

HERITAGE SPEED RIVER WORKING GROUP



Niska Road Improvement Schedule C
Municipal Class Assessment Study

Request for Part II Order

Submitted by

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On behalf of

Heritage Speed River Working Group
March 2016

**Niska Road Improvement Schedule C Municipal Class Assessment Study
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Niska Road Improvement Schedule C Municipal Class Assessment Study Heritage Speed River Working Group Request for a Part II Order

Purpose for the Request for a Part II Order

The Heritage Speed River Working Group shares with all parties involved in the Niska Road Improvement Project a commitment to achieving an outcome that meets the purposes of the Environmental Assessment Act - the betterment of the people of Guelph by providing for the protection, conservation and wise management of the environment.

We recognize, as stated in the PPS 2014, "the long-term prosperity and social well-being of Ontario depends upon planning for strong, sustainable and resilient communities for people of all ages, a clean and healthy environment, and a strong and competitive economy". In order to meet the requirements of the PPS and of the EAA it is necessary, in the review of any project, to give full consideration to the effect of alternative actions on all aspects of the environment i.e. the "natural, social, cultural, built and economic environments" (EAA).

The past planning history of the Niska Road area is complex and involves ecological linkages and possible transportation corridors that extend beyond the Niska Road area and involve several jurisdictions - the City of Guelph and the Townships of Puslinch and Guelph/Eramosa. Environmental assessment is particularly difficult in cases such as Niska road that involve multiple aspects of the natural social and economic environment and several political jurisdictions. An outline of the sequence of planning decisions that resulted in the current configuration of the Kortright Hills neighbourhood is set out in Appendix A-1 and Appendix A-2.

It is the position of the HSRWG that the Niska Road ESR, presented as a completed document, is the product of a process with numerous deficiencies that include a defective statement of purpose, inadequate study area, failures to consult stakeholders, failure to share information in a timely fashion, lack of consideration of fundamental unresolved landuse decisions in the project area, inadequate selection of alternatives, defective evaluation process, , inaccurate presentation of information to decision-makers.

It is also the position of the HSRWG that the alternative selected in the ESR will be damaging to the natural environment, and to the social environment through the loss of cultural heritage and of access to experience nature and is not an alternative that meets the requirements of the EAA.

Requested Actions of the Minister

The HSRWG is asking, in light of the defects that are documented in the sections that follow, that the Minister orders the following:

- (1) That the selection process for an alternative be redone but only after two fundamental planning decisions are made by Guelph City Council after consideration of a staff report on each issue. The first decision is whether the City of Guelph remains committed to the establishment of the Hanlon Creek Conservation Area with the former Kortright Waterfowl Park land forming the functional centre of the Conservation Area. The second decision is whether Niska Road is to function as an inter-highway connector or as a collector road for traffic generated within the Kortright Hills Neighbourhood.
- (2) That the study area be expanded to include the areas in which natural and social environmental effects will be felt. This will involve a multi-jurisdictional assessment of the affected road segment from highway 124 to Downey road and requires full participation by the Township of Puslinch and of Guelph/Eramosa in a joint study.
- (3) That a full range of alternatives be considered including the alternative of closing Niska at Pioneer Trail with the remainder of Niska to-and-over the Speed River becoming the entrance road to the Hanlon Creek Conservation Area (as outlined in the District 8 Plan that created the road patterns for all development west of the Hanlon Expressway).
- (4) That all agency and stakeholder comments on a revised preferred solution be completed and made available for public review before a decision is made on the solution to be adopted with all appropriate provincial agencies, City Advisory committees, and the GRCA as approval agency fully and completely engaged in the review and that the GRCA take adequate steps to resolve its conflict of interest as a property owner from its role as commenting agency on environmental impacts.

Deficiencies in Process

Defective Stated Purpose of the Study

A very basic concern of the Heritage Speed River Working Group is that the Niska Road Environmental Assessment process has been rushed through as if it addressed an emergency situation when, in fact, the issues of the intended purpose of Niska Road, and the intended land use for the area surrounding the section of Niska between Ptarmigan and the Speed River, have been under discussion since 1966 when this area of Puslinch Township was annexed by the City of Guelph for urbanization as the Southview District 8 of the City.

It is true that the current improper use of the Niska Bridge route as an inter-highway connector is causing considerable damage to the environmental services of the regionally important Speed River Valley ecological corridor and Provincially Significant Wetland and to the social and cultural environment of this now long-established and built-out community. This use of Niska, as we will demonstrate is contrary to policies of the District Plan that guided the development of this long-ago-built out

neighbourhood, the policies of the current Official Plan and the current Transportation Master Plan, and to the PPS requirements for environmental protection (natural and cultural) and for sustainable communities.

There is a need for a planning review of Niska Road and Bridge but this review must be comprehensive and examine all the issues. There is a fundamental decision to be made about the future of the land surrounding Niska between Ptarmigan and the City boundary that must be resolved before the best solution to the design of Niska Road and bridge is decided.

In 1970, based on the Kilborn Hanlon Creek Watershed report of 1968, commissioned by the GRCA, the City decided that 845 acres of the Hanlon Creek valleylands would be set aside from development and reserved as a natural conservation area. The City and the GRCA, by 1982, had purchased 670 acres of this land at a cost of \$6.5 million (in 2016 dollars). The purchases included the 116 acres of the former Kortright Waterfowl Park at the confluence of Hanlon Creek with the Speed River - this area was purchased by the GRCA at the request of the City of Guelph to secure provincial grants (no longer available) with the province and the City providing \$ 1,000,000 (90%) of the purchase price.

