

APPENDIX A ACRONYMS AND DEFINITIONS USED IN SPECIES LISTS

Species Status

COSEWIC	Committee On The Status Of Endangered Wildlife In Canada
The Committee on the Statu	is of Endangered Wildlife in Canada (COSEWIC) assesses the national status of wild species that
are considered to be at risk i	n Canada.

Extinct (X)	A wildlife species that no longer exists.
Extirpated (XT)	A wildlife species no longer existing in the wild in Canada, but occurring elsewhere.
Endangered (E)	A wildlife species facing imminent extirpation or extinction.
Threatened (T)	A wildlife species likely to become endangered if limiting factors are not reversed.
Special Concern (SC)	A wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats.
Not at Risk (NAR)	A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances.
Data Deficient (DD)	A category that applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction.

COSSARO/OMNR Committee On The Status Of Species At Risk In Ontario/Ontario Ministry Of Natural Resources

The Committee on the Status of Species at Risk in Ontario (COSSARO)/Ontario Ministry of Natural Resources (OMNR) assesses the provincial status of wild species that are considered to be at risk in Ontario.

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Extinct (EXT)	A species that no longer exists anywhere.
Extirpated (EXP)	A species that no longer exists in the wild in Ontario but still occurs elsewhere.
Endangered (Regulated) (END-R)	A species facing imminent extinction or extirpation in Ontario which has be regulated under Ontario's <i>Endangered Species Act</i> .
Endangered (END)	A species facing imminent extinction or extirpation in Ontario which is a candidate for regulation under Ontario's <i>Endangered Species Act</i> .
Threatened (THR)	A species that is at risk of becoming endangered in Ontario if limiting factors are not reversed.
Special Concern (SC)	A species with characteristics that make it sensitive to human activities or natural events.
Not at Risk (NAR)	A species that has been evaluated and found to be not at risk.
Data Deficient (DD)	A species for which there is insufficient information for a provincial status recommendation.

Species Rank

GRANK Global Rank

Global ranks are assigned by a consensus of the network of Conservation Data Centres, scientific experts, and The Nature Conservatory to designate a rarity rank based on the range-wide status of a species, subspecies or variety.

The most important factors considered in assigning global ranks are the total number of known, extant sites world-wide, and the degree to which they are potentially or actively threatened with destruction. Other criteria include the number of known populations considered to be securely protected, the size of the various populations, and the ability of the taxon to persist at its known sites. The taxonomic distinctness of each taxon has also been considered. Hybrids, introduced species, and taxonomically dubious species, subspecies and varieties have not been included.

- G1 **Extremely rare**; usually 5 or fewer occurrences in the overall range or very few remaining individuals; or because of some factor(s) making it especially vulnerable to extinction.
- G2 Very rare; usually between 5 and 20 occurrences in the overall range or with many individuals in fewer occurrences; or because of some factor(s) making it vulnerable to extinction.
- G3 Rare to uncommon; usually between 20 and 100 occurrences; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances.
- G4 Common; usually more than 100 occurrences; usually not susceptible to immediate threats.
- G5 Very common; demonstrably secure under present conditions.
- GH Historic, no records in the past 20 years.
- GU Status uncertain, often because of low search effort or cryptic nature of the species; more data needed.
- GX Globally extinct. No recent records despite specific searches.
- ? Denotes inexact numeric rank (i.e. G4?).
- G A "G" (or "T") followed by a blank space means that the NHIC has not yet obtained the Global Rank from The Nature Conservancy.
- G? Unranked, or, if following a ranking, rank tentatively assigned (e.g. G3?).
- Q Denotes that the taxonomic status of the species, subspecies, or variety is questionable.
- T Denotes that the rank applies to a subspecies or variety.

SRANK Provincial Rank

Provincial (or Sub-national) ranks are used by the Ontario Ministry of Natural Resources Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. These ranks are not legal designations. Provincial ranks are assigned in a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario. By comparing the global and provincial ranks, the status, rarity, and the urgency of conservation needs can be ascertained. The NHIC evaluates provincial ranks on a continual basis and produces updated lists at least annually.

- S1 **Critically imperiled** in Ontario because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation.
- S2 **Imperiled** in Ontario because of rarity due to very restricted range, very few populations (often 20 or fewer occurrences) steep declines or other factors making it very vulnerable to extirpation.
- S3 **Vulnerable** in Ontario due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
- S4 Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5 Secure—Common, widespread, and abundant in Ontario.
- SX Presumed Extirpated Species or community is believed to be extirpated from Ontario.
- SH **Possibly Extirpated** Species or community occurred historically in Ontario and there is some possibility that it may be rediscovered.
- SNR Unranked—Conservation status in Ontario not yet assessed
- SU **Unrankable**—Currently unrankable due to lack of information or due to substantially conflicting information about status or trends.
- SNA **Not Applicable** —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.
- S#S# **Range Rank** —A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4).

Species Regulated by Statute

SARA Species at Risk Act

The Canada *Species at Risk Act* provides a framework for actions across Canada to ensure the survival of wildlife species and the protection of our natural heritage. It sets out how to decide which species are a priority for action and what to do to protect a species. It identifies ways governments, organizations and individuals can work together, and it establishes penalties for a failure to obey the law. Regulated species are listed in Schedules 1, 2 and 3 of the Act.

Schedule 1 SARA (1)	Species that are currently covered under the Act.
Schedule 2 SARA (2)	Species that are endangered or threatened that have not been re-assessed by COSEWIC for inclusion on Schedule 1.
Schedule 3 SARA (3)	Species that are of special concern that have not yet been re-assessed by COSEWIC for inclusion on Schedule 1.

OESA Endangered Species Act

The new Ontario *Endangered Species Act* (2007) will provide for the conservation, protection, restoration and propagation of fauna and flora of the Province of Ontario that are threatened with extinction, extirpated, endangered, threatened or of special concern. Regulated species are listed in Schedules 1, 2, 3, 4 and 5 of the Act.

Schedule 1 Species declared to the threatened with Extinction in Regulation 328 fo the revised regulations of Ontario, 1990.

Schedule 2 OESA (2)	Species to be listed as Extirpated species.
Schedule 3 OESA (3)	Species to be listed as Endangered species.
Schedule 4 OESA (4)	Species to be listed as Threatened species.
Schedule 5 OESA (5)	Species to be listed as Special Concern species.

FWCA Fish and Wildlife Conservation Act

The Ontario *Fish and Wildlife Conservation Act* enables the Ministry of Natural Resources to protect and manage a broad range of fish and wildlife species. Regulated fish and wildlife are listed as furbearing (F), game (G) or protected (P) in schedules to the Act.

FWCA (F) Furbearing mammals (Schedule 1).

FWCA (G) Game mammals (Schedule 2), birds (Schedule 3), reptiles (Schedule 4) and amphibians (Schedule 5)

FWCA (SP) Specially protected mammals (Schedule 6), birds (raptors) (Schedule 7), birds (other than raptors) (Schedule 8), reptiles (Schedule 9), amphibians (Schedule 10) and invertebrates (Schedule 11).

MBCA Migratory Birds Convention Act

The Canada *Migratory Birds Convention Act* implements the Convention by protecting and conserving migratory birds — as populations and individual birds — and their nests. Article 1 identifies the migratory game birds, migratory insectivorous birds and other migratory non-game birds regulated by the Act.

