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Item No. 13.1.9
Halifax and West Community Council
November 15, 2016

TO: Chair and Members of Halifax and West Community Council

Original signed

SUBMITTED BY: _____

Brad Anguish, Director, Parks and Recreation

DATE: October 26, 2016

SUBJECT: **BMX Dirt Jump Facility in Armdale/Springvale**

SUPPLEMENTARY REPORT

ORIGIN

April 19, 2016 Halifax and West Community Council motion:

MOVED by Councillor Mosher, seconded by Councillor Rankin that Halifax and West Community Council request a recommendation report assessing the feasibility of establishing additional BMX sites in the area. MOTION PUT AND PASSED

November 18, 2015 Halifax and West Community Council motion:

MOVED by Councillor Mosher, seconded by Councillor Rankin that Halifax and West Community Council request a staff report for consideration of a BMX Bike Park on the Chain of Lakes field and bridge pass to connect to the Chain of Lakes trail. MOTION PUT AND PASSED

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, Section 79(1): Council may expend money required by the Municipality for: k) recreational programs; (x) lands and buildings required for a municipal purpose; (y) furnishing and equipping any municipal facility; and (ah) ... trails, including trails developed, operated or maintained pursuant to an agreement made under clause 73(c), bike paths ... and other recreational facilities.

RECOMMENDATION

It is recommended that Halifax and West Community Council not proceed with a recommendation to Regional Council for the development of a BMX dirt jump facility in the Armdale/Springvale area.

BACKGROUND

At its April 19, 2016 meeting, Halifax and West Community Council (HWCC) considered an Information Report, dated April 11, 2016, about the feasibility of establishing a BMX dirt jump facility on Chain Lake Field. HWCC requested a staff report regarding the potential consideration of a BMX Bike Park on the Chain of Lakes field in response to a request in November 2015 for a potential BMX dirt jump facility in the Edward Drillio Park.

The information report concluded that Chain Lake Field is not suitable for BMX use as the field is required for recreational purposes and the community is already served at a regional level by other BMX facilities. However, HWCC passed a new motion directing staff to consider other potential BMX sites in the Armdale/Springvale area. This report considers alternative sites in the vicinity of Chain Lake Field (Map 1).

Municipal BMX Facilities

The abbreviation BMX refers to the sport *bicycle motocross*. Locally, BMX means an assortment of activities involving tricks, stunts or jumps performed on a bicycle. There are two types of facilities which accommodate BMX within HRM. Skateboard facilities provide an urban experience with rails, ramps and bowls for bike stunts. BMX dirt jump facilities provide a series of earthen jumps along a soft track (Attachment A).

There are 25 BMX facilities; 10 BMX dirt jump facilities; and 15 skateboard facilities in HRM. Additionally, a BMX dirt jump facility is under construction in Eastern Passage and another one has been considered for Musquodoboit Harbour.

DISCUSSION

Access to BMX Dirt Jump Facilities

As noted in the April 11, 2016 report, based on their existing distribution, BMX dirt jump facilities in HRM are achieving a regional level of coverage, with 84.7% of HRM residents having access to one within a 20 minute drive (Table 1). Further, 91.0% of residents have access to a BMX dirt jump facility or a skate park within the same driving time of 20 minutes or less (Attachment B).

Table 1: Percentage of HRM Residents with BMX Service by Drive Time

Drive Time	BMX Dirt Jump Facilities Only	BMX Dirt Jump Facilities + Skate Parks Combined
20 minute drive	84.7%	91.0%
15 minute drive	63.0%	87.5%
10 minute drive	35.9%	78.4%
5 minute drive	12.2%	45.1%

On this basis, there is not an identified need to establish a new BMX dirt jump facility within the Armdale/Springvale area. Rather than establishing a new BMX dirt jump facility, it is recommended that an emphasis be placed on investing and maintaining existing facilities, including the nearby Glenbourne BMX Facility.

Alternatives to Chain of Lakes Park

While there is not an identified need for an additional BMX dirt jump facility based on the service level analysis, as requested, staff has reviewed potential alternative sites in the Springvale/Armdale area as follows:

1. Edward Drillio Park - The proposed location is behind the tennis courts in Edward Drillio Park at Springvale Elementary School.

