

**REPORT NO. 198** of the  
**ENVIRONMENT, TRANSPORTATION & PUBLIC SAFETY**  
**STANDING COMMITTEE**  
of its meeting held April 23, 2014

**Present:** Councillor J. Gignac  
Councillor A. Halberstadt  
Councillor R. Jones  
Councillor H. Payne  
Councillor F. Valentinis, Chair

**Reference:** Report No. 78 of the Windsor-Essex County Environment Committee (Phase 3 of the Swamp Wetland Restoration Project on airport lands)

That the following recommendations of the Environment, Transportation and Public Safety Standing Committee **BE APPROVED:**

Moved by Councillor Gignac, seconded by Councillor Jones,

**THAT** City Council and the Board of Directors of Your Quick Gateway (Windsor) Inc. **BE REQUESTED TO ENDORSE** Phase 3 of the Swamp Wetland Restoration Project on the YQG airport lands as submitted by the Little River Enhancement Group subject to a report from Administration outlining concerns to the overall planning of the area as well as abutting properties.

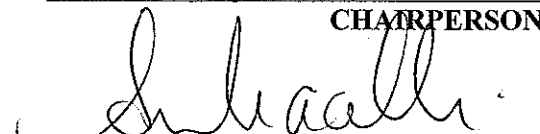
Carried.

Councillor Payne was absent at the time the vote was taken.

Clerk's Note: Report No. 78 of the Windsor-Essex County Environment Committee (Phase 3 of the Swamp Wetland Restoration Project on airport lands) is attached as background information. Also attached as additional information is a memo dated July 17, 2014 from the Environment & Sustainability Coordinator regarding request for continued restoration (tree planting) on airport lands.