FA Fisheries Act

The Canada *Fisheries Act* enables the Department of Fisheries and Oceans to protect and manage fish and fish habitat. Fish includes: parts of fish; shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals; and, the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals.

PA Planning Act

The Ontario *Planning Act* legislates land use planning and development within the province. The *Provincial Policy Statement* is issued under the authority of Section 3 of the *Planning Act*. It provides direction on matters of provincial interest related to land use planning and development, and promotes the provincial "policy-led" planning system. The PPS enables the Province to protect significant natural heritage features and areas including the significant habitat of endangered and threatened species.

APPENDIX B

APPENDIX B
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	EQUISETACEAE	HORSETAIL FAMILY						
	Equisetum arvense	field horsetail			G5	S5	С	
	<i>Equisetum hyemale</i> ssp. <i>affine</i>	scouring-rush			G5T5	S5	С	
	Equisetum laevigatum	smooth scouring-rush			G5	S4	VU	
	Equisetum pratense	meadow horsetail			G5	S5	?	
I	Equisetum variegatum ssp. variegatum	variegated horsetail			G5T	S5	R2	
(OPHIOGLOSSACEAE	ADDER'S TONGUE FAMILY						
	Botrychium dissectum	cut-leaved grape fern			G5	S5	С	
	OSMUNDACEAE	ROYAL FERN FAMILY						
-	Osmunda claytoniana	interrupted fern			G5	S5	U	
	<i>Osmunda regalis</i> var. <i>spectabilis</i>	royal fern			G5T5	S5	U	
	DENNSTAEDTIACEAE	BRACKEN FERN FAMILY						
	Pteridium aquilinum var. latiusculum	eastern bracken-fern			G5T5	S5	U	
1	THELYPTERIDACEAE	MARSH FERN						
	Thelypteris noveboracensis	New York fern			G5	S4S 5	R5	
ŀ	Thelypteris palustris var. pubescens DRYOPTERIDACEAE	marsh fern WOOD FERN FAMILY			G5T5	S5	С	
/	Athyrium filix-femina var. angustum	northern lady fern			G5T5	S5	С	
	Dryopteris carthusiana	spinulose wood fern			G5	S5	С	
1	Matteuccia struthiopteris var. pensylvanica	ostrich fern			G5T5	S5	R3	
	Onoclea sensibilis	sensitive fern			G5	S5	С	
	PINACEAE	PINE FAMILY						
	Picea abies	Norway spruce			G?	SE3	?	
	Picea glauca	white spruce			G5	S5	?	
	Picea pungens	Colorado spruce			G5	SE1	?	
* /	Pinus nigra	Austrian pine			G?	SE2	?	
/	Pinus strobus	eastern white pine			G5	S5	R1	
* /	Pinus sylvestris	scotch pine			G?	SE5	?	
	CUPRESSACEAE	CEDAR FAMILY						
	Juniperus communis	common juniper			G5	S5	R4	
	Juniperus virginiana	eastern red cedar			G5	S5	С	
	Thuja occidentalis	eastern white cedar			G5	S5	?	
1	TAXACEAE	YEW FAMILY						

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*	Taxus cuspidata	Japanese yew				SE	?	
	MAGNOLIACEAE	MAGNOLIA FAMILY						
*	Magnolia soulangeana	saucer magnolia				SE	?	
	LAURACEAE	LAUREL FAMILY						
	Sassafras albidum	sassafras			G5	S4	С	
	RANUNCULACEAE	BUTTERCUP FAMILY						
	Actaea pachypoda	white baneberry			G5	S5	С	
	Anemone americana	round-lobed hepatica			G?	S5	R5	
	Anemone canadensis	Canada anemone			G5	S5	С	
	Anemone cylindrica	thimbleweed			G5	S4	VU	
	Anemone quinquefolia var. quinquefolia	wood anemone			G5	S5	С	
	Anemone virginiana var. virginiana	thimbleweed			G5T5	S5	С	
	Aquilegia canadensis	wild columbine			G5	S5	С	
	Ranunculus abortivus	kidney-leaf buttercup			G5	S5	С	
*	Ranunculus acris	tall buttercup			G5	SE5	lvu	
	Ranunculus hispidus var. caricetorum	swamp buttercup			G5T5	S5	С	
	Ranunculus recurvatus var. recurvatus	hooked buttercup			G5	S5	VU	
	Ranunculus sceleratus var. sceleratus	cursed buttercup			G5T5	SU	С	
	Thalictrum dasycarpum	purple meadow-rue			G5	S4?	С	
	Thalictrum dioicum	early meadow-rue			G5	S5	С	
	Thalictrum pubescens	tall meadow-rue			G5	S5	?	
	Thalictrum revolutum	waxy meadow-rue			G5	S2	R2	
	BERBERIDACEAE	BARBERRY FAMILY						
*	Berberis thunbergii	Japanese barberry			G?	SE5	lu	
*	Berberis vulgaris	common barberry			G?	SE5	?	
	Podophyllum peltatum	may-apple			G5	S5	С	
	MENISPERMACEAE	MOONSEED FAMILY						
	Menispermum canadense	moonseed			G5	S4	С	
	PAPAVERACEAE	POPPY FAMILY						
*	Chelidonium majus	celandine			G?	SE5	lr	
	PLATANACEAE	PLANE-TREE FAMILY						
	Platanus occidentalis	sycamore			G5	S4	С	
	HAMAMELIDACEAE	WITCH-HAZEL FAMILY						
	Hamamelis virginiana	witch-hazel			G5	S5	С	
	ULMACEAE	ELM FAMILY						

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Celtis occidentalis	common hackberry			G5	S4	С	
	Ulmus americana	white elm			G5?	S5	С	
*	Ulmus glabra	Scotch elm			G?	SE1	?	
*	Ulmus pumila	Siberian elm			G?	SE3	lvu	
	Ulmus rubra	slippery elm			G5	S5	С	
	MORACEAE	MULBERRY FAMILY						
*	Morus alba	white mulberry			G?	SE5	Ic	
	URTICACEAE	NETTLE FAMILY						
	Boehmeria cylindrica	false nettle			G5	S5	С	
	Pilea pumila	dwarf clearweed			G5	S5	С	
*	Urtica dioica ssp. dioica	European stinging nettle			G5T?	SE2	?	
	JUGLANDACEAE	WALNUT FAMILY						
	Carya cordiformis	bitternut hickory			G5	S5	С	
	Carya glabra	pignut hickory			G5	S3	VU	
	Carya laciniosa	big shellbark hickory			G5	S3	С	
	Carya ovata var. ovata	shagbark hickory			G5	S5	С	
	Juglans cinerea	butternut	END	END	G3G4	S3?	С	SARA (1), OESA (3), PA
	Juglans nigra	black walnut			G5	S4	С	17
*	Juglans regia	English walnut			G?	SE1	?	
	FAGACEAE	BEECH FAMILY						
	Quercus alba	white oak			G5	S5	С	
	Quercus bicolor	swamp white oak			G5	S4	C	
	Quercus macrocarpa	bur oak			G5	S5	C	
	Quercus palustris	pin oak			G5	S3	C	
<u> </u>	Quercus rubra	red oak			G5	S5	C	
	Quercus shumardii	shumard oak	SC	SC	G5	S3	U	SARA (3), OESA (5)
	Quercus velutina	black oak			G5	S4	С	X-7
	BETULACEAE	BIRCH FAMILY						
	Betula papyrifera	white birch			G5	S5	lr	
*	Betula pendula	European weeping birch			G?	SE4	?	
	Carpinus caroliniana ssp. virginiana	blue beech			G5T	S5	С	
	Corylus americana	American hazel			G5	S5	С	
	Corylus cornuta ssp. cornuta	beaked hazel			G5T	S5	?	
	Ostrya virginiana	ironwood			G5	S5	С	
	PHYTOLACCACEAE	POKEWEED FAMILY						
	Phytolacca americana	pokeweed			G5	S4	С	

