

Memo

Date: June 2, 2010
File: 0870-20
To: City Manager
From: Property Manager
Subject: Mission Creek Mountain Bike Skills Park - Purchase of Service Agreement



Recommendation:

THAT City Council approve a one (1) year Purchase of Service Agreement with the option to renew for four (4) additional one (1) year terms based on the attached criteria with Mountain Bikers of the Central Okanagan Club for the operation and maintenance of the Mission Creek Mountain Bike Skills Park located on Lot B, Plan KAP82009;

AND FURTHER THAT the Mayor and City Clerk be authorized to execute the agreement.

Purpose:

To obtain approval from City Council for the Purchase of Service Agreement between the City of Kelowna and the Mountain Bikers of the Central Okanagan club.

Background:

The City has been building the Mission Creek Mountain Bike Skills Park ("Park") located on the corner of Hollywood Road South and East Kelowna Road. Construction is nearing completion and will be ready to open in the near future.

The Park was a partnership between the City and the Mountain Bikers of the Central Okanagan Club (MTBco) and was designed to provide various skill challenges to riders.

The agreement is a one (1) year term with the option to renew for four (4) additional one (1) year terms. As the park is a new feature, Staff and MTBco felt that a one (1) year renewable agreement would allow for revisions and amendments as the park continues its development and operation.

Key terms of the agreement are;

- the MTBco will provide inspections of the park on a regular basis and will perform maintenance as needed.
- the MTBco will offer programs to teach riders the proper riding techniques
- the MTBco will promote the programs through the City's Recreation and Cultural Services department.
- the MTBco will also be able to offer special events within the park provided the events comply with the outdoor event guidelines. Special events will potentially attract a large

9✓

number of people to the site which has very limited parking. The MTBco has agreed to provide a parking management plan in order to deal with this situation.

- The MTBco has also agreed to provide input into the development of a three (3) year strategic plan for the full build out of the park.

The City is under no obligation to provide operating funds or capital grants for the operation and development of the park.

The City and the MTBco agree to meet on an annual basis to evaluate the previous year's operations and make any changes to the agreement.

Internal Circulation:

Manager, Park and Public Space Projects
Manager, Parks Planning
Supervisor, Parks, Beaches & Sportsfields

Community & Media Relations Considerations:

The Grand Opening will be coordinated through the Community & Media Relations department.

Considerations not applicable to this report:

Personnel Implications:

Alternate Recommendation:

Legal/Statutory Procedural Requirements:


Legal/Statutory Authority:

Financial/Budgetary Considerations:

External Agency/Public Comments:

In light of the above, the Property Management branch of the Real Estate & Building Services department request Council support on this matter.

Submitted by:

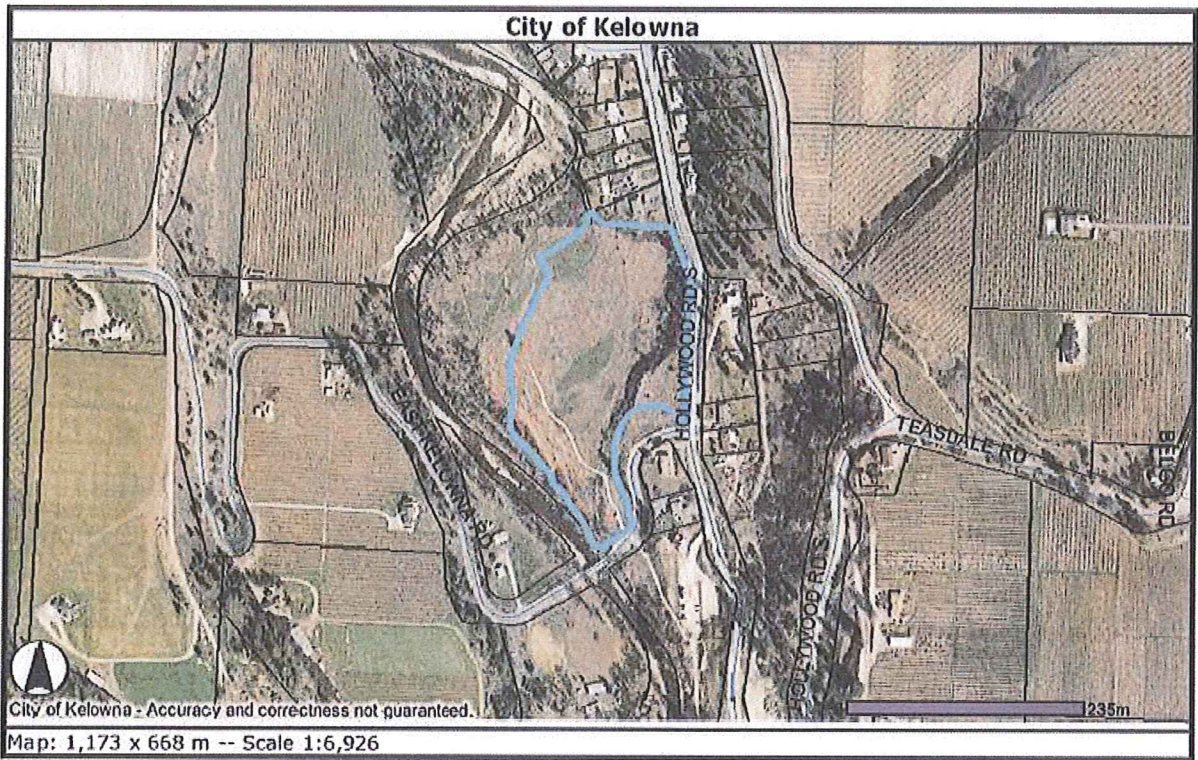


Ron Forbes, Manager
Property Management

Approved for inclusion:



Doug Gilchrist, Director, Real Estate & Building



This map is for general information only. The City of Kelowna does not guarantee its accuracy. All information should be verified.

CITY OF KELOWNA

MISSION CREEK MOUNTAIN BIKE SKILLS PARK SERVICES AGREEMENT

THIS AGREEMENT MADE this 1st day of June, 2010

BETWEEN:

CITY OF KELOWNA
1435 Water Street
Kelowna, B.C. V1Y 1J4

(hereinafter called the "City")

AND

The MOUNTAIN BIKERS OF THE CENTRAL OKANAGAN
PO Box 20075
RPO Towne Centre Mall
Kelowna BC
V1Y 9H2

(hereinafter called the "Club")

WHEREAS:

- A. The City of Kelowna owns the lands more particularly described as Lot B, Section 14, Township 26, ODYD, Plan KAP82009 (the Lands")
- B. The City operates the Mission Creek Mountain Bike Skills Park on the Lands (the "Bike Park") outlined in black on Schedule "A";
- C. The City wishes to have the Club provide certain services relating to the planning, expansion, organization, promotion, operation, maintenance, repair, management and supervision of the Bike Park; and
- D. The Club and the City wish to enter into this Agreement in order to confirm the terms and conditions under which the Club will operate the Bike Park, provide certain services and programs associated therewith, and receive assistance from the City.

NOW THEREFORE: in consideration of the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows;

1. TERM AND APPOINTMENT

- 1.1. Term.** This Agreement shall commence on the 1st day of June 2010, and shall remain valid until the 31st day of December 2010 (the "Term")
- 1.2. Renewal.** This Agreement can be renewed for four (4) additional one (1) year terms by mutual agreement of both parties.
- 1.3. Services.** The City hereby appoints the Club to provide the following services in consultation with the City, and the Club hereby accepts such appointment;

- 1.3.1. Develop, maintain, manage and operate the Bike Park and the Lands on which the Bike Park is situated all in accordance with the "Bike Park Management Plan", which is attached as Schedule "B" hereto ("the Bike Park Management Plan"), and all with a focus on safety and risk management;
- 1.3.2. Inspect the Bike Park on a regularly scheduled basis according to the Bike Park Management Plan and record all the results of the inspections on the Kelowna Mountain Bike Skills Park Inspection Checklist attached hereto as Schedule "C". All records shall be submitted to the City Parks Department.
- 1.3.3. Report to the City immediately any hazardous conditions that pose a life threatening hazard and prevent the public use until City Staff arrive to shut down the bike park. All injuries reported to the Club shall be reported to the City in a timely manner.
- 1.3.4. Provide a Bike Park Operations Supervisor who resides in the vicinity of the Park and can provide service to the park on short notice.
- 1.3.5. Conduct all Bike Park maintenance and repair activities, including the construction, maintenance, repair and replacement of all trails signage, structures, fences and buildings, all of which shall be in accordance with City standards and policies adopted from time to time. At the time of the signing of this agreement the City standards are the "Whistler Trail Standard" (attached as Schedule "D"), and "Trail Solutions IMBA's guide to Sweet Single Track" published by International Mountain Bike Association and printed by Johnson Printing ISBN:0-9755023-0-1 and the maintenance manual prepared by Gravity Logic;
- 1.3.6. The Club will be responsible to pick up loose garbage and place it in the trash containers provided by the City.
- 1.3.7. The Club will be responsible for weed control, string trimming and mowing where they feel that additional level of service is required. The Club will not be allowed to use any pesticides under any circumstances.
- 1.3.8. All repairs by the Club will be undertaken using only hand tools. Power carpentry tools can be used onsite by the Club but only by a journeyman carpenter. If heavy equipment is required the operator must be qualified and hold a valid City of Kelowna Business License, proof of insurance and a valid WCB coverage;
- 1.3.9. Designing and constructing future Bike Park expansion within the boundaries of the Lands, including all structures, trails and features within the Bike Park;
- 1.3.10. Setting, implementing, monitoring and enforcing Bike Park rules and standards (the "Bike Park Rules");
- 1.3.11. Hosting and/or co-hosting recreational, training and competitive events at the Bike Park. The Club will be responsible for the development and implementation of a parking management plan when hosting larger events;
- 1.3.12. Ensuring that its members and the general public comply with the terms of the Bike Park Rules in particular that no person creates terrain features of any kind within the Bike Park, unless such terrain features are in full compliance with the Bike Park Management Plan,

(collectively, the "Services")