The relevance of this history is that the portion of Niska Road from Ptarmigan to the City Boundary at the west top-of-bank of the Speed River bisects the 116 acres purchased to be a nature reserve. The extension of Niska on the west bank in Puslinch Township continues through the west-bank portion of the Speed River wooded wetland bounded on the north by a west-bank extension of the purchased nature reserve land.

As a result of the decision to reserve the 845 acres the plans to have Niska become an arterial ringroad, included in the 1965 Transportation Master Plan, were abandoned in the 1974 Transportation Master Plan and Niska was designated as a local road in the subsequent Southview District 8 Plan with the recommendation that Niska become an access road within the Conservation area when it was formally established and thus closed to through traffic at the River.

It is thus essential that any planning for Niska Road take into account the option of having Niska serve as a local road within the Kortright Hills neighbourhood and as an access road within the Conservation area. The City has never acted to formally create the Conservation Area but is still committed to do so when funding is available.

The Class B EA that was announced in April 2013 was undertaken to allow the City to include the bridge replacement to be included in a list of shovel-ready projects ready for federal infrastructure funding. It was later found that the process could not be completed in time and other projects were found for the list. The EA was nevertheless continued and the project team has continued to stress a sense of urgency to complete the EA. This has been very counterproductive to a proper comprehensive and in-depth consideration of the many complex issues surrounding the future of Niska Road.

The stated purpose of the Class Environmental Assessment for Niska Road, as originally announced,(Appendix A) was to study "*proposed improvements to Niska Road from Ptarmigan Drive to the City limits including replacement of the existing Bailey bridge over the Speed River. Both the roadway*

and the bridge are nearing the end of their useful life and require replacement due to deterioration and increasing maintenance costs. The City is proposing to replace the bridge with a two-lane bridge to provide one vehicle lane in each direction in keeping with current design standards. The City is also considering implementing sidewalks and bike lanes on both sides of the roadway and bridge."

The mention of the intended outcome as being an urban road cross-section with sidewalks and bicycle lanes and the bridge being replaced by a two-lane bridge meeting current design standards (i.e. with capacity for heavy truck use) reproduces the expressed intent of the City in previous City of Guelph Staff Reports and in the 10 y Capital Forecast and creates a reasonable suspicion of bias that the City must answer to meet the standards of natural justice and the requirements for impartiality required under the EAA guidelines for the selection of a preferred alternative.

There are several defects in this stated purpose that preclude a comprehensive and unbiased consideration of alternatives that should be considered. The statement that "the roadway and bridge are nearing the end of their useful life", revised in the ESR to be "the road and bridge require significant remediation and replacement in order to meet current and future traffic and safety demands of the corridor" are based on an assumption that the current use of the road and bridge as an inter-highway connecting corridor are intended and that the approved uses are allowed for in the current Official Plan, justified in the current 2005 Transportation Master Plan and represent good planning that meets the criteria of the PPS and EAA for social well being of residents of Guelph and proper protection, conservation and wise management of the environment.

In contradiction to this assumption about the approved the use of Niska Road as an inter-highway connection the facts are that this use has been rejected three times in the planning history of Guelph. The 1965 Transportation Plan identified Niska as part of a of an arterial inter-highway ring-road connector (Appendix C). This use was rejected in the 1974 Transportation Master Plan because of a City decision to reserve all of the valley lands of Hanlon Creek, 845 acres, as a conservation area and Niska Road was identified as a local road serving the Kortright Hills neighbourhood (Appendix D).

The Guelph Wellington Transportation Plan (2005) reconsidered and again rejected the use of Niska Road as an interhighway connector (Appendix E). Finally as part of the environmental planning study for upgrading of the Hanlon Expressway, conducted by MTO, the use of Niska Road, including widening of the bridge was again mentioned in the context of the need for a second connector between Highway 124 and Highway 6 to supplement the Wellington Street interchange but it was noted that the City had identified the Niska bridge as serving only the river-crossing needs of the Kortright Hills neighbourhood. (Appendix E).

Given the multiple evaluations and rejections of using Niska Road as an inter-highway connector, and the recommendation in the District 8 Plan, which guided the development of the roadway system for the Kortright Hills subdivision, that Niska Road from Pioneer Trail to Downey function as a local road and from Pioneer Trail to and beyond the Speed River become an access road within the Hanlon Creek Conservation Area (Appendix G), it is the contention of the HSRWG that the portion of Niska Road between Ptarmigan and the Speed River, and the Bailey Bridge, are not *nearing the end of their useful*

life if their purpose is to be a local road as far as Pioneer Trail and an access road within the HCCA beyond Pioneer Trail.

With specific regard to the Bailey bridge the Heritage Speed River Working group commissioned a study in December, 2015 by B.M. Ross and Associates to check on the feasibility of retaining the bridge in situ, on the existing century old masonry abutments, as part of a Conservation Area. Mr Ross concludes that rehabilitation of the bridge and abutments is feasible and with an estimated cost of rehabilitation of under \$300,000 that a 30 y life expectancy would be achieved.

The HSRWG suggests that the purpose of the study be restated to be "to determine the future use and classification for the portions of Niska Road between Downey and Ptarmigan, Ptarmigan to Pioneer Trail and beyond Pioneer Trail and to determine the preferred roadway and bridge options for these road sections."