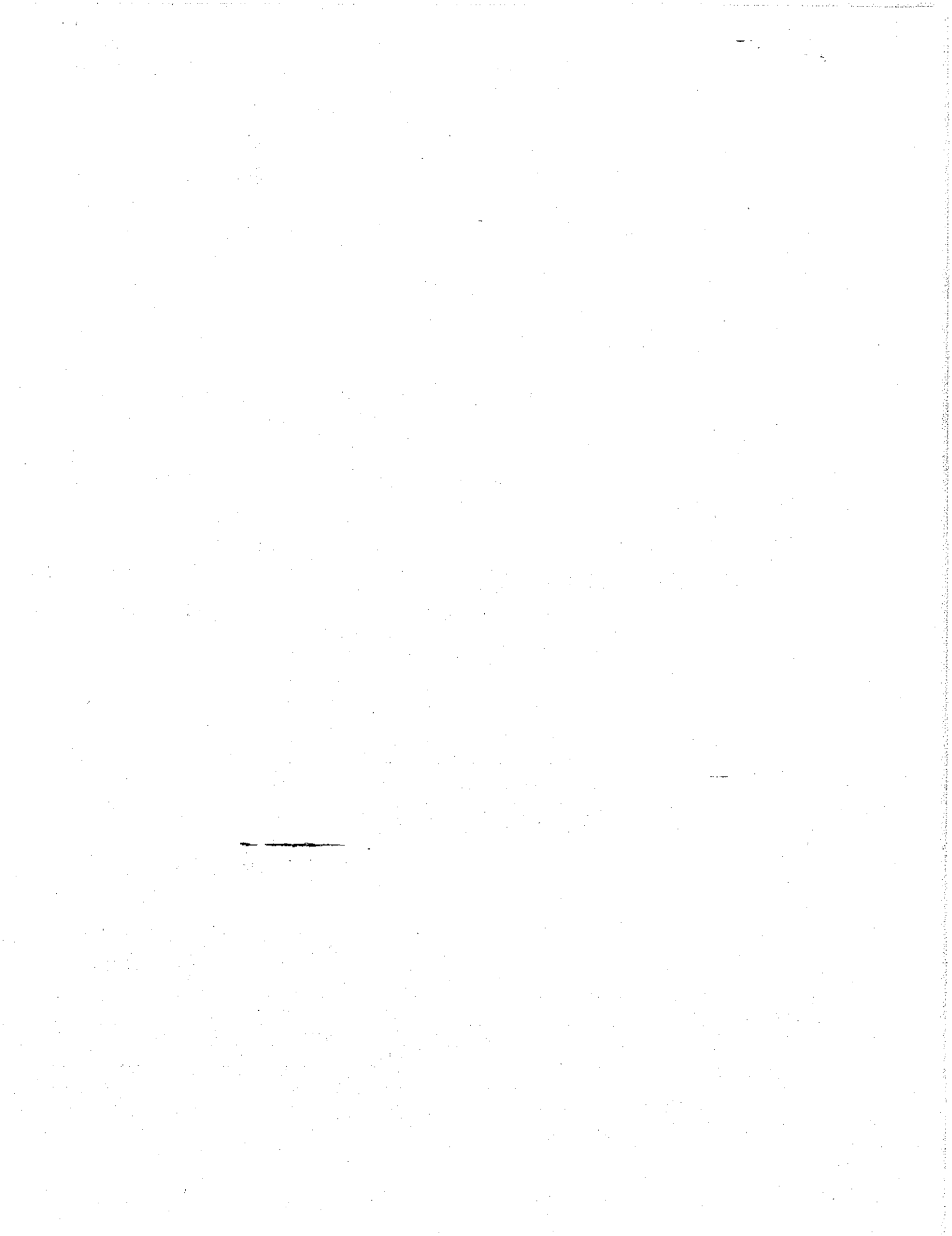


CHAIRPERSON



SUPERVISOR OF COUNCIL SERVICES

| NOTIFICATION:            |         |                        |       |     |
|--------------------------|---------|------------------------|-------|-----|
| Name                     | Address | Email Address          | Phone | FAX |
| WECEC                    |         | on file                |       |     |
| Ian Naisbitt             |         | inaisbitt@sympatico.ca |       |     |
| Caroline Biribauer, ERCA |         | cbiribauer@erca.org    |       |     |
| Kathryn Arthur, ERCA     |         | karthur@erca.org       |       |     |



**REPORT NO. 78**  
of the  
**WINDSOR-ESSEX COUNTY ENVIRONMENT COMMITTEE (WECEC)**  
of its meeting held  
January 9, 2014  
at 5:30 o'clock p.m.  
Lou Romano Water Reclamation Plant, 4155 Ojibway Parkway

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**Members present at the January 9, 2014 meeting:**

Councillor Alan Halberstadt, Co-Chair  
Charlie Wright, Co-Chair  
Eileen Chen (non-voting)  
Pauline Cheslock  
Derek Coronado  
Rick Coronado  
Theresa Czerwinski  
Roger Dzugan  
Jesse Gardner Costa  
Paul Henshaw  
John Miller  
Mike Nelson  
Lindita Prindi  
Tamara Stomp  
Radwan Tamr

**Your Committee submits the following recommendation:**

Moved by T. Stomp, seconded by J. Miller,  
That City Council and the Board of Directors of Your Quick Gateway (Windsor) Inc. **BE REQUESTED** to endorse Phase 3 of the Swamp Wetland Restoration Project on the YQG Airport lands as submitted by the Little River Enhancement Group.  
Carried.

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COUNCILLOR ALAN HALBERSTADT, CO-CHAIR

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COMMITTEE COORDINATOR

**Note:** The document submitted by Ian Naisbitt, Chair of the Little River Enhancement Group (Lil' Reg) regarding Phase 3: Swamp Wetland Restoration Project – YQG – attached.