2. COVENANTS OF THE CLUB

- 2.1. Objectives and Conduct of the Club.** The Club and its members shall act as role models in the community with respect to the development, operation and promotion of the Bike Park. The Club covenants and agrees to:
- 2.1.1. Conduct its affairs in accordance with its Constitution and By-laws (attached as Schedule "E", and in accordance with the Bike Park Management Plan;
 - 2.1.2. During the Term hereof, conduct its operations with the official sanction of the International Mountain Bike Association (IMBA); and
 - 2.1.3. Ensure that the City's Official Mark and the words Mission Creek Mountain Bike Skills Park are included on all promotional materials, including all signage install as recognition to contributors for significant upgrading projects.
 - 2.1.4. Coordinate events at the Bike Park including complying with all rules and regulations of the Outdoor Event Committee as per Schedule "F"
- 2.2. Compliance with Laws.** The Club shall comply with all laws of the Government of Canada, Province of British Columbia, and all by-laws, policies rules and requirements of the City of Kelowna. The Club shall obtain and pay for all necessary permits, licenses and approvals, and shall not do or suffer to be done anything in, on or about the Bike Park in violation of any such laws, by-laws, policies, rules or requirements, and if the attention of the Club is called to any such violation on the part of the Club or any person authorized or employed by or admitted to the said Bike Park by the Club, the Club will immediately desist from and correct such violation.
- 2.3. Programming.** The Club shall provide the City with a schedule of events on an annual basis prior to the start of each season. The Club shall work with the Recreation and Cultural Services Department for the provision of programming at the Bike Park.
- 2.4. Annual Report.** On or before January 31 of each year during the Term of this Agreement, the Club shall provide to the City Parks Services Branch a written Annual Report detailing;
- 2.4.1. **Delivery of Services** – The manner in which the services were delivered in the previous twelve (12) month period, including statistical data related to the Bike Park use and visitations, as well as staffing and volunteer levels for the reporting period;
 - 2.4.2. **Expenditures and Projects** – The particulars of all Capital grant expenditures and Operating Grant expenditures for the previous twelve (12) month period as well as a summary, including its rationale, for all proposed operating and capital projects to be undertaken in the upcoming twelve (12) month period;
 - 2.4.3. **Financial Reports** – Its financial operations during the previous twelve (12) month period, including particulars of other funding and support sources;
 - 2.4.4. **Maintenance and Repair** – A maintenance and repair plan, which details the Club's plans for the maintenance and repair of the Bike Park, including all grounds and improvements thereon, for the upcoming twelve (12) month period; and
 - 2.4.5. **Incident Reports** – A summary of all reported incidents at the Bike Park which results in bodily injury or alleged bodily injury;

- 2.5. Three Year Strategic Plan.** On or before August 31 of each year during the term of this Agreement, the Club shall provide to the City Parks Services Branch an updated version of the Club's three (3) year strategic plan, which shall include;
- 2.5.1.** The Club's objectives, strategies and achievements;
 - 2.5.2.** An updated and revised "Bike Park Management Plan" which details the Club's plans for the expansion, development, maintenance and repair of the Bike Park, including all grounds and improvements thereon, as well as its risk management plan;
 - 2.5.3.** A summary, including its rationale, for all long-term operating and capital projects to be undertaken; and
 - 2.5.4.** A review of any future direction or changes that the Club is undertaking. (the "Three-year Strategic Plan")
- 2.6. Club Representative(s).** The Club shall provide the names, phone numbers and email addresses of two Club members who are on the Executive, in good standing to act as liaisons between the City and the Club. In February of each year during the Term hereof, during the Presentation, the Club shall renew the assignment of the Club Representative(s)
- 2.7. Presentations.** In February of each year during the Term hereof, a Club Representative shall make a presentation to the City which said presentation shall include a review of the Club's Annual Report and its updated Three-year Strategic Plan.
- 2.8. Information.** In addition to the foregoing, the Club shall provide the City upon request, detailed information regarding any aspect of its operations.
- 2.9.** The Club shall provide all safety and Bike Skills Park usage signage consistent with the recommendations from the Bike Park Management Plan.
- 2.10.** The Club shall provide a dedicated Internet web page with up-to-date park hours (including closures for programs and special events) and club contact information.

3. COVENANTS OF THE CITY

- 3.1.** The City is responsible for the maintenance of the irrigation system and will pay for the cost of water for irrigation and electrical for the irrigation controller.
- 3.2.** The City will pay for garbage containers for the collection and disposal of refuse from the garbage containers. The City will provide and pay for portable toilets on site. Both of these services will be provided for day-to-day operations. Special events will require event organizers to pay for adequate garbage containers and collection as well as adequate on-site portable toilets.
- 3.3.** The City will rough cut / mow the grass and maintain the sprinkler system, maintain the trees and shrubs, and maintain the parking lot.

3.4. The City will provide security patrols that will lock and unlock the gates and portable toilets on site. The Bike Park will be opened at 7am and closed at dusk during the riding season.

3.5. The City will provide Park identification signage consistent with other City-owned parks.

3.6. The City will only rent the park for an event if Club provides written approval of the event which will not be unreasonably withheld.

4. **CAPITAL AND OPERATING GRANT**

4.1. **Operating Grant.** The City will not provide to the Club and annual operating grant.

4.2. **Capital Grant.** The City will not provide to the Club and annual capital grant.

5. **TERMINATION**

5.1. **Termination.** Either party may terminate this Agreement without cause by providing the other party with thirty (30) days prior written notice.

5.2. **Effect of Termination.** In the event of termination in accordance with Section 5.1 of this Agreement, the Club shall immediately vacate the Bike Park, and ensure that it is left in good order and condition as required hereunder.

6. **INSURANCE AND INDEMNITY**

6.1. **Insurance.** At all times during the Term hereof, the Club shall at no expense to the City maintain, to the City's satisfaction, commercial general liability insurance against any and all third party claims for bodily injury, death, or property damage whatsoever. Such insurance shall name the City as an ADDITIONAL INSURED but not as ADDITIONAL NAMED INSURED and shall cover for not less than Five Million Dollars (\$5,000,000)

6.2. **Certificate of Insurance.** Upon signing this Agreement, the Club shall promptly forward a Certificate of Insurance including insuring agreements acceptable to the City. The City will supply a form of insurance certificate to be completed by the Club's insurer containing minimum insurance coverage required by the City. During the Term hereof, the City may obtain directly from the Clubs insurer copies of all such Certificates of Insurance and all such insuring agreements required under this Agreement.

6.3. **Expiry.** Should the insurance policies under which the Insurance Certificate is drawn expire during the term of this Agreement or any extension or renewal thereof, the Club shall forward a renewal Insurance Certificate to the City thirty (30) days prior to the expiry of said insurance policies on a form satisfactory to the City.

6.4. **Insurance Carrier.** All required policies of insurance must be issued by insurers duly authorized by law to do business in the Province of British Columbia and shall include a provision that coverage shall not be cancelled or any material changes made unless thirty (30) days written notice has been given to the City.

6.5. **Termination.** Should the Club fail to supply the Certificate of Insurance required by this Agreement, then such Agreement may be terminated by the City.

6.6. **Release.** The Club hereby releases, remises, and forever discharges the City and the City's agents, representatives and employees (the "Related Parties") from any and all liability, loss, damages, costs, charges, debts, expenses, accounts, claims, suits, actions and demands which the Club, or its representatives employees, volunteers or invitees, may have against the released Parties from and by reason of any damage suffered: (a)

personally; or (b) in connection with the Club's business; or (c) in connection with the use or operation of the Bike Park.

6.7. Indemnity. The Club hereby agrees to unconditionally indemnify and save harmless the Released Parties from and against all liability, loss, damages, costs, charges, debts, expenses, accounts, claims, suits, actions and demands, (except such as may arise out of the negligence of the City, or the City's agents or employees) in connection with;

6.7.1. Any breach, violation or non-performance of any covenant, regulation, condition or agreement in this Agreement, set forth and contained on the part of the Club, to be fulfilled, kept, observed or performed;

6.7.2. Any damage to the property while said property is in or about the Lands in general or the Bike Park in particular; and

6.7.3. Any injury to any licensee, invitee, agent, employee or volunteer of the Club (including death) occurring in or about the Lands in general or the Bike Park in particular.

And this indemnity shall survive the expiry or sooner determination of this Agreement.

7. GENERAL PROVISIONS

7.1. Entire Agreement. This Agreement embodies the entire agreement between the parties with regard to the matters contained herein, and no other agreement shall be deemed to exist except as entered into in writing by both parties. There are no representations, warranties, terms, conditions, undertakings or collateral agreements expressed or implied between the parties other than those expressly set forth in this Agreement.

7.2. Relationship of the Parties. The parties hereby acknowledge and agree that the Club is an independent contractor, that it shall not be considered to be the agent, representative, master or servant of the City for any purpose whatsoever, and that it has no authority to enter into any contract, assume any obligation or to give any warranties or representations on behalf of the City.

7.3. No Subcontracting. None of the Services to be performed by the Club may be contracted out by the Club without the prior written consent of the City.

7.4. No Assignment. The Club may not assign this Agreement or any part thereof without the prior written consent of the City.

7.5. Severance. In the event that any provision of this Agreement is deemed void, invalid, or unenforceable by a court of competent jurisdiction, the remaining provisions or parts thereof, shall be and remain in full force and effect.

7.6. Waiver. No failure on the part of the City to exercise any right or remedy in respect of this Agreement shall operate as a waiver thereof, unless it is in writing and signed by the City.

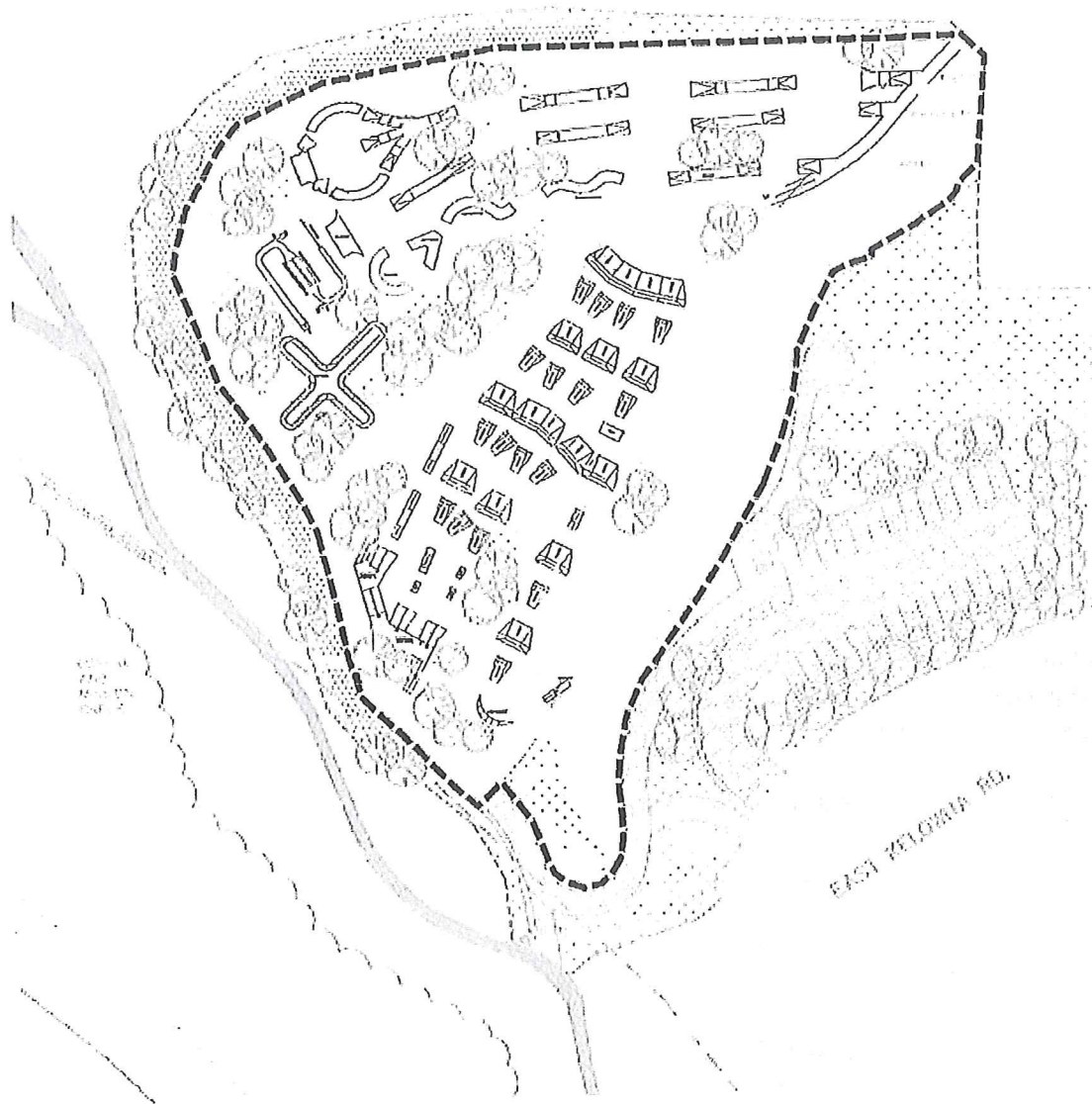
7.7. Notice. All notices required by this Agreement shall be in writing and shall be sent by facsimile transmission, or delivered in person or by prepaid courier or mailed as is set forth on page one (1) of this Agreement. All notices so sent shall be deemed to have been received by the recipient on the date the facsimile transmission was sent, or on the date of delivery or on the second business day following the mailing thereof. The address of either party may be changed by giving the other party written notice of the new address. If postal service is interrupted, or threatened to be interrupted, or substantially delayed, any notice shall only be sent by facsimile transmission or delivered by courier.

