Meeting Agenda



City of Guelph

River Systems Advisory Committee

April 17, 2019

City Hall, Meeting Room B

From 4:00 to 6:00 p.m.

Meeting Chair: Nicola Lower

Agenda Items

Welcome to all

Item 1, 2, and 3

Item 1, Roll call and certification of quorum

Item 2, Declaration of conflict of interest

Item 3, Approval of minutes of February 20, 2019 meeting

Item 4

York Road Environmental Design Study - Environmental Impact Study

- Information from City staff and project team
- Hearing of delegations
- In Committee discussion motion

Item 5

Declaration of Conflict of Interest - Procedure Update

Information Items

Scheduling a May meeting

Next Meeting:

May 15, 2019 from 4:00 to 6:00 p.m. City Hall, Meeting Room B

April 17, 2019 River Systems Advisory Committee



Item

York Road Environmental Design Study – Environmental Impact Study (EIS) prepared by Wood Environment & Infrastructure Solutions dated March 2019

Proposal

The City of Guelph (City) initiated the York Road Environmental Design Study (YREDS) to assist with the implementation of the recommendations stemming from the 2007 York Road Improvements Class Environmental Assessment (EA). The YREDS EIS focuses on the development of preliminary road design and preliminary design for the realignment of Clythe Creek. The EIS includes recommendations and provides direction for detailed design.

Location

The study area is located within the Eramosa River Watershed, and includes York Road from Victoria Road, east to the City limit past Watson Parkway, and south of York Road generally to the southern limits of the reformatory ponds and the Eramosa River, and north to include parts of Elizabeth Street and a portion of Hadati Creek. A study area map is provided in Attachment 1.

The City's Trail Master Plan and Active Transportation Network Study identify a trail connection along the south side of York Road.

The lands located generally south of York Road are within the City's Guelph Innovation District (GID) Secondary Plan Area.

The study area includes Clythe and Hadati Creeks. In its headwaters, Clythe Creek is a coldwater stream that sustains a trout population. Lower reaches are classified as coolwater, due to temperature impacts from on-line ponds. Through the study area, Clythe Creek is highly altered, with numerous drop structures and on-line ponds that restrict fish passage and warm the water. Within the study area, Hadati Creek is highly altered and straightened. It is classified as a warmwater system. An abundance of groundwater at or near the surface appears to influence the overall creek characteristics.

The study area also includes significant wetlands, significant wildlife habitat, habitat for endangered and threatened species and habitat for significant species.

Background

In February 2007, the City of Guelph filed the York Road Improvements: Wyndham Street South to East City Limits Class Environmental Assessment. This Environmental Assessment (EA) assessed the travel needs for York Road from Wyndham Street to the East City Limits. Recommendations included the widening of the road from two lanes to four between Victoria Road and the East City Limits.

The preferred alternative coming out of the 2007 Class EA recommended a four-lane cross section with a continuous on-road cycling lane and

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sidewalk on the north side. Since 2007, City of Guelph's policies on Active Transportation, Natural Heritage and Cultural Heritage have changed. Equivalent levels of service for cycling facilities and vehicular facilities are to be provided. Therefore, the limited cycling and pedestrian facilities recommended in the 2007 EA are no longer sufficient to meet City objectives. Additionally, removal of natural heritage system and cultural heritage features are no longer acceptable. An update to the original design was deemed necessary.

Selection of a preferred alternative for redesign of York Road and realignment of Clythe Creek considered the following objectives:

- Defined north property limit;
- Provision of required vehicular and active transportation infrastructure within the corridor;
- Mitigation of impacts to heritage features, particularly the significant features associated with the Reformatory Entrance;
- Provision of equivalent levels of service for vehicular and active transportation modes;
- Need to maintain existing entrances where they could not be combined or relocated;
- Provision of 1.5 m boulevard for snow storage;
- Ability to mitigate impacts / improve existing conditions within Hadati and Clythe Creeks;
- Ability to mitigate impacts / improve existing conditions of adjacent terrestrial and aquatic habitats;
- Minimize impacts to existing utility infrastructure; and
- Minimize construction costs.