Windsor Essex County Environment Committee  
Report No. 78

March 19, 2014

| NOTIFICATION:                                      |  |
|--|--|
| NAME   | CONTACT INFORMATION  |
| WECEC Committee including resource personnel       | on file  |
| Ian Naisbitt, Chair Little River Enhancement Group | <a href="mailto:inaisbitt@sympatico.ca">inaisbitt@sympatico.ca</a> |
| Caroline Biribauer, Outreach Coordinator, ERCA     | <a href="mailto:cbiribauer@erca.org">cbiribauer@erca.org</a>       |
| Kathryn Arthur, Management Biologist, ERCA         | <a href="mailto:karthur@erca.org">karthur@erca.org</a>             |

Lil' Reg Delegation to WECEC January 9, 2014

Lou Romano Water Reclamation Plant

4155 Ojibway Parkway @ 5:30 p.m.

Introduction:

Ian Naisbitt, Chair of the Little River Enhancement Group (Lil' Reg). Our community volunteers have participated in a variety of events that have helped to improve the ecosystem health of the Little River Watershed.

Our community partnership for this project includes:

City of Windsor;  
David Suzuki Public Elementary School;  
Detroit River Canadian Cleanup;  
Essex County Nature;  
Essex Region Conservation Authority (ERCA);  
Unifor Local 200 Environment Committee;  
Windsor International Airport (YQG).

History:

Since 1989, we have participated in 35 river cleanup events. Unfortunately, these cleanups have become annual events for our community partnership. Since 1990, our group has participated in 82 planting events with over 29 000 trees and shrubs in the ground. In 1991, our group "adopted" the Little River Watershed, which drains portions of the City of Windsor and County of Essex. The Windsor International Airport is in the Little River Watershed. Specifically, we have a keen interest in the three Provincially Significant Wetlands (PSWs) on the airport property. We refer to these as the Windsor Airport Swamps as does the ON Ministry of Natural Resources (OMNR).

**Phase 1:** trees and shrubs were planting on airport property on Earth Day 1997;  
**Phase 2:** the process of connecting the 3 swamps began last year (June 4).

**Phase 3: Swamp Wetland Restoration Project – YQG**

PROJECT OUTLINE

**Goals:**

1. Continue ecological connection of fragmented Provincially Significant Wetland Swamps at Windsor International Airport;

2. Develop and test a green infrastructure concept for stormwater water retention utilizing a continuous tree and shrub covered swamp while mitigating for wildlife attraction from large waterfowl and gull species.

**Project Elements:**

1. Identify boundaries for the next phase of planting (approximately 2 to 3 hectares/ 5 to 7.5 acres);
2. Engineer earthworks to create vernal pools within the next phase of planting, with the pools linking to drainage for first 3-4 years until vegetation becomes established;
3. Undertake earthworks to create vernal pools and temporary water relief;
4. Develop a species list of hydrophilic Carolinian zone trees and shrubs;
5. Plant species, both upland and wetland to the site as the water characteristics dictate;
6. Monitor the site for wildlife attraction and planting success.

**Relevant items:**

- 1) the existing PSWs are swamp wetlands (OMNR 2008) and this restoration project will undertake to mimic those characteristics;
- 2) the environmental community has a need to connect the PSW swamps for their continued health and ecological diversity and we have a commitment from the Mayor of Windsor, Windsor Airport and City Administration to do so (December 2012);
- 3) the Windsor Airport has a need to look at stormwater retention features for continued development without attracting hazardous wildlife species like geese, gulls and swans;
- 4) this green infrastructure concept will not actually be required to deal with stormwater other than prove the effectiveness of the restoration concept and wildlife mitigation;
- 5) the restoration project will be funded by sources other than the City of Windsor and Windsor Airport (I can confirm that ERCA will fund all excavation and planting works required for this project);
- 6) our target date is this Spring (April or May); due to the fact ERCA needs to order the plant stock in March, so we hope this timeline can be met.

Lil' Reg is requesting that the Windsor Essex County Environment Committee endorse our project and recommend to City Council and the Windsor Airport Board of Directors to allow the restoration project to continue on airport property.