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	NYCTAGINACEAE	FOUR-O-CLOCK FAMILY						
	Mirabilis nyctaginea	wild four-o'clock			G5	S4	lc	
	CHENOPODIACEAE	GOOSEFOOT FAMILY						
*	<i>Chenopodium album</i> var. <i>album</i>	lamb's quarters			G5T5	SE5	lc	
*	Salsola kali	Russian thistle			G?	SE1	Ic	
	Suaeda calceoliformis	western seablite			G5	S2	?	
	CARYOPHYLLACEAE	PINK FAMILY						
*	Cerastium semidecandrum	small chickweed			G?	SE5	lr	
*	Dianthus armeria	deptford pink			G?	SE5	lc	
*	Lychnis coronaria	mullein pink			G?	SE3	?	
*	Saponaria officinalis	bouncing-bet			G?	SE5	lc	
*	Silene latifolia	bladder campion			G?	SE5	lu	
*	Stellaria media	common chickweed			G?	SE5	lc	
	POLYGONACEAE	SMARTWEED FAMILY						
*	Polygonum convolvulus	black bindweed			G?	SE5	lc	
*	Polygonum cuspidatum	Japanese knotweed			G?	SE4	lr	
*	Polygonum hydropiper	water-pepper			G5	SE5	С	
	Polygonum lapathifolium	pale smartweed			G5	S5	С	
	Polygonum pensylvanicum	Pennsylvania smartweed			G5	S5	С	
*	Polygonum persicaria	lady's-thumb			G?	SE5	lc	
	Polygonum punctatum	water smartweed			G5	S5	С	
	Polygonum virginianum	Virginia knotweed			G5	S4	С	
*	<i>Rumex acetosella</i> ssp. <i>acetosella</i>	sheep sorrel			G5T	SE	lc	
*	Rumex crispus	curly-leaf dock			G?	SE5	lc	
	GUTTIFERAE	ST. JOHN'S-WORT FAMILY						
*	Hypericum perforatum	common St. John's-wort			G?	SE5	lc	
	Hypericum punctatum	corymbed St. John's-wort			G5	S5	С	
	TILIACEAE	LINDEN FAMILY						
	Tilia americana	American basswood			G5	S5	С	
	MALVACEAE	MALLOW FAMILY						
*	Abutilon theophrasti	velvet-leaf			G?	SE5	lc	
*	Hibiscus syriacus	Rose-of-Shraon					lr	
*	Hibiscus trionum	flower-of-an-hour			G?	SE4	lu	
*	Malva neglecta	cheeses			G?	SE5	lr	
	VIOLACEAE	VIOLET FAMILY						
	Viola blanda	sweet white violet			G4G5	S4S 5	R2	
	Viola pubescens	downy yellow violet			G5	S5	С	

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Viola sagittata var. sagittata	arrow-leaved violet			G5T5	S4	R4	
Viola sororia	woolly blue violet			G5	S5	С	
SALICACEAE	WILLOW FAMILY						
* Populus alba	silver poplar			G5	SE5	lr	
Populus balsamifera ssp. balsamifera	balsam poplar			G5T5	S5	R2	
Populus deltoides ssp. deltoides	eastern cottonwood			G5T5	SU	С	
Populus grandidentata	large-tooth aspen			G5	S5	U	
Populus tremuloides	trembling aspen			G5	S5	С	
* Salix alba	white willow			G5	SE4	lr	
Salix amygdaloides	peach-leaved willow			G5	S5	С	
Salix bebbiana	long-beaked willow			G5	S5	VU	
Salix discolor	pussy willow			G5	S5	С	
Salix eriocephala	Missouri willow			G5	S5	С	
Salix exigua	sandbar willow			G5	S5	С	
Salix humilis	prairie willow			G5	S5	R4	
Salix lucida	shining willow			G5	S5	R1	
* Salix matsudana	corkscrew willow					lr	
Salix nigra	black willow			G5	S4?	U	
Salix petiolaris	slender willow			G5	S5	R1	
* Salix X rubens	hybrid crack willow			HYB	SE4	lr	
* Salix X sepulcralis	weeping willow			HYB	SE2	?	
BRASSICACEAE	MUSTARD FAMILY						
* Alliaria petiolata	garlic mustard			G5	SE5	lc	
* Barbarea vulgaris	yellow rocket			G?	SE5	lc	
* Berteroa incana	hoary alyssum			G?	SE5	lu	
* Brassica nigra	black mustard			G?	SE5	?	
* Capsella bursa-pastoris	shepherd's purse			G?	SE5	lc	
Cardamine douglassii	purple cress			G5	S4	С	
* Erysimum cheiranthoides ssp. cheiranthoides	wormseed mustard				SE5	lc	
* Hesperis matronalis	dame's rocket			G4G5	SE5	lu	
* Lepidium campestre	field cress			G?	SE5	lc	
* Rorippa sylvestris	creeping yellow-cress			G5	SE5	lvu	
* Sisymbrium altissimum	tall tumble-mustard			G?	SE5	lvu	
* Thlaspi arvense	field penny-cress			G?	SE5	Ic	
ERICACEAE	HEATH FAMILY						
Vaccinium pallidum	pale blueberry			G5	S4	С	

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Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
PYROLACEAE	WINTERGREEN FAMILY						
Pyrola elliptica	shinleaf			G5	S5	R3	
PRIMULACEAE	PRIMROSE FAMILY						
Lysimachia ciliata	fringed loosestrife			G5	S5	С	
* Lysimachia nummularia	moneywort			G?	SE5	lc	
Lysimachia quadriflora	four-flowered loosestrife			G5?	S4	R4	
Lysimachia quadrifolia	whorled loosestrife			G5	S4	R4	
GROSSULARIACEAE	GOOSEBERRY FAMILY						
Ribes americanum	wild black currant			G5	S5	С	
Ribes cynosbati	prickly gooseberry			G5	S5	С	
Ribes hirtellum	smooth gooseberry			G5	S5	R3	
* Ribes rubrum	red currant			G4G5	SE5	?	
SAXIFRAGACEAE	SAXIFRAGE FAMILY						
Penthorum sedoides	ditch stonecrop			G5	S5	С	
ROSACEAE	ROSE FAMILY						
Agrimonia gryposepala	tall hairy agrimony			G5	S5	С	
Agrimonia parviflora	many-flowered agrimony			G5	S3	С	
Amelanchier arborea	downy juneberry			G5	S5	U	
Amelanchier laevis	smooth juneberry			G4G5 Q	S5	VU	
Aronia melanocarpa	black chokeberry			G5	S5	U	
Crataegus crus-galli	cockspur thorn			G5	S5	С	
Crataegus mollis	downy thorn			G5	S5	R1	
* Crataegus monogyna	English hawthorn			G5	SE5	lr	
Crataegus punctata	large-fruited thorn			G5	S5	С	
<i>Fragaria virginiana</i> ssp. <i>virginiana</i>	scarlet strawberry			G5T5	SU	С	
Geum aleppicum	yellow avens			G5T5	S5	R3	
Geum canadense	white avens			G5	S5	С	
Geum vernum	spring avens			G5	S3	С	
* Malus baccata	Siberian crabapple			G?	SE1	?	
Malus coronaria	narrow-leaved crabapple			G5	S4	С	
* Malus pumila	common crabapple			G5	SE5	lr	
Physocarpus opulifolius	ninebark			G5	S5	R2	
Potentilla anserina ssp. anserina	silverweed				S5	С	
Potentilla canadensis	common cinquefoil			G5	SU	?	
Potentilla norvegica ssp. norvegica	cinquefoil			G5T?	SU	lc	
* Potentilla recta	rough-fruited cinquefoil			G?	SE5	lc	

