

## Forest Glade North - Evaluation of Alternative Solutions for Stormwater Management

CRITERIA FOR EVALUATING ALTERNATIVES		1: Do Nothing	2: Two regional stormwater ponds, one on either side of the proposed Catherine Street extension	3: One regional stormwater management pond adjacent to the CN Rail and Hawkins Drain with on-site quantity and quality control
<b>A NATURAL ENVIRONMENT</b>				
1	<b>Impact migratory birds</b>	By doing nothing, there will be no impact to migratory birds.	A small number of trees may be removed along the Hawkins Drain. Trees will be removed outside of the bird nesting season to avoid impacts to birds. Disturbed areas will be restored to a natural condition after construction. No impacts are expected.	A small number of trees may be removed along the Hawkins Drain. Trees will be removed outside of the bird nesting season to avoid impacts to birds. Disturbed areas will be restored to a natural condition after construction. No impacts are expected.
	<i>Rating</i>	●	●	●
5	<b>Impact to Woodland and Wildlife Habitat</b>	There would be no change from current conditions.	A small number of trees may be removed along the Hawkins Drain during construction. There is an opportunity to naturalize areas around the ponds and create an overall increase in tree cover and wildlife habitat.	A small number of trees may be removed along the Hawkins Drain during construction. There is an opportunity to naturalize areas around the ponds and create an overall increase in tree cover and wildlife habitat.
	<i>Rating</i>	●	●	●
6	<b>Impact to Aquatic Habitat</b>	Without any stormwater management, surface water from developed areas will flow without quality and quantity controls directly to the Hawkins Drain. Aquatic habitat would be negatively affected.	The establishment of two stormwater ponds would result in two areas of construction within the watercourse, potentially causing disturbances, however the flow and quality of water into the Hawkins Drain would not be altered significantly.	The establishment of one stormwater pond would result in a single area of construction within the watercourse, potentially causing disturbances, however the flow and quality of water into the Hawkins Drain would not be altered significantly.
	<i>Rating</i>	○	◐	◑
8	<b>Impact to species at risk</b>	By doing nothing, there will be no impact to species at risk.	Provincially protected snake species could potentially inhabit the area. All work areas will be fenced to exclude snakes and will be monitored regularly. No impacts are expected.	Provincially protected snake species could potentially inhabit the area. All work areas will be fenced to exclude snakes and will be monitored regularly. No impacts are expected.
	<i>Rating</i>	●	●	●
<b>SUMMARY NATURAL ENVIRONMENT</b>		◐	◐	◑
CRITERIA FOR EVALUATING ALTERNATIVES		1: Do Nothing	2: Two regional stormwater ponds, one on either side of the proposed Catherine Street extension	3: One regional stormwater management pond adjacent to the CN Rail and Hawkins Drain with on-site quantity and quality control
<b>D SOCIO-CULTURAL ENVIRONMENT</b>				

1	<b>Property acquisition</b>	No property will be acquired.	The City will need to acquire sufficient land to construct two SWM ponds on either side of Catherine St. Both ponds would be similar in size.	The City will need to acquire sufficient land to construct one SWM pond north of Catherine St. All remaining SWM requirements will be met on private property. Thus this Alternative requires less property acquisition than Alternative 2.
	<i>Rating</i>	●	●	●
2	<b>Impacts to Heritage Resources (archaeological features, built heritage, and cultural heritage landscapes)</b>	No archaeological resources, built heritage or cultural heritage landscapes are present. No impacts are expected.	No archaeological resources, built heritage or cultural heritage landscapes are present. If undocumented archaeological resources are uncovered during construction, all requirements under the Ontario Heritage Act will be met. Indigenous communities will be contacted. No impacts are expected.	No archaeological resources, built heritage or cultural heritage landscapes are present. If undocumented archaeological resources are uncovered during construction, all requirements under the Ontario Heritage Act will be met. Indigenous communities will be contacted. No impacts are expected.
	<i>Rating</i>	●	●	●
3	<b>Impacts to Indigenous Treaty Rights, Claims and Interests</b>	The Study Area is within Treaty 2, known as the McKee Purchase. The Treaty was signed by the representatives of the British Crown, the Potawatomi, Huron, Chippewa and Ottawa in May 1790. There are no known land claims. Indigenous communities likely have an interest in natural features, including the woodlot and Hawkins Drain. No impacts to the features are expected .	The Study Area is within Treaty 2, known as the McKee Purchase. The Treaty was signed by the representatives of the British Crown, the Potawatomi, Huron, Chippewa and Ottawa in May 1790. There are no known land claims. Indigenous communities likely have an interest in natural features, including the woodlot and Hawkins Drain. No impacts to the features are expected as a result of the Collector Roads.	The Study Area is within Treaty 2, known as the McKee Purchase. The Treaty was signed by the representatives of the British Crown, the Potawatomi, Huron, Chippewa and Ottawa in May 1790. There are no known land claims. Indigenous communities likely have an interest in natural features, including the woodlot and Hawkins Drain. No impacts to the features are expected as a result of the Collector Roads.
	<i>Rating</i>	●	●	●
<b>SUMMARY SOCIO-CULTURAL ENVIRONMENT</b>		●	●	●