7.8. Time. The shall be of the essence in this Agreement

7.9. Further Acts. The parties agree to do and to execute all such further acts and assurances as may be necessary to give more and full affect to the intent of this Agreement.

7.10. Counterparts. This Agreement may be executed in any number of counterparts and all such counterparts shall for all purposes constitute on Agreement binding on the parties, notwithstanding that not all parties are signatories to the same counterpart.

Schedule "A"
Map of the Lands and Mission Creek Mountain Bike Skills Park



Schedule "B"

Mission Creek Mountain Bike Skills Park Management Plan

Inspections

Inspections will be carried out weekly or more frequently depending on weather conditions.

Maintaining Dirt Jumps

All dirt jumps need maintenance. Whether caused by too much rain, not enough rain, irresponsible riders, vandalism, or unsupervised well intentioned but misguided maintenance - dirt is not immune to the effects of gravity and erosion. As such the shape, uniformity and quality of the jumps will change over time. The Kelowna dirt jumps were built to withstand the forces of nature to the extent practical through proven construction methods and careful design. High quality dirt, careful and thorough compaction of inward sloping layers of self supporting material in addition to well planned design will help ensure their longevity. The first line of defense, however, will be regular maintenance. If dirt jumps are well maintained and respected (i.e not ridden during / after a heavy rainfall) they should not require any major rebuilds during a normal riding season. Well maintained dirt jumps get ridden and stay safe. Dirt jumps that are in disrepair will not get ridden defeating the purpose of building them in the first place.

Notes:

- Tools required: Hose or Watering can, Flat Shovels, Pick (mattock), Broom, Rake
- It is important that a mature, well respected rider is placed in charge of the dirt jumps and that he is the one that manages the day-to-day maintenance and any changes. Free-for-all digging, modifications, and extensive maintenance should be avoided unless supervised.
- Any riders helping with maintenance of the jumps should be educated on maintenance methods and etiquette.
- Never take dirt away from the jumps during regular maintenance. It is equally important not to add dirt unless absolutely necessary as this will alter the intended and original shape of the jump. Dirt that has eroded off the jumps is always (or nearly always) found in the bottom 3rd of the tranny. This will look like the jump is pregnant. If those responsible for maintenance keep adding to the lip to build out to this lump, the jump will grow over time and the set will lose its flow. Rather than importing extra dirt, begin by scraping out the hump in the bottom 3rd of the tranny and adding it to the lip, packing as you go. This will nearly always provide enough dirt to repair the jumps to their original shape and dimension. If there are major holes in the lip (such as unfixed case marks) then add from the spare dirt pile, compacting as you go.
- To fix erosion ruts or holes: Do not simply add dirt to cover up the damage. It is impossible to achieve a lasting repair using band-aid techniques as the two different soils, (even if initially the same) will have different moisture and compaction levels and, as a result, will not properly bond together. The most effective technique is to take a pick and cut into the face around the hole or rut in order to create a bigger area to fill. Remix the dirt with water and replace the mixed dirt to the hole and pack again. How big this hole needs to be depends on the moisture of the dirt and how well it will bond. If the bond is not adequate, the edges of the repair will be visible and it will be necessary to dig out a bigger section and do it again until a virtually seamless patch is achieved.
- After a jump has been patched and repaired many times it may be best to excavate the entire face with a pick and rebuild. Dig down about 10- 12 inches, water the exposed area and let it soak in while mixing the removed

soil. Lay the whole thing back packing as you go. This should create a uniform, fresh, and complete jump face as good as the original

Drop in Ramps	
Railings - Posts	The "Railing posts" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Railings - Top & Bottom Rail	The "Top Rail" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Railings - Spindles	The "Spindles" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Decking – Flat	The "Decking" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Decking – drop-in ramps	The "Decking" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Joists	The "Joists" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Columns	The "Columns" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Knee Braces	The "Knee Braces" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Angle Braces	The "Angular Braces" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Ramp decking	The "Ramp Decking" should be inspected for cracks, splinters and rot, if found it should be replaced immediately
Lag and Thru Bolts	The "Lag Bolts" should be tight and should be checked regularly
Chicken Boards	The "Chicken Boards" should be inspected for cracks, wear, splinters and rot, if found it should be replaced immediately
Tidyness	The entire structure should be kept "tidy" to provide ease of inspection, dirt should not be allowed to accumulate on the upper deck as this will cause accelerated rotting.
Dirt Jumps	
Moisture Content	The "moisture content" is the amount of water within the dirt, too little means dust and too much means mud, stay away from either
Lips	The "lips" should be maintained by a highly experienced & expert dirt jump mountain biker and be free of any ruts, braking bumps, loose gravel, and debris
Landings	The "landings" should be maintained by a highly experienced & expert dirt jump mountain biker and be free of ruts, braking bumps, loose gravel and debris
Debris	"Debris" can be hazardous to any riding environment and should not be present at any time
Loose Gravel	"Loose Gravel" can be hazardous to a dirt jump environment and should not be present at any time
Ruts	"Ruts" are depressions caused by the riding and left un-repaired can be hazardous
Braking Bumps	"Braking Bumps" and depressions and ridges caused by the riding and can be hazardous and should be repaired immediately
Pump Track	

Moisture Content	The "moisture content" is the amount of water within the dirt, too little means dust and too much means mud, stay away from either
Lips	The "lips" should be maintained by a highly experienced & expert dirt jump mountain biker and be free of any ruts, braking bumps, loose gravel, and debris
Landings	The "landings" should be maintained by a highly experienced & expert dirt jump mountain biker and be free of ruts, braking bumps, loose gravel and debris
Roll Overs	The "Roll Overs" should be maintained as originally built
Debris	"debris" is anything not intended to be found in the area should be removed immediately
Loose Gravel	"loose gravel" can cause a loss of traction and should be swept or raked away on a daily basis
Ruts	"ruts" will form from normal wear and tear and especially in wet conditions and should be repaired immediately
Braking Bumps	"Braking Bumps" will form from normal wear and tear and should be repaired immediately
Signage	
Posts	The Signage "Posts" support the signs and should be free of cracks or splinters and their integrity should be checked regularly
Signs	The "Signs" warn the park users of the skill level required and rules of the park and should be replaced immediately if damaged or stolen
Loose Bolts	"Loose Bolts" will need tightening as they ensure the signage stays in place
Sharp Edges	"Sharp Edges" may form from damage to the sign and if present the sign should be replaced
Legibility	"Legibility" is crucial when reviewing the signage, if park users are unable to read the signage it should be replaced immediately

SCHEDULE "C"



Inspection Checklist

Mountain Bike Skills Park

DATE : _____

ITEM	DESCRIPTION	CONDITION	COMMENTS	ACTION BY
1.0 DROP-IN RAMPS				
1.1	Railings - posts			
1.2	Railings - top & bottom rail			
1.3	Railings - spindels			
1.4	Decking - flat			
1.5	Decking - drop-in ramps			
1.6	Joists			
1.7	Columns			
1.8	Knee braces			
1.9	Angle braces			
1.10	Lag & thru bolts			
1.11	Chicken boards			
1.13	Tidyness			
1.14				
1.15				
2.0 DIRT JUMPS				
2.1	Moisture content			
2.2	Lips			
2.3	Landings			
2.4	Debris			
2.5	Loose gravel			
2.6	Ruts			
2.7	Braking bumps			
2.8				
2.9				
3.0 PUMP TRACK				
3.1	Moisture content			
3.2	Lips			
3.3	Landings			
3.4	Roll overs			
3.5	Debris			
3.6	Loose gravel			
3.7	Ruts			
3.8	Braking bumps			
3.9				
3.10				
4.0 SIGNAGE				
4.1	Posts			
4.2	Sign panels			
4.3	Bolts			
4.4	Legibility			
4.5				

CONTINUED ON OTHER SIDE

INSPECTED BY : _____

SCHEDULE "D"



WHISTLER
TRAIL STANDARDS



ENVIRONMENTAL AND TECHNICAL TRAIL FEATURES



4325 BLACKCOMB WAY, WHISTLER BC CANADA V0N 1B4
TELEPHONE (604) 932-5535 FACSIMILE (604) 935-8109

www.whistler.com/rmow

AUTHOR'S NOTES

As planners, we must not lose sight of the fact that guests are here to have a good time, avoid injury and not get lost.

The evolution of mountain bike trails, recreational equipment, and environmental issues require that this document be amendable.

Thanks to North Shore Mountain Bike Association (NSMBA) and the Whistler Off-Road Cycling Association (WORCA) for reviewing the document and providing feedback. Also thanks to Channa Peljola, Ken Neave and Jim Richardson for their feedback and insight. Special thanks to Keith Bennett for his feedback, insight and proactive approach to mountain biking.

Cover photos were provided by Bonnie Makarewicz Photography and David Diplock, Director of the North Shore Mountain Bike Association. Trail Type drawings by Jensen Resort Planning.