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[1						
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Potentilla simplex	old-field cinquefoil			G5	S5	С	
* Prunus avium	sweet cherry			G?	SE4	lr	
* Prunus cerasus	sour cherry			G?	SE1	lr	
Prunus pensylvanica	pin cherry			G5	S5	R1	
Prunus serotina	black cherry			G5	S5	С	
Prunus virginiana ssp. virginiana	choke cherry			G5T5	S5	С	
* Prunus virginiana var. Schubert	Schubert Chokecherry					?	
* Pyrus communis	common pear			G5	SE4	lr	
Rosa acicularis ssp. sayi	prickly rose			G5T5	S5	?	
Rosa blanda	smooth rose			G5	S5	С	
Rosa carolina	swamp rose			G5	S4	С	
* Rosa multiflora	multiflora rose			G?	SE4	Ic	
Rosa palustris	marsh rose			G5	S5	С	
* Rosa rubiginosa	sweetbrier rose				SE4	lu	
Rosa setigera	prairie rose	SC	SC	G5	S3	С	SARA (1), OESA (5)
Rubus allegheniensis	common blackberry			G5	S5	С	
Rubus canadensis	smooth blackberry			G5	S4?	?	
Rubus flagellaris	prickly raspberry			G5	S4	С	
Rubus hispidus	trailing blackberry			G5	S4S 5	С	
Rubus idaeus ssp. melanolasius	wild red raspberry			G5T5	S5	С	
Rubus occidentalis	thimble-berry			G5	S5	С	
* Sorbaria sorbifolia	false spiraea			G5	SE4	?	
* Sorbus aucuparia	European mountain-ash			G5	SE4	lr	
Spiraea alba	narrow-leaved meadow-sweet			G5	S5	С	
* Spiraea prunifolia	bridal-wreath spiraea			G5	SE1	?	
Spiraea tomentosa	tomentose meadow-sweet			G5	S4S 5	R4	
FABACEAE	PEA FAMILY						
Amphicarpaea bracteata	hog peanut			G5	S5	С	
Apios americana	groundnut			G5	S5	С	
Baptisia tinctoria	wild indigo			G5	S2	R5	
* Caragana arborescens	Siberian pea tree			G?	SE1	?	
Cercis canadensis	Canadian redbud			G5	SX	Rh	
* Coronilla varia	variable crown-vetch			G?	SE5	lu	
Desmodium canadense	Canadian tick-trefoil			G5	S4	С	
Desmodium glutinosum	pointed-leaved tick-trefoil			G5	S4	U	

APPENDIX B
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

Scientific Name		Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Gleditsia triacanthos	honey locust	TUD	TUD	G5	S2	U	
	Gymnocladus dioicus	Kentucky coffee-tree	THR	THR	G5	S2	VU	SARA (1), OESA (4), PA
*	Lathyrus latifolius	everlasting pea			G?	SE4	lvu	
	Lathyrus ochroleucus	cream-coloured vetchling			G4G5	S4	R1	
	Lathyrus palustris	marsh vetchling			G5	S5	U	
*	Lathyrus tuberosus	tuberous vetchling			G?	SE3	lr	
	Lespedeza capitata	round-headed bush-clover			G5	S4	R3	
*	Lotus corniculatus	bird's-foot trefoil			G?	SE5	lc	
*	Medicago lupulina	black medick			G?	SE5	lc	
*	<i>Medicago sativa</i> ssp. <i>sativa</i>	alfalfa			G?T?	SE5	lvu	
*	Melilotus alba	white sweet-clover			G?	SE5	lc	
*	Melilotus officinalis	yellow sweet-clover			G?	SE5	lc	
*	Robinia pseudo-acacia	black locust			G5	SE5	lu	
*	Trifolium aureum	yellow clover			G?	SE5	lr	
*	<i>Trifolium hybridum</i> ssp. <i>elegans</i>	alsike clover				SE5	lr	
*	Trifolium pratense	red clover			G?	SE5	lu	
*	Trifolium repens	white clover			G?	SE5	lu	
*	Vicia cracca	tufted vetch			G?	SE5	lr	
	ELAEAGNACEAE	OLEASTER FAMILY						
*	Elaeagnus angustifolia	Russian olive			G?	SE3	lr	
*	Elaeagnus umbellata	Russian olive			G?	SE3	lr	
	LYTHRACEAE	LOOSESTRIFE FAMILY						
	Lythrum alatum	wing-angled loosestrife			G5	S3	С	
*	Lythrum salicaria	purple loosestrife			G5	SE5	lc	
	ONAGRACEAE	EVENING-PRIMROSE FAMILY						
	<i>Circaea lutetiana</i> ssp. <i>canadensis</i>	yellowish enchanter's nightshade			G5T5	S5	С	
	Epilobium ciliatum ssp. ciliatum	ciliate willow-herb			G5T?	S5	R1	
*	Epilobium hirsutum	great hairy willow-herb			G?	SE5	lc	
	Gaura biennis	biennial gaura			G5	S2	U	
	Ludwigia alternifolia	rattle-box			G5	S1	R3	
	Ludwigia polycarpa	many-fruited false loosestrife			G4	S2	U	
	Oenothera biennis	common evening-primrose			G5	S5	С	
	Oenothera perennis	perennial evening-primrose			G5	S4S 5	R1	
	CORNACEAE	DOGWOOD FAMILY						
	Cornus amomum ssp. obliqua	silky dogwood			G5T?	S5	С	
	Cornus drummondii	Drummond's dogwood			G5	S4	С	

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Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
Cornus foemina ssp. racemosa	gray dogwood			G5T5?	S5	С	
Cornus rugosa	round-leaved dogwood			G5	S5	?	
Cornus stolonifera	red-osier dogwood			G5	S5	С	
NYSSACEAE	SOUR GUM FAMILY						
Nyssa sylvatica	black gum			G5	S3	U	
SANTALACEAE	SANDALWOOD FAMILY					-	
Comandra umbellata	bastard toad-flax			G5	S5	С	
CELASTRACEAE	STAFF-TREE FAMILY				-		
* Celastrus orbiculatus	Oriental bittersweet			G?	SE2	?	
Celastrus scandens	climbing bittersweet			G5	S5	С	
* Euonymus alata	winged spindle tree			G?	SE2	lr	
* Euonymus europaea	spindle tree			G?	SE2	lr	
Euonymus obovata	running strawberry-bush			G5	S5	С	
EUPHORBIACEAE	SPURGE FAMILY						
Acalypha virginica var. rhomboidea	three-seeded mercury			G5T5	S5	С	
* Chamaesyce maculata	spotted spurge			G5?	SE5	lc	
Euphorbia corollata	flowering spurge			G5	S4	VU	
RHAMNACEAE	BUCKTHORN FAMILY						
* Rhamnus cathartica	common buckthorn			G?	SE5	lvu	
* Rhamnus frangula	glossy buckthorn			G?	SE5	lr	
VITACEAE	GRAPE FAMILY						
Parthenocissus inserta	inserted Virginia-creeper			G5	S5	С	
Parthenocissus quinquefolia	five-leaved Virginia-creeper			G5	S4?	С	
Vitis aestivalis	summer grape			G5	S4	U	
Vitis labrusca	fox grape			G5	S1	R1/ Ir	
Vitis riparia	riverbank grape			G5	S5	С	
POLYGALACEAE	MILKWORT FAMILY						
Polygala sanguinea	blood-red milkwort			G5	S4	R4	
Polygala verticillata	whorled milkwort			G5	S4	VU	
HIPPOCASTANACEAE	BUCKEYE FAMILY						
* Aesculus hippocastanum	horse chestnut			G?	SE2	lr	
ACERACEAE	MAPLE FAMILY						
Acer negundo	Manitoba maple			G5	S5	С	
* Acer platanoides	Norway maple			G?	SE5	lu	
Acer rubrum	red maple			G5	S5	С	
Acer saccharinum	silver maple			G5	S5	С	
Acer saccharum ssp. saccharum	sugar maple			G5T5	S5	С	

