



**TOWN OF MARKHAM**  
**MILNE DAM CONSERVATION AREA WORKING**  
**GROUP**

**To:** Members of the Working Group  
**From:** Jay Cranstone, MMM  
**Subject:** Meeting #2  
 Evaluation Criteria and Approach

**Date:** May 1, 2009  
**Job No.:** 14-09407-001LA1  
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**Introduction**

The route evaluation criteria have been revised based on comments and suggestions received at the first Working Group meeting and the Group Site Tour. To streamline the evaluation process we will compare the criteria listed in the left hand column of **Table 1** against each of the trail route options. Factors for consideration (see right hand column in **Table 1**) represent characteristics or items that can assist in determining how favourable or unfavourable one of the options is with respect to individual criteria.

As illustrated in **Table 2**, each option would be compared against each of the criteria and rated as:

- Very favourable;
- Moderately favourable;
- Neutral ;
- Moderately unfavourable; or
- Very unfavourable

















<b>Table 1: Evaluation Criteria</b>	
<b>Criteria</b>	<b>Factors for consideration to assist in evaluating favourability of route against criteria</b>
<b>1. Safety</b>	a. The trail can be designed to minimize or reduce potential risk to users (think about proximity to potentially hazardous situations).
	b. Trail route enables efficient security/police/emergency access (think about number and location of connection points to public roads formalized access points
	c. Trail route enables nearby residents with opportunity to assist with security through the concept of “eyes on the trail”
	d. Trail route reflects /supports/incorporates the principles of Crime Prevention Through Environmental Design (CPTED).
<b>2. Connectivity and Access</b>	a. Trail route supports the vision of the Cycling Master Plan and Trail Master Plan.
	b. Trail route makes use of existing trails and facilities on the site.
	c. Trail route enables access from neighbourhoods, without the need to create additional openings from the road network.
	d. Trail route forms part of a connected Town wide network.
	e. Route can reasonably provide access for persons with disabilities

<b>3. Convenience</b>	a. The trail route is convenient for users (within 5 minute walk of the majority of residents, easy to get to, close to destinations).
<b>4. Property Ownership</b>	a. Natural features such as landform and vegetation can be used to block or screen potential short cut routes. b. Opportunities exist to mitigate potential disturbance of adjacent residents (i.e. suitable area to develop screening). c. Trail minimizes potential disturbance to adjacent residents (think about things like distance to adjacent private properties, how far homes are set back from rear property lines, views wide open versus hidden etc). d. The trail route minimizes potential concerns by neighbouring residents regarding parking.
<b>5. Attractiveness</b>	a. Trail route takes advantage of attractive and scenic areas.
<b>6. Cost</b>	a. The cost to establish trail route is considered reasonable, cost effective and satisfies the objectives of the Town. b. Funding to develop the trail route is available. c. The trail route has been located and designed to minimize the need for site improvements such as trail lighting sight line improvements, and vegetation clearing to enhance safety.
<b>7. Modal Integration</b>	a. The trail route enables integration with other modes of travel (route provides direct access to, or is a very short distance such as within a 2 minute walk of a transit stop- i.e. along McCowan Rd., Hwy 7 and Markham Rd.)
<b>8. Natural /Ecological</b>	a. The trail route lies outside sensitive habitats on the site, and associated protection buffers. b. The trail route is located in the least sensitive locations on the site. c. The trail route maximizes use of areas that have been disturbed previously, and continuing to have the trail route in the disturbed location is acceptable in the first place) d. The trail route avoids core natural areas and interior habitats. e. The trail route minimizes the number of watercourse crossings. f. Except for watercourse crossing points, the trail remains outside of the riparian zone (a setback distance of 10m is the minimum, 30m preferred). g. Watercourse crossings do not require structures with piers in the watercourse. h. New trail alignments in wooded areas have been kept to a minimum (to minimize impacts on the highest quality trees. Edges of new trail alignments in wooded areas can be clearly defined to discourage short cutting and trail widening. i. The trail route minimizes the removal of native trees and shrubs, and minimizes impacts on root zones of native trees and shrubs. j. The trail avoids seasonally or permanently wet areas such as vernal pools or wetlands. k. The trail route avoids the outside of meander bends, particularly on sites where erosion is a concern. l. The trail route provides opportunities for enhancement plantings in strategic areas m. Trail route minimizes the amount of fill to be placed in floodplain areas. n. Trail route enables the closure and rehabilitation of existing informal routes that is/are determined to be in and appropriate location
<b>9. User Impacts</b>	a. The trail route can be adequately monitored to ensure that the resource is not being degraded and effective, reasonable measures to curb impacts can be taken if/where necessary. b. Where trail routes must traverse steep slopes appropriate structures can be employed.

	c. The trail route can be designed to minimize erosion.
	d. The trail route avoids steep slopes.
	f. Management controls can be employed so that access and use can be maintained at optimum levels.
	e. Where areas of unstable soils must be crossed, the use of special trail surfacing or bridging can be reasonably and practically employed.
	f. The trail can be located on soils that are resistant to erosion and the need for trail hardening can be minimized (i.e. percentage of entire length of trail as a comparison between different route alternatives)
	h. Trail route is respectful of existing and future users including adjacent land uses
	i. Trail route minimizes the need for extensive excavation and grading.
	j. An appropriate trail width and surface type can be employed so that the anticipated user volume can be accommodated.
	k. Trail widenings can be properly accommodated in locations where trail users are most likely to gather.
<b>10. User Experience</b>	a. Year round trail access can be provided (i.e. there are no restrictions due to seasonal wildlife habitat sensitivities).
	b. Trail route provides an interesting and meaningful experience for users.
	c. Trail route profiles the diversity of the site.
	d. Trail route facilitates the placement of a sufficient number of signs regarding trail user etiquette.
	e. Trail route facilitates the placement of a sufficient number of waste receptacles and these can be easily accessed for regular maintenance.
<b>11. Range of Users</b>	a. Trail route and design provides opportunities for a wide range of users and abilities.
<b>12. Sustainability<sup>1</sup></b>	a. The route and alignment is such that it can be sustained over time with a minimal amount of intervention (materials used and location of trail don't result in the need for patching and repairs above and beyond what would be considered normal wear and tear)
	b. The trail can be effectively maintained (think about ease/convenience for access)
<b>13. Interpretation</b>	a. The trail route provides access to cultural features worthy of interpretation (trail provides teaching opportunities related to cultural heritage)
	b. The trail route provides the opportunity to interpret the local natural heritage.(trail provides teaching opportunities to interpret natural heritage)
	c. Where applicable, lookouts and/or viewing areas can be provided to interpret sensitive habitats and/or sensitive species from a distance.

Notes:

1. The concept of sustainability is also inherent in several of the criteria including #6 Cost, #8 Natural/Ecological and #9 User Impacts

<b>Table 2: Evaluation Matrix (Sample for illustration only)</b>					
	Option 1	Option 2	Option 2 and 3	Option 3	Option 4
Safety					
Connectivity/Access					
Convenience					
Property Ownership					
Attractiveness					
Cost					
Modal Integration					
Natural/Ecological					
User Impacts					
User Experience					
Range of Users					
Sustainability					
Interpretation					
<b>Summary/Overall</b>					

- Very favourable
- Moderately favourable
- Neutral
- Moderately unfavourable
- Very unfavourable

