APPENDIX P

Existing Vegetation/Aesthetics Assessment
August 20, 2014

Conlin Road East (Simcoe Street North to Townline Road North) City of Oshawa
Existing Vegetation/Aesthetics Assessment

INTRODUCTION

This report is prepared as part of the Environmental Assessment for the proposed road improvements on Conlin Road East, extending between Simcoe Street North and Townline Road North, a distance of approximately 4.8km. It provides an evaluation of the aesthetics of the local environment and the general streetscape conditions including a general overview of the existing vegetation.

This section of Conlin Road East is located in the north-east section of the City of Oshawa. The west end of the study area is predominantly residential. The east end is more rural in character but rapidly urbanizing with new and proposed subdivision developments scattered primarily along the south side of Conlin Road East.

The proposed improvements to the Conlin Road East corridor will see the road being widened from 2 lanes to 4 lanes, culvert upgrades and intersection improvements which will include two roundabouts.

The study area is located in an area of gently rolling topography. The only significant landforms are the East Oshawa Creek valley and two tributaries of Harmony Creek. There are no significant views from the road corridor.

This streetscape/aesthetics/vegetation study provides:
- an overview of the existing visual character of the road corridor,
- existing land uses adjacent to the roadway,
- a general analysis of the existing vegetation found along the roadway,
- identifies the impacts of the road improvements, and
- recommended streetscape upgrades.

The study area has been divided into the following four sub-sections starting in the west, to include:
- Section A: Simcoe Street North to Ritson Road North (1.6km),
- Section B: Ritson Road North to Harmony Road North (1.6km), and
- Section C: Harmony Road North to Townline Road North (1.6km).

The vegetation/aesthetic/streetscape site analysis was carried out in June, 2014. The vegetation analysis is limited to the existing woody vegetation located along the road frontage, typically within or immediately beside the road right-of-way (ROW), and provides an evaluation of the proposed road improvements on the existing vegetation and the aesthetics of the streetscape. The vegetation survey is very general in nature and is not to be considered as a detailed tree survey.

Streetscape improvement recommendations are discussed for each section of the corridor.
Figures 1 to 7 show the location of existing vegetation, and land uses located along this section of the Conlin Road East corridor.

**GENERAL CORRIDOR AESTHETICS**

This section of Conlin Road East passes through both urban and rural land uses. The west section of the corridor, between Simcoe Street N. and Ritson Street North passes through established residential neighbourhoods and crosses over the East Oshawa Creek valley.

The east portion of the corridor, extending between Ritson Road North and Townline Road North, passes through the urban fringe of the City of Oshawa. The north side of the road corridor is primarily agricultural. The south side of the road corridor is rapidly urbanizing with a variety of new subdivisions in various stages of construction.

The general character of the landscape is gently rolling. There are three stream crossings, East Oshawa Creek at the west end of the study area and two tributaries of Harmony Creek at the Townline Road North end of the study area.

Existing woody vegetation along this section of the Conlin Road East corridor is very limited with the most significant wooded areas located on the Camp Samac grounds located on the south side of the roadway between Simcoe Street North and Ritson Road North, along both sides of East Oshawa Creek.

There are a few of areas where some scattered mature trees remain as remnants of a more rural landscape.

There are no significant views from the road corridor except in the vicinity of the Townline Road where there are limited views to the south towards Lake Ontario.

The following Streetscape Analysis provides an a more detailed description of the existing conditions of the 3 sections of the study area and provides an estimation of impacts of the proposed undertaking and mitigation recommendations.

**STREETSCAPE ANALYSIS**

**Section A: Simcoe Street North to Ritson Road North**

**Distance:** approximately 1.6km.

**Existing Conditions:**

The land uses along this section of the Conlin Road East are mostly urban. The East Oshawa Creek valleylands are located midway between Simcoe Street North and Ritson Road North. The west end of this section is flanked by new subdivisions and commercial land uses.

The valleylands of East Oshawa Creek are heavily wooded especially on the south side of Conlin Road East on the Camp Samac property.
Existing Vegetation-North Side:

There is a row of immature street trees along the edge of the road corridor west of Oshawa Creek East. The species in this row of street trees include Red Maple (*acer rubrum*), Honeylocust (*gleditsia triacanthos*) and Basswood (*tilia sp.*). The tree species located on the Oshawa Creek East valleylands are typically mature and include Scot’s Pine (*pinus sylvestris*), White Pine (*pinus strobus*), Apple (*malus sp.*), Manitoba Maple (*acer negundo*) and Poplar (*populus sp.*). East of the valleylands there are some scattered mature trees located along the front of the residences facing Conlin Road East. The species here are dominated by Norway Maple (*acer platanoides*), White Spruce (*picea glauca*) and White Cedar (*thuja occidentalis*).