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LIST OF VASCULA	R PLANTS LOCATED IN THE AREA OF INVESTIGATION

	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
Ace	er X freemanii	freeman's maple			HYB	S5?	R?	
AN/	ACARDIACEAE	SUMAC FAMILY						
Rhu	ıs glabra	smooth sumac			G5	S5	U	
	is radicans	poison-ivy			G5	S5	С	
Rhu	ıs rydbergii	western poison-ivy			G5T	S5	С	
	is typhina	staghorn sumac			G5	S5	С	
	AROUBACEAE	AILANTHUS FAMILY						
* Ailai	nthus altissima	tree-of-heaven			G?	SE5	lr	
	ГАСЕАЕ	RUE FAMILY				-		
	thoxylum americanum	American prickly-ash			G5	S5	С	
	ALIDACEAE	WOOD SORREL FAMILY						
	alis stricta	upright yellow wood-sorrel			G5	S5	С	
	RANIACEAE	GERANIUM FAMILY					-	
	anium maculatum	spotted crane's-bill			G5	S5	С	
	SAMINACEAE	TOUCH-ME-NOT FAMILY						
	atiens capensis	spotted touch-me-not			G5	S5	С	
	ALIACEAE	GINSENG FAMILY						
	lia nudicaulis	wild sarsaparilla			G5	S5	С	
	ACEAE	PARSLEY FAMILY						
	nelica atropurpurea	dark-purple alexanders			G5	S5	R1	
-	uta maculata	spotted water-hemlock			G5	S5	С	
	icus carota	wild carrot			G?	SE5	lc	
	acleum lanatum	cow-parsnip			G5	S5	R5	
	polis rigidior	cowbane			G5	S2	U	
	tinaca sativa	wild parsnip			G?	SE5	lu	
San	nicula canadensis var. adensis	Canada snakeroot			G5T5	S4	C	
	nicula marilandica	black snakeroot			G5	S5	С	
	m suave	hemlock water-parsnip			G5	S5	C	
	NTIANACEAE	GENTIAN FAMILY					-	
	ntaurium erythraea	erythraea-like centaury			G?	SE2	lr	
	ntiana andrewsii	closed gentian			G4	S4	U	
	ntianopsis crinita	fringed gentian				S5	R4	
	DCYNACEAE	DOGBANE FAMILY			1			
Аро	ocynum androsaemifolium . androsaemifolium	spreading dogbane			G5T5	S5	U	
Аро	ocynum cannabinum var. nabinum	Indian hemp			G5T	S5	С	
* Vind	ca minor	periwinkle			G?	SE5	lr	

	APPENDIX B
LIST OF VASCULAR PLANTS	LOCATED IN THE AREA OF INVESTIGATION

[[1		
Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
ASCLEPIADACEAE	MILKWEED FAMILY						
Asclepias incarnata ssp. incarnata	swamp milkweed			G5T5	S5	С	
Asclepias purpurascens	purple milkweed			G4G5	S2	R5	
Asclepias sullivantii	Sullivant's milkweed			G5	S2	?	
Asclepias syriaca	common milkweed			G5	S5	С	
Asclepias tuberosa	butterfly-weed			G5?	S4	U	
* Cynanchum nigrum	black swallow-wort			G?	SE?	?	
* Cynanchum rossicum	swallow-wort			G?	SE5	?	
SOLANACEAE	POTATO FAMILY						
* Lycopersicon esculentum	tomato			G?	SE2	?	
Physalis heterophylla	clammy ground-cherry			G5	S4	С	
Physalis virginiana	Virginia ground-cherry			G5	SU	R1	
* Solanum carolinense	horse nettle			G5	SE3	lu	
* Solanum dulcamara	bitter nightshade			G?	SE5	lc	
* Solanum tuberosum	potato			G?	SE1	?	
CONVOLVULACEAE	MORNING-GLORY FAMILY						
Calystegia sepium ssp. angulatum	hedge bindweed			G4G5T ?	SU	С	
Calystegia spithamaea ssp. Spithamaea	low bindweed			G4G5T 4T5	S4S 5	?	
* Convolvulus arvensis	field bindweed			G?	SE5	lc	
<i>Cuscuta</i> sp.	dodder					?	
BORAGINACEAE	BORAGE FAMILY						
* Cynoglossum officinale	hound's-tongue			G?	SE5	lr	
* Echium vulgare	blueweed			G?	SE5	lr	
Hackelia deflexa	spurred stickweed			G5	S5	?	
Hackelia virginiana	Virginia stickweed			G5	S5	С	
Lithospermum caroliniense var. croceum	plains puccoon			G4G5T 4T5	S3	R2	
PHRYMACEAE	LOPSEED FAMILY						
Phryma leptostachya	lopseed			G5	S4S 5	С	
VERBENACEAE	VERVAIN FAMILY						
Verbena hastata	blue vervain			G5	S5	С	
Verbena stricta	hoary vervain			G5	S4	R2	
Verbena urticifolia	white vervain			G5	S5	С	
LAMIACEAE	MINT FAMILY		-				
Clinopodium vulgare	wild basil			G5	S5	U	
Collinsonia canadensis	stoneroot			G5	S4	С	

