 <p><b>CROWSNEST PASS</b> <i>Naturally Rewarding</i></p>	<h2>Municipality of Crowsnest Pass Policy</h2>
<p>Policy No.: Policy Title: Approval Date: Revision Date: Supersedes Policy: Department:</p>	<p>1214-02 Green Space Management Policy January 12, 2021 March 9, 2021 1214-01 Community Services</p>

### 1.0 POLICY PURPOSE

This policy has been prepared to set out, as clearly as possible, the guidelines and regulations, which shall govern the standard of operations and maintenance of the green spaces within control of the Municipality of Crowsnest Pass.

### 2.0 DEFINITIONS

“**Adult**” means individuals who are 18 years of age or older.

“**Aeration**” means the process of using equipment to penetrate grass for oxygen to circulate through.

“**Arterial Trails**” means trails that are a main connector to access many other loop trails.

“**Athletic Fields**” means a parcel of land prepared for organized sports. Examples include baseball, soccer and football grassed surfaces.

“**Bollards**” means a short and sturdy vertical post that acts as both a physical and visual barrier to guide traffic. Natural bollards can be used as well.

“**Bridge**” means a structure built over something so people can cross safely. This is a permanent structure spanning and providing passage over a river, road, ravine or like.

“**CAO**” means the Chief Administration Officer of the Municipality of Crowsnest Pass or designate.

“**Commercial/For Profit**” means an individual, group, or business whose primary focus is to gain profit.

“**Connectivity**” means connection of certain areas.

“**Council**” means the group of officials elected by the residents of the Municipality of Crowsnest Pass.

“**Clearance Zone**” means a height of 3 meters or 9.84 feet.

“**Crown Land**” means land located in Alberta and managed by the government of Alberta.

**“Fall Protection Zone”** means the designated area around a play structure to prevent serious injury from a fall.

**“Greenspace”** means an area of grass, trees or other vegetation set apart for recreational or aesthetic purposes in an otherwise urban environment.

**“High-Use trails”** means a trail that generally has more use. For example, a trail that is used more than 10 times per hour.

**“Irrigation”** means the supply of water to land or crops to help growth.

**“Leadhand”** means the position of leadhand for the Community Services Department.

**“Parking Lot”** means an area where recreational users stage their vehicle while on the trail.

**“Periodically”** means No less than twice per calendar month.

**“Pesticide”** means any organism or substance sold or used as a means of controlling, preventing, destroying mitigating, attracting, or repelling any pest or altering growth of vegetation.

**“Play areas”** means any play space designated as a play structure in green spaces within the Municipality of Crowsnest Pass.

**“Playground”** means a structure used for outdoor play or recreation, especially by children, and often containing equipment such as slides and swings as informal recreational amusement.

**“Private Organization”** means a group or organization with restricted membership.

**“Pruning”** means the systematic removal of branches of woody landscape plants to eliminate dead or diseased material, repair vandalism, maintain and enhance plant form, control growth, or rejuvenate a tree or shrub.

**“Main Arterial”** means a trail developed to connect the Municipality of Crowsnest Pass communities or a major trail system that connects to other branch trails.

**“Manager”** means the Community Service Manager for the Municipality of Crowsnest Pass.

**“Monthly Inspection”** means the inspection called “monthly inspection” found in the Community Services Inspections folder in the company “T” drive. This inspection is to be completed within 31 days from the date of the last inspection.

**“Mowing”** means the act of cutting grass to an even height.

**“Municipality”** means the Municipality of Crowsnest Pass.

**“Roadside”** means the area of land between a property boundary and the edge of a roadway.

**“Sports Field”** means an area designated by the Municipality for organized field play, such as baseball, soccer, football or like uses.

**“Sports Organization”** means an organization that provides a sustained sporting experience to its members.

**“Terms and Conditions”** means the rental agreement provided by the Municipality.

**“Trailhead”** means the access point to a trail.

**“Turf”** means grass and the surface layer of earth held together by its roots.

**“Trim”** means to make neat and tidy by clipping or pruning.

**“User Groups”** means an organization that either uses the greenspace or has an agreement in place to utilize the greenspace.