2. Chain Lake Park (southeast corner beside field) - The proposed location is a triangular patch along the southeastern edge of Chain Lake Field between the stream and the road (Crown Drive).
3. HRM Open Space alongside COLTA multi-use trail - The proposed location is a flat patch alongside the Chain of Lakes Multi-Use Trail.
4. Chain Lake Park (northwest corner behind field) - The proposed location is in Chain Lake Park alongside (behind) Chain Lake Field, between the field and the stream.
5. HRM Open Space above COLTA Connector Path in Fairmount - The proposed location is at the top of the hill behind the houses near the connector from Springvale/Fairmount subdivision to the Chain of Lakes Trail.
6. Former C. A. Beckett School Site - The proposed location is in C.A. Beckett Park where the former elementary school once stood.
7. Chain Lake Park near Informal Trails - The proposed location is in Chain Lake Park in the treed area before the bridge cross near the pathways.

See Attachment C for the location of these sites.

Analysis

HRM does not have Council-approved standards for the provision and siting of BMX facilities. In the absence of such standards, staff assessed a report from Surrey, British Columbia, *Surrey Bicycle Recreation Facilities Strategy (2007)*, which contains BMX siting criteria based on best practices internationally and across Canada. These criteria were adapted and modified to consider HRM's current BMX dirt jump service provisions, along with best practices from local BMX course designers (Attachment D). This criteria was used to assess the seven identified alternative locations (Table 2).

Table 2: Evaluation of Alternative Sites

Alternatives	Beyond Service Distance to Existing BMX Facilities	Low Existing Recreation Use	Adequate Size	Adequate Slope	Maximum Sun Exposure	Watercourse Protection	Minimal Environmental Damage / Tree Clearing	Good Visibility and Surveillance	Co-location with Other Recreation Assets	Ample Nearby Residents	Opportunity for Separation Between Homes	Available Parking Nearby	Good Access for Emergency Vehicles	Connectivity with AT Infrastructure	TOTAL out of 14
1			✓	✓		✓		✓	✓	✓		✓			7
2		✓	✓		✓		✓	✓	✓			✓	✓	✓	9
3		✓	✓			✓			✓		✓			✓	6
4		✓	✓	✓	✓				✓		✓	✓	✓	✓	9
5		✓	✓			✓				✓	✓				5
6				✓				✓		✓			✓	✓	5
7			✓								✓		✓	✓	4

None of the identified sites scored overly high with regard to the criteria. The following observations are made with regard to the two highest scoring alternatives:

Alternative 2 (Chain Lake Park (southeast corner behind field)) would require minimal environmental damage and tree clearing as it is mostly low brush. There is good visibility from the road, and it is co-located with other recreational amenities (Chain Lake Field). Parking exists on site, and there is good access for emergency vehicles. It is connected to the Chain of Lakes trail system promoting AT and attracting users. The shortfall of this site is that its relatively flat (around 2%) grade may impact drainage and drying time. The site is also located nearby to the stream leading from First Chain Lake to Chocolate Lake making sediment runoff a concern. It is also fairly isolated without many homes nearby for surveillance and stewardship.

Alternative 4 (Chain Lake Park (northwest corner behind field)) scored the same as Alternative 2. The site is the right size, slope, and exposure to support a BMX dirt jump facility; however, it would require significantly more tree clearing and environmental damage to implement. Alternative 4 is set back behind Chain Lake Field making visibility more of a concern. There is on-site parking nearby and reasonably good access for emergency vehicles. The potential impact of this site on the nearby watercourse is greater than Alternative 2 as it shares a longer common boundary.

Alternative 2 may be slightly more favourable than Alternative 4 since Alternative 4 has a greater potential impact upon a watercourse and requires the remove of trees and other vegetation. However, with the relatively low score of all of the alternatives, none of them are recommended for a BMX dirt jump facility.