Respectfully submitted,

Ian Naisbitt/ Chair  
Little River Enhancement Group



# THE CORPORATION OF THE CITY OF WINDSOR

CITY OF WINDSOR  
COUNCIL SERVICES

JUL 24 2014

**RECEIVED**

## Memo

**To:** Mayor and Members of Council  
**From:** Averil Parent, Environment & Sustainability Coordinator  
**Date:** July 17<sup>th</sup> 2014  
**Subject:** Re. Report No. 198 of the Environment, Transportation & Public Safety Standing Committee:  
Request for continued restoration (tree planting) on airport lands

The Essex Region Conservation Authority (ERCA) and the Little River Enhancement (Lil' Reg) group have proposed Phase 3 of a habitat restoration project at the Windsor International Airport (YQG). The goal of this project is to restore habitat in an agricultural field at YQG and continue to ecologically connect two existing woodlots.

Previous ERCA and Lil' Reg restoration efforts in 1997 (phase 1) as well as in 2013 and the spring of 2014 (phase 2) to plant trees and shrubs to connect two airport woodlots received council approval, have been completed and were successful.

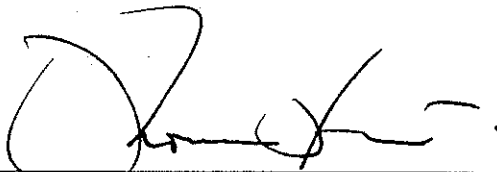
The proposed site for the phase 3 restoration is adjacent to the phase 2 planting area which was completed in the spring of 2013 and 2014.

A meeting was held on June 11<sup>th</sup> with administration, YQG, ERCA and Lil' Reg representatives to discuss the implications of the project on future development at the Airport. All parties were in agreement that the restoration project should go forward.

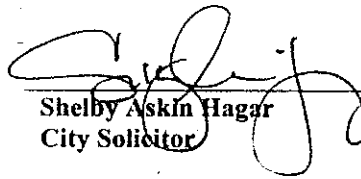
Upon further consideration, YQG will not provide consent for the project to occur at this time. Therefore city administration is no longer proceeding to gain approval for the project. Administration now recommends to note and file Report No. 198 of the Environment, Transportation & Public Safety Standing Committee.

Averil Parent  
Environment & Sustainability Coordinator

Mario Sonogo  
City Engineer and Corporate Leader Environmental  
Protection and Transportation



**Thom Hunt**  
City Planner



**Shelby Askin Hagar**  
City Solicitor



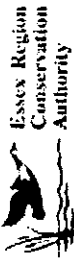
**Helga Reidel**  
Chief Administrative Officer

AP

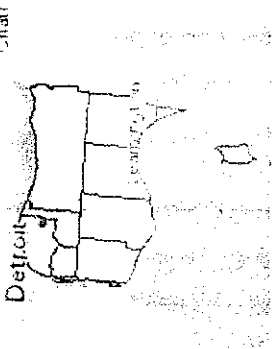
**APPENDICES:**

- Appendix A – Project area mapping
- Appendix B – Project proposal from ERCA





# Figure 1: Windsor Airport - Habitat Restoration Project Plan



- Legend**
- ERCA Boundary
  - Regional Assessment (ARN)
  - Provincially Significant Wetland
  - Limit of Regulated Area
  - Municipal Drains