Failure to Consult

The Manual for Municipal Class Environmental Assessment prepared by the Ontario Municipal Engineers Association lists six key principles of successful environmental assessment planning. These are: consultation, reasonable range of alternatives, consideration of effects on all aspects of the environment, systematic evaluation, clear documentation, traceable decision making.

The Manual explains that the first key principle- consultation - must involve meeting with all affected parties early in and throughout the process with the first meeting as early in the process as possible to identify concerns and allow planning to focus on these concerns before alternative selection is completed and evaluation has begun. There are three City of Guelph advisory committees that each have in their mandate the role of reviewing and commenting on projects that will consider bridge replacement these are the Environment Advisory Committee (EAC), Heritage Guelph, and the River Systems Advisory Committee. Of the three committees the mandate for EAC adopted by City Council is the most direct: "EAC will be circulated for review..all studies such as Transportations".

All three of these advisory committees have had productive involvement with previous bridge-replacement EA's, notably the Stone Road bridge replacement (which resulted in the preservation of the historic bow-string arch bridge) and the Gordon Street Bridge Replacement. In this latter case the advisory committees, particularly RSAC and Heritage Guelph in a joint effort were able to affect a change in bridge design. The resulting design is featured in the cover illustration of the Ontario Heritage Conservation Districts Guide (OMC).

In the Niska Road environmental assessment the key principle of early consultation before decision-making began was violated since no meeting early in the process were held with any of the three advisory committees – the Environmental Advisory Committee (EAC), Heritage Guelph or the Rivers System Advisory Committee (RSAC). In fact, no meeting has been held with EAC - the committee most directly mandated to review environmental assessments- at any time in the process.

The project team was asked to consult with EAC by the CWG but refused to do so. This is unfortunate because EAC has a special interest in ecological corridors and wildlife crossings and Niska crosses a regionally important corridor. Other road EA's in Guelph, such as the Victoria Road EA, which have similarly been denied access to EAC the result has been that recognized ecological corridors and crossings have been ignored in road design and the mistake discovered afterward when EIS's for the adjoining properties (which are always presented to EAC) are examined.

Meetings late in the process were held with Heritage Guelph and with RSAC. In the case of RSAC the first meeting was asked for early in the process by RSAC but was not held until the preferred solution was selected and presented to RSAC for approval. Heritage Guelph was similarly ignored until the preferred solution was presented for approval. Heritage Guelph at first passed a confusing motion both approving and disapproving the preferred solution but later, after reflection, moved to reconsider the issue and passed a motion that supported a different alternative.

The revised motion of Heritage Guelph, approved at the Heritage Guelph meeting of November 9th is as follows:

"THAT Heritage Guelph does not support the preliminary preferred alternative for the Niska Road Environmental Assessment presented to Heritage Guelph on April 13, 2015 by Engineering Staff and their consultant; and THAT Heritage Guelph recommends to Council that the Niska Road area bounded to the west by the Speed River, the north by the Guelph-Eramosa and Puslinch Township line, to the east at the eastern boundary of the GRCA lands, and the south at the City of Guelph boundary be designated under the Ontario Heritage Act as a cultural heritage landscape and be preserved in such a form as to continue its sightlines and its current land use patterns.

THAT the area recommended for designation include the existing Bailey bridge, stone abutments and existing road widths and graded shoulders.

When a similar motion was passed by Cambridge Heritage during the Black Bridge EA the motion was immediately brought to Cambridge City Council for a decision, the EA process was paused, pending a council decision on Designation, and resumed with allowance for Designation once Council has approved proceeding with Designation.

In contrast the recommendation to Designate by Heritage Guelph was not brought forward to City Council for consideration and the study team dismissed the recommendation in the following terms in the December 3 Staff Report to Council

While the project team considered the revised November 9, 2015 recommendations from the Heritage Guelph Advisory Committee, the preferred options and mitigation strategies identified through the EA are consistent with the Cultural Heritage Evaluation Report (CHER) and CHER Addendum findings and recommendations and also consistent with the City Heritage Planner's recommendations.

The HSRWG considers the lack of timely and constructive consultation with stakeholders, and the lack of consideration of their recommendations when made, to be a major flaw in the EA process.

Failure to share information

The effectiveness of consultation, according to the Manual on Class Environmental Assessment, depends on the assessment process being collaborative and co-operative among all participants. The Code of Practice for Preparing, Reviewing and Using Class Environmental Assessments in Ontario (MOECC January 2014 - Appendix J) stresses that Openness and Transparency are essential for a successful process and a chief means of achieving transparency is "sharing complete information with all interested persons to support conclusions and recommendations at each phase of the project".

The project team, never strong on timely sharing of all information, decided in mid-process to stop sharing information with any interested person, other than government agencies, and to withhold all further background information from the public until Notice of Completion was published. At this time a dump of almost 8,000 pages of information was provided, most of it not indexed or with numbered pages.

The failure to share information on request at all stages of the process results in a failure of transparency. At this time scores of inquiries from members of the public on the meaning, accuracy, and completeness of the background information remain unanswered by the project team.

Inadequate Consideration of Alternatives and Improper Evaluation of Alternatives

There was no consideration of the alternative of having Niska become the access road within the conservation area. This serious omission will be dealt with under the technical errors section of this request. Also the loss of environmental services of the natural environment, and the costs to the social environment, were not weighted appropriately in the evaluation.

Proceeding to Completion is Premature

A fundamental concern of the HSRWG is that the rush to release the Notice of Completion and the ESR, for the EA has resulted in a failure to complete analyses and a lack of comprehensive consideration of issues. The study team brought the decision to City Council to approve the recommended alternative solution on December 3, 2015 without receipt of the GRCA technical review and when this review was received it contained a long list of fundamental concerns (Appendix K).

