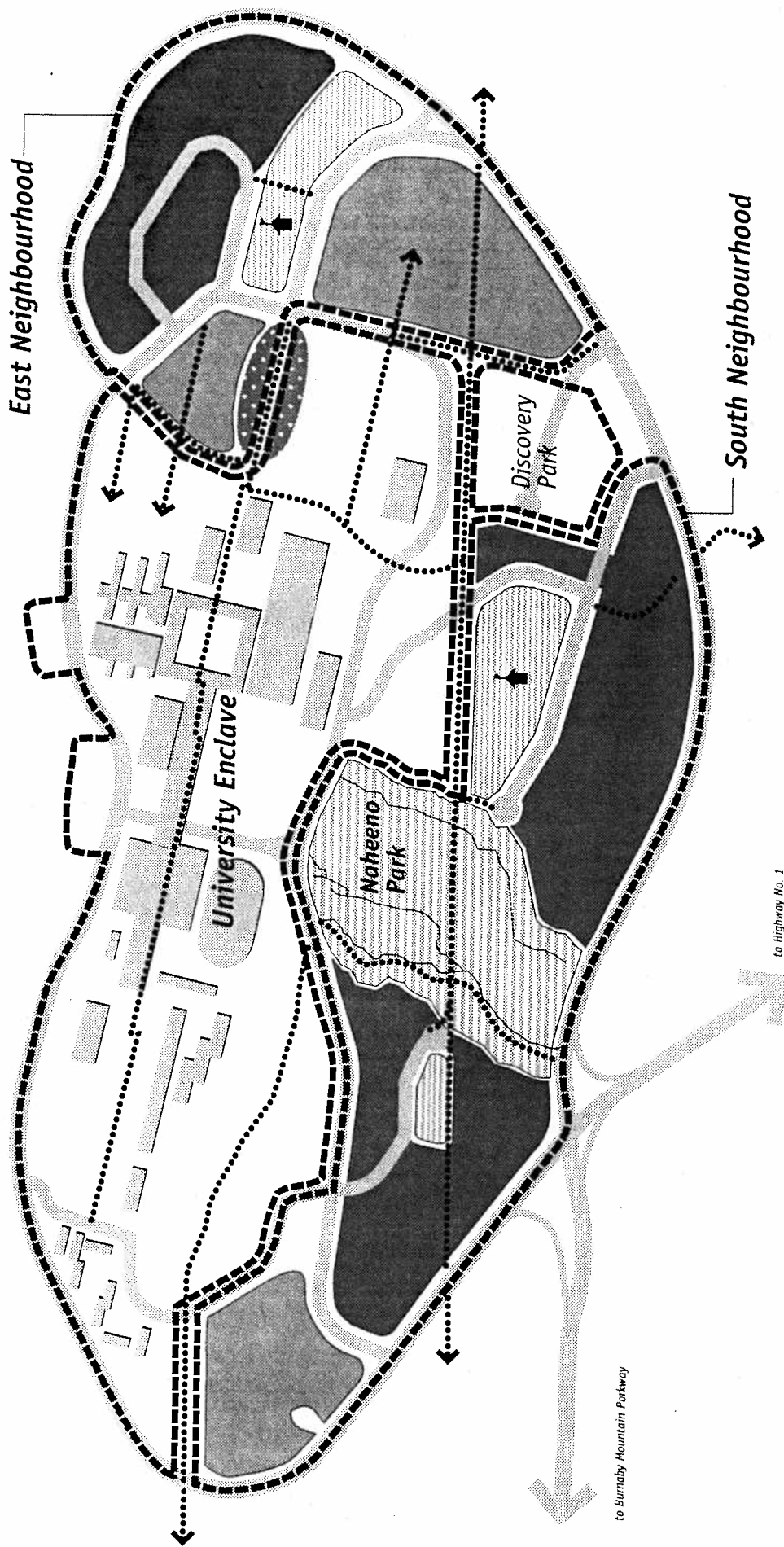
- 5.3.1 Recognizing that the City will not hold Public Hearings for developments not requiring rezoning, the University has committed to pursuing a public consultation process prior to submitting any specific development to the City for Preliminary Plan Approval.
- 5.3.2 The University's public consultation process will include development information signs (on or adjacent the site), advertisements and Public Information Meetings for specific proposals for development parcels. The City will be advised of any proposed consultation process.
- 5.3.3 Comments of the public, both written and verbal, will be summarized and forwarded to Burnaby in support of the Preliminary Plan Approval application.