Costs and Maintenance

The costs to establish a BMX dirt jump facility are relatively low compared to other facilities. In the past, new BMX facilities have been built on a cost-shared basis with contributions by HRM, community members and a local Councillor. Depending on the site conditions, capital costs would range from \$15,000 to \$25,000. The annual costs to maintain the facilities are approximately \$2,500-\$3,500. It should be noted that on occasion, users have altered the dirt jumps to build more difficult obstacles, which is dangerous and increases liability to HRM which has resulted in increased maintenance costs to HRM to restore the original condition.

Summary

A regional service level analysis shows that there is no need for a BMX dirt jump facility in the Springvale/Armdale area. Furthermore, the locations for a potential facility have scored relatively low based upon criteria as outlined. On this basis, it is recommended that HWCC not proceed with the development of a BMX facility in the Armdale/Springvale area.

FINANCIAL IMPLICATIONS

There are no financial implications associated with this report. Should HWCC choose to proceed with construction of a BMX dirt jump facility, it would need to be considered through the annual capital budget process and be subject to approval by Regional Council.

RISK CONSIDERATION

There are no significant risks associated with the recommendation in this report. This conclusion has been reached on the basis that no new BMX dirt jump facilities are being recommended, which has been supported through an analysis of service standards. Should Regional Council choose to proceed the establishment of a BMX dirt jump facility, some environmental risks, as identified within this report, would need to be addressed.

COMMUNITY ENGAGEMENT

This request came forward from a community consultation on Edward Drillio Park. No additional community consultation is identified as being necessary with regard to the recommendation.

ENVIRONMENTAL IMPLICATIONS

There are no environmental implications associated with the recommendation in this report. Should HWCC choose to proceed with a BMX facility on one of the alternative sites, the design would be subject to an environmental impact analysis to minimize impacts on sensitive ecosystems and watersheds.

ALTERNATIVES

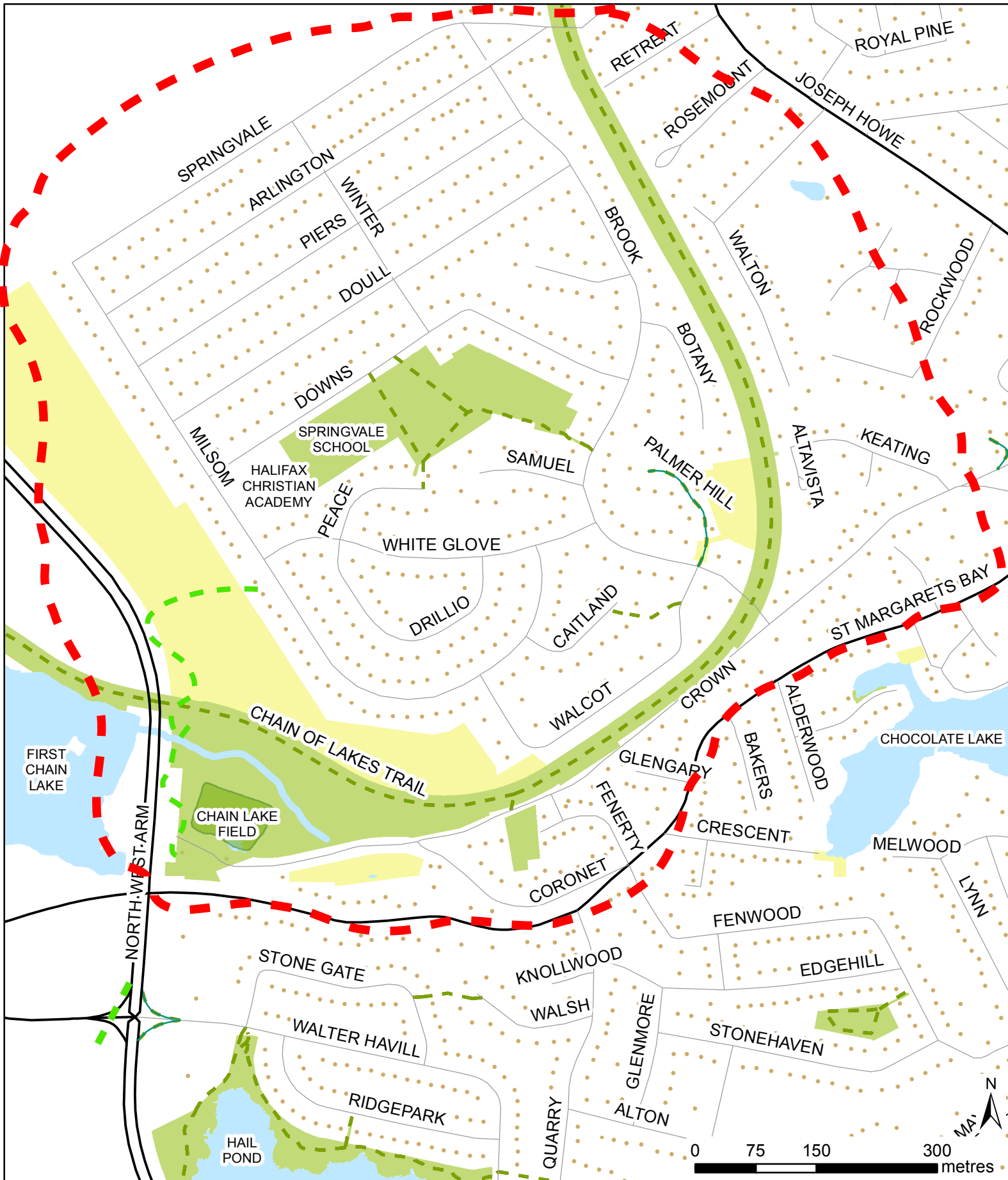
Alternative 1. Community Council may choose to recommend that Regional Council direct staff to include a BMX dirt jump facility for the Armdale/Springvale area in a future capital budget for prioritization with all other recreation projects. In that case, the criteria indicates that the Alternative 2 site (southeast edge of Chain Lake Field along Crown Drive) would be the best choice.