**“Wayfinding”** means a map showing the location and route of the trail.

### **3.0 RESPONSIBILITY**

- 3.1** Council is responsible for approving this policy, approving budgets regarding to turf management and provide direction to administration, as needed, on issues that may arise.
- 3.2** The Chief Administrative Officer is responsible for maintaining and enforcing the policy, providing a budget for Council approval, monitoring of budget dollars and making recommendations to Council on actions concerning playgrounds and their structures.
- 3.3** The Leadhand is responsible for ensuring inspection and turf management are being completed within the governance of this policy and all legislation is adhered to.
- 3.4** User groups with operational agreements are responsible for inspections and safety of green spaces they operate.

### **4.0 POLICY STATEMENTS**

- 4.1** The following guidelines do not attempt to set rigid policies, but rather to serve as a guide to outline key maintenance consideration for all parks and greenspaces. The Municipality reserves the right to deviate from these guidelines, wherein conditions warrant.
- 4.2** These guidelines and regulations shall not be considered all inclusive and may require updating from time to time. The guidelines will, however, cover those areas that may have given rise to questions and conflict. The regulations and guidelines are intended to serve as a guide for the Community Services staff and to provide the users of the greenspace with safe, efficient and entertaining use with a friendly disposition.

- 4.3 Whenever these guidelines contradict legislation or Canadian standards, legislation will take precedence over this policy.
- 4.4 Greenspaces are inspected and open to the public for safe use from June 1 to September 1 of each calendar year. These spaces can be used year-round, but users are responsible to check over the area/equipment and area for safety, prior to use outside of the dates as listed.
- 4.5 Greenspaces, including any structures that are leased, adopted by clubs or community organizations, do not fall within this policy and shall be the responsibility of the organization to adhere to safety guidelines.
- 4.6 Since greenspaces cannot be inspected every day and safety concerns may arise, adult supervision is strongly recommended with children using all trails and green spaces.
- 4.7 The Municipality has the potential of wildlife encounters in all outdoor play spaces. Adult supervision is strongly recommended while children are using the trail systems and green spaces.
- 4.8 Whenever any structure is erected in the Municipality and designed for public use, it must meet all applicable legislation.
- 4.9 Whenever possible, the Municipality will mulch grass, instead of bagging grass clippings, to provide a sustainable greenspace.
- 4.10 All new trail development should incorporate facilities for the users at trailheads or major collection points.
- 4.11 Whenever possible, storm ponds are to be left as natural areas and are not to be mowed, to keep the design efficiency of the area.
- 4.12 Grass will be mowed in a pattern that avoids leaving grass clippings on pathways.
- 4.13 Whenever possible for the health of the turf, staff should change patterns on mowing.
- 4.14 All non-irrigated planters should be comprised of a self-watering system for efficiency and better health of the plant life.
- 4.15 Winter lights may be erected in parks and on main thoroughfares during the Christmas season. All fixed and not fixed decorations or lights must be removed no later than January 31 following the Christmas season. However, Lights erected in trees are permissible to be left up as long tree health is not compromised. Tree lights left up all season must be maintained in good repair and inspected periodically in the off season for any safety issues.

- 4.16** Whenever possible no snow removed from other property or streets, they contain contaminants or gravel and stored on any green space. Snow and the contaminants stored on priority 1 and priority 2 areas must be removed in a timely manor to ensure minimal damage to turf.