5.4 PRELIMINARY PLAN APPROVAL (PPA)

- 5.4.1 All developments will require PPA prior to issue of Building Permits.
- 5.4.2 Specific Official Community Plan and zoning parameters applicable to the site, as well as documentation requirements, should be discussed with City staff prior to submitting an application for PPA.
- 5.4.3 PPA applications are to include the following:
- ▶ topographic survey showing any watercourses and significant trees
 - ▶ proposals for watercourse protection and tree retention and any other relevant environmental issues.
 - ▶ a site plan showing property dimensions, building location, including setbacks from property lines, fully-dimensioned parking and loading lay-outs indicating parking required and provided, and the location of vehicular and pedestrian access to the property
 - ▶ a grading plan showing existing and proposed contour lines, all proposed retaining walls, proposed building and paving grades, existing grade and driplines for any trees being preserved on or adjacent the site, and existing or design grades for any adjacent roads, sidewalks and trails
 - ▶ fully-dimensioned floor plans of all buildings indicating the use of the floor space
 - ▶ location of adequately sized and screened garbage handling and recycling material holding space
 - ▶ a plan showing roof elevations and proposed elevations at finished grade superimposed on the existing topographic survey

- ▶ exterior elevations of the buildings indicating exterior finishes and materials to be used
- ▶ a simple typical building cross-section indicating height of buildings
- ▶ a landscape plan including a detailed planting plan and plant list indicating common and botanical plant names, quantities of plants, and size and/or spacing of plants, and indicating protection measures for retained trees and watercourse leavestrips
- ▶ a demonstration of consistency with applicable design guidelines and development guideplans, as well as zoning regulations and this Plan
- ▶ a sediment control plan subject to Environmental Health review.

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Simon Fraser University Official Community Plan **Land Use Concept**

The Official Community Plan accommodates University or Discovery Park uses (as currently permitted) as an alternative to the development of the two residential neighbourhoods.

- Core Residential Areas
- Swing Residential Areas
- Commercial Services
- Neighbourhood Park
- School / Neighbourhood Park
- Major pedestrian and/or bicycle paths