ATTACHMENTS

Map 1: Context Area
Attachment A: Photos of a Typical BMX Dirt Jump Facility (Metzler Common Bike Park, Fall River)
Attachment B: Current Distribution of BMX Facilities with Regional Catchment (20 Minute Drive)
Attachment C: Alternative Locations for a BMX Facility near Chain Lake Field
Attachment D: BMX Siting Criteria Adapted from Surrey, BC

A copy of this report can be obtained online at <http://www.halifax.ca/commcoun/index.php> then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

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Map 1
Context Area

- Chain Lake Field
- HRM Parkland
- Other HRM-Owned Open Space
- Lakes and Streams
- Walkways and AT Trails
- Study Area

Attachment A: Photos of a Typical BMX Dirt Jump Facility (Metzler Common Bike Park Fall River)



(Clockwise from above)

Photo 1: Large free ride area, with room to build speed before larger jumps

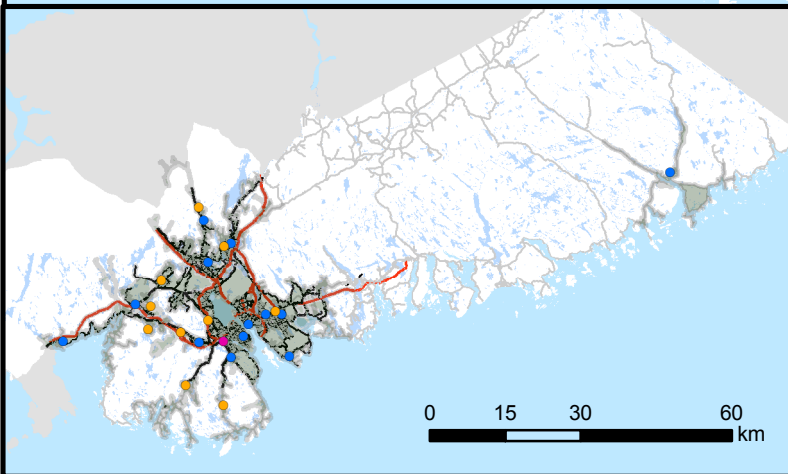
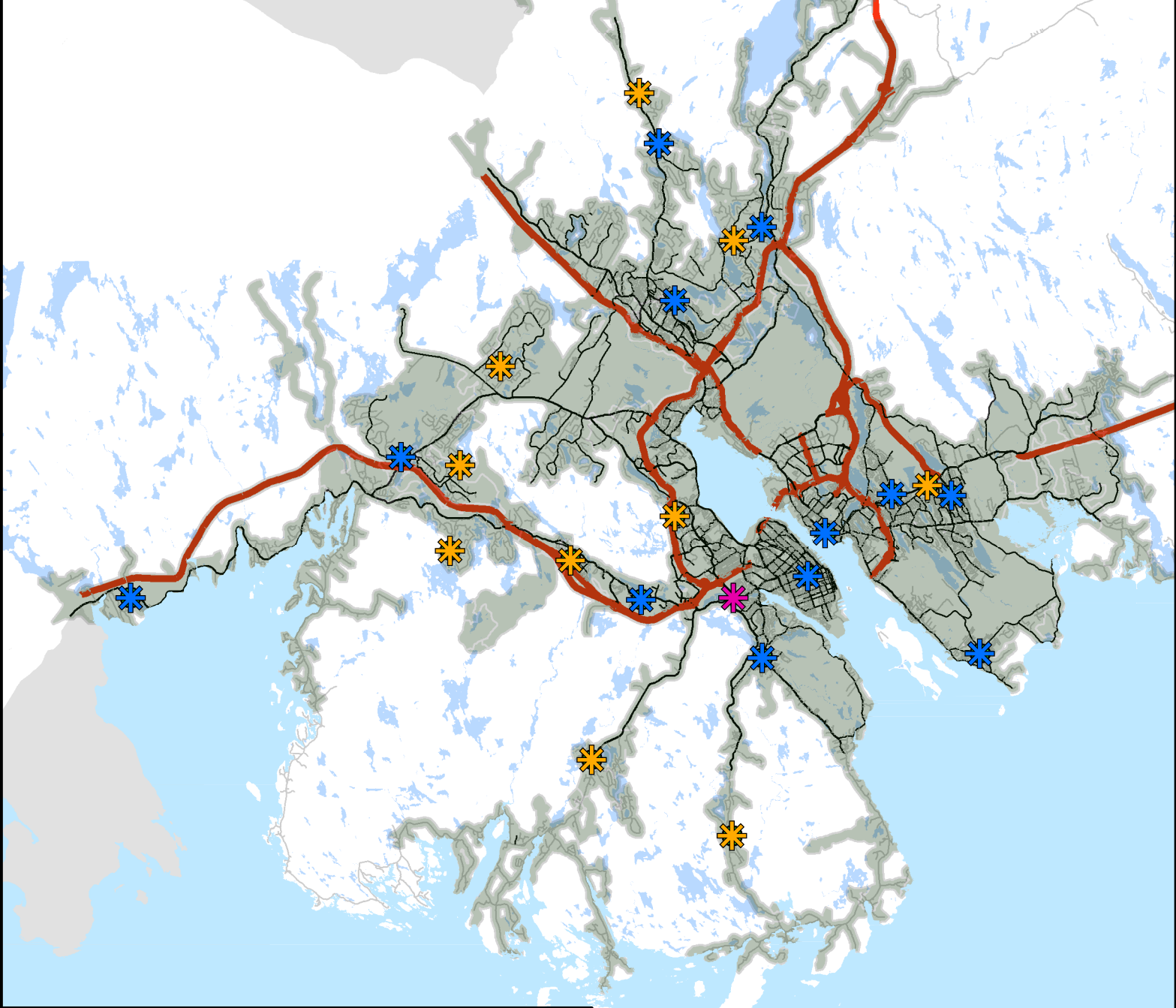
Photo 2: Beginner skill-building area with smaller double-jumps and/or pump track





Photo 3: Bank turn with a small drop for building speed. This also helps to create more of a continuous riding circuit.