Andrew DeBoer
Whistler Cycling Committee
Summer 2003

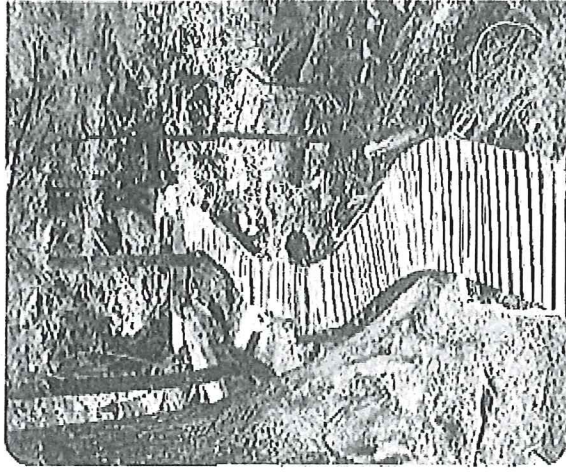


PHOTO COURTESY, 2010

TABLE OF CONTENTS

Author's Notes	1
Table of Contents	2
Introduction	3
Trails and Land Use	4
Land Use Directions	4
Compatibility Matrix	5
Trail Types	6
Mountain Bike Trail Difficulty Levels	8
Supporting Guidelines and Standards	10
Environmental Guidelines	10
TTF Construction Standards	12
Fall Zone Guidelines	14
Sign Guidelines	15
Management Guidelines	17
Trail Maintenance	17
Terminology	19



PHOTO COURTESY OF WHISTLER

INTRODUCTION

Whistler, British Columbia has been recognized as a premier destination resort for mountain biking. For the most part, this can be credited to the Whistler Mountain Bike Park and a network of valley and off-road trails that provide a recreational and commuter experience for a wide range of residents and visitors. To sustain this experience, the Resort Municipality of Whistler (RMOW) proposes to review, sign, maintain and manage this network of trails throughout the Whistler Valley. This document is not a "how-to" on building or maintaining trails; rather it is the standard by which the trails will be managed within the Whistler Valley.

The Resort Municipality of Whistler's Trail Standards, Environmental and Technical Trail Features was drafted in support of two initiatives identified by Volume One of Whistler 2002: Charting a Course for the Future. The first and foremost initiative described under the priority of Moving Toward Environmental Sustainability states: "We've established a trail hierarchy and environmental standards to ensure the type of trail and its maintenance is appropriate to the setting." A land use compatibility matrix was developed to address this objective. The matrix outlines the Trail Type and Trail Difficulty Level acceptable in distinct land-use classes. As well, environmental guidelines were established to minimize the placement of trails in sensitive environments. The second initiative described under the priority of Enhancing the Whistler Experience states "Whistler is one of the top bike towns in North America, with world-class trails." Whistler's trails must continue to provide exciting experiences for all levels of riders, from families to advanced riders. Attention to providing a challenging experience, maintenance, a seamless network and an easy-to-use trail system will help position Whistler as one of the top bike towns in North America.

Appropriate management of our on- and off-road trail network is intended to elevate Whistler's status as a cycling destination with minimal environmental impact.



PHOTO COURTESY OF WHISTLER

TRAILS AND LAND USE

This section is a macroscopic view of the trails, the environment and where trails may be placed. This section outlines the levels of land protection, trail type descriptions and trail difficulty levels. These three classifications interact together as defined by a compatibility matrix.

LAND USE DIRECTIONS

Whistler's environmental values and principles direct us to address land use as an important environmental consideration. Whistler's principle of an ecosystem-based approach advises us to mesh our human purposes with the larger patterns and flows of the natural world, and to study these to inform and guide our activities on the land.¹

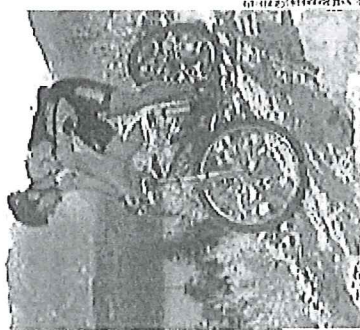
From the draft Whistler Environmental Strategy, six land use directions are defined for the Whistler Valley. Each land use direction has a different level of environmental protection. For the purpose of this document, the LRUP and PAN 3 are given the same level of conservation.

DEVELOPED AREAS – This land use designation includes industrial, commercial and residential areas.

RECREATIONAL GREENWAYS – An important means for creating linkages between the built and natural environments, and between the needs of human communities and natural ecological systems. Incorporating opportunities for both recreational activities and the maintenance of natural features and wildlife habitat. Recreational Greenways are a vital part of environmentally responsible land use planning.

LRUP – The Local Resource Use Plan was developed in response to public concerns over logging effects on the visual quality of landscapes and the recreation uses of the land in and near the RMOW. It was a joint effort from the Ministry of Forests, Squamish Forest District, and the RMOW. The LRUP boundaries extend from Brandywine Falls in the south to Cougar Mountain in the north. LRUP land contains rare and unique species or unique habitat features not found in other ecosystems and are therefore important to protect.²

¹The Whistler Environmental Strategy, Discussion Paper, September 21, 1995, Executive Summary, page 15.
²Local Resource Use Plan, Forest District, page 15.
³Whistler Local Resource Use Plan, June, 1995, Page 4.
⁴The Whistler Environmental Strategy, section 4.01, Page 24.



PAN PROTECTED AREA NETWORK – Divided into the following three subcategories of protection:

- PAN 3 – RESERVE LANDS** Large tracts of relatively natural land, which could be subject to recreational or other development provided an Environmental Impact Assessment is done. PAN 3 protection is generally used for second growth forests and other natural areas not included in PAN 1 and 2. In cases of development, key ecological components of reserve lands may be subject to PAN 1 or 2 protection after development. Most trail types are acceptable with the exception of paved Type I trails.
- PAN 2 – SPECIAL MANAGEMENT ZONES** Well protected and allow some low-impact human activities or development (creation of trails). Priorities for PAN 2 protection include significant streams and riparian areas, significant old growth forests and wildlife corridors. Only low impact trails such as Trail Type III, IV or V are acceptable to be built in PAN 2 areas.
- PAN 1 – KEY PROTECTED AREAS** Reserved to protect unique and sensitive ecosystems from any human development or use, with the possible exception in individual cases of very low-impact nature trails, boardwalks or wildlife viewing platforms for the specific purpose of habitat protection. Priorities for PAN 1 protection include streams, wetlands, riparian areas, old growth forests, key wildlife corridors and unique or threatened habitat types. No cycling trails are to be built in these areas.

COMPATIBILITY MATRIX

The Whistler Valley effectively has five land use directions. These land use directions relate to the five trail types (reference to page 6-7) and the first four trail difficulty levels (reference to page 6-5) in the following compatibility matrix. The RMOW will construct new trails only in environments compatible with trails.

Mountain Bike TRAIL DIFFICULTY TRAIL TYPE	LAND USE DIRECTION			
	Developed Areas	Greenways	PAN 3	
			Include LRUP	PAN 1
I	✓	✓	✓	✓
II	✓	✓	✓	✓
III	✓	✓	✓	✓
IV	✓	✓	✓	✓
V	✓	✓	✓	✓

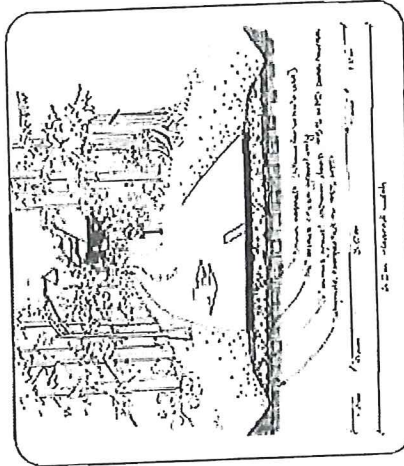
✓ = Compatible ✗ = Incompatible G = Grandfather Clause³

TABLE 1. COMPATIBILITY MATRIX

¹The Whistler Environmental Strategy, Section 5.1, Page 29.
²Only hiking trails in individual cases on very low-impact natural trails, boardwalks or wildlife platforms for the specific purpose of habitat protection are permitted to be constructed in PAN 1.
³Refer to page 16, this document.

TRAIL TYPES

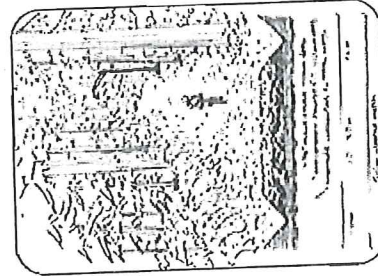
Trail Types^a are a description of non-motorized trail tread characteristics. Trail Type I has the highest amount of traffic and the most impact on the environment of the trail types. Conversely, Trail Type V has little traffic and the trail tread is minimal.



TRAIL TYPE I

TYPE I

- plan as paved double-track trail for smooth, all weather use to provide access to village, parks and subdivisions
- use asphalt or chip-seal road surfacing
- clear width to tread width plus 0.6 m gravel shoulder and adequate drainage on each side
- clear height to 3.0 m
- provide 2.3 m tread width
- provide illumination for night use if appropriate
- provide interpretive and directional signs, benches, viewing areas where appropriate



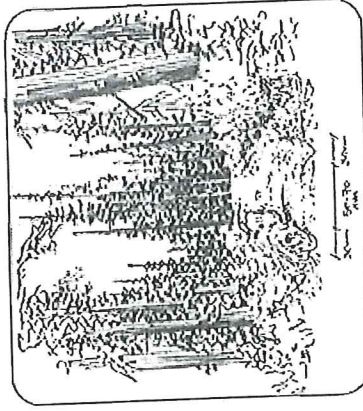
TRAIL TYPE II

TYPE II

- plan as surfaced double-track or single-track trail
- machine built
- remove all embedded trail obstacles
- use crushed limestone with fines, well-compacted gravel or existing old roadbeds
- clear width to 5.0 m for double-track and 1.6 m for single-track trails
- clear height to 2.4 m
- provide 2.3 m tread width for double-track trails, 1 m for single-track trails
- provide illumination for night use if appropriate

TYPE III

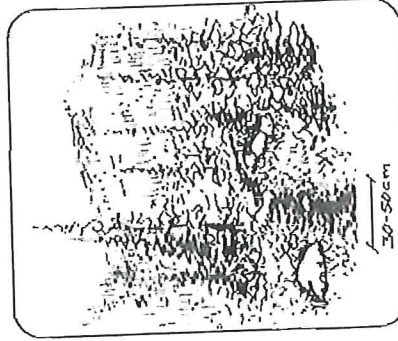
- plan as un surfaced single-track trail
- may be machine built
- clear width to 1.2-1.3 m
- clear height to 2.4 m
- provide 30-70 cm tread width on native soil



TRAIL TYPE III

TYPE IV

- plan as un surfaced single-track trail
- clear width to 1 m
- clear height to 2.4 m
- provide 30-50 cm width tread on native soil, sometimes rough terrain



TRAIL TYPE IV

TYPE V

- plan as low-impact nature trail or lightly used wilderness trail
- no high impact users, such as motorized vehicles or horses
- clear height to 2.4 m
- provide 30-50 cm tread maximum, avoid tread grubbing sections of very rough terrain
- in the case of low-impact nature trails use boardwalks to traverse sensitive areas




TRAIL TYPE V

^a Sources for these classifications are: BC Parks BC Forest Service and RAOOW Park Risk Management Tool Classification, Schedule C

MOUNTAIN BIKE TRAIL DIFFICULTY LEVELS

The following identify all the levels of trail technical difficulty as they apply to mountain bikes, starting with easiest and moving up to expert unlimited. Included are general and detailed description of trails and Technical Trail Features (TTFs). This section quantifies what characteristics compose the trail difficulty for mountain bikes.