The recommended creek design accommodates the proposed grading for Road Alternative 4 (remove boulevards, maintain 3.0 m multi-use pathways and relocate heritage walls beyond clear zone limit) by realigning the creek, south from the road into a new channel from the Clythe Creek/York Road culvert to upstream of the former Reformatory driveway. The realigned channel would have connection to the existing channel with the cultural heritage features during storm events of a 2 year frequency or greater. West of the driveway proposed grading works would provide a natural form to the channel while maintaining the location of the channel and minimizing the impact to cultural heritage features. The realigned connection to the Eramosa River provides improved sinuosity and maintains a connection to the existing natural heritage system, while improving the thermal regime by no longer flowing through the online pond system.

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The following improvements are proposed to the overall function and habitat of Clythe Creek:

- Channel realignment will separate the creek from the York Road rightof-way, providing a natural buffer to the corridor.
- The proposed planform will utilize a great extent of the existing floodplain, including a portion of an existing tributary planform.
- The northern Reformatory Pond will be disconnected from the creek in an effort to limit interactions between the pond and creek channel.
- As a result of the channel realignment, the majority of the cultural heritage features will be taken off-line but remain within the landscape.
- The realignment of Reach C-9A has incorporated a 'high-flow' channel that directs flows exceeding bankfull towards and through the existing channel at a weir (Cultural Feature '14') upstream of the Reformatory Entrance. This approach supports fish passage through the primary channel while allowing the weir to be activated during higher flows, partially mitigating its disconnection from the main channel.
- To improve the functioning of Reaches C-9B and C-10, significant grading works are proposed that narrow the channel cross-section and create a consistent bed profile, promoting improved natural channel function and stability. The bed and bank grading will continue downstream within Reach C-10 where full channel realignment will occur downstream from the confluence with Hadati Creek to the Eramosa River. As a result, the existing flow splitter downstream of the confluence with Hadati Creek will be taken off-line. The existing channel downstream of the flow splitter will be re-purposed as necessary to accommodate stormwater management practices.
- The newly established channel will provide improved function, promoting natural channel processes and in turn is expected to improve overall aquatic habitat via removal of barriers to fish passage and establishment of stable habitat (e.g. riffle-pool profile).

Fisheries Act authorization and approval from the Grand River Conservation Authority (GRCA) is required for the channel works.

Potential impacts resulting from the recommended alternative include:

- Changes to permeability
- Changes to water balance
- Potential alteration of drainage patterns
- Potential increases in runoff
- Potential changes in water quality and temperature
- Potential changes in channel stability

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- Potential changes in fish passage
- · Potential changes in fish habitat
- Modification of vegetation communities
- Modification of arboricultural resources
- Construction disturbance of wildlife
- Decreased soil stability
- Import/export of fill
- Removal of open country bird habitat
- Removal or encroachment to area sensitive bird habitat
- Encroachment of natural areas
- Indirect pollution
- Removal of significant species

Proposed mitigation, compensation and enhancement measures include:

- Sediment and erosion control
- Breeding bird window timing restrictions
- Compensation of vegetation resources
- Buffer enhancements
- Open country bird habitat replacement habitat
- Tree replacements
- Wildlife habitat enhancement measures
- Vegetation enhancement measures (riparian plantings)

RSAC Project History

The City's River Systems Advisory Committee (RSAC) reviewed the TOR for the YREDS and passed the following motion of support at the April 19, 2017 RSAC meeting:

"THAT a revised EIS be brought back to the committee with additional detail, including updates to the impact assessment, policy analysis and recommendations sections that address:

- Avoidance measures, an analysis regarding buffers, invasive species, bio salvage opportunities, and also consider the time period associated with impacts;
- Construction mitigation measures;
- Preliminary multi-use pathway centre line elevations, linear slopes, and anticipated extents of side slopes.
- Recommendations for maintaining stream flows through construction;

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- A summary of any additional field study recommendations to be completed through detail design; and
- Recommendations for monitoring to be completed through detail design, during construction, as well as post construction monitoring and include recommendations regarding effectiveness monitoring."