## **5.0 PARKS AND GREEN SPACES CLASSIFICATION**

- 5.1** Services provided by the Parks staff are weather dependent. This means that the weather directly influences the volume, demand and costs associated with service levels. A dry season can result in reducing the need for grass mowing and may require watering or additional weed control. A series of windstorms can result in additional tree pruning/removal and branch clearing in the Municipality. The Municipality recognizes that some greenspaces operate under private organizations and these areas are not recognized under this policy. Operating agreements will be the governing agent for these areas.
- 5.2** Priority Level 1 – Are primarily high usage greenspace or athletic fields. These areas are generally irrigated fields with higher than usual growing amounts and most likely include high public profile areas or areas where additional care is required, such as garbage pick-up, public washrooms, flowerbeds and water features, such as spray parks.
- 5.3** Priority Level 2 - Parks and greenspaces typically include most of the public open space areas such as linear parks, boulevards, medians, playground spaces, walkways, and entrance areas to neighbourhoods. These areas are designed to serve the immediate area and add to the community's livability.
- 5.4** Priority Level 3 – Areas that still have importance, but do not require frequent attention due to geological growing conditions. Generally, these areas require maintenance scheduling at no more than monthly scheduling.
- 5.5** Priority Level 4 – Areas that require maintenance no more than a few times throughout the growing season.

## **6.0 PRIORITY RANKING**

### **6.1 Priority Level 1**

- a. Generally, these areas are mowed and trimmed weekly. These areas may be increased or decreased as weather permits. Ideally, these areas have a need to maintain a grass height for athletic play or aesthetics, due to high usage and ideally maintain a grass height of between 10 cm to 16 cm (4 to 6 inches).
- b. Some areas, such as athletic fields, need to be maintained at this level, only during the league season. During the off-season, these areas will not require a Priority 1 and will be moved to the most applicable priority as required.
- c. Generally, weekly inspection of Municipal owned greenspaces for litter control.
- d. Generally, garbage is picked up on a weekly basis. There are times when garbage will be picked up more often, due to high usage.

- e. Generally, these areas require a granular fertilization process over a liquid process, due to the need of a slow-release process. Sports fields or athletic fields are the only areas that require this. However, the Municipality, from time to time, may deviate from this schedule, depending upon the needs of the area.
- f. Fertilization and/or weed control will vary in needs, but at least one application will be applied on all Priority 1 areas.
- g. All aesthetic areas, including flower beds, require frequent and regular maintenance. Priority of these areas will be as the budget allows for repairs or upkeep of structures.
- h. Planters will be watered on an “as needed” basis due to inclement weather.
- i. Downtown streetscapes will take priority over other areas, as the budget allows.
- j. Generally complete at a minimum aeration of athletic fields every two seasons of play.
- k. Athletic sports fields will be lined as required during seasonal play.

## **6.2 Priority Level 2**

- a. Generally, these areas are mowed and trimmed bi-weekly. These areas may be increased or decreased as weather permits. Ideally, these areas have a need to maintain a grass height of between 10 cm to 20 cm (4 inches to 8 inches) for aesthetics and frequent use.
- b. Some areas may only require maintenance at this level during part of the season. These areas will not require a Priority 2 level during the off season and will be moved to the most applicable priority as needed.
- c. Generally, bi-weekly inspections of Municipal owned greenspaces for litter control.
- d. Generally, garbage is picked up weekly. There are occasions when garbage will be picked up more often, due to high usage.
- e. Fertilization and/or weed control will vary, based on requirements and as the budget may allow.
- f. Flower beds, as well as other aesthetic features, will require frequent maintenance. Priority of these areas for repairs and upkeep of structures will be subject to budget.
- g. Generally, complete aeration of high usage areas every three seasons of use.

## **6.3 Priority Level 3**

- a. Generally, these areas are mowed and trimmed monthly. These areas may be increased or decreased as weather permits. These areas are maintained generally due to pest control management or grass management requirements. Ideally maintain a grass height of between 13 cm to 25 cm (5 inches to 10 inches).

- b. Some areas may only require to be maintained at this level during part of the season. Out of season, these areas will not require a Priority 3 level and can be moved to the most applicable priority as needed.
- c. Generally, a monthly inspection of the Municipal owned greenspaces for litter control.
- d. Generally, garbage is picked up weekly. There are times when garbage will be picked up more often, due to high usage.
- e. The level of weed control services will follow legislative requirements only.
- f. Generally, complete aeration of these areas as required.