Figure 1

Simon Fraser University
Official Community Plan
Discovery Park

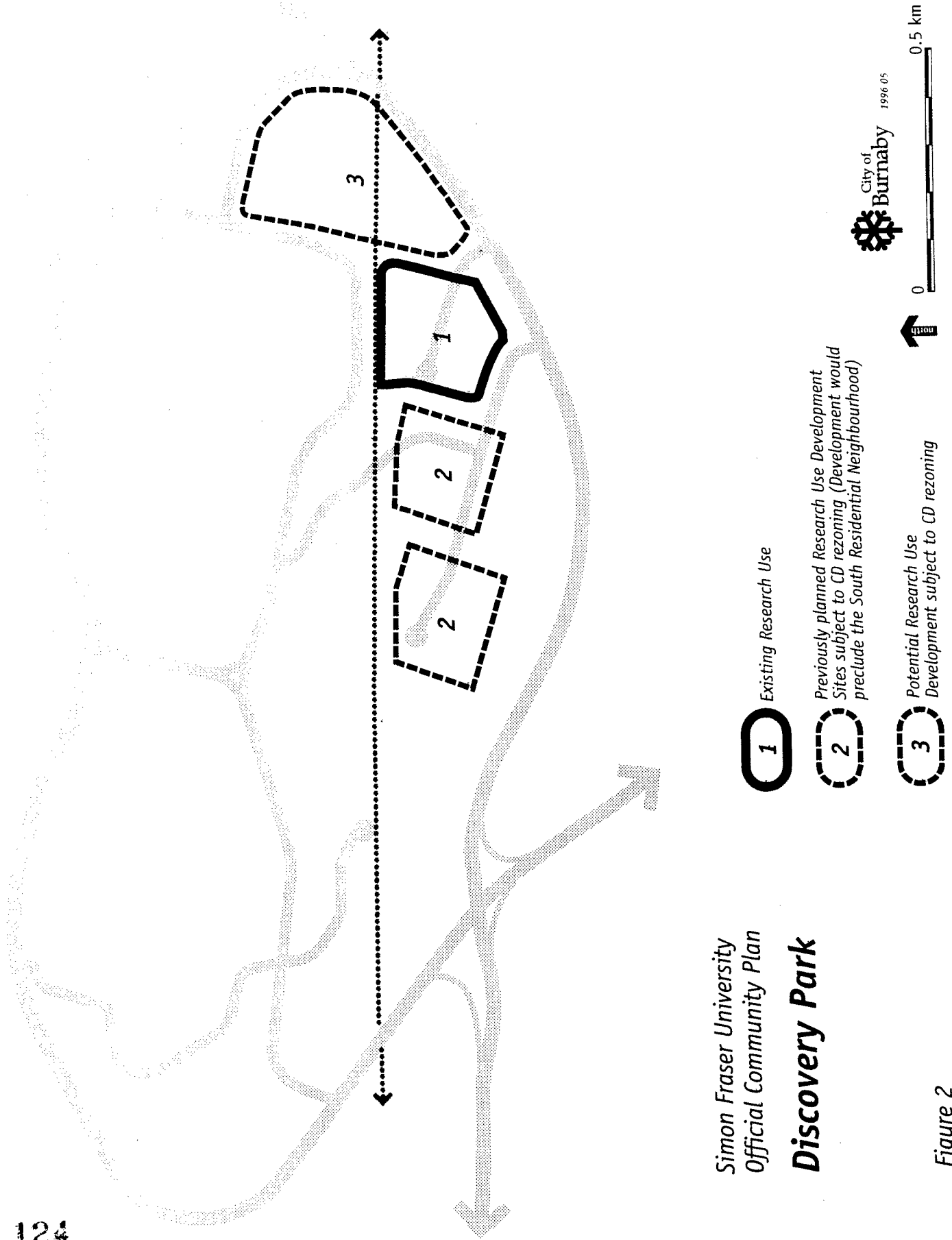
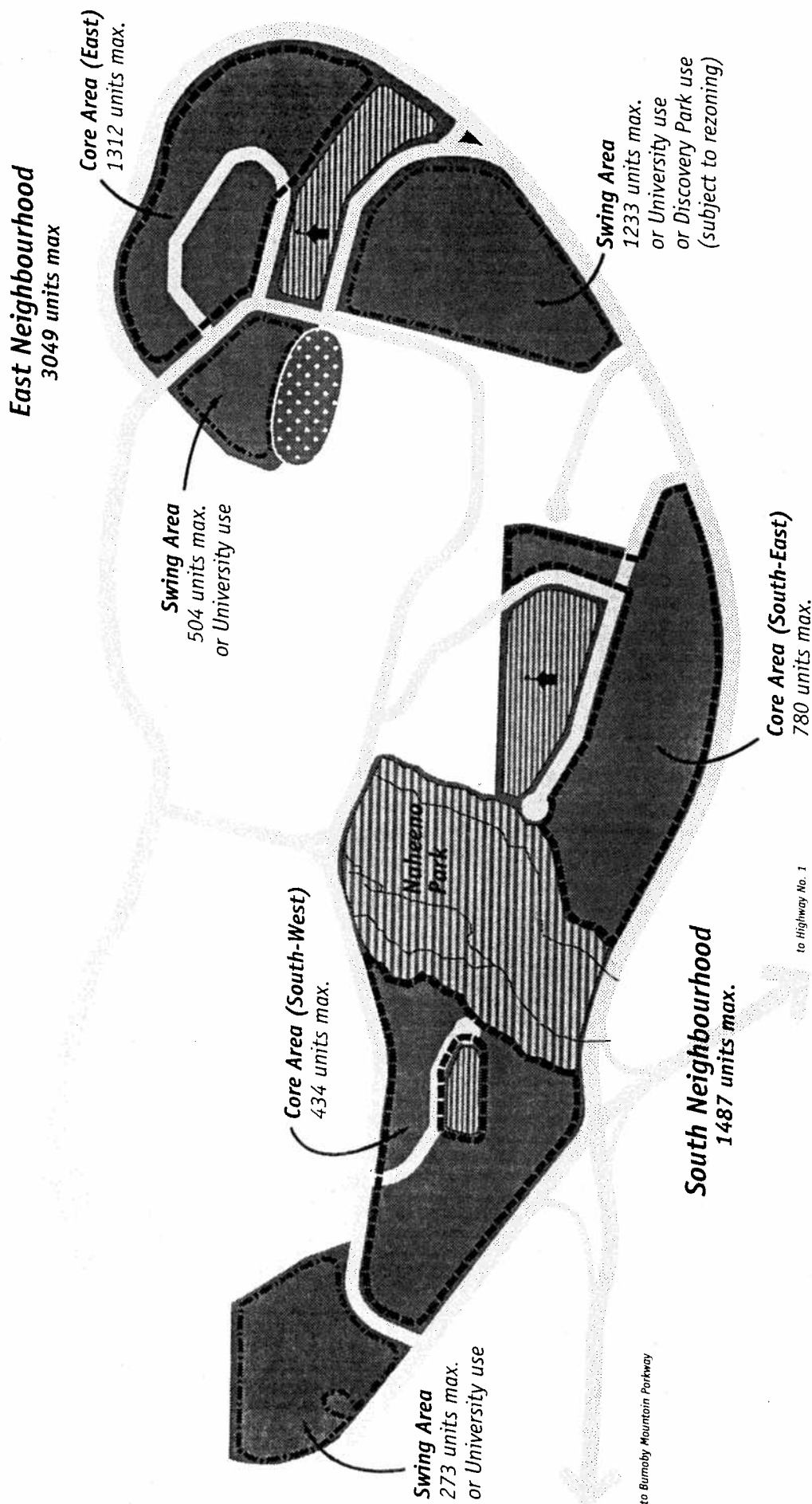


