

## APPENDIX J

### Conceptual Options Considered for Burnaby Mountain Conservation area

#### Preliminary Options

A number of alternative design options for Burnaby Mountain Conservation Area were considered as part of the planning process. Given the diversity of landscapes and land uses on Burnaby Mountain, it was possible to develop several viable yet distinctly different conceptual options. To facilitate the development and evaluation of options, five sub-areas of the conservation area were discussed:

- |                            |   |
|----------------------------|---|
| <b>North Side</b>          | The generally north facing slopes, including the steep, unstable terrain below the upper trails and the northern conservation area boundary above the Barnet Highway.   |
| <b>West Side</b>           | The generally west facing slope between the Centennial Pavilion and the conservation area boundary.   |
| <b>Centennial Pavilion</b> | The open, unforested areas around Horizons Restaurant and the Rose Garden was treated as a special case within the West Side options.   |
| <b>South Side</b>          | The southwestern and southern facing slopes between the Ring Road and Gagliardi Way.  |
| <b>East Side</b>           | The southeastern and eastern facing slopes between the Ring Road and the North Road Corridor, but excluding the extreme northeast section of the mountain which is outside of the conservation area boundary. |

For each of the sub-areas, options were defined which combined a range of conceptual ideas worthy of consideration, including many of the suggestions obtained during the public consultation process. The options were intended to combine ideas that worked well together to produce concepts which could be readily communicated and understood. Each option had advantages and disadvantages, but all were considered suitable for consideration as potential recommendations for the Management Plan. Eventually, a single recommended Concept Plan would be produced combining preferred aspects of several of the proposed options. Sketch diagrams illustrating each proposed option are presented in Figures J-1 to J-4.



## **North Side Options**

### **N1: Increased Access and Loop Trail Opportunities**

Introduction of a continuous lower trail which includes use of the existing right-of-way access road (pending permission from the current leaseholder), a link to the former target range sites, a pedestrian-only connection past the Harry Jerome Sports Centre, and a loop connection to the Trans-Canada Trail near the Centennial Pavilion.

Potential for public parking/picnicking at the former target range sites.

Potential for an interpretive/orientation function at the former target range sites, including continuation of the salmon rearing program.

Potential for improved connections across (or under) Barnet Highway to waterfront trails as part of a loop system; an underpass could provide pedestrian access, a wildlife movement corridor, and opportunities to enhance the fisheries value of the stream at that location.

Improved connections to Barnet Marine Park and its urban trail would provide an east-west route for cyclist use, which would allow a larger loop system to be created for cyclists.

Minor negative impacts on wildlife would be expected with the introduction of the proposed lower trail access, which would reduce the size of an existing block of undisturbed habitat and increase human use of this area. Given the desirability of achieving this trail link, further inventories would be required to assess potential impacts.

### **N2: Emphasis on Habitat Protection over Access**

Protection of the intact habitat area by making the introduction of new trails a low priority (perhaps pending substantially increased demand in the long-term future).

Habitat value could be increased through provision of an underpass designed to permit deer and other wildlife to move between the waterfront and the mountain.

Retention of some barrier vegetation on the right-of-way to discourage use, while offering some cleared sections of the right-of-way for deer browse and use by other wildlife.

Potential use of the target range sites for additional parking for Barnet Marine Park and/or for Burnaby Mountain Conservation Area through a limited trail connection past the Harry Jerome Sports Centre to the Trans-Canada Trail for pedestrians only, and a cyclist link on the waterfront urban trail. There is also potential to create additional open space for deer browse and use by wildlife.



Cyclist route using Urban Trail link (N1 & N2)

Potential Burnet Highway underpass (N1 & N2)

Location of new loop trail for Option N1

Pedestrian-only link to Centennial Park area (N1 & N2)

Loop connects to Trans Canada Trail (N1)

Loop connects to Trans Canada Trail (N1)

North Side Options

N1: Increased Access and Loop Trail Opportunities

N2: Emphasis on Habitat Protection over Access

Figure J-1. Original Options Proposed for the North Side of Burnaby Mountain Conservation Area



## **West Side Options**

### **W1: *Mixed Pedestrian and Cyclist Opportunities***

Improvement to east-west connections for commuter cyclists to link with Hastings and Curtis Streets and probably to Pandora Street via Trail 'C'.

Design features to allow for safety of pedestrians while not preventing commuter cyclists from achieving speeds appropriate to commuting use; may require the use of separate parallel routes in some sections, especially on the Trans-Canada Trail link to Hastings.

Parallel but separate locations for the Trans-Canada Trail between the Centennial Pavilion and the foot of Hastings Street, both in the vicinity of Trail 'B'. The pedestrian route would include sections of stairs to address steep slope sections, while the cyclist route would focus on the right-of-way and use switchbacks to maintain an acceptable cycling grade.

### **W2: *Pedestrian / Hiker Emphasis***

Provision of a very limited number of good east-west links for cyclists to Hastings and Curtis Streets with emphasis on the Trans-Canada Trail (see above description of 'B'); the intent is to permit cyclist access to SFU and other parts of the conservation area without encouraging extensive trail use in this sub-area.