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						1		
	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
*	Glechoma hederacea	creeping Charlie			G?	SE5	lc	
*	Lamium amplexicaule	henbit			G?	SE3	lr	
*	<i>Leonurus cardiaca</i> ssp. <i>cardiaca</i>	common motherwort			G?T?	SE5	Ic	
	Lycopus americanus	cut-leaved water-horehound			G5	S5	С	
	Lycopus uniflorus	northern water-horehound			G5	S5	U	
	Mentha arvensis ssp. borealis	American wild mint			G5T5	S5	С	
*	Mentha X piperita	pepper mint			HYB	SE4	lvu	
	Monarda fistulosa	wild bergamot			G5	S5	С	
*	Nepeta cataria	catnip			G?	SE5	lc	
	<i>Physostegia virginiana</i> ssp. <i>virginiana</i>	Virginia false dragonhead			G5T?	S4	R5	
*	Prunella vulgaris ssp. vulgaris	common heal-all			G5T?	SE3	С	
	Pycnanthemum verticillatum var. pilosum	hairy mountain-mint			G5T5	S1	R4	
	Pycnanthemum virginianum	Virginia mountain-mint			G5	S4	С	
	Scutellaria lateriflora	mad-dog skullcap			G5	S5	С	
	Stachys hispida	rough hedge-nettle			G4Q	S4S 5	С	
*	Stachys palustris	hedge-nettle			G5	SE5	?	
	PLANTAGINACEAE	PLANTAIN FAMILY						
*	Plantago lanceolata	ribgrass			G5	SE5	lc	
*	Plantago major	common plantain			G5	SE5	lvu	
	OLEACEAE	OLIVE FAMILY						
*	Forsythia viridissima	golden-bells			G?	SE2	?	
	Fraxinus americana	white ash			G5	S5	С	
	Fraxinus nigra	black ash			G5	S5	С	
	Fraxinus pennsylvanica	red ash			G5	S5	С	
	Fraxinus profunda	pumpkin ash			G4	S2	VU	
*	Ligustrum vulgare	common privet			G?	SE5	lvu	
*	Syringa vulgaris	common lilac			G?	SE5	lr	
	SCROPHULARIACEAE	FIGWORT FAMILY						
	Agalinis purpurea	large purple agalinis			G5	S1	R5	
	<i>Agalinis tenuifolia</i> var. <i>macrophylla</i>	slender-leaved agalinis			G4G5 Q	S1?	VU	
	Aureolaria flava	yellow false foxglove			G5	S3	R5	
	Aureolaria pedicularia	fern-leaved false foxglove			G5	S3	R1	
*	Linaria vulgaris	butter-and-eggs			G?	SE5	lc	
	Mimulus ringens	square-stemmed monkey-flower			G5	S5	С	
	Pedicularis lanceolata	swamp wood-betony			G5	S4	VU	

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Penstemon digitalis	foxglove beard-tongue			G5	S4S 5	VU	
*	Verbascum blattaria	moth mullein			G?	SE5	lc	
*	Verbascum thapsus	common mullein			G?	SE5	lc	
	Veronicastrum virginicum	Virginia culver's-root			G4	S2	R4	
	BIGNONIACEAE	TRUMPET-CREEPER FAMILY						
	Campsis radicans	trumpet creeper			G5	S2	R5/ Ir	
*	Catalpa bignonioides	common catalpa			G4G5	SE1	?	
*	Catalpa speciosa	northern catalpa			GU	SE1	?	
	CAMPANULACEAE	BLUEBELL FAMILY						
*	Campanula rapunculoides	creeping bellflower			G?	SE5	С	
	Lobelia inflata	Indian tobacco			G5	S5	U	
	Lobelia siphilitica	great lobelia			G5	S5	С	
	Lobelia spicata	pale-spiked lobelia			G5	S4	VU	
	RUBIACEAE	MADDER FAMILY						
	Cephalanthus occidentalis	eastern buttonbush			G5	S5	С	
	Galium aparine	cleavers			G5	S5	С	
	Galium asprellum	rough bedstraw			G5	S5	R3	
	Galium circaezans	white wild licorice			G5	S5	С	
*	Galium mollugo	white bedstraw			G?	SE5	?	
	Galium palustre	marsh bedstraw			G5	S5	R4	
	<i>Galium pilosum</i> var. <i>pilosum</i>	hairy bedstraw			G5T?	S3	R3	
	Galium trifidum ssp. trifidum	small bedstraw			G5T5	S5	R5	
	Galium triflorum	sweet-scented bedstraw			G5	S5	С	
	CAPRIFOLIACEAE	HONEYSUCKLE FAMILY			0.5	0.5		
	Diervilla lonicera	bush honeysuckle			G5	S5	R1	
<u> </u>	Lonicera canadensis	American fly honeysuckle			G5	S5	R1	
,e.	Lonicera dioica	glaucous honeysuckle			G5	S5	С	
*	Lonicera maackii	amur honeysuckle			G?	SE2	lr	
~	Lonicera tatarica	Tartarian honeysuckle	_		G?	SE5	lu	
	Sambucus canadensis	common elderberry			G5	S5	C	
	Sambucus racemosa ssp. pubens	red-berried elderberry			G5T5	S5	R4	
*	Symphoricarpos occidentalis	wolfberry			G5	SE3	?	
	Viburnum acerifolium	maple-leaved viburnum			G5	S5	С	
*	Viburnum lantana	bending wayfaring-tree			G?	SE2	?	
	Viburnum lentago	nannyberry			G5	S5	С	
*	Viburnum macrocephalum	Snowball Viburnum					?	
*	Viburnum opulus	guelder rose			G5	SE4	?	

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	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Viburnum rafinesquianum	downy arrow-wood			G5	S5	С	
	Viburnum recognitum	southern arrow-wood			G5	S4	R1	
	DIPSACACEAE	TEASEL FAMILY						
*	<i>Dipsacus fullonum</i> ssp. <i>sylvestris</i>	wild teasel			G?T?	SE5	lc	
	ÁSTERACEAE	ASTER FAMILY						
*	Achillea millefolium ssp. millefolium	common yarrow			G5T?	SE?	С	
	Ambrosia artemisiifolia	common ragweed			G5	S5	С	
	Ambrosia trifida	giant ragweed			G5	S5	С	
	Anaphalis margaritacea	pearly everlasting			G5	S5	R1?	
	Antennaria neglecta	field pussytoes			G5	S5	R2	
	<i>Antennaria parlinii</i> ssp. <i>fallax</i>	Parlin's pussytoes			G4G5T ?	SU	С	
*	Arctium lappa	great burdock			G?	SE5	lr	
*	Arctium minus ssp. minus	common burdock			G?T?	SE5	lc	
*	Artemisia vulgaris	common mugwort			G?	SE5	lr	
	Aster cordifolius	heart-leaved aster			G5	S5	U	
	Aster ericoides ssp. ericoides	white heath aster			G5T?	S5	С	
	Aster laevis var. laevis	smooth blue aster			G5T?	S5	U	
	<i>Aster lanceolatus</i> ssp. <i>lanceolatus</i>	tall white aster			G5T?	S5	С	
	Aster lateriflorus var. lateriflorus	calico aster			G5T5	S5	С	
	Aster macrophyllus	large-leaved aster			G5	S5	С	
	Aster novae-angliae	New England aster			G5	S5	С	
	Aster oolentangiensis	sky blue aster			G5	S4	R4	
	Aster pilosus var. pilosus	hairy aster			G5T?	S5	С	
	Aster praealtus var. praealtus	willow aster	THR	THR	G5T?	S2	R2	SARA (1), PA
	Aster shortii	short's aster	NAR	NAR	G4G5	S4	U	
*	Aster subulatus var. subulatus	annual saltmarsh aster			G5	SE2	lr	
	Aster umbellatus var. umbellatus	flat-top white aster			G5T?	S5	R3	
	Aster urophyllus	arrow-leaved aster			G4	S4	С	
	Bidens frondosa	devil's beggar-ticks			G5	S5	С	
	Bidens tripartita	European beggar-ticks			G5	S5	С	
*	Centaurea maculosa	spotted knapweed			G?	SE5	lvu	
*	Chrysanthemum leucanthemum	ox-eye daisy			G?	SE5	lc	
*	Cichorium intybus	chicory			G?	SE5	lc	