0 48.80 97.6 Meters

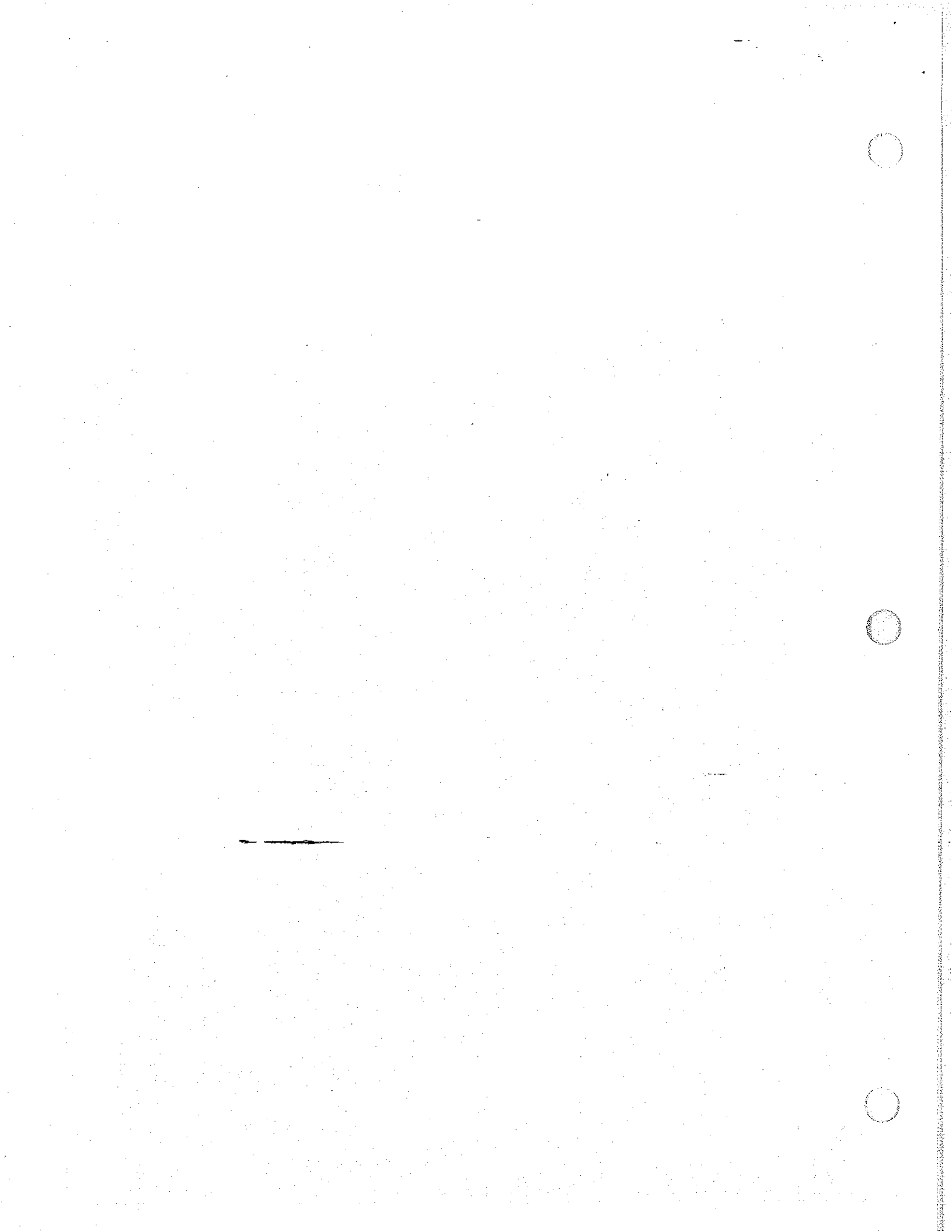
1: 2,928

7/2/2014

**Notes**

THIS MAP IS NOT TO BE USED FOR NAVIGATION  
 Copyright the Essex Region Conservation Authority, 2014. Data herein is provided by ERCA on an 'as is' basis. Assessment parcel provided by Teramet Enterprises Inc. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Project Plan created by K. Arthur (June 2014).