Existing Vegetation-South Side:

At the Simcoe Street end of Conlin Road East there are a row of young street trees located between the curb and the sidewalk. These street trees include Honeylocust (*gleditsia triacanthos*) and Green Ash (*fraxinus pennsylvanica*). These street trees terminate near the Oshawa Creek East valley. The valleylands are wooded and dominated by mature Green Ash (*fraxinus pennsylvanica*), Elm (*ulmus sp.*), Manitoba Maple (*acer negundo*) and Scot’s Pine (*pinus sylvestris*). East of the valleylands there are no trees along the street corridor however the adjacent Camp Samac property is heavily wooded with a mix of mature deciduous and coniferous trees.

Impacts of the Undertaking:

It is anticipated that the road improvements will have an impact on the following existing trees:

- The trees located along the banks of the Oshawa Creek East where bridge construction will occur,
- The recreation trail located along Oshawa Creek East will be impacted,
- The trees located along the frontage of the row of residences on the north side of Conlin Road between the Oshawa Creek East valley and Ritson Road North.

Recommended Streetscape Treatments:

The following landscape planting treatments are recommended for this section of the Conlin Road East corridor:

- Street trees are to be planted on 10 metre spacing along both sides of the roadway
- Riparian plantings along the Oshawa Creek East stream channel and disturbed banks/slopes as required by the Conservation Authority. Compensation plantings (due to removals) may be required on private property adjacent to the ROW.
Photograph #1: View looking east along Conlin Road East showing street trees on north side of road.

Photograph #2: A view looking east showing vegetation associated with the East Oshawa Creek valleylands on the south side of Conlin Road East.
Photograph #3: a view looking east towards the Ritson Road North intersection showing mature trees along the north side of Conlin Road East.

Section B: Ritson Road North to Harmony Road North

Distance: approximately 1.6km

Existing Conditions:

This section of Conlin Road East is gently rolling. There is one watercourse crossing over a tributary of Harmony Creek. A recreational trail crosses Conlin Street East at the stream crossing location. The surrounding land uses are more rural than the Simcoe Street to Ritson Road section of Conlin Road East.

The land uses along the north side are primarily agricultural and vacant lands. There are two rural residences and one farm complex fronting onto this side of the road corridor.

The lands adjacent to the south side of the roadway are more developed and include a church, a wooded valleyland area associated with a tributary of Oshawa Creek East, a row of nine rural residences fronting onto the street, a subdivision as well as agricultural fields located along the road.

Existing Vegetation-North Side:

There are some scattered trees located along the north side of the road corridor predominantly between Ritson Road North and Wilson Road North. These trees include a group of large Black Locust (*robinia pseudoacacia*) located along the frontage of one of the rural residences, some mature Silver Maple (*acer saccharinum*), Norway Maple (*acer platanoides*), Sugar Maple (*acer saccharum*), Chestnut (*aesculus sp.*). West of Wilson Road North there are no trees along this side of the road corridor.
Existing Vegetation-South Side:

The largest woody vegetation community along the south side of Conlin Road is located just to the east of Ritson Road North where the road corridor passes beside the valleylands associated with a tributary of Oshawa Creek East. This wooded area is dominated by Green Ash (*fraxinus pennsylvanica*), Apple (*malus sp.*), Manitoba Maple (*acer negundo*), Elm (*ulmus sp.*) and Chokecherry (*prunus virginiana*). West of this area there are some scattered trees located along the frontage of the row of rural residences. These trees include Norway Maple (*acer negundo*), Sugar Maple (*acer saccharum*), Silver Maple (*acer saccharinum*) and Honeylocust (*gleditsia sp.*).

West of Wilson Road North there is a grouping of mature Willow (*salix sp.*) beside the Harmony Creek stream channel. East of the stream channel the road corridor does not have any significant trees.

Impacts of the Undertaking:

It is anticipated that the road improvements will have an impact on the following existing trees:

- Most of the trees located along the north side of this section of Conlin Road East will require removal. There is a row of mature Black Walnut trees along the frontage of a rural residence (see Photograph #4) that should be preserved if possible.
- Recreation trail crossing
- Roadway improvements along the south side will impact the wooded areas beside the tributary to East Oshawa Creek and the trees located along the frontage of the rural residences

Recommended Streetscape Treatments:

The following landscape planting treatments are recommended for this section of the Conlin Road East corridor:

- Street trees are to be planted on 10 metre spacing along both sides of the roadway
- Restoration of any landscaped areas located along the front of the rural residences (compensation planting may be required on private property adjacent to the ROW).
Photograph #4: A view of mature Black Walnut in front of residence on the north side of Conlin Street East.

Photograph #5: A view looking east in a more rural section of the road corridor showing scattered roadside vegetation.
Conlin Road East, Oshawa, EA                                                    Existing Vegetation/Aesthetic Assessment

Photograph #6: A view looking east towards Harmony Road North showing agricultural lands on both side of the road and limited existing vegetation.

Section C: Harmony Road North to Townline Road North

Distance: approximately 1.6km.

Existing Conditions:

The road corridor is gently rolling as it passes between upland areas and valleylands. The road passes over two tributaries of Harmony Creek. There are some extensive views from the roadway (in the upland areas) to the north and south over surrounding farmland and urban development.

The land uses along the south side of Conlin Road East in this section of the corridor include a new subdivision, a park, agricultural fields, vacant land and wooded areas (in the valleylands associated with the tributary of Harmony Creek).