NAME: Easiest

SYMBOL: White circle

GENERAL


- Fairly flat, wide and paved. Suitable for all users.*

DETAILED

- Maximum grade: 10%
- Preferred average grade: no more than 5%
- Maintain a minimum 2.5 m curve radius
- Usually associated with Trail Type I

EXPECTED TECHNICAL TRAIL FEATURES

TTFs are not appropriate for this trail level.



NAME: Easy

SYMBOL: Green circle

GENERAL

- Gentle climbs and easily avoidable obstacles such as rocks, roots and potholes.

DETAILED

- Maximum grade: 15%
- Maximum sustained climbing grade: 8%
- Curve radius 2-4 m minimum
- Usually associated with Trail Types II or III


EXPECTED TECHNICAL TRAIL FEATURES

GENERAL

- Small roots & logs to cross
- Embedded rocks to avoid
- Wide bridges

DETAILED

- Embedded trail obstacles up to 10 cm.
- Logs and roots perpendicular to direction of travel
- Bridge minimum 90 cm wide, handrail required if height of bridge above surface exceeds 60 cm
- Rock face descents not to exceed 25%
- No drops
- No jumps



NAME: More Difficult

SYMBOL: Blue Square

GENERAL

- Challenging riding with steep slopes and/or obstacles, possibly on a narrow trail with poor traction. Requires riding experience.**

DETAILED

- Maximum climbing grade: 25%
- Maximum sustained climbing grade: 10%
- Maximum descent grade on non-rock surface: 35%
- Curve radius: 1.5 m minimum
- Usually associated with Trail Type III or IV


EXPECTED TECHNICAL TRAIL FEATURES

GENERAL

- TTF width to height ratio of 1:2
- Small bridges (flat, wide, low and reliable from section to section)
- Small rollable drops
- Small teeter-totters
- Small jumps
- Medium sized logs

DETAILED

- Embedded trail obstacles: up to 20 cm high
- Elevated bridges: less than 1.5 m (5') high above surface
 - Minimum width of flat decking is one-half the height above surface
 - For connected sections, the bisecting angle between each connected section must be large enough to allow the bicycle to complete transition without requiring any wheel lifting techniques
- Teeter-totters: maximum pivot height, less than 60 cm (2') high above the surface
 - Minimum width of flat decking is one-half the height above surface at pivot point
- Rock or ramp descents not to exceed 45%
- Drop-offs not exceeding 30 cm high with exit cleared of all obstacles.
- Jumps
 - No jumps with consequences for lack of speed (for example, coffin jumps or pop jumps)
 - Table top jumps maximum height 60 cm (2')
 - Jumps: maximum height 45 cm (18")



NAME: Most Difficult

SYMBOL: Black Diamond

GENERAL

- A mixture of long steep climbs, loose trail surfaces, numerous difficult obstacles to avoid or jump over, drop-offs and sharp corners. Some sections are definitely easier to walk.

DETAILED

- Maximum climbing grade: 30%
- Maximum sustained climbing grade: 15%
- Usually associated with Trail Type III, IV or V


EXPECTED TECHNICAL TRAIL FEATURES

GENERAL

- TTF width to height ratio of 1:4
- Elevated bridges and teeter-totters with maximum deck height
- Connected bridges
- Mandatory air
- Larger jumps
- Steep descents with sharp transitions

DETAILED

- Elevated bridges: less than 3 m (10') high above surface
 - Minimum width of flat decking is one-quarter the height above surface
 - Teeter-totter: maximum pivot height less than 1.5 m (5') above surface
 - Minimum width of flat decking is one-quarter the height above surface at pivot point
- Mandatory air less than 1.0 m (3.3') vertical
- Rock or ramp descents not to exceed 120%
- Jumps
 - Table tops, no maximum height
 - No gap jumps or rhythm sections



NAME: Expert Unlimited

SYMBOL: Double Black Diamond

GENERAL

- Exceptional bike control skills and balance essential to clear many challenging obstacles High-risk level. Only a handful of riders will enjoy these trails.
- The RMOW recognizes Expert Unlimited as a difficulty level but due to the small size of the user group, the RMOW will not pursue ownership of these trails, however there may be some of these elements on a trail provided there is a clearly defined alternate route around.

DETAILED

- Similar to Most Difficult
- Usually associated with Trail Type III or IV

EXPECTED TECHNICAL TRAIL FEATURES

GENERAL

- Risk exceeds Most Difficult due to height, width and exposure
- Fall zones may not meet fall zone standards
- The consequences of errors may be severe and rescue may be difficult

DETAILED

- Exceeding Most Difficult

* Paul Kenner
 ** WCSP requires "...that a fall protection system is used when work is being done at a place (i) from which a fall of 3m (10ft) or more may occur or (b) where a fall from a lesser height involves an unusual risk of injury." Occupational Health & Safety Regulation Book 2, section 1.4.4, page 1.4.2

SUPPORTING GUIDELINES AND STANDARDS

This section is a microscopic view of trails. It contains guidelines and standards about the placement of trails, construction and strength of technical trail features and the signing of trails.

ENVIRONMENTAL GUIDELINES

The benefits of a trail for recreational purposes must be balanced with the desire to protect the environment. All intrusions into the environment have some degree of impact. However, these impacts can be minimized to balance the objective of a recreational experience with minimal impact on the surrounding environment. Trails that adversely impact the environment will deteriorate in time, have a low aesthetic value and incur a high maintenance cost. Trail construction must strive for minimal impact on their surroundings and be designed with consideration for the specific environment and the intended use of the trails.¹⁶

TRAIL PLACEMENT GUIDELINES

- Trail placement should avoid hazard areas such as unstable slopes, soil prone to erosion, cliffs, embankments and undercut stream banks, etc.
- Avoid shallow rooted trees with high windthrow potential and snags.
- Avoid routes that impact on wildlife species.
- Avoid critical habitat of rare or fragile plant species. If there are fragile plant communities next to the trail, delineate the trail edges by using logs or rocks.
- Avoid sensitive or fragile archaeological or historic sites.
- Avoid building trails in community watersheds.

- Avoid trail routing that encourages users to take shortcuts where an easier route or interesting feature is visible. If an interesting feature exists, locate the trail to provide the desired access to the trail user.
- Use landforms or vegetation to block potential shortcut routes.
- Avoid routing a trail too close to another trail section to prevent trail proliferation or shortcuts between the two trails.
- Route trailheads on bedrock or hard packed surfaces and avoid organic materials.
- Use placed stones in sensitive areas and steep descents to minimize trail erosion.

¹⁶ Sources for these classifications are: Ministry of Forests, Recreation Trail Management Areas Near Aquatic Areas, A Guide to Wildlife-Friendly Design Site Management, Province of BC.

AQUATIC ENVIRONMENTS

- Trail construction of Trail Types III-V near an aquatic area within 30 m of streams and within management zones as per Forest Practice Codes must minimize vegetation removal and soil disturbance.
- Construction standards should be consistent with trail use, thereby minimizing trail width requirements.
- Structures in direct contact with water should be inert (for example, natural untreated cedar, precast concrete or steel) to avoid water quality impacts associated with chemical leaching from treated wood.
- Pile supported structures are preferred over slabs or floats for bridges requiring supports in contact with streams.
- Locate bridge crossings to minimize disturbances to streambeds and banks. Sections of the waterway that are straight and where banks are stable are preferred for crossing.
- Construct bridges across streams to top-of-the-bank. This minimizes erosion of stream banks and sedimentation of streams.

GENERAL

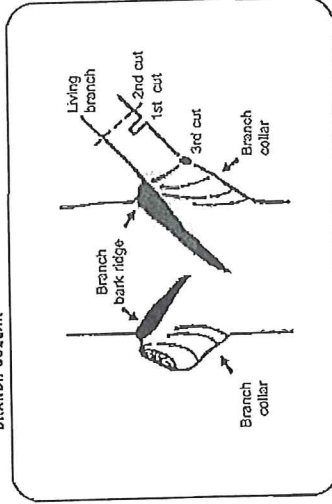
- Avoid cutting down live trees.
- Tree branches must be cut at the collar, both longer or shorter are likely to cause infection to the tree (figure 1).
- Cover exposed roots.
- If pretreated wood has been selected for structures being placed in the ground, the structure should be isolated in poly wrap below grade.

USE OF MACHINERY

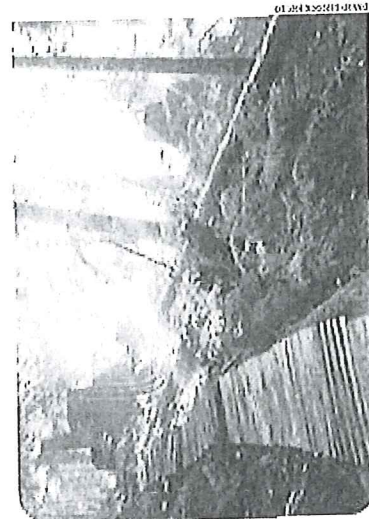
- Limited access trails that penetrate sensitive areas should be constructed manually with materials and equipment that can be easily transported by small work crews.
- If machinery is required, minimum standards as per Forest Practices Code should be adopted (i.e. no machinery within 5 m of any water-body). Low impact construction techniques should be employed such as small underinflated, rubber tired vehicles, and construction pads, platforms or cranes.

Prefabricated structures that can be manually assembled on site should be used, if possible.

FIGURE 1 BRANCH BARK RIDGE AND BRANCH COLLAR



¹⁷ "Pruning Basics and Tools" | <http://www.centrabulpubs/january/190-455/456-458.pdf> | (April 7, 2009)



TTF CONSTRUCTION STANDARDS

Trails with constructed Technical Trail Features (TTF) must exceed a minimum standard to protect the trail user.

SAFETY

TTFs must exceed the minimum strength and stability standard. Also, the finish must be such that if a rider were to fall, the structure or other provisions would not increase the degree of the injury.

STRENGTH AND STABILITY

Each span of the TTF must be capable of withstanding a centered vertical load of 225 kg (495 lb, 2 times heaviest rider/bike and gear). Every single rung should be capable of holding a rider/bike and gear's weight.

TTF DESIGN PHILOSOPHY

• Gateways:

- By placing a narrow section or difficult turn early while the TTF is still close to the ground (known as a gateway), inexperienced riders may dismount prior to the TTF getting too high above the ground where the rider is more likely to be injured should a fall occur. For example, place a 10 cm wide gateway 40 cm off the ground as a gateway to a 30 cm wide section 1.2 m off the ground.
- Make the highest difficulty section visible from the entry.