#### **6.4 Priority Level 4**

- a. Generally, these areas are mowed and trimmed once or twice per season. These areas may be increased or decreased as weather permits. These areas are maintained generally due to pest control management or grass management requirements and are not areas generally accessed for public use.
- b. Generally, these areas do not move up in the priority list.
- c. Generally, a yearly inspection of Municipal owned greenspaces for litter control.
- d. Generally, garbage is picked up weekly. There are times when garbage will be picked up more often, due to high usage.
- e. Only restricted weeds will be controlled in these areas.
- f. Trees will be inspected for hazards on a yearly basis and hazards will be assessed and prioritized on a yearly work plan.

### **7.0 Municipal Trail Systems**

**7.1** Community Trail Systems should be balanced to achieve a variety of trail experiences for user types.

#### **a. Mountain Bike Trails**

- i. Summer Use: Single-track trail designed for cross country and downhill mountain biking.
- ii. Winter use: Some of the summer use mountain bike trails can also be used for fat biking in the winter.

There is potential for designated and groomed fat biking trails. The width of the designated and groomed fat biking trails will need to accommodate the trail groomer and the groomer size will need to be pre-approved by the municipality.

It is recommended that mountain bike trails follow the International Mountain Bike Association guidelines to create sustainable trails with flow, visitor experience, and

engineered features and infrastructure. When developing new trails, indicate whether trails require separate up and down tracks.

**b. Hiking Trails**

- i. Summer Use: Single-track trail designed for foot access, such as walking, hiking, dog watching, birdwatching, and running.
- ii. Winter Use: Can be used for foot access, such as snowshoeing and trail running.

It is recommended that hiking trails follow the IMBA guidelines to create sustainable trails with flow, visitor experience, and engineered features and infrastructure.

**c. Nordic Ski Trails**

- i. Summer: Trails can be used for multiple non-motorized purposes depending on the width of the trails.
- ii. Winter: Trails may be single or double-tracked, depending on the width of the trail and if this trail is groomed.

If new areas within the municipality are created for designated Nordic ski trails, the groomer size and trail width must be pre-approved by the municipality.

**d. Off-Highway Vehicle Trails**

- i. Summer Use: Double-track trail designed for quads, side by sides or 4x4ers or a single-track trail designed for dirt bikes.
- ii. Winter Use: Double-track trail designed for sleds or a single-track trail designed for snow bikes.

These trails are only permitted within Crown Land and are managed by the Government of Alberta.

**7.2** New trail proposals should be demonstrated by demand (purpose for the trail) and are to clearly identify the type of users of the trail system and whenever possible, provide dual purpose trails for other users. Whenever possible, work with Community groups and develop Trail Operating Agreements, so all Municipal trail systems use common terminology. Parking and public use facilities, such as parking lots, garbage collection and washrooms should be incorporated into all new trail development.

**7.3 Trail Infrastructure Recommendations.**

**a. Bridges**

- i. Bridges must be designed and stamped by an engineer.



- ii. If applicable, bridge installation must abide by, but not limited to, the Code of Practice for Watercourse Crossings, Canadian Navigable Waters Act, and Water Act approvals.
  - iii. Weight capacity signs should be posted at the bridge from both sides.
  - iv. Bridge design, manufacture, installation date and lifespan expectancy must be submitted to the municipality for their records.
  - v. Bridge locations should limit the length of the bridge, be above the high-water level, and be strategically placed to reduce being washout by floods.
  - vi. If possible and necessary, and abiding by regulation, the debris above and below the bridge should be removed to reduce log jams.
- b. Culverts
  - i. Indicate whether the culvert is used for water drainage or is a part of a water system, such as an ephemeral stream or river.
  - ii. All culverts must extend further than the trail width and be capped with appropriate material.
  - iii. Soil erosion should be mitigated surrounding the culvert, if applicable.
  - iv. Culverts which are a part of a water system must meet federal and provincial regulation, including but not limited to the Water Act and Fisheries Acts.
- c. Trail Features
  - i. Must be installed according to standards set out to ensure safety of the user.
- d. Benches
  - i. Must create a design that discourages inappropriate and nuisance behaviours, e.g.: skateboarding, reclining, sleeping and forms of vandalism.
- e. Garbage Cans
  - i. Garbage cans should be situated at high-use trailheads and/or parking lots. Some trails, such as arterial trails, may have garbage cans strategically situated along the trail where garbage collection can be easily accessed. All garbage cans Must be bear proof.
- f. Outhouses
  - i. Outhouses should be situated at high-use trailheads and/or parking lots. Some trails, such as arterial trails, may have outhouses strategically