Figure 2



Simon Fraser University
Official Community Plan

Potential Residential Neighbourhoods

The Official Community Plan accommodates University or Discovery Park uses (as currently permitted) as an alternative to the development of the two residential neighbourhoods.



Commercial Services



Neighbourhood Park



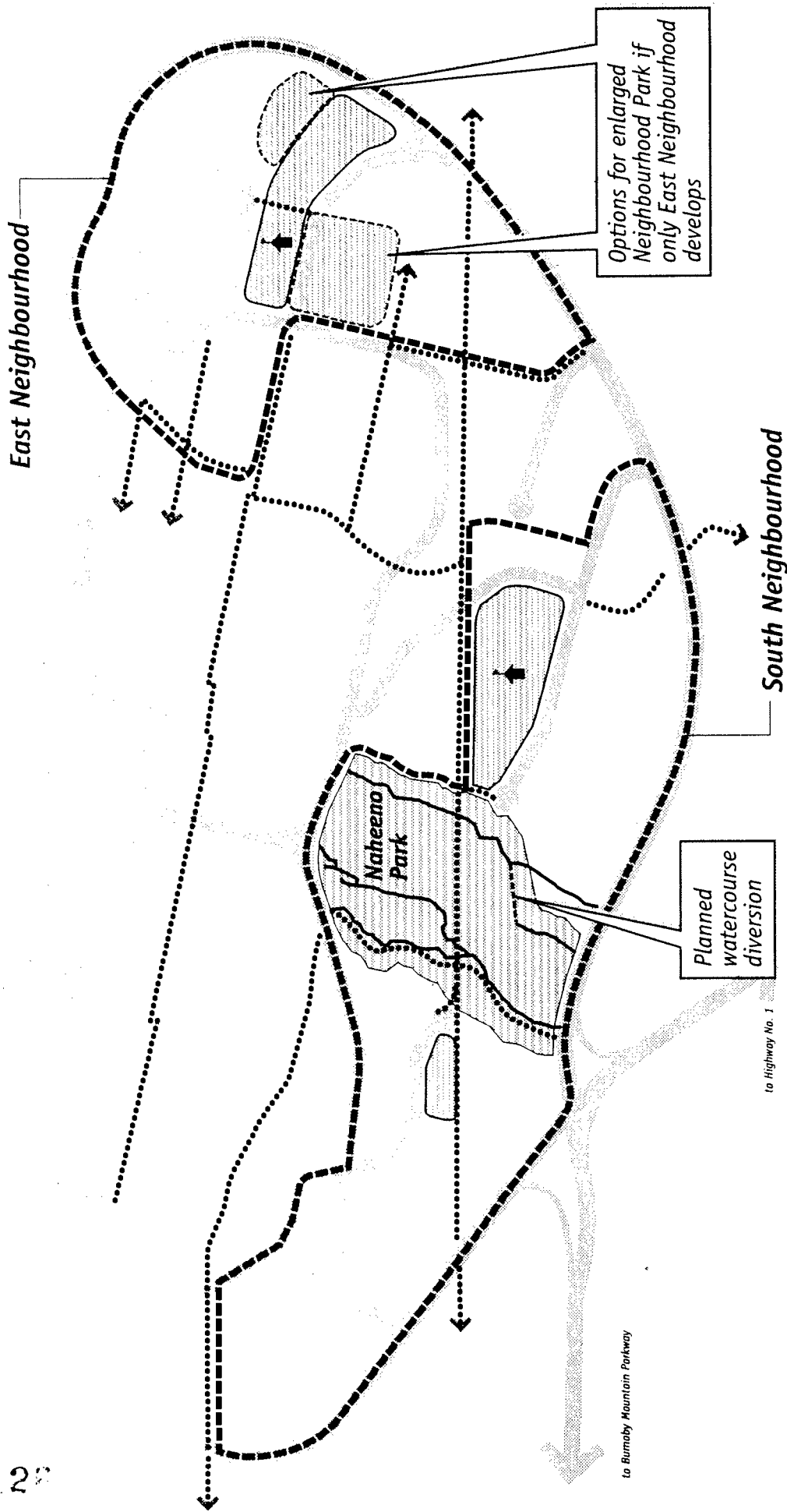
School / Neighbourhood Park



City of
Burnaby
1996.05



0 0.5 km

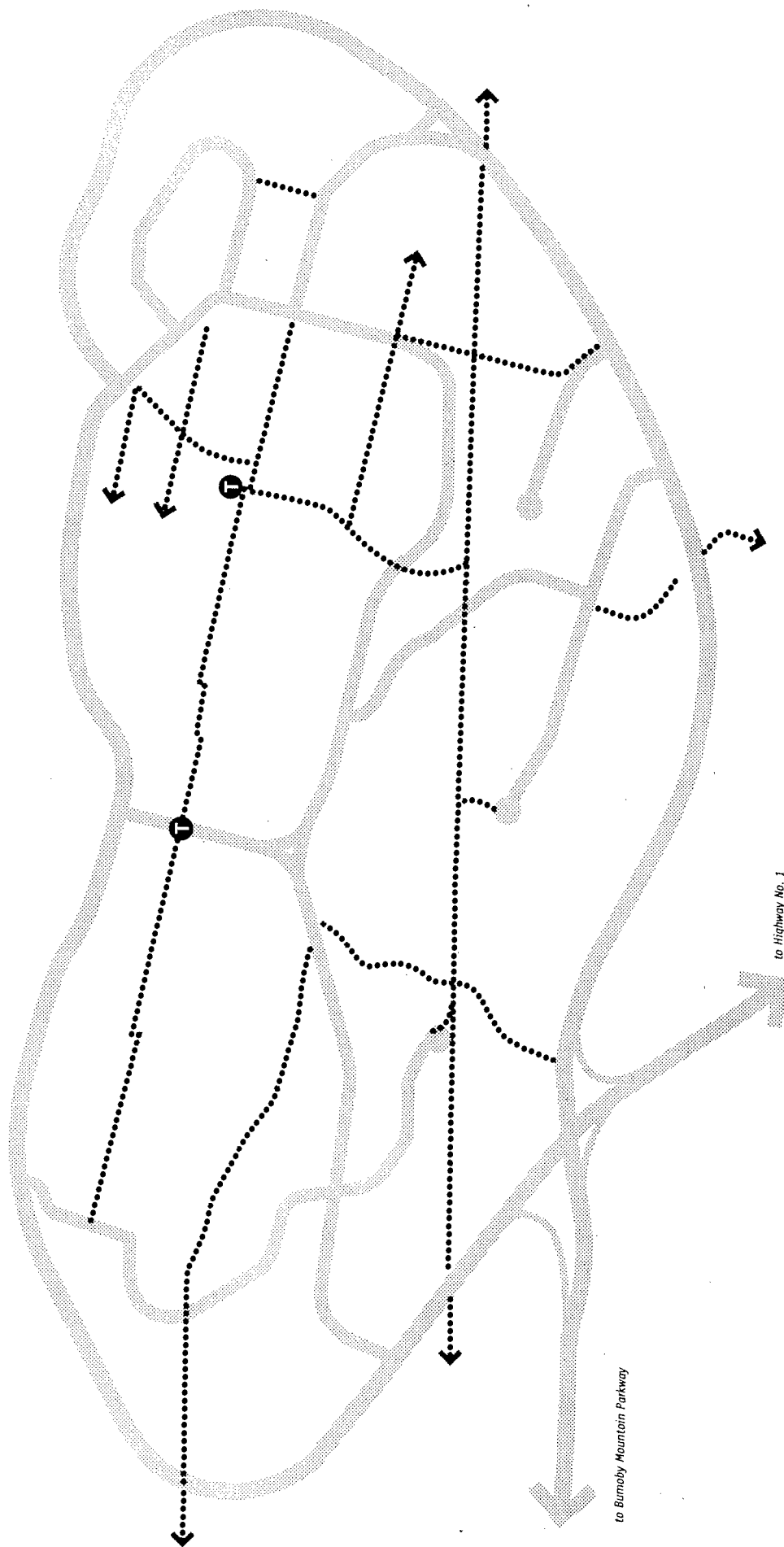


Simon Fraser University
Official Community Plan

Parks and Schools



Figure 4



Simon Fraser University
Official Community Plan

Circulation Concept

..... Roads and Sidewalks

..... Major pedestrian and/or
bicycle paths

T Public Transit Nodes



Figure 5

ATTACHMENT 2

Note:- _____ (*underline*) indicates recommended new wording.

1996 July 16

511 S.F.U. Neighbourhood District (P11)

This District provides for development of multi-family market residential neighbourhoods with parks, schools and commercial support facilities, as an alternative to University uses, and in accordance with the Simon Fraser University Official Community Plan.

511.1 Uses Permitted:

- (1) Uses, other than hospitals, prisons and reformatories, permitted in the P6 Regional Institutional District, subject to the regulations contained therein.
- (2) Multiple-family dwellings or groups of multiple-family dwellings.
- (3) Child care facilities that are not located in a dwelling unit.
- (4) Public parks.
- (5) Public schools.
- (6) Research laboratories and associated business and professional offices, subject to the Discovery Park Community Plan, and subject to the condition that such use is included as part of a comprehensive development plan subject to the CD (Comprehensive Development) District.
- (7) Home occupations except for family daycare centres.
- (8) Accessory buildings and uses.

511.2 Uses Permitted in a P11e Zoning District:

- (1) Uses permitted in the P11 S.F.U. Neighbourhood District.
- (2) Uses permitted in the C1 Neighbourhood Commercial District, subject to the regulations contained therein, except that height of buildings shall be governed by Section 511.5.
- (3) Retail sale of used books

511.3 Conditions of Use:

- (1) No clearing of trees or regrading is to be undertaken prior to Preliminary Plan Approval being granted.
- (2) All principal uses shall be oriented to pedestrian needs and be so located and designed as to avoid vehicular interference with pedestrian movement.