The north side of Conlin Road is still primarily agricultural. There are three farm complexes and two rural residences fronting onto the road corridor.
Existing Vegetation-North Side:

There is a variety of existing vegetation along the north side of the road corridor. The vegetation includes: few scattered mature trees (Silver Maple \((\text{acer saccharinum})\) Green Ash \((\text{fraxinus pennsylvanica})\), Norway Spruce \((\text{picea abies})\), and Sugar Maple \((\text{acer saccharum})\)), and some long stretches of ‘hedgerow’ vegetation including Buckthorn \((\text{rhamnus sp.})\), Hawthorn \((\text{crataegus sp.})\), Apple \((\text{malus sp.})\) and Green Ash \((\text{fraxinus pennsylvanica})\).

There are some large specimen trees located along the frontage of the farm complex located beside Townline Road North. These trees include Sugar Maple \((\text{acer saccharum})\), Horse Chestnut \((\text{aesculus sp.})\) Apple \((\text{malus sp.})\) Spruce \((\text{picea sp.})\) and Norway Maple \((\text{acer platanoides})\).

Existing Vegetation-South Side:

The south side of the road corridor has fewer mature trees but also has extensive stretches of ‘hedgerow’ vegetation including Buckthorn \((\text{rhamnus sp.})\), Hawthorn \((\text{crataegus sp.})\), Apple \((\text{malus sp.})\) and Green Ash \((\text{fraxinus pennsylvanica})\).

Impacts of the Undertaking:

It is anticipated that the road improvements will have an impact on the following existing trees:
- All the trees and hedgerows located along the north and south sides of this section of Conlin Road East will require removal
- Trees located adjacent to the Harmony Creek tributaries at culvert crossings
- Recreational trail crossing

Recommended Streetscape Treatments:

The following landscape planting treatments are recommended for this section of the Conlin Road East corridor:
- Street trees are to be planted on 10 metre spacing along both sides of the roadway
- Riparian plantings along the Harmony Creek tributary stream channels, as required by the Conservation Authority.
- Restoration planting of valleylands disturbed due to road improvements and culvert upgrades.
Photograph #7: A view looking east showing some a mature Silver Maple along the frontage of a rural residence

Photograph #8: A view of the Harmony Creek valleylands on the north side of Conlin Road East where some riparian planting has recently been installed.
Photograph #9: A view looking east showing some mature vegetation located on the north side of Conlin Road East.

CONCLUSIONS

The road widening/improvements to this section of Conlin Road East will have impacts on some of the existing trees within the road right-of-way. The impacts will include removal of numerous mature trees and hedgerows located along both sides of the road corridor. The existing vegetation associated with the three stream crossings will also be impacted.

The road improvements will also have an impact on recreational trail crossings at the various stream channels. These trail crossings will require consideration in the detailed design phase of the project.

Although the proposed undertaking will require the removal of most of the existing trees located in the road corridor, the reconstruction of this portion Conlin Road East will provide an opportunity to improve the overall aesthetics of the road with a comprehensive streetscaping/tree planting plan, as reviewed and approved by the City of Oshawa.
The following chart summarizes the streetscape opportunities as noted in this report.

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<th>Opportunity/Issue</th>
<th>Streetscape Treatment</th>
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<td>To be planted on 10.0m centres</td>
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<td>Tree Removal</td>
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<td>Stream Channel Restoration</td>
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RECOMMENDATIONS

The following recommendations relate to the streetscape improvements that are to be implemented along this portion of the Conlin Road East corridor:

**Vegetation Assessment:**
A Vegetation Assessment will be required, prepared by a certified ISA arborist. All existing vegetation removed as part of this project should be inventoried.

**Mitigation During Construction:**
- Construction activities are to avoid damaging existing, healthy, trees located close to the ROW wherever possible. This is to be accomplished by installing suitable tree protection fencing, extending to the ‘dripline’ of trees designated for protection. This tree protection zone is to remain undisturbed by excavation,
storage of materials and equipment, and other construction related activities. The fencing is to remain in place through the duration of construction activities.

- Existing trees scheduled for removal are to be inspected to determine if transplanting is a feasible option (depending on size, species and health of tree).

**Street Tree Planting and Planting/Streetscape Design:**

- Tree planting/streetscape plans are to be prepared for the corridor by a registered landscape architect, as part of the detailed design of the roadway. These plans are to address:
  - Compensation for vegetation requiring removal on or near private property
  - Planting of new street trees to improve the aesthetics of the streetscape, to be planted on 10.0m centres or as required by the City of Oshawa
  - Restoration of disturbed boulevard landscaped areas and valleylands

- All trees to be planted are to be selected from the City of Oshawa approved street tree plant list

- The planting of new trees along the corridor is to be coordinated with existing and proposed utility corridors, and light standards

- Construction impacts at stream crossing areas are to be mitigated with the planting of riparian vegetation. This vegetation should be native, non-invasive, riparian vegetation, as approved by the Conservation Authority.

- Trees to be planted near overhead utilities to be selected to conform to mature height limitations (Hydro approved species)