situated along the trail where outhouse maintenance can be easily accessed.

g. Kiosks

- i. Kiosks should be situated at high-use trailheads and/or parking lots.
- ii. Information on the kiosk should include the permitted trail use, name of the trail(s), map of the trail system, trail difficulties, trail distance and elevation, emergency contact information on who maintains this trail and connect information, seasonal closures, caution and warnings.

h. Trail Signage

- i. Trailhead signs should be at the start of each trail.
- ii. Information on a trailhead sign should include the permitted trail use, name of the trail, map of the trail, trail difficulty, trail distance and elevation, logo of who maintains the trail. Other considerations can include sponsor logos.
- iii. Trail wayfinding signs should be at junctions along the trail.
- iv. Information on the trail wayfinding sign should include a minimum of a directional arrow. Other considerations include trail name and a distance marker.

i. Trail Lighting

- i. Keep lighting, where practical, to a minimum in compliance with dark sky practices, for user safety.

#### 7.4 Trail Construction

- a. Follow all federal and provincial regulations. This includes, but is not limited to, Water Act, Fisheries Acts, Bird Migratory Act, Weed Control Act, Wildlife Act, and Species at Risk Act.
- b. All equipment must be cleaned prior to starting construction to reduce the spread of invasive species.
- c. Preserve existing vegetation, where appropriate. Do not damage any species at risk in the process of trail construction.
- d. Trail borrow pits must be recontoured to resemble the surrounding area.

- e. Erosion control measures must be in place in highly erodible locations and around water ways.
- f. Ensure the trail has drainage conveyance along the longitudinal line of the trail.
- g. Ensure no obstacles impede sightlines, where pathways intersect with roadways or other trail systems.
- h. Ensure no obstacles impede sightlines, where pathways intersect with roadways or other trail systems.

## **7.5 Trail Maintenance**

- i. Ensure sections of trail that act as maintenance access will accommodate the largest piece of equipment needed in that area.
- j. Whenever possible, paved or asphalt main arterial trail systems will be cleared of snow within 96 hours of an accumulation of more than 10 cm (4 inches) of snow, unless unforeseen circumstances or elements should arise that will impede the time limit. The Municipality will not apply any anti-slip coating to these surfaces and recommends extreme caution in the use of all trail systems. As wind events are prevalent through the Municipality, it is understood that drifting may often occur. Whenever possible, the Municipality will address drifting areas with more than 50% surface coverage of an accumulation of more than 10 cm (4 inches) of snow, measured over a distance of more than 10 metres.
- k. Repair and seal cracks as required, on an annual basis.
- l. Inspect pathway tread surface on a monthly schedule for debris that may impede traffic. Seasonal dates apply to pathways not constructed of asphalt or cement.
- m. The Municipality understands that main arterial trails should consist of asphalt, cement, and crushed rock, whenever possible, unless the trail is located as a natural system.
- n. User groups and/or associations responsible for trail maintenance and infrastructure inspections of trails with operating agreements.

## **7.6 Recreational Off-road Cycling**

Off-road cycling trail users gravitate to trail loop systems. A successful trail system will have a variety of looping trails with varying landscape features and of varying lengths. As illustrated on the Network Trail Plan, the goal is to provide cycling loops that are suitable for family-oriented activities. Pedestrian linkage, neighbourhood trails, regional trails, utility corridors, park/natural area trails and strategic transportation plan bike routes, combined to provide a system of north-south and east-west cycling connections. Any trailhead being developed must provide a plan for parking, garbage, and washrooms to accommodate users.