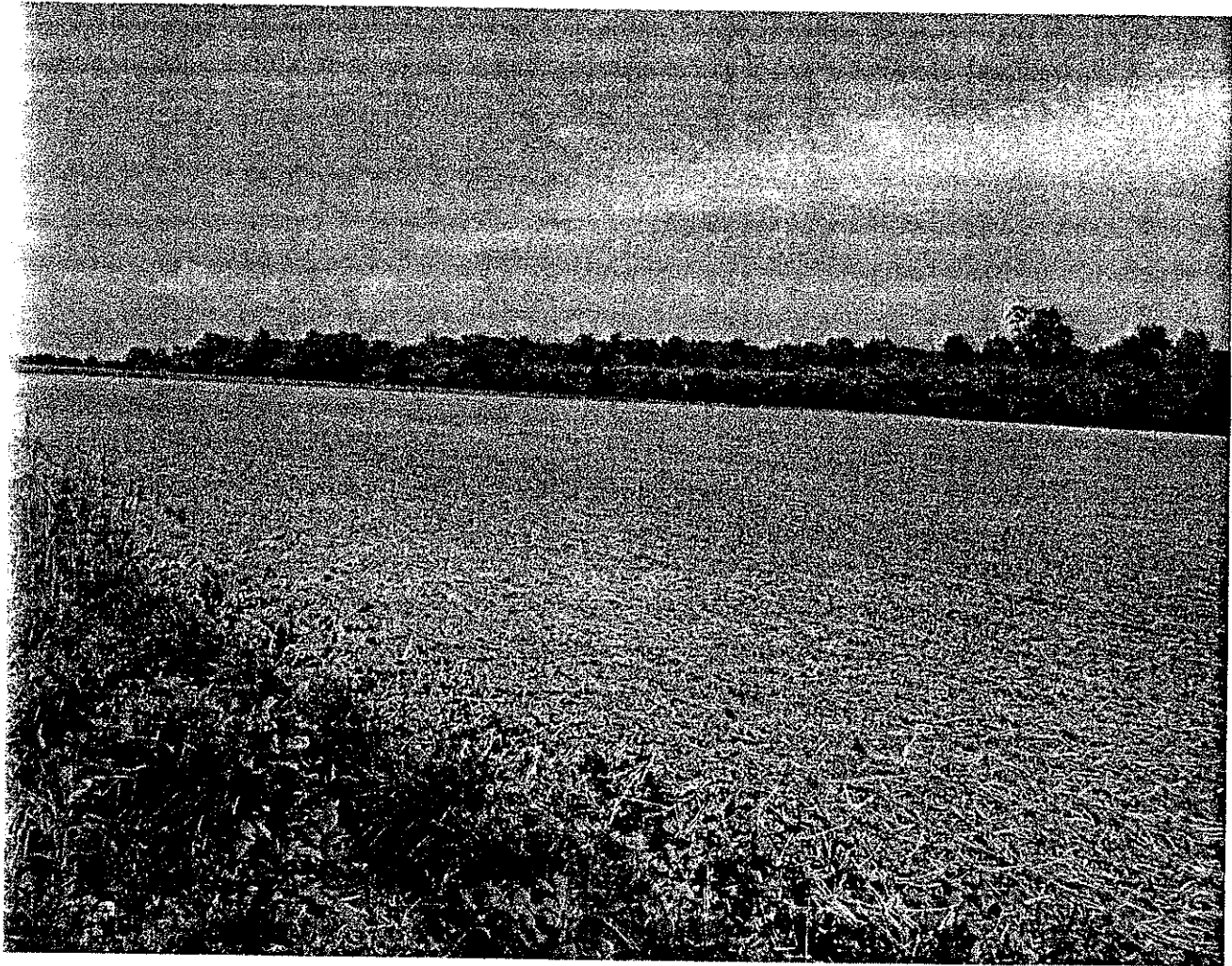
Appendix B.



Essex Region  
Conservation  
Authority



## Windsor Airport Swamps (Phase 3) – Fall 2014/Spring 2015 Habitat Restoration Project Proposal



Report Prepared by: Kathryn Arthur, ERCA Biologist (June 12, 2014)

## Project Goal

The goal of this project is to restore habitat in an agricultural field at the Windsor International Airport and continue to ecologically connect two existing, fragmented swamps which are designated as Provincially Significant Wetlands (PSW), by the Ontario Ministry of Natural Resources (OMNR 2008).

The restored and created habitats will include Carolinian swamp forest and native meadow habitat (which will expand upon an existing open, grassland area). Please refer to attached project plan (Figure 1).

## Background

Phase 1 of this project began in 1997 when native trees and shrubs were planted along the Little River on airport property by the Little River Enhancement Group (LREG).

LREG was instrumental in advocating for Phase 2 of the project which was completed in the spring of 2013. Phase 2 involved machine and hand planting of 7.5 acres with approximately 5000 native trees and shrubs, as well as seeding and planting of native wildflowers and grasses. Survival monitoring completed by ERCA in fall 2013 indicated 88% seedling survival.