Furthermore the study team requested, and the Mayor arranged, a closed meeting of City Council to consider the staff report on the EA and its recommended decisions a week before the Open meeting of City Council to receive the staff report and to debate and decide on the decisions involved. This sequence of Closed meeting discussion prior to Open meeting discussion is a violation of transparency, and traceability two key requirements for a successful assessment process.

Deficiencies and Errors in the Consideration of Environmental Impacts

Natural Environment

I have reviewed the ESR, the Natural Environment Report Appendix, the comments submitted during the EA process from 2013 – December 3, 2015 from the letters and minutes of Meetings with Grand River Conservation Area, and staff reports by April Nix Environmental Planner City of Guelph for RSAC (appended for your review) it is clear that there numerous deficiencies and lack of technical information requirements that must be satisfied before the preferred alternatives are selected and the is an movement to the detailed design stage.

This was a very difficult task to cover all the NH material scattered among thousands of pages, many of them unnumbered pages scattered among 16 Appendices in the 30 day review period.

Specific Environmental impacts not properly evaluated

To allow the ESR to move forward without sufficient information to support the implementation of the preferred EA options would appear to be in contravention of the PPS 2014 Policy Statement Section 2.0 Wise Use and Management of Resources the lack of technical detail cannot assure us that there will be negative impacts on the natural features and ecological functions of the Speed River Provincially Significant Wetland Land Complex and the Heritage Speed River.

These deficiencies include the following:

- Inadequate consideration of protection of the Speed River PSW as a regionally important ecological corridor that extends beyond the City of Guelph Municipal boundaries
- NER does not appear to conform to EIR format as requested by the GRCA
- The biological inventory and assessment by Burnside is incomplete and deficient:

Inadequate wildlife surveys which includes:

Speed River

- No fish study, fresh water mussels, benthics
- ? Terrestrial crayfish survey not completed

Terrestrial and Hydrological:

- No bat maternity studies
- Lack of adequate salamander habitat information re vernal pools, movement corridors (survey was only 20 minute survey on Niska Rd. conducted from a car?)
- Need for further assessment of critical wildlife habitat
- No proposal of how to mitigate wildlife road kill impacts on west side of the Speed River PSW ecological corridor which was outside the study area. Recent discovery of Milk snake in this area
- Need to conduct a further 3 season floristic study (see NER)

- Potential for SWM facility in Oak Savannah
- SWM infrastructure is prohibited by the significant natural heritage in Guelph's Official Plan and PPS
- Was timing of wildlife and bird studies done at right times of year
- No spring ephemeral plant surveys,
- No assessment of current and future impacts on wildlife from traffic noise, air pollution road kill with current volume of 4600 vehicles per day
- Potential plans to alter the SWM pond at Niska and Ptarmigan to query restrict flows in permanent stream. This pond has been identified by April Nix City planner as containing 4 species of amphibians including green frog with no assessment by Burnside staff of whether this pond as critical wildlife habitat.
- no mitigation identified if pond alteration occurs (see SWM Report)
- No recognition or assessment of permanent stream out letting from SWM at Ptarmigan and Niska
- Inadequate assessment of impacts of Proposed SWM system on groundwater, water balance, groundwater discharge in the Speed River, maintenance of wetland ecology and function
- No assessment of impacts of road reconstruction SWM on Seeps
- Need to revise and update ELC surveys
- No reference to the MMM 1993 Hanlon Creek Watershed Study or the PEIL 2004 State of the Hanlon Creek Watershed Study. The 1993 HCWS and SOW still being used in other recent EIR's in The City of Guelph
- Incorrect identification of locally significant wetland at Downey and Niska intersection. This is part of the Hanlon Creek PSW
- No identification or discussion in NER of rarity of marsh and wetland ELC units found within the Study Area as locally or regionally significant information found in The City of Guelph Dougan and Associates Natural Heritage Parts 1 and 2. The NER uses the word common to describe these area, when it is well known that less than two thirds of wetlands in Southern Ontario are gone and the rest are under threat
<https://www.ec.gc.ca/nature/default.asp?lang=En&n=B4669525-1>. Therefore this comment in the NER seems inappropriate
- No 4 season groundwater studies, water balance, water temperatures to assess impacts
- No water chemistry studies the Speed River including dissolved oxygen, conductivity,
- Inadequate physical data and measurements of river including physical morphology, depth's, bank full, conditions, wetted depths and widths, summer thermal stability, assessment, aquatic habitat mapping, physical channel, identification of aquatic areas and features for potential spawning, overwintering and nursery despite plans to put storm water into a section of the Speed where there is no storm run off.

Failure to identify the perennial stream issuing from storm water pond

Professor Hugh Whiteley has prepared a report on his categorization of the stream on South side of Niska Rd. out letting from the SWM pond based on based on field visits in Nov. 2014. He characterizes the stream as perennial for the first 200 meters of its course with watercress present as an index of perennial flow. , then intermittent to Pioneer Trail and ephemeral from Pioneer Trail to the diversion into the woodland about 200 meters from Pioneer Trail.

At the Speed River there is no evidence of surface flow ever entering the river in any of the 4 roadside ditches.

Pictures and videos are available demonstrating no flow into the river after major storm events from the all 4 roadside ditches.