- By placing the difficult section in view, the rider can make an informed decision before they may get into trouble with a TTF that may be beyond their ability.
- Avoid wide, easy entrances leading to high, narrow exposed features

TTF HEIGHT AND WIDTH

An outlined in the Technical Trail Difficulty section, maximum height and minimum width are dependent on the TTFs difficulty. As the height above the ground increases, the consequences of injury in the case of a fall increases.

Height is measured vertically to the lowest point within 1.0 m adjacent to TTF (figure 2). Tread width is the amount of flat tread (figure 3).

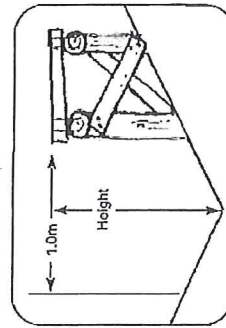


FIGURE 2 MEASUREMENT OF TTF HEIGHT

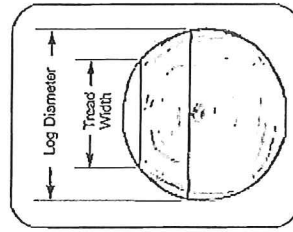


FIGURE 3 TREAD WIDTH MEASUREMENT

CONSTRUCTION PRACTICES

Cross bracing of vertical members is required (figure 4). Also, TTFs should not be mounted to living trees for the following reasons:

- The tree will continue to grow, compromising the integrity of the TTF.
- The tree may sway due to wind, weakening the TTF.
- Nailing to live trees is harmful to the tree.

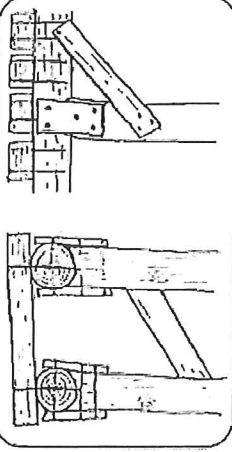


FIGURE 4 BRIDGE STRINGER SUPPORT AND CROSS BRACING

CONNECTED MEMBERS

The methods for joining members in order of preference is: nuts and bolts, big bolts, wood screws or ardox nails. Ensure two-thirds of nail or screw's length penetrates the stringer. Loading on a member should be done in such a way as not to rely exclusively on the shear strength of the joining method.

BRIDGE RUNG SPACING

Deck rungs must be placed tightly so that children will not fit between rungs and all users including dogs will use bridges as opposed to walking adjacent to the bridge, compromising the sensitive area the bridge was intended to protect.

An appropriate spacing between rungs is 3 cm to promote drainage of water and mud. Overhang rungs past stringers by less than 5 cm (2 in) (figure 5).

BRIDGE SURFACING

It is recommended that wood surfaces with a slope exceeding 10° with the exception of split wood having a rough surface finish, have an applied anti-slip surface. One recommended material is expanded diamond lath. Chicken wire and rolled roofing material, although popular, are not durable and roofing material traps moisture promoting premature rotting.

Note: TTFs must be reinforced to withstand the additional loading of anti-slip surfaces against the direction of the braking forces.

WOOD PREPARATION

Bark must be stripped off and wood in contact with the earth should be isolated to minimize rotting. For natural rot resistant wood, use cedar.

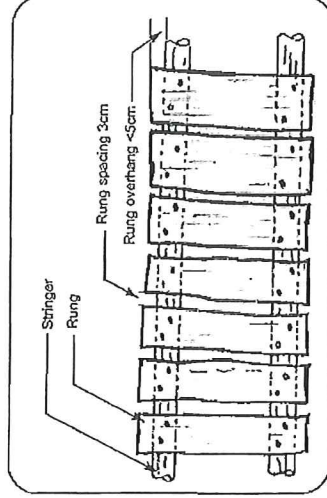


FIGURE 5 BRIDGE RUNG SPACING, RUNG OVERHANG

SIGN GUIDELINES

Signs are a necessary component of trail management. They provide the user with information that will allow them to make an informed and educated choice. The hierarchy of signs in Whistler will be comprised of three levels. The first is a Trail Network Sign book that contains a map, general information about the area and safety suggestions. The second level is a Trailhead Sign that would contain information specific to the trail. Third, En Route Signs along the trail to promote confidence in the user that they are following the correct route and to be posted on features that are a higher difficult rating than the trail rating.

TRAIL NETWORK SIGN

Located at a parking lot or similar entrance to a network of trails. Information for trail network signs may contain a combination of the following:

- Topographical map of area
- IMBA rules of the trail

1. Ride on open trails only
2. Leave no trace
3. Control your bicycle
4. Always yield trail
5. Never spook animals
6. Plan ahead

METHODS

Methods to reduce risk in fall zones (1-1.5 m to each side of the trail) include but are not limited to:

- Cutting or digging out any sharp objects
- Trimming tree branches to branch shoulder (see figure 1)
- Covering of hazards is another option if material such as rotten logs, bark, mulch, dirt, etc. is available
- Areas where falls are frequent may need periodic re-covering
- Dulling of sharp points or edges of exposed rocks

NOTE: The fall zone need not be cleared of all foliage; the purpose of fall zone guidelines is to reduce the chance of injury should a fall occur. Replanting of the fall zone with a durable locally occurring species may be considered.

FOCUS

The primary focus for fall zone clearing should be on trails rated 'More Difficult'. Riders may be learning to ride TTFs and their fall recovery may not be perfected.



FIGURE 1: FALL ZONE CLEARING

FALL ZONE

The fall zone is the area adjacent to the technical trail feature, bottom of descents and the outside of corners that the rider may deviate into. To help reduce the incidence and severity of injuries, fall zones should be reviewed for hazards. Hazard mitigation efforts can be limited to those items that can be reasonably expected to be rechecked or removed using hand tools while maintaining the natural characteristics of the terrain surrounding the trail.

METHODS

Methods to reduce risk in fall zones (1-1.5 m to each side of the trail) include but are not limited to:

- Cutting or digging out any sharp objects
- Trimming tree branches to branch shoulder (see figure 1)
- Covering of hazards is another option if material such as rotten logs, bark, mulch, dirt, etc. is available
- Areas where falls are frequent may need periodic re-covering
- Dulling of sharp points or edges of exposed rocks

NOTE: The fall zone need not be cleared of all foliage; the purpose of fall zone guidelines is to reduce the chance of injury should a fall occur. Replanting of the fall zone with a durable locally occurring species may be considered.

FOCUS

The primary focus for fall zone clearing should be on trails rated 'More Difficult'. Riders may be learning to ride TTFs and their fall recovery may not be perfected.

TRAILHEAD SIGN

These signs are to be located at the entrance(s) of a particular trail to provide the user with the information necessary to make an informed and educated decision whether to proceed or not.

SUGGESTED INFORMATION

- Trail name
- Topographical map of trail
- Trail length
- Elevation gain and loss
- Use at own risk disclaimer

DETAILS

Sign size: 140 mm X 370 mm. Selected to be mounted without overhang on 150 mm X 150 mm posts (figure 6).

OPTIONAL INFORMATION

- Trail difficulty rating and a written explanation of what the user may encounter on the trail
- Warning and quantity of higher difficulty TTFs if present
- Conditions subject to change
- Inspect TTFs prior to riding
- Time range to complete
- Trail profile
- Disclaimer — most trails will be a level or two harder to ride when slippery

MANAGEMENT GUIDELINES

EN ROUTE SIGN

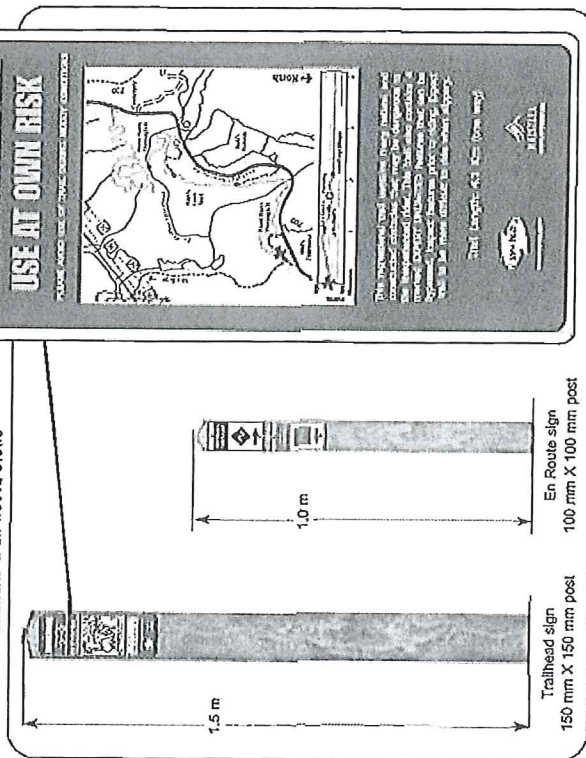
Located along the trail indicating to the user they are still on the desired trail and/or give warning of the higher difficulty of an upcoming TTF. En route signs express difficulty in three ways: shape of sign, color of sign and trail profile symbol on the sign. The signs are labeled with the trail name to distinguish between different trails.

- En route signs to be placed at junctions with alternate trails giving clear indication of each trail's direction. Use difficulty symbol and trail name with a reflective white border.
- For TTFs rated a higher difficulty than the trail rating, en route signs to be posted as warning. Use difficulty symbol and trail name with a reflective yellow border. If feature can not be safely walked, an easier signed bypass route must be provided (figure 6).
- If appropriate, signs may be placed at intervals to guide user.
- Consider reflective signs for night use.

DETAILS

For en route signs marking higher difficulty features, it is important for the sign to be highly visible. Place sign approximately 1.0-1.5 m above tread.

FIGURE 6 TRAILHEAD & EN ROUTE SIGNS



CONSTRUCTION

For all or new trails, the RMOW will use an experienced trail builder for the trail alignment and follow the supporting guidelines and standards.

TRAIL RATING

The trail and each feature along the trail is reviewed and measured to determine its difficulty. The details and difficulty level of each feature need to be recorded. The trail may be rated as low as the average feature difficulty or as high as the highest feature's difficulty, bearing in mind all features rated as a higher difficulty than the trail's rating must be individually signed. If the feature can not be safely walked, the feature must have an easier, signed bypass route. The trailhead sign must also inform the user that there are higher difficulty features.

TRAIL MAINTENANCE

Trail maintenance is an integral part of managing trails. In general, high use trails and trails in environmentally sensitive areas require a greater level of maintenance and an expedited response to trail deterioration. Trails with man-made TTFs also require more frequent inspection.

MAINTENANCE PRIORITIES

The RMOW will inspect municipal trails as follows:

- **HIGH PRIORITY TRAILS** will be inspected twice a year (April and July). These include all Type I trails, all trails in PAN 1 environments and trails with known constructed TTFs.
- **MEDIUM PRIORITY TRAILS** will be inspected in the spring of each year or prior to the start of the trail use season. These include all trails in PAN 2 and PAN 3 environments and all Type II trails.
- **LOW PRIORITY TRAILS** will be inspected in the spring of each year or prior to the start of the trail use season. These include all remaining mountain bike trails.

All inspections and maintenance must be documented.