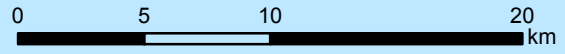
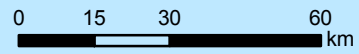
Photo 4: More advanced jumps. The jumps are taller, however, they are still table top style so that learners can roll over the top if desired. Some of the table tops have eroded making the flat portions fairly skinny / small

Attachment B

Current Distribution of BMX Facilities
(Urban and Dirt Jump) with Regional
Catchment of 20 minute Drive















-  Proposed BMX Dirt Jump Facility at Chain Lake Field
-  Existing BMX Dirt Jump Facilities
-  Existing Urban BMX Facilities (Skate Parks)
-  Served by Existing BMX Facilities within 20 Minute Drive





Attachment C

Alternative Sites for a BMX Facility Near Chain Lake Field

- | | | |
|--|--|--|
|  Chain Lake Field |  Alternative 4 |  HRM Parkland |
|  Alternative 1 |  Alternative 5 |  Lakes and Streams |
|  Alternative 2 |  Alternative 6 |  Walkways and AT Trails |
|  Alternative 3 |  Alternative 7 |  Contours |

Attachment D: BMX Siting Criteria Adapted from Surrey, BC

The *Surrey Bicycle Recreation Facilities Strategy (2007)* contains BMX siting criteria based on best practices internationally and across Canada. This was modified in consideration of HRM's current BMX dirt jump service provision, along with best practices from local BMX course designers:

1. Adequate size (over 0.25 ha)
The size requirement for a BMX dirt jump facility is over 2,500 square metres or 0.25 hectares. This size will allow for a small pump track and a handful (2-3) of small jumps. Ideally, the site should be over 5,000 square metres or 0.5 hectares to allow for a greater variety of jump lines and a larger pump track.
2. Adequate slope (around 4-6%) and soil drainage
The most successful BMX dirt jump facilities have a small slope to the site ranging between 4% and 6%. This slope will promote drainage of rainwater off the site, and therefore allow for faster drying after rain events. Flat sites may take longer to dry after rain events, or may experience pooling of water based on the nature of the jumps. As such, sites with a low percentage of organic matter in the soil are preferred. Using wet BMX stunts can lead to damage and increased maintenance needs.
3. Ample sunlight (Y/N)
The amount of direct sunlight on a site relates to the speed of drying after rain events. Ideal BMX sites will be in direct sunlight for all or part of the day. Sites that are shaded by tall trees may take longer to dry out, leading to less usable hours of the BMX stunts.
4. Adequate distance from watercourses (over 100m) and other environmentally sensitive areas
By nature, BMX dirt jump facilities involve the moving and shaping of dirt. This disturbance can loosen the soil and lead to sediment being swept away in stormwater runoff. BMX dirt jump facilities near watercourses can have an impact on the water quality of the system due to increased sedimentation from runoff. Areas of environmental sensitivity should also be avoided for BMX uses.
5. Adequate visibility and informal surveillance (Y/N)
Visibility and surveillance are key principles of Crime Prevention Through Environmental Design (CPTED). BMX facilities have the tendency to attract unsupervised youth and young adults, which may lead to misbehaviour and vandalism without proper siting and landscape design. To deter undesirable activities, the site should be visible from the road and located in an area of moderate to high activity. This promotes informal surveillance by community members, thus enhancing safety.
6. Co-location with other uses (Y/N)
Recreation principles state the value of locating complementary recreational amenities in close proximity to each other. A BMX dirt jump facility alongside a sportsfield, playground, or tennis court may allow for trip-chaining, as well as promoting families recreating together. The increased activity generated from these nearby facilities will also positively impact the surveillance of the site.
7. Balance of nearby population, but with an adequate buffer distance from homes (over 30m)
In most cases, BMX facilities should be located in residential areas to promote use and neighbourhood stewardship of the site. However, facilities built in very close proximity to homes may lead to conflict with park neighbours. Some separation between homes and BMX parks is necessary. This could take the form of a treed buffer (30m recommended) between homes and the BMX site, or using recreation assets such as sportsfields to separate the uses.
8. Nearby parking (under 100m)
As BMX dirt jump facilities are regional in provision, it is assumed that the majority of users will drive to the facility. On-site parking or ample on-street parking within 100m of the BMX facility is needed.
9. Access for emergency vehicles (Y/N)
Police, fire, and ambulance services must be able to access the site in the event of an emergency.
10. Connectivity with active transportation (AT) routes and other bicycle infrastructure (Y/N)
The ideal BMX site is connected to other AT and bicycle infrastructure to promote safe access and attract a greater number of users.