This appears to be a naturalized stormwater system that has functioned for many years with no run off into the river. There appears to have been no consideration of any changes in groundwater regimes that may impact the seeps and wetland functioning that may occur if curb and gutter replace this system.

I have sent an extensive set of questions and concerns to the Study Team since the start of my involvement in the EA as a CWG member. I have appended my emails to April Nix City of Guelph Environmental Planner, my CWG additions to the evaluation criteria for the Road and Bridge to this report. Since the ESR was released I have submitted a series of questions and comment to the Study Team. I appreciate that the Study team was not able to answer all my questions by the end of the 30 day comment period so I have appended my email correspondence to date and reserve the right to submit further comments if new information becomes available.

Deficiency in the Selection of Road Cross-Section Ptarmigan to the City Boundary

The preferred cross-section recommended by the EA and approved by Guelph City Council is an urban cross-section with curb and gutter and with stormwater conveyed by an under-road pipe with direct discharge to the Speed River. This selected cross-section does not reflect current engineering best practice and contravenes recommendations in Guelph's Official Plan and the recommendations of Heritage Guelph that the existing rural road cross-section be designated as part of the Cultural Heritage Landscape.

The Guelph Official Plan in section 5.8.2. requires that "The City shall have regard for and, when necessary, will require measures to mitigate any *negative impacts* on *cultural heritage resources*, especially the character of landscapes, streetscapes, tree lines, bridges, views and points of scenic interest and the prevailing pattern of settlement, when considering the construction of new roads and road improvements, including road re-alignment and road widening. This provision of the Official Plan mandates the selection of a rural cross-section for Niska in the section from Ptarmigan to the River.

The argument in the ESR that a rural cross-section is less environmentally friendly because it requires widening to accommodate sidewalks and bicycle lanes has no merit. This section of Niska is flanked by lands zoned C-1 conservation and the Guelph trails master plan calls for a multi-use trail parallel to Niska on these lands. No sidewalks or bicycle lanes are required and this is confirmed by Section 5.4.7. (iv) Of the Official Plan that recommends a trail with a high level of service be used instead of a sidewalk for roadways adjacent to the Natural Heritage System.

The choice of a curb and gutter stormwater collection system over a system utilizing vegetated shoulders and ditches is not supported by currently recognized best practice. As early as 1997 research demonstrated the superiority of vegetated shoulders over curb and gutter systems in control of both runoff quantity and runoff quality (Smith 1997: Effect of Road Shoulder Treatment on Highway Runoff

Quantity and Quality). The EPA issued its first Stormwater Technology Factsheet on Bioretention in 1999, recommending against use of curb and gutter wherever rural cross-sections could be used. This was updated in 2009 by the EPA Fact Sheet Incorporating Environmentally Sensitive Development into Municipal Stormwater Programs with the same recommendations. Locally Credit Valley Conservation published last year the very favourable results from the Elm Street conversion of a very urban street to infiltration-based stormwater management from curb and gutter and on March 1 2016 hosted a one day workshop on "Roads and Runoff: Implementing Green Streets in the Greater Golden Horseshoe Official Plan ".

Moving to a curb and gutter stormwater control system is particularly damaging to the environment in the case of Niska Road between Ptarmigan and the river. It involves burying the groundwater-fed perennial stream that starts at the corner of Ptarmigan and Niska at a time that many municipalities are sending money to expose previously-buried streams to gain the aesthetic benefits provided. It also involves replacing a stormwater system that infiltrates all stormwater in the roadside ditch with no overland flow, and hence no sediment, reaching the river, replaces this system environmentally sensitive system with one that will discharge stormwater at high flowrates during major storms directly into the Speed River at a location providing refuge in a deep pool for fishes, including possibly trout (brook trout have been observed by the GRCA in the lower Hanlon Creek for the first time since the 1960's) and these will make use of the Speed River for food and protection during cool-weather months.

Deficiencies and Errors in the Consideration of Environmental Impacts

Cultural Environment

History of the CHL and Heritage Guelph Support of Designation

The Niska Rd., Bailey bridge and Hanlon Creek Conservation Area are valued by our community, and by many others in Guelph, because this area represents an evolved cultural heritage landscape from pioneer times that have retained its essential character while Guelph grew and urbanized.

Our Landscape includes:

- The Canadian Heritage Speed River and its views
- The Speed River Provincially Significant Wetland Complex
- The Historic Niska Rd. and famous pioneer settlers
- The Hanlon Creek Conservation Area (Former Kortright Waterfowl Park)
- Our heritage Bailey Bridge
- Our viewshed , night skies and sunsets
- Associations with famous early settlers of Puslinch Township and Guelph

Niska is a historic pioneer road anchored at the east end by The Hanlon Farm circa 1833 and on the west end by the Heritage Speed River and the former Kortright Waterfowl Park Land, once owned by a famous Guelph resident and 1st Sherriff of Wellington County , George Grange and now owned by the GRCA

The Niska Road Cultural Heritage Landscape represents a valuable legacy from past City of Guelph Council commitments to protect the Hanlon Creek Conservation Area in perpetuity.

The Hanlon Creek Conservation Area Master Plan which includes the Niska EA Study Area was developed based on landscape characteristics *``in order to enhance and complement the open space``*:

To quote from the plan: **``by doing this the city automatically avoids the `formless urban matrix`` which is the result of planning based on the characteristic of the automobile and short term economic gain``**

Our goal to conserve this area for future generation is supported by the 2014 PPS Section 2.6. Cultural Heritage and Archeology as we believe this area is unique in Guelph and should be conserved in the long term for ours and future generations.