## **8.0 TREE MAINTENANCE**

- 8.1 To preserve the natural aesthetics of greenspaces, trees will only be trimmed or removed if a danger is present that may impede or cause harm.
- 8.2 Maintain tree wells. If cultivated, wells should be free of weeds, intact and able to hold water. If mulched, mulch should be spread evenly to a depth of 25 cm.
- 8.3 Plant trees specific to the zone and soil. Refrain from planting any fruit trees or any tree that may attract wildlife in any park or pathway area.
- 8.4 Whenever possible, each tree that fails should be replaced with another tree.
- 8.5 Areas with public traffic should have the trees inspected for safety prior to each seasonal opening. Trees or branches considered dangerous to the public should be removed as soon as possible.
- 8.6 No more than 25% of the tree canopy and living wood should be removed in one season.

## 9.0 IRRIGATION

- 9.1 Irrigation is to be in operation during the period of June 1 to August 15 of each year, depending upon needs and licence agreements.
  - 9.2 The concept of “irrigate only when necessary” will be advocated in areas that are not athletic sports fields.
  - 9.3 Generally, irrigated areas require a level 1 mowing priority and increased levels of service to maintain the infrastructure. Careful selection of areas that require irrigation is recommended.
  - 9.4 The four methods of irrigation are:
    - a. Surface – Water is distributed over and across land by gravity, sometimes referred to as flood irrigation. This method is watering by a hose. This is the least efficient manner of irrigation.
    - b. Sprinkler – is a mechanical system used most often on greenspaces, in a manner that mimics rainfall. Sprinkler heads range from misting to large area coverage.
    - c. Drip/Trickle – The most efficient way to irrigate plantings and ideal for clay soils because the water is applied slowly.
    - d. Sub-Surface – is like the drip/trickle method, as it distributes water below the ground through tubes and emitters.
  - 9.5 Whenever practical, irrigation clocks should be set to water in the early morning before 10:00 a.m.
  - 9.6 Whenever practical, irrigation clocks should have weather control functions to eliminate unnecessary watering.
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- 9.7 Irrigation infrastructure requires frequent monitoring to ensure its operating efficiency. Most sprinkler type systems have filters inside that may plug up, damaging rotary function and missing areas. Monthly inspections of the system are recommended at a minimum and should increase during hot spells, so the grass does not die off.
- 9.8 As moisture needs of plantings are different, it is recommended to use a moisture meter method to ensure the plant receives the appropriate amount of moisture at bi-weekly intervals.
- 9.9 Properly closing your irrigation before the freezing temperatures is the most important component to maintaining your irrigation.

## 10.0 LIFE EXPECTANCY

- 10.1 Preventative maintenance of asphalt trail greatly extends the lifespan. A yearly crack sealing program, along with a 10-year overlay program, greatly extends the asphalt trail system.
- 10.2 Gravel surfaced trail systems require top grading at least every 3 seasons and topping gravel surfaces every 10 years.
- 10.3 Major irrigation pieces, like pumps, time clocks and sprinkler heads need to be replaced as per manufacturer guidelines.

## 11.0 EQUIPMENT INSTALLATION

- 11.1 Benches should be a minimum height of 43.18 cm (17 inches) and a maximum height of 51 cm (20 inches) off the ground.
- 11.2 Whenever possible, benches should be constructed of a long-lasting metal material, following the theme of benching already used by the Municipality. Benches should be installed on a cement base.
- 11.3 Galvanized lag bolts should be utilized in conjunction with recessed flat washers.
- 11.4 Signage should follow the Municipality's theme already used and mounted at a height of 1.83 metres (6 feet).
- 11.5 Trail design best practice guidelines:
  - a. Generally, asphalt surfaced pathways be no less than 1.82 metres (6 feet) in width.
  - b. Have a clear sight line zone of at least 1.0 metre width from the edge of a pathway. Plant life should be maintained not exceeding a height of 90 cm inside of this zone.
  - c. Generally, asphalt or cement trail systems are to maintain a slope to a maximum of an 8% grade or a 15% grade over short distances. Steps are recommended over 16% and have a maximum of a 2% cross slop grade for drainage where practical.