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*	Cirsium arvense	Canada thistle			G?	SE5	lc	
	Cirsium discolor	field thistle			G5	S4	U	
*	Cirsium vulgare	bull thistle			G5	SE5	Ic	
	Conyza canadensis	horseweed			G5	S5	С	
	Coreopsis tripteris	tall tickseed			G5	S2	U	
	Erechtites hieracifolia	fire-weed			G5	S5	С	
	Erigeron annuus	daisy fleabane			G5	S5	С	
	Erigeron philadelphicus ssp. philadelphicus	Philadelphia fleabane			G5T5	S5	С	
	Erigeron strigosus	daisy fleabane			G5	S5	С	
	Eupatorium altissimum	tall joe-pyeweed			G5	S1	R3/ Iu	
	<i>Eupatorium maculatum</i> ssp. <i>maculatum</i>	spotted joe-pye-weed			G5T5	S5	С	
	Eupatorium perfoliatum	perfoliate thoroughwort			G5	S5	С	
	Eupatorium purpureum var. purpureum	purple joe-pye-weed			G5T?	S3	VU	
	Euthamia graminifolia	flat-topped bushy goldenrod			G5	S5	С	
	Euthamia gymnospermoides	viscid bushy goldenrod			G5	S1	R3	
	Helenium autumnale	common sneezeweed			G5	S5	U	
*	Helenium flexuosum	purple-headed sneezeweed			G5	SE2 ?	?	
	Helianthus divaricatus	rough woodland sunflower			G5	S5	С	
	Helianthus giganteus	tall wild sunflower			G5	S5	С	
*	Helianthus tuberosus	Jerusalem artichoke			G5	SE5	lu	
*	Hieracium aurantiacum	devil's paintbrush			G?	SE5	lr	
*	<i>Hieracium caespitosum</i> ssp. <i>caespitosum</i>	field hawkweed				SE5	lu	
	Hieracium scabrum	rough hawkweed			G5	S4	VU	
	<i>Krigia biflora</i> var. <i>biflora</i>	two-flowered Cynthia			G5	S2	U	
	Lactuca biennis	biennial lettuce			G5	S5	VU	
	Lactuca canadensis	tall lettuce			G5	S5	С	
*	Lactuca serriola	prickly lettuce			G?	SE5	lc	
	<i>Liatris aspera</i> var. <i>intermedia</i>	rough blazing star			G4G5T ?	S2	R2	
	Liatris spicata	spiked blazing star	THR	THR	G5	S2	R5	SARA (1), OESA (4), PA
*	Matricaria matricarioides	pineapple-weed			G5	SE5	lu	
	Prenanthes alba	white rattlesnake-root			G5	S5	С	
	Prenanthes racemosa ssp.	glaucous white rattlesnake-root			G5T?	SU	R4	

APPENDIX B LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

Scientific N	ame	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
racemosa								
Ratibida pinnata		gray-headed coneflower			G5	S2S 3	U	
* Rudbeckia fulgida		orange coneflower			G5	S1	?	
Rudbeckia hirta		black-eyed Susan			G5	S5	С	
Senecio aureus		golden groundsel			G5	S5	VU	
Silphium terebintl terebinthinaceum	<i>hinaceum</i> var.	prairie dock			G4G5T 4T5	S1	VU	
Solidago altis altissima	<i>sima</i> var.	tall goldenrod				S5	С	
Solidago caesia		blue-stem goldenrod			G5	S5	С	
Solidago canaden	sis	Canada goldenrod			G5	S5	С	
Solidago gigantea		giant goldenrod			G5	S5	VU	
Solidago juncea		early goldenrod			G5	S5	U	
Solidago nem nemoralis	<i>oralis</i> ssp.	gray goldenrod			G5T5	S5	С	
Solidago ohioensi	S	Ohio goldenrod			G4	S4	?	
Solidago riddellii		Riddell's goldenrod	SC	SC	G5	S3	VU	SARA (1), OESA (5)
Solidago rigida ss	o. <i>rigida</i>	stiff-leaved goldenrod			G5T5	S3	U	
Solidago rugosa s	sp. <i>rugosa</i>	rough goldenrod			G5T?	S5	С	
* Solidago semperv	irens	seaside goldenrod			G5	SE2	lvu	
* Sonchus arvensis	ssp. <i>arvensis</i>	field sow-thistle			G?T?	SE5	lc	
* Sonchus asperss	p. <i>asper</i>	spiny-leaved sow-thistle			G?T?	SE5	lu	
* Sonchus oleraceu		common sow-thistle			G?	SE5	lvu	
* Tanacetum vulgar		common tansy			G?	SE5	lr	
* Taraxacum officin		common dandelion			G5	SE5	lc	
* Tragopogon dubiu		doubtful goat's-beard			G?	SE5	lc	
Vernonia gigantea		ironweed			G5T	S3	С	
Vernonica missuri		ironweed		ļ	G4G5	S3?	?	
Xanthium strumar	ium	tumor-curing cocklebur			G5	S5	С	
BUTOMACEAE		FLOWERING RUSH FAMILY			05	055		
* Butomus umbellat		flowering-rush			G5	SE5	lc	
ALISMATACEAE		WATER-PLANTAIN FAMILY			05	005		
Alisma plantago-a	quatica	common water-plantain			G5	SRF	C	
Sagittaria latifolia	0545	broad-leaved arrowhead			G5	S5	С	
HYDROCHARITA	UEAE	FROG'S-BIT FAMILY				64	D1	
Elodea nuttallii	<u></u>	Nuttall's waterweed			G5	S4	R1	
Vallisneria americ POTAMOGETON		water-celery PONDWEED FAMILY			G5	S5	VU	

APPENDIX B	
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVE	ESTIGATION

Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
Potamogeton foliosus	leafy pondweed			G5	S5	U	
Potamogeton nodosus	knotty pondweed			G5	S5	R2	
Potamogeton sp.	pondweed					?	
NAJADACEAE	NAIAD FAMILY						
Najas flexilis	slender najas			G5	S5	VU	
ARACEAE	ARUM FAMILY						
Arisaema triphyllum ssp. triphyllum	small jack-in-the-pulpit			G5T5	S5	С	
LEMNACEAE	DUCKWEED FAMILY						
Lemna minor	lesser duckweed			G5	S5	С	
COMMELINACEAE	SPIDERWORT FAMILY						
Tradescantia ohiensis	Ohio spiderwort			G5	S2	VU	
JUNCACEAE	RUSH FAMILY						
Juncus alpinoarticulatus	Richardson's rush			G5	S5	R5	
Juncus biflorus	two-flowered rush			G5Q	S1	R3	
Juncus brachycarpus	short-fruited rush			G4G5	S1	R3	
Juncus bufonius	toad rush			G5	S5	VU	
Juncus dudleyi	Dudley's rush			G5	S5	С	
Juncus greenei	Greene's rush			G5	S3	R3	
Juncus marginatus	grass-leaved rush			G5	S2	R1	
Juncus nodosus	knotted rush			G5	S5	U	
Juncus tenuis	path rush			G5	S5	R1	
Juncus torreyi	Torrey's rush			G5	S5	С	
Luzula multiflora ssp. multiflora	woodrush			G5T5	S5	U	
CYPERACEAE	SEDGE FAMILY						
Carex arctata	drooping wood sedge			G5?	S5	?	
Carex bebbii	Bebb's sedge			G5	S5	С	
Carex blanda	woodland sedge			G5?	S5	С	
Carex brevior	shorter sedge			G5?	S4S 5	R4	
Carex buxbaumii	brown sedge			G5	S5	VU	
Carex cephaloidea	thin-leaved sedge			G5	S5	U	
Carex cephalophora	oval-headed sedge			G5	S5	С	
Carex foena	bronzy sedge			G5	S5	R1	
Carex granularis	meadow sedge			G5	S5	С	
Carex lacustris	lake-bank sedge			G5	S5	С	
Carex lasiocarpa	slender sedge			G5	S5	R2	
Carex normalis	larger straw sedge			G5	S4	С	
Carex pellita	woolly sedge			G5	S5	С	