INSPECTION TO INCLUDE

Review of the trail:

- for safety;
 - to verify difficulty designation.
- Review of signs:
- for presence and condition.
 - Review of constructed features;
 - for structural integrity.

TERMINOLOGY

- A-FRAME** – two ramps (approach and exit) placed together with no level section at the apex. Typically used to bridge deadfall across the trail.
- BEER** – built up bank on the outside of a corner to improve cornering.
- BOARDWALK** – a raised walkway made of boards; used to traverse sensitive areas; similar to bridge.
- BRIDGE** – a structure that is built above and across a river or other obstacle allowing passage across or over obstacle.
- DANGER** – likely to cause harm or result in injury.
- DROP-OFF** – a drop in the trail, possibly at the end of a log or off a rock; may require a technique depending on the vertical drop and/or the angle of descent.
- EN ROUTE** – on the way.
- EXPOSURE** – placing a rider in the position or location that an error in balance or maneuvering may result in an injury; for example, a narrow bridge above rocks would be exposure and the greater the elevation of the bridge above the rocks, the greater the level of exposure.
- FACE** – the steep exposed side of a rock.
- FALL-AWAY** – a drop-off which incorporates a turn in the trail.
- GAP** – two ramps placed back to back with a space between them. The rider must travel with enough velocity to cross the space and land on the second ramp.
- GATEWAY** – a qualifier placed before a trail or TTF; for example, a 2x4 placed before an elevated bridge or a difficult corner. If the rider can successfully negotiate the more difficult gateway, then they will likely be able to negotiate the TTF.
- GRANDFATHER CLAUSE** – provision exempting certain pre-existing trails from the requirements of a new regulation.
- JUMP** – a wedge shaped feature built with the intention of sending the rider airborne.
- LAODER** – a TTF with ramps attached to sides (cutting) made of metal, wood or rope, used for climbing up or down.
- LOGJAM** – a pile of logs placed near perpendicular to trail to make a ramp, usually placed in front of and behind deadfall to ease passage.
- MACHINE BUILT** – constructed with the use of an excavator.
- MANDATORY AIR** – a TTF requiring a wholistic drop or other advanced technique to exit due to a steep or undercut exit.
- MANUAL** – technique used to lift the front end of a bike up without the use of a pedal stroke; can be used off mandatory airs, etc.; generally requires more forward momentum than a wholistic drop.
- PAN** – Protected Area Network, sometimes know worldwide as greenways, environmental corridors, landscapes linkages, wildlife corridors or riparian buffers.
- RAMP** – any inclined structure, typically used as an approach to or exit from a TTF. A ramp can also be a jump.
- RHYTHM SECTION** – series of gap jumps placed end to end. Most technical form of jumping; due to skill, timing, technique and failure consequences.
- RIPARIAN ZONE/AREA** – land between the water and the high water mark on the riverbanks. Riparian areas typically exemplify a rich and diverse vegetative mosaic reflecting the influence of water.
- ROLLABLE** – a section that can be ridden without requiring higher-level rider skills; for example, an elevated bridge, intersection/corner that can be ridden without having to hop and coast.
- ROLL OVER** – usually a rock that gets in the way of the rider; the rider advances, to the point where stopping may not be an option and the rider must continue despite not being prepared for what's ahead.
- TABLETOP** – two jumps back to back with the void between the jumps filled in with dirt, creating the tabletop.
- TECHNICAL JITTER** – a TTF consisting of a long plank balanced on a central support for riders to cross over, providing an down motion as the rider passes over the plank.
- TONQUE** – a steep ramp on the exit of a TTF, often as an easier alternative to mandatory air.
- TOP-OF-THE-BANK** – the highest elevation of land, which confines to their channel waters flowing in an intermittent or perennial stream or river.
- TREAD** – the traveled surface of the trail.
- TTF** – Technical Trail Feature – an obstacle on the trail requiring suspension, the feature can be either man made or natural, such as an elevated bridge or a rock face respectively.
- WHEELIE DROP** – technique used to pedal off drop-off or logs with the back wheel landing before the front wheel.

MAINTENANCE TRIGGERS

- Triggers for trails requiring additional maintenance:
- TTFs deteriorating.
 - Short-cutting of climbing turns and/or switchbacks.
 - Trail drifting or sliding down the hill.
 - Vegetation cover loss.
 - Trail proliferation (widening or braiding).
 - Trail incision and soil loss (ruts exceeding 15 cm depth).

GRANDFATHER CLAUSE

In the case of valued existing trails in protected areas when trail deactivation is unlikely to succeed, trail management becomes the preferred option. When considering the Grandfather Clause as an option, evaluate the continuing cost of maintenance to manage the trail. A trail deactivation/closure may not be successful if the trail has been established, is well used, and no alternative route is proposed. The resulting damage may be worse than had the trail remained open and effectively managed.

TRAIL DEACTIVATION

There may be a number of reasons for deactivating an existing trail. When considering deactivation of a trail, take into account:

- Is the trail popular?
- Is the level of impact acceptable or can it be made acceptable by management?
- Can the trail or part of the trail be rerouted to improve the situation?
- Are there suitable alternatives for users if the trail was deactivated?
- Is the trail historically significant?

Alternates to trail deactivation:

- Management of trail use.
- Temporary closures
- Reroute sections of trail
- Exclusion of damaging users
- Education of users with signs or other education initiatives.

When considering deactivation of trails, steps must include the following:

- Consult user groups.
 - Public notice.
 - Monitoring to ensure trail remains deactivated.
- And may include:
- Signs informing users of reasons for closure.
 - Fences.



NOTES

Schedule "E"

MTBco Code of Conduct, Constitution and Bylaws

MTBco Code of Conduct

- Act within the governing document and the law – being aware of the contents of the organizations governing document and the law as it applies to MTBco.
- Act in the best interest of MTBco as a whole – considering what is best for the organisation and its beneficiaries and avoiding bringing MTBco into disrepute.
- Manage conflicts of interest effectively – registering, declaring and resolving conflicts of interest. Not gaining materially or financially unless specifically authorized to do so.
- Respect confidentiality – understanding what confidentiality means in practice for MTBco, its board and the individuals involved with it.
- Have a sound and up-to-date knowledge of MTBco and its environment – understanding how MTBco works and the environment within which it operates.
- Attend meetings and other appointments or give apologies – considering other ways of engaging with the organisation if regularly unable to attend meetings.
- Prepare fully for meetings and all work for MTBco – reading papers, querying anything you don't understand and thinking through issues in good time before meetings.
- Actively engage in discussion, debate and voting in meetings – contributing positively, listening carefully, challenging sensitively and avoiding conflict.
- Act jointly and accept a majority decision – making decisions collectively, standing by them and not acting individually unless specifically authorized to do so.
- Work considerately and respectfully with all – respecting diversity, different roles and boundaries, and avoiding giving offence.

CONSTITUTION

1. The name of the society is Mountain Bikers of the Central Okanagan Association.
2. The purpose(s) of the society is (are):
 - (a) To protect, create, manage & maintain all aspects of mountain bike terrain, and all areas associated with mountain biking.
 - (b) To foster community spirit through organizing mountain bike related community events.
 - (c) To foster youth involvement and further the progression of the sport of mountain biking.

BYLAWS

The bylaws of the society are those set out in Schedule B to the Society Act.

Dated June 1, 1998

Witness

Applicants for Incorporation

Mike Kittmer
123 Any Street, Victoria BC V1V 1V1

1) Justin Evernden
3457 Webber Rd. Westbank, B.C. V4T-1H4

2) John Matthews
3602 Dunbarton Rd. Westbank, B.C. V4T-1J4

3) Stuart Evans
#27-316 Whitman Rd. Kelowna, B.C. V1V-1Y9

4) Ryan McKenna
889 Tataryn Rd. Kelowna, B.C. V1X-1N6

5) Brant Lyon
#305-1329 Ellis St. Kelowna, B.C. V1Y-9X5

Bylaws of Mountain Bikers of the Central Okanagan Association

Part 1 — Interpretation

- 1 (1) In these bylaws, unless the context otherwise requires:
“directors” means the directors of the society for the time being;
“Society Act” means the Society Act of British Columbia from time to time in force and all amendments to it;
“registered address” of a member means the member’s address as recorded in the register of members.
- (2) The definitions in the Society Act on the date these bylaws become effective apply to these bylaws.
- 2 Words importing the singular include the plural and vice versa, and words importing a male person include a female person and a corporation.

Part 2 — Membership

- 3 The members of the society are the applicants for incorporation of the society, and those persons who subsequently become members, in accordance with these bylaws and, in either case, have not ceased to be members.
- 4 A person may apply to the directors for membership in the society and on acceptance by the directors is a member.
- 5 Every member must uphold the constitution and comply with these bylaws.
- 6 The amount of the first annual membership dues must be determined by the directors and after that the annual membership dues must be determined at the annual general meeting of the society.
- 7 A person ceases to be a member of the society
 - (a) by delivering his or her resignation in writing to the secretary of the society or by mailing or delivering it to the address of the society,
 - (b) on his or her death or, in the case of a corporation, on dissolution,
 - (c) on being expelled, or
 - (d) on having been a member not in good standing for 12 consecutive months.
- 8 (1) A member may be expelled by a special resolution of the members passed at a general meeting.
(2) The notice of special resolution for expulsion must be accompanied by a brief statement of the reason for the proposed expulsion.
(3) The person who is the subject of the proposed resolution for expulsion must be given an opportunity to be heard at the general meeting before the special resolution is put to a vote.
- 9 All members are in good standing except a member who has failed to pay his or her current annual membership fee, or any other subscription or debt due and owing by the member to the society, and the member is not in good standing so long as the debt remains unpaid.

Part 3 — Meetings of Members

- 10 General meetings of the society must be held at the time and place, in accordance with the Society Act, that the directors decide.
- 11 Every general meeting, other than an annual general meeting, is an extraordinary general meeting.
- 12 The directors may, when they think fit, convene an extraordinary general meeting.

- 13 (1) Notice of a general meeting must specify the place, day and hour of the meeting, and, in case of special business, the general nature of that business.
(2) The accidental omission to give notice of a meeting to, or the non-receipt of a notice by, any of the members entitled to receive notice does not invalidate proceedings at that meeting.
- 14 The first annual general meeting of the society must be held not more than 15 months after the date of incorporation and after that an annual general meeting must be held at least once in every calendar year and not more than 15 months after the holding of the last preceding annual general meeting.