Restriction of other trails to pedestrian use only and implementation of trail designs to support this single use designation, e.g., develop stairs in steep sections or bridges designed to discourage bike use.



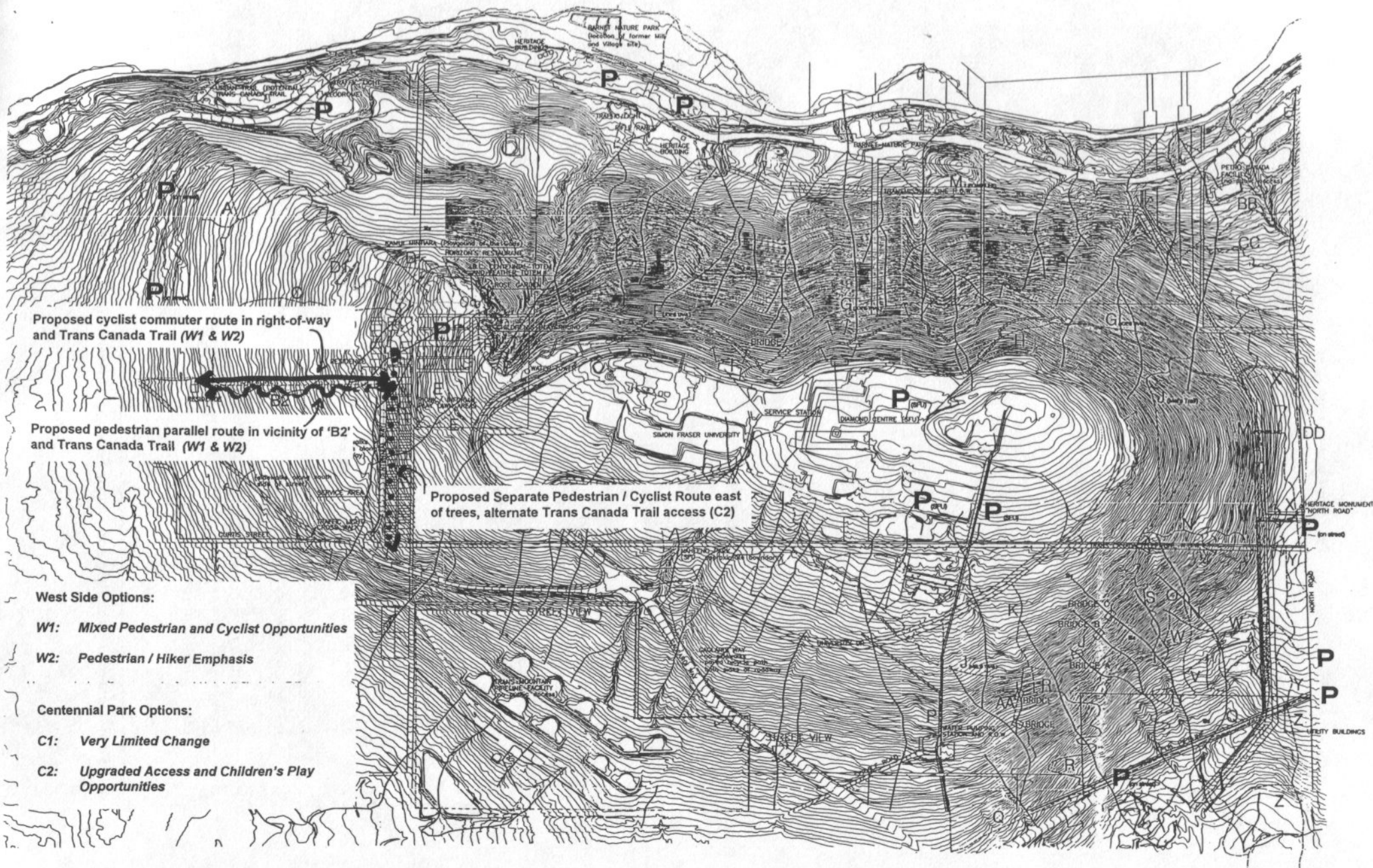


Figure J-2. Original Options Proposed for the West Side of Burnaby Mountain Conservation Area



## **South Side Options**

### **S1: Mixed Pedestrian and Cyclist Emphasis**

Priority to trail improvements which address environmental sensitivities with particular emphasis on protecting sensitive watercourses; most trails would be designed for mixed use.

A few trails might be separated into single use designations if appropriate to environmental sensitivities, e.g., a pedestrian trail within a creek ravine on a boardwalk.

Terrain is more suitable in this sub-area for relatively higher levels of trail use although the environmental habitat and watercourse sensitivities suggest priority be given to ensuring appropriate trail design is implemented.

### **S2: Concentrated Hiking Area with Environmental Emphasis**

Designation of a 'no mountain bike area' in all or part of this section combined with trail improvements, such as stairs or barriers to prevent mountain bike access.