Comments

Environmental Planning Staff have reviewed the YREDS EIS dated March 2019 prepared by Wood Environment & Infrastructure Solutions and offer the following comments:

Policy Analysis

- 1. The EIS needs to demonstrate consistency with OP policies. Section 1.3.1 City of Guelph Official Plan (March 2018 Consolidation) provides a summary of relevant natural heritage policies. Essential transportation infrastructure may be permitted within some but not all Significant Natural Areas and Natural Areas. There appears to be inconsistency in text provided on page 4. Following 'Buffer implications:' the report erroneously states that 'essential transportation infrastructure work is permitted within the NHS and its associated buffers'. This should be revised.
- 2. Essential transportation infrastructure is not a permitted use within the buffer of significant wetlands. Surface Water Features and Fish Habitat official plan policy 4.1.3.5.10 states that "Opportunities to restore permanent and intermittent steam and fish habitat shall be encourage and supported". Furthermore, fish and wildlife management is a general permitted use within the natural heritage system. The EIS should reflect the distinction between essential transportation infrastructure and stream/fish habitat restoration (i.e., fish and wildlife management) and where these uses are permitted within and adjacent to the natural heritage system.
- 3. Section 8.7.4 Buffers is incorrect. References to policies relate to the City's previous Official Plan and should be updated to the March 2018 Consolidation.

Wetland Delineation

4. The wetlands on the subject property are identified in the Official Plan as Locally Significant Wetlands (LSW) and have not been evaluated using the provincial Ontario Wetland Evaluation System (OWES). An assessment of the significance of the wetland should be provided at the detailed design stage to determine whether the wetlands present on the property are LSW or Provincially Significant Wetlands (PSW). The EIS should describe the potential implications of the road widening works extending within the buffer (minimum of either 15 m for LSW or 30 m for PSW) of wetland vegetation communities. Once the wetland limit has been staked in the field with GRCA, it is

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recommended that a policy analysis be completed as part of the detailed design work to confirm consistency with Official Plan policy.

Natural Channel Plan and Profile

- 5. It would be helpful to include some preliminary details on what is proposed for the existing channel following the realignment of Clythe and Hadati Creek, downstream of their confluence. Noting that restoration measures should be explored and identified through detailed design would be sufficient. This could be added to section 10.2 Recommendations for Detailed Design included in the EIS.
- 6. Incorporating riffle-pool sequences downstream of the Reformatory Entrance should be explored in the future as part of detailed design to improve fish habitat within the realigned channel. This could be added to section 10.2 Recommendations for Detailed Design included in the EIS. A note could also be added to Figures 5 and 6, which detail the preliminary plan and profile of the natural channel design, included in Appendix N.
- 7. On Figure 5 in Appendix N, a cultural heritage feature/structure appears to be mislabeled in the Channel Profile. What is labeled as '13' should be labeled '34'.

Suggested Motion

THAT the River Systems Advisory Committee support the Environmental Impact Study for the York Road Environmental Design Study provided that the EIS be revised to incorporate:

- an updated policy analysis, consistent with the City of Guelph's Official Plan (March 2018 Consolidation);
- a recommendation that the policy framework be revisited once additional information on the limits and significance of wetland on the subject property is available through detailed design;
- a recommendation to explore restoration measures that are compatible with the existing channel re-purposed for stormwater management through detailed design; and
- a recommendation to incorporate riffle-pool sequences downstream of the Reformatory Entrance through detailed design.

Attachment 1 – Study Area Map