511.4 Special Administrative Provisions:

- (1) In addition to the requirements of section 7.3, applications for development shall be accompanied by the following:
 - (a) topographic survey showing watercourses and coniferous trees having trunk diameter greater than 10cm (3.94 in.) and deciduous trees having a trunk diameter greater than 20cm (7.87 in.), and proposals for watercourse protection and tree retention and such additional environmental information as the Director Planning and Building may require;
 - (b) a site plan showing property dimensions, building location, including setbacks from property lines, fully-dimensioned parking and loading lay-outs indicating parking required and provided, and the location of vehicular and pedestrian access to the site, in addition to or as part of the plan referred to in section 7.3(2)(d);
 - (c) a grading plan showing existing and proposed contour lines, all proposed retaining walls, proposed building and paving grades, existing grade and driplines for any trees being preserved on or adjacent the site, and existing or design grades for any adjacent roads, sidewalks and trails;
 - (d) fully-dimensioned floor plans of all proposed buildings indicating the use of the floor space;
 - (e) proposed location of adequately sized and screened garbage handling and recycling material holding space;
 - (f) a plan showing proposed roof elevations and proposed elevations at finished grade, superimposed on the existing topographic survey;
 - (g) exterior elevations of the buildings indicating proposed exterior finishes and materials to be used;
 - (h) a simple typical building cross-section, indicating height of buildings;
 - (i) a landscape plan including a detailed proposed planting plan and plant list indicating common and botanical plant names, quantities of plants, and size and/or spacing of plants, and indicating protection measures for retained trees and watercourse leavestrips;
 - (j) demonstration of consistency with applicable design guidelines and development guideplans; and
 - (k) a sediment control plan; approved by the Director Engineering or designate.

511.5 Height of Buildings:

- (1) In a P11 Zoning District, no portion of a building shall exceed a height of 4 storeys or 16.5m (54.1 ft.) measured vertically from natural grade at that point, or at the perimeter of the building from the lower of natural or finished grade at that point, subject to the applicable exceptions in Section 6.4.
- (2) In a P11e Zoning District, no portion of a building shall exceed a height of 10 storeys or 33.5m (109.9 ft.) measured vertically from natural grade at that point, or at the perimeter of the building from the lower of natural or finished grade at that point, subject to the applicable exceptions in Section 6.4.

511.6 Lot Area and Width:

Each lot shall have an area of not less than 4,000m² (43,057.05 sq.ft.) and a width of not less than 37m (121.39 ft.).

511.7 Lot Coverage:

- (1) In a P11 Zoning District, the maximum coverage shall be 30 percent of the lot area.
- (2) In a P11e Zoning District, the maximum coverage shall be 35 percent of the lot area.

511.8 Floor Area Ratio:

The maximum floor area ratio shall be 0.45, except that:

- (a) in a P11 Zoning District, where underground parking is provided, an amount may be added to the floor area ratio equal to 0.45 multiplied by the ratio of parking spaces provided in the underground parking to the total parking spaces provided, but in no case shall the floor area ratio exceed 0.9;
- (b) in a P11e Zoning District, where underground parking is provided, an amount may be added to the floor area ratio equal to 1.25 multiplied by the ratio of parking spaces provided in the underground parking to the total parking spaces provided, but in no case shall the floor area ratio exceed 1.7.

511.9 Front Yard:

A front yard shall be provided of not less than 7.5m (24.61 ft.) in depth, except that where lots front on the Ring Road or Gaglardi Way, the front yard shall be not less than 15m (49.2 ft.) in depth.

511.10 Side Yard:

A side yard shall be provided on each side of the building of not less than 7.5m (24.61 ft.).

511.11 Rear Yard:

A rear yard shall be provided of not less than 7.5m (24.61 ft.) in depth.

511.12 Off-Street Parking:

Off-street parking shall be provided and maintained in accordance with Schedule VIII of this Bylaw.

511.13 Off-Street Loading:

Off-street loading shall be provided and maintained in accordance with Schedule IX of this Bylaw.

511.14 Car Wash Stall:

One car wash stall with a "No Parking" sign affixed to it shall be provided for each 100 dwelling units.