Focus on improving linkages from the neighbourhoods and to the greenway system to attract more hikers to use the mountain.

Emphasize environmental enhancement of the aquatic habitat and deer habitat as justification for restrictions on cyclist use. Public education would stress the values of lower impact use and environmental enhancement.

Consideration of trail closures to create consolidated blocks of integrated habitat.

### **S3: Intensively Managed Mountain Bike Area**

Improvements to Mel's Trail (Trail 'J') for multiple use.

Restoration and enhancement work on existing trails with heavy mountain bike use to optimize their suitability for biking while offering more environmental protection.

Provision of a few trails for pedestrian-only use to allow access between adjacent residential neighbourhoods, SFU and the Trans-Canada Trail.

Provision of support facilities for mountain biking, e.g., a bike wash station.

Specification of a one- to several-year trial period to be renewed based on results.

Relocation or closure of trails which are heavily eroded (i.e., 'S') or which lie within a creek bed or ravine (i.e., 'AA').

Environmental sensitivities would be taxed in this option resulting in the need for more intensive trail improvement to achieve an acceptable level of environmental protection.







## East Side Options

### **E1: Mixed Pedestrian and Cyclist Area - Emphasis on Current Network**

Improvements to existing trail network for mixed use, removal of some of the recently created mountain bike paths and rehabilitation of the vegetation in closure areas.

Steps to ensure that new trails are not added to the network and that future use is restricted to the intended trail network.

Steps to reduce motorized vehicular use.

Equestrian use will be permitted on the existing Powerline Trail ('M1' and 'M2').

Retention of the existing clearing on the Ring Road as a grassy open space for wildlife use and, perhaps, for picnicking. Views available from this clearing to the east will be lost in the next few years unless forest management is used within the view corridor to provide some viewing windows.

### **E2: Mixed Pedestrian and Cyclist Area - Expanded Network**

Emphasize a mix of different levels of difficulty to ensure the area's suitability for use by families and neighbourhood children; create better links to adjacent neighbourhoods.

Potential location for related uses such as a bike training area or obstacle course in disturbed areas (i.e., near Trail 'V').

Equestrian use will be permitted on the existing Powerline Trail ('M1' and 'M2').

Retention of the existing clearing on the Ring Road as a grassy open space for wildlife use and, perhaps, for picnicking in the short-term; use of this area for future parking as demand increases. (The type of parking lot should be determined based on an assessment of environmental impacts. Options include: a permeable, grassed-surfaced lot to reduce runoff and retain some habitat for habitat; or an asphalt lot with interceptors to contain runoff and eliminate contaminant seepage).

Maintenance of existing views towards Port Moody from the above clearing will imply windowing and thinning of trees as they mature over time.







## **Centennial Pavilion Options**

### **C1: *Very Limited Change***

Very minor new interventions would be encouraged in the Centennial Pavilion area in order to maintain the current balance of natural areas to cultural facilities; facilities needed to support the Trans-Canada Trail would be permitted.

Expansion of parking would not be encouraged and parking on Centennial Way would be controlled.

Minor improvements to the playground would be an exception given the public support for this idea and the likely future increase of resident children within the SFU Ring Road.

### **C2: *Upgraded Access and Children's Play Opportunities***

Centennial Way is an important landscape feature with its allee of trees; improved access for pedestrians and cyclists is recommended in this option to be located along the east side of the road in a separate alignment located to the east of the street trees.

Over time, major improvements to the playground would be added as a community destination.



### Refinement of Options

Considering input from the public workshops and from the Steering Committee, the south side options were further refined to address the issue of single versus multiple-use trails. A decision was made at this point to provide multiple options for the south side for public comment at the Second Open House. The key elements of the new options included:

#### **Trail 'J' (Formerly Mel's Trail)**

*Short-term Option:* Upgrade 'J' Trail to support multiple use by cyclists and hikers.

*Long-term Option:* Create a new single-use trail to parallel 'J' Trail at a slightly higher elevation.

#### **Other South Side Trails**

*Short-term Option:* Allow for multiple use of all formalized trails on the south side; Hikers or cyclists may be given priority on some trails.

*Long-term Option:* Designate separate hiker only and cycle only trails on the south side with some trails remaining as multiple-use trails.

#### **North Side Loop Option**

An additional option for the North side was also proposed to create a lower loop trail within the conservation area. This option would require development of a short section of new trail between the former target range site and the Harry Jerome Sports Centre. The lower loop was included as a "long-term potential option" in the draft Trail Concept Plan displayed at the Second Open House.

Participants were asked whether they supported the inclusion of the three "long-term options" in the Management Plan. Of the 86 members of the public who responded to the questionnaire:

- 66.3 % supported a lower loop connection on the north side between the former target range sites and the Harry Jerome Sports Centre.
- 62.8 % supported creation of a parallel route above Mel's Trail to separate use on this popular trail.
- 54.6 % supported designating some trails on the south slopes as single-use trails.

The preferred Trail Concept Plan and accompanying management recommendations are presented in Section 7.0 of this document.