I have attached a sample copy of our Cultural Heritage Petition that was signed citywide by over 2000 citizens of Guelph who support the protection of the Bailey bridge in situ and the

cultural heritage Landscape. Copies of the original petitions were delivered to Heritage Guelph, Guelph City Council and the EA Study Team. The signed petitions can be viewed within Appendix A of the ESR.

As part of our commitment to conserving the CHL we researched and compiled a detailed history of our cultural heritage landscape. Please see our attached history of the Niska Area CHL that is located within the EA Study and beyond into Puslinch Township.

Extensive public support for the designation of the Bailey bridge in situ and the expansion of the identified CHL led to a reconsideration and clarification of Heritage Guelph's original motion from their April 13, 2015 meeting.

On Nov. 9, 2015 Heritage Guelph passed a motion a notice of motion to reconsider the HG resolutions of April 18, 2015 was approved at the HG meeting of November 9, 2015. The reconsideration motion resulted in new resolutions from HG as follows:

"THAT Heritage Guelph does not support the preliminary preferred alternative for the Niska Road Environmental Assessment presented to Heritage Guelph on April13, 2015 by Engineering Staff and their consultant;

And THAT Heritage Guelph recommends to Council that the Niska Road area bounded to the west by the Speed River, the north by the Guelph-Eramosa and Puslinch Township line, to the east at the eastern boundary of the GRCA lands, and the south at the City of Guelph boundary be designated under the Ontario Heritage Act as a cultural heritage landscape and be preserved in such a form as to continue its sightlines and its current land use patterns

THAT the area recommended for designation include the existing Bailey bridge, stone abutments and existing road widths and graded shoulders".

Despite the recommendations of Heritage Guelph there was no reweighting of the evaluation criteria or reconsideration of the preferred option of the 2 Lane Bridge and reconstruction of Niska Rd. by the EA Study team the EA was brought to Guelph City Council for Approval on Dec.3, 2015.

In our opinion once the recommendation was made by Heritage Guelph to move forward with the designation of the CHL this matter should have been brought to Guelph City Council before any decisions were made on the preferred bridge and road option.

What is especially puzzling and concerning is that **after City Council voted to support the removal of the Bailey bridge and support the reconstruction of Niska Rd. A motion was made and adopted to refer Heritage Guelph's recommendation to designate to the IDE**

Committee for consideration of a notice of intent to designate the cultural heritage landscape.

“The following motion was made and adopted:

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11. Moved by Councillor Piper

Seconded by Councillor Allt

1. That staff be directed to refer the Heritage Guelph recommendation to designate the Niska Road/Hanlon Creek Conservation precinct as a cultural heritage landscape to the IDE Committee for consideration of bringing forward a notice of intent to designate.

VOTING IN FAVOUR: Mayor Guthrie, Councillors Allt, Bell, Billings, Downer, Gibson, Gordon, Hofland, MacKinnon, Piper, Salisbury, Van Hellemond and Wettstein (13)

VOTING AGAINST: (0)

(from Minutes of Guelph City Council Held in the Council Chambers, Guelph City Hall on Thursday, December 3, 2015 at 6:00 p.m.)

How can Council vote to bring forward the CHL for designation when a Council decision has already been made to remove the Bailey bridge - a key character defining element in the CHL?

It is our contention that despite Guelph City Council’s support for the preferred option it is not proper procedure to remove the Heritage Bailey Bridge and alter the road before the consideration to designate the CHL as a Heritage Precinct.

Our goal is to have the EA identify options for the long-term conservation and enhancement of the character and heritage value of this unique area of geographical significance before the detailed design stage.

Mitigation and new tree planting, cannot replace in our lifetime what has evolved over many tears.

Our viewscape creates a sense of place that is unique in Guelph as a rural gateway into Puslinch Township and our pioneer roots.

Therefore I respectfully request that the CHL portions of the EA dealing with the determination of the CHL and its conservation be referred to the Ministry of Tourism Culture and Sport.

Deficiencies in evaluation of the Abutments and Bailey bridge

Failure to recognize important elements of the Bailey Bridge Stone Abutments:

1. In the opinion of Andrew Ross, from B. M. Ross and Associates Limited, who has experience in stone abutment restorations, our stone abutments are in good condition and are the best example of skillful masonry construction that he has encountered. This character defining element of the abutments was not mentioned in the ESR Heritage Appendices.
2. The Bailey bridge with its low profile is part of the view of the river upstream and downstream. The impacts of proposed 2 Lane Bridge on the riverine cultural landscape and abutments have not been fully evaluated.

Heritage Guelph passed a motion on Nov., 9, 2015 that the stone abutments should be retained in situ in their entirety. Phillip Rowe of R.J. Burnside indicated at the River Systems Advisory meeting that the top layer of the stone abutments would be removed for the new bridge. Will this impact the stability of the remaining abutments or not.

Given their heritage and aesthetic importance any alternatives accepted should retain the abutments in their entirety and provide excellent opportunities for viewing by visitors on both sides of the river.

The new abutments for the proposed 2 lane bridge will be built on land behind the stone abutments and the new road span will cover the abutments. There is no detail or indication of how this will affect our view of the retained heritage abutments.

The retention and rehabilitation of the bridge and its promotion as a tourist attraction was not an evaluation criteria. EA's must consider economics. I have attached a letter from William Hammill that makes an excellent suggestion that retaining the Bailey Bridge and Niska Road could become a 'Veteran's Way' because of the association of Bailey Bridge with WW 2 and the Vimy Ridge Farm in close proximity on Whitelaw RD. off Niska. Birdwatching, canoeing, fishing, hiking the 40 year old Speed River Trail, and enjoying the beauty of the river are traditional recreational activities that are part of the cultural landscape around the Speed River and bridge. These nature experiences all contribute to the cultural elements of the area.