Phase 2 also involved a community planting event in partnership with students from David Suzuki Public School and the LREG.

This was accomplished in partnership with the Essex Region Conservation Authority (ERCA) and various partners including Environment Canada, Trees Ontario, Essex County Nature, City of Windsor/Windsor Airport and Detroit River Canadian Cleanup (DRCC).

The decision to approve planting in this area by the City of Windsor was significant in that it accomplished the linkage of two existing swamp forest features on airport property.

It is hoped that Phase 3 of the project described in this report will continue to build on these ongoing habitat restoration efforts in fall 2014 and spring 2015.

LREG submitted a delegation to the Windsor Essex County Environment Committee (WECEC) on January 9, 2014 and the project concept was endorsed by the committee. Minutes from the January 9 WECEC meeting includes the motion that WECEC endorsed and the motion is worded as follows: "That City Council and the YQG Board of Directors **BE REQUESTED** to endorse Phase 3 (Swamp Wetland Restoration Project on the YQG Airport lands) submitted by the Little River Enhancement Group."

This proposal supports the restoration concept put forward by LREG and outlines ERCA's commitment and role in implementing and providing funding for the habitat restoration elements of the Phase 3 project.

### Site Description (Location, Soils, Topography, and Existing Features)

The proposed habitat restoration project area for Phase 3 is located at the Windsor International Airport property, 3200 County Road 42, adjacent to the Phase 2 planting area from spring 2013.

The area for Phase 3 is approximately 7.5 acres (3 ha) of agricultural field. Soils are classified as Brookston Clay across the entire project site, which is nearly level with poor natural drainage. Currently, the field is tile drained for agricultural purposes.

This project will further connect the two existing, fragmented PSW swamp forests which are located adjacent to (on the east and west sides), the Phase 2 and 3 habitat restoration areas.

### Proposed Habitat Features to be Restored, Methodology and Timelines

#### Swamp Forest Restoration

Following site preparation work in fall 2014, a total of 6.5 acres (2.6 ha) will be planted with approximately 6000 native trees and shrubs in April/May 2015, through a combination of machine and hand planting by ERCA. The area will also be seeded with native vegetation after planting work is completed in spring 2015. As was the case with the machine planting completed in Phase 2 during spring 2013, the species selected will include native species found within the existing swamps and that are appropriate for the soils and moisture regimes occurring at the site.

The following is a list of some native tree and shrub species which occur in the airport swamps and as such are suitable for the restoration project:

| Common Name           | Scientific Name             |
|-----------------------|-----------------------------|
| Freeman's/Swamp Maple | <i>Acer x freemanii</i>     |
| Silver Maple          | <i>Acer saccharinum</i>     |
| Bitternut Hickory     | <i>Carya cordiformis</i>    |
| Shagbark Hickory      | <i>Carya ovata</i>          |
| Silky Dogwood         | <i>Cornus amomum</i>        |
| Red Cedar             | <i>Juniperus virginiana</i> |
| Eastern Cottonwood    | <i>Populus deltoides</i>    |
| Choke Cherry          | <i>Prunus virginiana</i>    |
| Swamp White Oak       | <i>Quercus bicolor</i>      |
| Burr Oak              | <i>Quercus macrocarpa</i>   |
| Pin Oak               | <i>Quercus palustris</i>    |

|                     |                            |
|---------------------|----------------------------|
| Shumard Oak         | <i>Quercus shumardii</i>   |
| Peach-leaved Willow | <i>Salix Amygaloides</i>   |
| Black Elderberry    | <i>Sambucus canadensis</i> |
| American Elm        | <i>Ulmus americana</i>     |

Note: The above species are listed in the Windsor Candidate Natural Heritage Site #39 – Airport Woodlands Inventory and the Ontario Ministry of Natural Resources Wetland Evaluation ER 23 – Windsor Airport Swamps.