Part 4 — Proceedings at General Meetings

- 15 Special business is
- (a) all business at an extraordinary general meeting except the adoption of rules of order, and
 - (b) all business conducted at an annual general meeting, except the following:
 - (i) the adoption of rules of order;
 - (ii) the consideration of the financial statements;
 - (iii) the report of the directors;
 - (iv) the report of the auditor, if any;
 - (v) the election of directors;
 - (vi) the appointment of the auditor, if required;
 - (vii) the other business that, under these bylaws, ought to be conducted at an annual general meeting, or business that is brought under consideration by the report of the directors issued with the notice convening the meeting.
- 16 (1) Business, other than the election of a chair and the adjournment or termination of the meeting, must not be conducted at a general meeting at a time when a quorum is not present.
(2) If at any time during a general meeting there ceases to be a quorum present, business then in progress must be suspended until there is a quorum present or until the meeting is adjourned or terminated.
(3) A quorum is 3 members present or a greater number that the members may determine at a general meeting.
- 17 If within 30 minutes from the time appointed for a general meeting a quorum is not present, the meeting, if convened on the requisition of members, must be terminated, but in any other case, it must stand adjourned to the same day in the next week, at the same time and place, and if, at the adjourned meeting, a quorum is not present within 30 minutes from the time appointed for the meeting, the members present constitute a quorum.
- 18 Subject to bylaw 19, the president of the society, the vice president or, in the absence of both, one of the other directors present, must preside as chair of a general meeting.
- 19 If at a general meeting
- (a) there is no president, vice president or other director present within 15 minutes after the time appointed for holding the meeting, or
 - (b) the president and all the other directors present are unwilling to act as the chair, the members present must choose one of their number to be the chair.
- 20 (1) A general meeting may be adjourned from time to time and from place to place, but business must not be conducted at an adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place.
(2) When a meeting is adjourned for 10 days or more, notice of the adjourned meeting must be given as in the case of the original meeting.

- (3) Except as provided in this bylaw, it is not necessary to give notice of an adjournment or of the business to be conducted at an adjourned general meeting.
- 21 (1) A resolution proposed at a meeting need not be seconded, and the chair of a meeting may move or propose a resolution.
- (2) In the case of a tie vote, the chair does not have a casting or second vote in addition to the vote to which he or she may be entitled as a member, and the proposed resolution does not pass.
- 22 (1) A member in good standing present at a meeting of members is entitled to one vote.
- (2) Voting is by show of hands.
- (3) Voting by proxy is not permitted.
- 23 A corporate member may vote by its authorized representative, who is entitled to speak and vote, and in all other respects exercise the rights of a member, and that representative must be considered as a member for all purposes with respect to a meeting of the society.

Part 5 — Directors and Officers

- 24 (1) The directors may exercise all the powers and do all the acts and things that the society may exercise and do, and that are not by these bylaws or by statute or otherwise lawfully directed or required to be exercised or done by the society in a general meeting, but subject, nevertheless, to
- (a) all laws affecting the society,
 - (b) these bylaws, and
 - (c) rules, not being inconsistent with these bylaws, that are made from time to time by the society in a general meeting.
- (2) A rule, made by the society in a general meeting, does not invalidate a prior act of the directors that would have been valid if that rule had not been made.
- 25 (1) The president, vice president, secretary, treasurer and one or more other persons are the directors of the society.
- (2) The number of directors must be 5 or a greater number determined from time to time at a general meeting.
- 26 (1) The directors must retire from office at each annual general meeting when their successors are elected.
- (2) Separate elections must be held for each office to be filled.
- (3) An election may be by acclamation, otherwise it must be by ballot.
- (4) If a successor is not elected, the person previously elected or appointed continues to hold office.
- 27 (1) The directors may at any time and from time to time appoint a member as a director to fill a vacancy in the directors.
- (2) A director so appointed holds office only until the conclusion of the next annual general meeting of the society, but is eligible for re-election at the meeting.
- 28 (1) If a director resigns his or her office or otherwise ceases to hold office, the remaining directors must appoint a member to take the place of the former director.
- (2) An act or proceeding of the directors is not invalid merely because there are less than the prescribed number of directors in office.
- 29 The members may, by special resolution, remove a director, before the expiration of his or her term of office, and may elect a successor to complete the term of office.
- 30 A director must not be remunerated for being or acting as a director but a director must be reimbursed for all expenses necessarily and reasonably incurred by the director while engaged in the affairs of the society.

Part 6 — Proceedings of Directors

- 31 (1) The directors may meet at the places they think fit to conduct business, adjourn and otherwise regulate their meetings and proceedings, as they see fit.
(2) The directors may from time to time set the quorum necessary to conduct business, and unless so set the quorum is a majority of the directors then in office.
(3) The president is the chair of all meetings of the directors, but if at a meeting the president is not present within 30 minutes after the time appointed for holding the meeting, the vice president must act as chair, but if neither is present the directors present may choose one of their number to be the chair at that meeting.
(4) A director may at any time, and the secretary, on the request of a director, must, convene a meeting of the directors.
- 32 (1) The directors may delegate any, but not all, of their powers to committees consisting of the director or directors as they think fit.
(2) A committee so formed in the exercise of the powers so delegated must conform to any rules imposed on it by the directors, and must report every act or thing done in exercise of those powers to the earliest meeting of the directors held after the act or thing has been done.
- 33 A committee must elect a chair of its meetings, but if no chair is elected, or if at a meeting the chair is not present within 30 minutes after the time appointed for holding the meeting, the directors present who are members of the committee must choose one of their number to be the chair of the meeting.
- 34 The members of a committee may meet and adjourn as they think proper.
- 35 For a first meeting of directors held immediately following the appointment or election of a director or directors at an annual or other general meeting of members, or for a meeting of the directors at which a director is appointed to fill a vacancy in the directors, it is not necessary to give notice of the meeting to the newly elected or appointed director or directors for the meeting to be constituted, if a quorum of the directors is present.
- 36 A director who may be absent temporarily from British Columbia may send or deliver to the address of the society a waiver of notice, which may be by letter, telegram, telex or cable, of any meeting of the directors and may at any time withdraw the waiver, and until the waiver is withdrawn,
(a) a notice of meeting of directors is not required to be sent to that director, and
(b) any and all meetings of the directors of the society, notice of which has not been given to that director, if a quorum of the directors is present, are valid and effective.
- 37 (1) Questions arising at a meeting of the directors and committee of directors must be decided by a majority of votes.
(2) In the case of a tie vote, the chair does not have a second or casting vote.
- 38 A resolution proposed at a meeting of directors or committee of directors need not be seconded, and the chair of a meeting may move or propose a resolution.
- 39 A resolution in writing, signed by all the directors and placed with the minute of the directors, is as valid and effective as if regularly passed at a meeting of directors.

Part 7 — Duties of Officers

- 40 (1) The president presides at all meetings of the society and of the directors.
(2) The president is the chief executive officer of the society and must supervise the other officers in the execution of their duties.
- 41 The vice president must carry out the duties of the president during the president's absence.
- 42 The secretary must do the following:

- (a) conduct the correspondence of the society;
- (b) issue notices of meetings of the society and directors;
- (c) keep minutes of all meetings of the society and directors;
- (d) have custody of all records and documents of the society except those required to be kept by the treasurer;
- (e) have custody of the common seal of the society;
- (f) maintain the register of members.

43 The treasurer must

- (a) keep the financial records, including books of account, necessary to comply with the Society Act, and
- (b) render financial statements to the directors, members and others when required.

44 (1) The offices of secretary and treasurer may be held by one person who is to be known as the secretary treasurer.

(2) If a secretary treasurer holds office, the total number of directors must not be less than 5 or the greater number that may have been determined under bylaw 25 (2).

45 In the absence of the secretary from a meeting, the directors must appoint another person to act as secretary at the meeting.

Part 8 — Seal

46 The directors may provide a common seal for the society and may destroy a seal and substitute a new seal in its place.

47 The common seal must be affixed only when authorized by a resolution of the directors and then only in the presence of the persons specified in the resolution, or if no persons are specified, in the presence of the president and secretary or president and secretary treasurer.

Part 9 — Borrowing

48 In order to carry out the purposes of the society the directors may, on behalf of and in the name of the society, raise or secure the payment or repayment of money in the manner they decide, and, in particular but without limiting that power, by the issue of debentures.

49 A debenture must not be issued without the authorization of a special resolution.

50 The members may, by special resolution, restrict the borrowing powers of the directors, but a restriction imposed expires at the next annual general meeting.

Part 10 — Auditor

51 This Part applies only if the society is required or has resolved to have an auditor.

52 The first auditor must be appointed by the directors who must also fill all vacancies occurring in the office of auditor.

53 At each annual general meeting the society must appoint an auditor to hold office until the auditor is re-elected or a successor is elected at the next annual general meeting.

54 An auditor may be removed by ordinary resolution.

55 An auditor must be promptly informed in writing of the auditor's appointment or removal.

56 A director or employee of the society must not be its auditor.

57 The auditor may attend general meetings.

Part 11 — Notices to Members

- 58 A notice may be given to a member, either personally or by mail to the member at the member's registered address.
- 59 A notice sent by mail is deemed to have been given on the second day following the day on which the notice is posted, and in proving that notice has been given, it is sufficient to prove the notice was properly addressed and put in a Canadian post office receptacle.
- 60 (1) Notice of a general meeting must be given to
- (a) every member shown on the register of members on the day notice is given, and
 - (b) the auditor, if Part 10 applies.
- (2) No other person is entitled to receive a notice of a general meeting.

Part 12 — Bylaws

- 61 On being admitted to membership, each member is entitled to, and the society must give the member without charge, a copy of the constitution and bylaws of the society.
- 62 These bylaws must not be altered or added to except by special resolution.

Schedule "F"

City of Kelowna Outdoor Events Requirement for the Mission Creek Mountain Bike Skills Park Special Events

- Outdoor Event Permit will be required for events that expect attendance of 350+ people.
- Parking / Traffic Management Plan will be a requirement for each event. The plan cannot include parking on adjacent roadways. If using the adjacent Regional District parking lot, approval must be provided in writing to Outdoor Events Staff.
- Events hosted by organizations outside of the Mountain Bikers of the Central Okanagan Club (MTBCO) must receive written letter of support from the Club as part of the event request.
- Event Insurance must meet City of Kelowna requirements inclusive of \$5,000,000 Comprehensive General Liability. Insurance must name the City and MTBCO as an 'Additional Insured'.
- Submission of the outdoor event application will be required 60 days prior to event.
- Park rental fees, outdoor event application fee and damage deposit will apply.
- Although the park does not have accessible power for events, Temporary Electrical Permit may be required if a generator larger than 5KW is used for events. Contact BC Safety (250 861-7322) Authority for more information on obtaining this permit.
- Events with alcohol licensed area will not be permitted at this park.
- Event organizer will be responsible for site cleanup and removal of garbage during and after each event. Parks Department can supply additional garbage and recycling cans.
- Additional portable toilets required to support events will be at the cost of the organizer. Organizer will be responsible for making necessary arrangements.
- Written event notification may be required for affected residents.
- Events cannot be advertised until the City and the Club has provided permission to do so.
- Overnight parking/camping will not be permitted. This would not include vehicles / trailers on site to support events. Security should be in place for any event that has event infrastructure on site overnight.
- Closure of park to public access will be discussed and mutually agreed upon between MTBCo and the City except for when park conditions have deteriorated and the park must be closed for safety reasons.
- Staking will not be permitted without prior written consent from the City Parks Department. Damage to sprinkler lines caused by staking will be charged back to the club or renter.
- Club will be responsible to monitor the park during events to ensure event organizers maintain expected standards. The 'Club's' monitor should have the ability to shut down the event if this is not adhered to