The impacts of current noise levels or 4600 plus vehicles per day on the bridge and Niska Rd. that negatively impact the use and enjoyment of these activities within the CHL have never been evaluated. No study of expected noise increases with increased traffic has been evaluated.

Important Information I could not locate in the ESR or Appendices.

Heritage Impact Assessment and Conservation Plan and MTCS Checklist

On July 8, 2015 Mr. Joseph Muller from the MCTS in a letter to Mr. Rach, RJ Burnside, and Mr. Muller requested:

“Please send an HIA (Heritage Impact Assessment and Conservation Plan) to MTCS for review before issuing a Notice of Completion making copies available to local organizations and individuals who have expressed an interest in the cultural heritage component of this project”.

I did not receive a copy of the HIA as was required and I could not find the document or a reference to it in the ESR and Appendices. I could not find the MTCS Checklist within the ESR or Appendices

If I am correct, then the failure to complete the MTCS checklist and the HIA invalidates the selection process.

It is not appropriate to proceed to the detailed design stage of the selected preferred options without the identification and documentation of the key elements and attributes of the Cultural Heritage Landscape and bridge and abutments.

Without heritage designation it is my understanding that there is no protection of any cultural heritage attribute or elements within the road allowance and or the grade. So, for instance, the rolling rural scenic nature of Niska that we value could be altered.

I believe that the ranking given to the EA evaluation of the Cultural Heritage as a valued community asset was not adequate and must be re-evaluated. In any EA process the consideration of evaluation criteria, ranking of alternatives, the selection of the preferred alternatives and mitigation is vital to the selection of the preferred option. The conservation of the identified CHL is dependent on the pre-determination of impacts on the CHL elements and attributes. Without this information how can this EA move forward into the detailed design stage which could remove important CHL elements.

Procedural Issues with EA proceeding to Preliminary Preferred Option without 1st consideration by Heritage Guelph of Sept.3, 2014 by EA CWG members request for a Cultural Heritage Technical Study.

Please refer to attached April 11, 2015 Memo from Hugh Whiteley to City of Guelph Planner Stephen Robinson RE: Procedural Questions Regarding Consideration at the April 13 Meeting, Heritage Guelph, of the Designation of Niska Road Bridge and Cultural Heritage Landscape,

contains the CWG Sept. 3, 2014 letter and compares and outlines concerns about the Niska EA Process VS the City of Cambridge Black Bridge.

In Appendices L, M N, O, and P is correspondence on Heritage Aspects of the EA from Joseph Muller Heritage Planner and a sampling in letters and newspaper stories and columns that illustrate the deep emotional attachment to the Bailey bridge among residents in and outside of Guelph noted in the ESR and expressed in the thousands who signed the petition to retain the Bailey bridge.

Deficiencies and Errors in the Consideration of Function of Niska Road

A major defect in the EA is the misrepresentation of City of Guelph Official Plan policy for the function of Niska Road and the failure to distinguish major differences in the assigned function to different segments of Niska Road.

Niska Road from Downey to Ptarmigan is an urban road servicing a fully built out subdivision. It was classified as a local road in the District 8 plan and remained classified as a local road from 1975 to 1994. In the preparation of the 1994 Official Plan it was recognized that the College Avenue extension, designated in the District 8 Plan as the collector for Niska Road as a local road had not been built and was under review. The absence of the College Avenue extension meant that Ptarmigan, the collector road south of Niska had no northerly collector road connection to an arterial - Downey - as was required.

For the above reason the 1994 Official Plan reclassified Niska Road as a collector road in order to provide the needed connection to the arterial - Downey. This was in keeping with the three principles for roadway function and location adopted by the City of Guelph in 1975 in its district plans (specifically in the Southview District 8 Plan). These three principles are (1) that through traffic and local traffic are to be separated with through traffic restricted to arterial roads (2) that arterial roads are to be identified together with their intended function (for District 8 the three arterials were Downey Road, Hanlon Expressway, and Stone Road and all traffic to other parts of the City and beyond from the Southview District is to be directed to these three arterials); (3) That road crossings of valleys be minimized and that cultural heritage viewscales be preserved in location selection.

There is no indication in available documentation why the segment of Niska from Ptarmigan to the City boundary was reclassified from a local road to a collector since there is no traffic generated within the Southview District that requires this segment as a collector. This unjustified reclassification is an indication of the neglect of the change in function and character of Niska Road that occurs at Ptarmigan. Between Ptarmigan and the Speed River Niska Road is a rural road within a cultural heritage landscape a road form Heritage Guelph has recommended be Designated and preserved).

Illustration of the change in character of Niska at Ptarmigan



For the portion of Niska that is classified properly as a collector road its intended function is described in the Guelph Official Plan's definition of a collector road:

5.7.3 Collector Roads

1. Collector roads are intended to move low to moderate volumes of traffic within specific areas of the City and collect local traffic for distribution to the arterial or provincial highway system.

The key words in this definition are these: "**within** specific areas of the City". Since 1975, with the first statement of the principles underlying the classification of roads in the District 8 Plan, and in every Official Plan definition since, it has been City of Guelph policy that through traffic between specific areas of the City are directed to arterial roads. If through traffic begins to use collector roads it is the obligation of the City, an obligation recognized universally in all municipalities in Ontario, to curtail the use of collectors for through traffic.