CRITERIA FOR EVALUATING ALTERNATIVES		1: Do Nothing	2: Two regional stormwater ponds, one on either side of the proposed Catherine Street extension	3: One regional stormwater management pond adjacent to the CN Rail and Hawkins Drain with on-site quantity and quality control
<b>E</b>	<b>TECHNICAL ENVIRONMENT</b>			
1	Ability to adequately manage stormwater volumes from future development	By doing nothing, stormwater generated by future development is not managed.	This alternative would provide the required stormwater management quantity controls. However, most of the study area drains north to the Hawkins Drain, and the majority of the undeveloped lands are located north of Catherine St. These conditions reduce the effectiveness of a second regional stormwater management pond on the south side of Catherine St.	This alternative could service the greatest portion of the study area, providing the necessary quantity controls. Remaining areas can be adequately serviced with on-site controls.
	<i>Rating</i>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
2	Ability to provide adequate treatment to meet discharge standards	Stormwater generated by future development is not treated prior to entering the nearest watercourse or ditch.	This alternative would provide the required stormwater management quality controls. However, most of the study area drains north to the Hawkins Drain, and the majority of the undeveloped lands are located north of Catherine St. These conditions reduce the effectiveness of a second regional stormwater management pond on the south side of Catherine St.	This alternative could service the greatest portion of the study area, providing the necessary quality controls. Remaining areas can be adequately serviced with on-site controls.
	<i>Rating</i>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<b>SUMMARY TECHNICAL ENVIRONMENT</b>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>

CRITERIA FOR EVALUATING ALTERNATIVES		1: Do Nothing	2: Two regional stormwater ponds, one on either side of the proposed Catherine Street extension	3: One regional stormwater management pond adjacent to the CN Rail and Hawkins Drain with on-site quantity and quality control
<b>F</b>	<b>ECONOMIC ENVIRONMENT</b>			
1	Relative capital costs	There is no cost associated with this Alternative.	Two Regional SWM ponds would have a higher cost to construct than Alternative 3 with just one pond.	This is less costly than Alternative 2 as only one SWM pond would be constructed.
	<i>Rating</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2	Relative operation and maintenance costs	There is no operation or maintenance associated with this Alternative.	Two Regional SWM ponds would have a higher costs to operate and maintain over Alternative 3 with just one pond.	This is less costly to maintain than Alternative 2 as only one SWM pond would be operated by the City.
	<i>Rating</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	<b>SUMMARY ECONOMIC ENVIRONMENT</b>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

CRITERIA FOR EVALUATING ALTERNATIVES		1: Do Nothing	2: Two regional stormwater ponds, one on either side of the proposed Catherine Street extension	3: One regional stormwater management pond adjacent to the CN Rail and Hawkins Drain with on-site quantity and quality control
<b>E</b>	<b>PROBLEM STATEMENT</b>			
1	Addresses Project Problem and Opportunity Statement	Doing Nothing does not address the Problem and Opportunity Statement	This Alternative addresses the Problem and Opportunity Statement	This Alternative addresses the Problem and Opportunity Statement
	<b>SUMMARY PROBLEM STATEMENT</b>	<b>Do Not Move Forward</b>	<b>Move Forward</b>	<b>Move Forward</b>

CRITERIA FOR EVALUATING ALTERNATIVES	1: Do Nothing	2: Two regional stormwater ponds, one on either side of the proposed Catherine Street extension	3: One regional stormwater management pond adjacent to the CN Rail and Hawkins Drain with on-site quantity and quality control
<b>OVERALL SUMMARY</b>	<b>Do Not Move Forward</b>	<b>Least Preferred</b>	<b>Most Preferred</b>

**ORDER OF PREFERENCE**

- Least Preferred
- Less Preferred
- Somewhat Preferred
- Moderately Preferred
- Most Preferred