#### Grassland Habitat Creation

Approximately 1 acre (0.4 ha) of native grassland/meadow habitat will be created adjacent to the existing grassland habitat, which is being maintained through periodic mowing on the site (see Fig. 1). This area will be seeded with a diverse, native seed mix of tallgrass prairie/mesic meadow species in late spring 2015.

The following is a list of suitable, potential species to be used in a native seed mix for establishing the prairie/meadow habitat area:

| <b>Common Name</b>     | <b>Scientific Name</b>         |
|------------------------|--------------------------------|
| Swamp Milkweed         | <i>Asclepias incarnata</i>     |
| Heath Aster*           | <i>Aster ericoides</i>         |
| New England Aster*     | <i>Aster novae-angliae</i>     |
| Hairy Aster*           | <i>Aster pilosus</i>           |
| Showy-tick Trefoil     | <i>Desmodium canadense</i>     |
| Virginia Wild Rye*     | <i>Elymus virginicus</i>       |
| Joe-pye Weed           | <i>Eupatorium maculatum</i>    |
| Boneset*               | <i>Eupatorium perfoliatum</i>  |
| Sweet Ox-eye           | <i>Heliopsis helianthoides</i> |
| Great Blue Lobelia*    | <i>Lobelia siphilitica</i>     |
| Wild Bergamot          | <i>Monarda fistulosa</i>       |
| Evening Primrose*      | <i>Oenothera biennis</i>       |
| Foxglove Beardtongue   | <i>Penstemon digitalis</i>     |
| Grey-headed Coneflower | <i>Ratibida pinnata</i>        |

|  |  |
|--|--|
| Brown-eyed Susan   | <i>Rudbeckia hirta</i>   |
| Grass-leaved Goldenrod*                                      | <i>Solidago graminifolia</i>   |
| Tall Ironweed*   | <i>Veronia gigantea</i>  |
| Prairie Grass Mix – Big Bluestem, Indian Grass, Switch Grass | <i>Andropogon gerardii</i> ,<br><i>Sorghastrum nutans</i> ,<br><i>Panicum virgatum</i> |

\*Species listed in City of Windsor Update to the Candidate Natural Heritage Inventory - Site #39 Airport Woodlands Report

## Maintenance and Monitoring

### Tree Seedlings

Maintenance activities will continue to be done collaboratively with the Airport Operations crew and ERCA through mowing and spraying, respectively. As part of ERCA's warranty program, the tree seedling rows are sprayed with a pre-emergent herbicide each spring during the first two growing seasons. This helps to reduce weedy competition around the seedlings until the seedlings reach a "free-to-grow" status (approximately 3-5 years post-planting), at which point mowing between the tree rows should also cease.

ERCA's monitoring portion of the warranty program focuses on the survival of woody stems in tree planting sites, with a minimum goal of 70% survival.

ERCA's Restoration Biologist will continue to monitor these sites in the fall of 2014, 2015 and 2016 and if woody stem survival is below 70%, ERCA will re-enter the site in spring 2015, 2016 and 2017 to replant as necessary.

There are also general, qualitative observations recorded along with photo documentation with respect to establishment of native, herbaceous groundcover, invasive species and any wildlife observed in the restored habitat.

### Grassland Habitat

Grassland habitat should be maintained through periodic disturbance such as burning or mowing to inhibit the growth of woody species in the area. The airport is already maintaining adjacent, existing grassland/meadow habitat through periodic mowing and the additional 1 acre area to be planted in spring 2015 can be maintained in the same manner.

## Project Cost & Funding

The entire project including contractor costs, native plant materials (6000 tree seedlings and native seed), seeding, tree planting and warranty cash costs are estimated to be approximately \$28,000 and will be 100% funded by ERCA and our funding partners.

## References

Essex Region Conservation Authority. July 2008. City of Windsor Update to the Candidate Natural Heritage Inventory. Site Report #39 – Airport Woodlands (Pgs. 114-123).

Ontario Ministry of Natural Resources, Aylmer District. October 2008. Wetland Evaluation Report ER 23 – Windsor Airport Swamps.