- d. Entry gates or bollards to be placed at the entrances of main trail systems with a tread width of 1.0 metres or more.
- e. Trees should not be planted close to asphalt trails, whenever possible, and ensure a distance of 4 metres between the edge of an asphalt trail and the trunk of the tree.
- f. Wherever possible, restroom facilities should be accessible for trail users every 4 kilometers along the trail system.
- g. Ensure access points have a smooth transition in grade.
- h. Generally, to provide dog waste receptacles every 2 kilometres of linear paved pathways, when practical.
- i. Provide Bear Proof garbage receptacles every 2 kilometres of linear paved pathways, when practical.
- j. The Municipality will attempt to provide rest nodes approximately every 2 kilometre of linear paved pathway networks.
- k. Provide waypoint signage at all main access points.
- l. Do not change the drainage pattern.
- m. Riparian crossings for pedestrian and/or bikes along trails that are primarily applicable to the Urban Nature Trail and Nature Trail. It is unlikely that the other trail types will cross riparian areas, though they may at times. The type of crossing will depend on the trail width and construction and the width of the stream and riparian gully (high water mark or top of bank). Maximum slopes of crossings should be a consideration and may be governed by trail type.
- n. New forms of paving are available and may be an alternative to asphalt. These paving materials involve the use of aggregate binders derived from plant by-products. Unlike asphalt, these binders do not contain petrochemicals, making them suitable for use in environmentally sensitive areas, e.g.: soil stabilizers, pervious pavers. Stabilizer paving can be significantly cooler than asphalt because its lighter colour reflects light and reduces heat reradiation. It also can help in stormwater management by allowing drainage through the paving.

#### **11.6 Adventure Park Facility/Off Road Bike Trails**


- a. The focus of the Adventure Park is to provide skill graded progression-based obstacles for novice to intermediate riders, to practice bike handling skills. Obstacles are predominately constructed out of natural materials, such as dirt, wood, and rock. Refer to the Trail Solutions: Reference material may be used from International Mountain Biking Associations Guide to Building Sweet Singletrack (2004) and the Whistler Trail Standards.

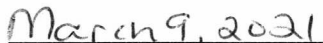
- b. Signage: Trail maps: It is recommended to have a trail map at the entrance of off-road bike trails, outlining the difficulty of the trail system for users. Below are the standards used to mark natural bike trail systems:

IMBA Description	Colour code (signs and maps)	Other Description
Easy	Green (circle)	Beginner
More difficult	Blue (square)	Intermediate
Very difficult	Black (single black diamond)	Advanced
Extremely difficult	Black (double black diamond)	Expert
(unlimited)	Black (triple black diamond)	Pro-line


- c. Provide contact information signage on or near washrooms so the public can report maintenance or vandalism issues.
- d. Wherever possible, restroom facilities should be accessible for trail users.
- e. Infrastructure needs, while locating new trails to accommodate users: parking, change/washrooms, garbage receptacles.
- f. Technical trail features, both natural and man-made, are important aspects of mountain biking trails, by adding interest and challenges, which is sought by users.
- g. Trail features should be compatible with the trail rating. Sometimes, they will dictate the trail rating. Features may be optional or mandatory, i.e.: if optional, there will be a bypass and if mandatory, then the feature does not have a bypass (you can still dismount and walk around). Advance signage is generally provided to indicate the type of feature where it is large and/or high risk.
- h. Incorporating natural features into the trail is often preferred because it is “more natural” and often lower maintenance or no maintenance. Man-made features, usually involving wood construction, requires more frequent inspections and maintenance.
- i. Consideration of all hazards is very important for technical trail feature trails. Fall hazards should always be minimized where possible.

**MUNICIPALITY OF CROWSNEST PASS**

  
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Mayor

  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Chief Administrative Officer

  
\_\_\_\_\_  
Date