In the April 27 2009 staff report the City identified the "specific area" for which Niska Road between Ptarmigan and Downey was a collector to be the 470 unit Kortright Hills subdivision. This is exactly the area identified in the District 8 Plan as needing a collector to direct traffic to the Downey Road and the Hanlon Expressway arterials. This description of the collector function has remained constant for over

40 y and is fully compatible with the emphasis on Demand Management that is now required for all transportation decisions by the PPS and by the City of Guelph Official Plan.

The assertion in the documentation of the Niska Road Improvement EA that there is a through traffic function to be considered for Niska Road as a collector is not correct as it is contradicted by the Official Plan and by the 2009 staff report. This mistaken assertion of a "through traffic" role for Niska Road is present in many places in the EA document and invalidates most of the assessment of alternatives.

Examples of this mistaken assertion include:

In section 1.1 of the ESR the statement is made that Niska Road, as a collector, is to provide "through movement for travel to/from arterials and expressways". This is incorrect, there is no "through" traffic allowed on collectors. The role of Niska is to provide access to/from arterials and expressways for traffic generated by the Kortright Hills subdivision. This is how the subdivision was planned and how the traffic should move.

Section 6.2.3 of the ESR summarizes the results from a Niska Road Origin/Destination survey conducted from 7 a.m. to 7p.m. in October 2013. The statement is made that "many of the trips (approximately 48%) on the roadway were external indicating that the corridor is integral to external trips and is a significant roadway within the City of Guelph network." This statement is wrong on several counts.

The trips from the Hanlon Creek neighbourhood (Edinburgh to the Hanlon plus Kortright), an area east of the Hanlon Expressway, are not counted as external but they are external to the Kortright Hills neighbourhood for which Niska is one of the collectors. Traffic from and to the HCN not destined for the KHN must either cross the Hanlon (the arterial connection all through traffic is to use) or turn off of Highway 124 to Whitelaw when traffic is directed to use the Wellington Street interchange with Hwy 6 (Hanlon Expressway). The HCN traffic on Niska is external. The correct percentage for external traffic is thus 87% as only 13% of the traffic originates or has as its destination the Kortright Hills neighbourhood.

The second error is to assert that Niska is a corridor road within the City of Guelph network. Niska is not a corridor road; it is one of the collector roads for the Kortright Hills neighbourhood. The high volume of through traffic (4100 v/d) is an indication of a severe misuse of Niska as an inter-highway connection. The remedy for such violation is stringent application of deterrents to strongly discourage through traffic. An example is the City decision to remove the Stone Road extension from the City network in order to "protect Woodland Glen and College Heights communities from external vehicular and truck traffic".

An obvious deterrent to through traffic is to close the Niska Bridge to vehicular traffic. There is no need for Kortright Hills neighbourhood vehicles to use Niska Road since traffic out of the neighbourhood is directed to Downey Road and the Hanlon Expressway arterials. No emergency vehicles use the Niska bridge either to serve the Kortright Hills neighbourhood or to provide service to the small number (about six) residents in Puslinch on the Niska Road extension on the west side of the river. These residents are serviced from Whitelaw Road and Highway 124.

The EA was deficient in not identifying the large through traffic problem on Niska and not considering in the alternatives the ability of the alternative to control this problem. In fact the chosen alternative will increase this problem, perhaps greatly increase it.

In the December 3 2015 Staff Report on the Niska Road EA the statement is made " Niska Road being a collector road servicing established land uses within the City" This is incorrect. Niska Road is a collector servicing only the Kortright Hills Subdivision - there is no "within the City" role for Niska.

Deficiencies in the Cost Estimates and the Use of Costs in Evaluation

The main defect in the cost estimates used in the Ea concerns costs associated with any option that involved rehabilitation of the Bailey bridge and its historic masonry abutments. One of the causes for unduly high cost estimates is the failure to recognize that bailey bridges are built entirely of easily replaced parts and hence only the specific parts showing deterioration need be replaced. All replacement parts are readily available from a US supplier and not have superior coatings to reduce corrosion compared to replacement parts used by the City in previous years.

The second cause of exaggerated costs is the characterization of the abutments and embankments of the bridge as failing. In his inspection of the bridge Mr Ross P.Eng. found the abutments to require a modest amount of repair but showing no evidence of rotational failure. He made no observation of failure of the embankments and concluded there was no urgent needs for repair of the bridge at this time. Mr Ross's estimate of the rehabilitation costs to provide a 30 y service life for the bridge and abutments was \$265,000 + HST.

In the evaluation of alternatives the cost of each alternative is a primary factor in the evaluation and cost should be directly included in the evaluation.

Deficiencies in the in Evaluation Procedures

The two major deficiencies in the evaluation procedure were (1) The Inclusion of "Meeting the Problem Statement" as a criteria and (2) the failure to weight the evaluation which results in less important aspects being given as much weight in the selection as very important factors.

The problem statement is defective, as noted in the preceding analysis. As a result meeting the wrong problem statement gives an alternative a higher ranking. This is wrong and can only be corrected by leaving out this criteria. To add to the defect the problem statement is designed to favour a two lane bridge replacement and strongly influences the eventual choice of a two lane bridge replacement.

The Black Bridge EA has an excellent evaluation system with weighting that was used to choose a preferred option among the 23 options considered. This evaluation system should be used in the revision of the Niska Road Improvement EA.