	APPENDIX B	
LIST OF	VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION)N

Sci	ientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
Carex pe	ensylvanica	Pennsylvania sedge			G5	S5	С	
Carex ps	seudo-cyperus	cypress-like sedge			G5	S5	?	
Carex ra	ndiata	radiate sedge			G4	S4	С	
Carex ro	osea	stellate sedge			G5	S5	С	
Carex so	coparia	pointed broom sedge			G5	S5	R3	
Carex sq		squarrose sedge			G4G5	S2	С	
Carex st	tipata	awl-fruited sedge			G5	S5	С	
Carex sti	tricta	tussock sedge			G5	S5	С	
Carex sv	wanii	swan's sedge			G5	S3	С	
Carex te	enera	straw sedge			G5	S5	С	
Carex tri	ichocarpa	hairy-fruited sedge			G4	S3	?	
Carex vii	<i>iridula</i> ssp. <i>viridula</i>	greenish sedge			G5T5	S5	R4	
Carex vu	ulpinoidea	fox sedge			G5	S5	С	
Carex we	roodii	wood's sedge			G4Q	S4	VU	
	sesculentus	yellow nut-grass			G5	S5	С	
Cyperus	s odoratus	fragrant umbrella sedge			G5	S5	С	
Cyperus	s strigosus	straw-colored umbrella sedge			G5	S5	С	
Eleochai	ris erythropoda	red-footed spike-rush			G5	S5	С	
Eleochai	ris obtusa	blunt spike-rush			G5	S5	С	
Rhyncho	ospora capitellata	small-headed beaked-rush			G5	S4	R3	
Scirpus a	atrovirens	dark-green bulrush			G5?	S5	С	
Scirpus µ	pendulus	lined bulrush			G5	S5	С	
Scirpus I	validus	American great bulrush			G?	S5	U	
	riglomerata	tall nut-rush			G5	S1	R4	
POACEA	AE	GRASS FAMILY						
* Agrostis	gigantea	red-top			G4G5	SE5	lc	
Agrostis	stolonifera	redtop			G5	S5	U	
Andropo	ogon gerardii	big bluestem			G5	S4	U	
	ogon virginicus	Virginia broom-sedge			G5	S4	VU	
* Anthoxal odoratum	<i>nthum odoratum</i> ssp. m	sweet vernal grass			G?T?	SE4	?	
Aristida purpuras	purpurascens var. scens	arrow-feather three-awn			G5T?	S1	R4	
* Avena fa	atua	wild oats			G?	SE3	lr	
* Bromus	<i>inermis</i> ssp. <i>inermis</i>	awnless brome			G4G5T ?	SE5	lc	
* Bromus	tectorum	downy chess			G?	SE5	lu	
Calamag	grostis canadensis	blue-joint grass			G5	S5	С	
* Dactylis	glomerata	orchard grass			G?	SE5	Ic	
	nia spicata	poverty oat grass			G5	S5	С	

APPENDIX B
LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

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Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
* Digitaria ischaemum	small crabgrass			G?	SE5	lu	
* Digitaria sanguinalis	large crabgrass			G5	SE5	lu	
* Echinochloa crusgalli	common barnyard grass			G?	SE5	lc	
Echinochloa microstachya	small-spiked barnyard grass			G5Q	S4S 5	R?	
Elymus canadensis	nodding wild rye			G5	S4S 5	VU	
Elymus hystrix	bottle-brush grass			G5	S5	С	
* Elymus repens	quack grass			G?	SE5	Ic	
<i>Elymus virginicus</i> var. <i>virginicus</i>	Virginia wild rye			G5T?	S5	С	
* Festuca arundinacea	tall fescue			G?	SE5	lc	
* Festuca pratensis	meadow fescue			G5	SE5	lr	
Festuca rubra ssp. rubra	red fescue			G5T4	S5	lr	
Glyceria striata	fowl meadow grass			G5	S5	С	
Hierochloe odorata ssp. odorata	sweet grass			G5T?	S4	R3	
* Hordeum jubatum ssp. jubatum	squirrel-tail grass			G5T?	SE5	lu	
Leersia oryzoides	rice cut grass			G5	S5	С	
Leersia virginica	white cut grass			G5	S4	С	
* Lolium perenne	English rye grass			G?	SE4	lu	
Milium effusum	wood millet			G5	S4S 5	R3	
Muhlenbergia frondosa	leafy satin grass			G5	S4	VU	
Muhlenbergia mexicana var. mexicana	Mexican satin grass			G5T?	S5	U	
Panicum acuminatum var. acuminatum	acuminate panic grass			G5T	S5	С	
Panicum capillare	witch grass			G5	S5	С	
Panicum columbianum var. siccanum	panic grass			G5T5	S4	R1	
* Panicum dichotomiflorum	fall panicum			G5	SE5	lc	
Panicum latifolium	broad-leaved panic grass			G5	S4	U	
Panicum sphaerocarpon	rough-fruited panic grass			G5	S3	R5	
Panicum virgatum	switch grass			G5	S4	U	
Paspalum setaceum	bristle-like paspalum			G5	S2	R4	
Phalaris arundinacea	reed canary grass			G5	S5	С	
* Phleum pratense	timothy			G?	SE5	Ic	
Phragmites australis	common reed			G5	S5	С	
Poa compressa	Canada blue grass			G?	SE5	С	
Poa palustris	fowl meadow grass			G5	S5	VU	

APPENDIX B	
LIST OF VASCULAR PLANTS LOCATED IN THE ARE	OF INVESTIGATION

	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Poa pratensis ssp. pratensis	Kentucky bluegrass			G5T5?	S5	С	
	Schizachyrium scoparium	little bluestem			G5	S4	U	
*	Setaria faberi	giant foxtail			G?	SE4	lc	
*	Setaria pumila	yellow foxtail			G?	SE5	lc	
*	Setaria viridis	green foxtail			G?	SE5	lc	
	Sorghastrum nutans	Indian grass			G5	S4	R5	
	Spartina pectinata	tall cord grass			G5	S4	U	
	TYPHACEAE	CAT-TAIL FAMILY						
	Typha angustifolia	narrow-leaved cattail			G5	SE5	С	
-	Typha latifolia	broad-leaved cattail			G5	S5	U	
-	LILIACEAE	LILY FAMILY						
	Aletris farinosa	colic-root	THR	THR	G5	S2	R4	SARA (1), OESA (4), PA
	Allium canadense var. canadense	Canada wild onion			G5T5	S5	С	
*	Asparagus officinalis	garden asparagus			G5?	SE5	Ic	
*	Convallaria majalis	lily-of-the-valley			G5	SE5	lr	
	<i>Erythronium americanum</i> ssp. <i>americanum</i>	yellow trout lily			G5T5	S5	С	
*	Hemerocallis fulva	orange day-lily			G?	SE5	lu	
	Hypoxis hirsuta	yellow star-grass			G5	S3	R5	
	<i>Maianthemum racemosum</i> ssp. <i>racemosum</i>	false Solomon's seal			G5T5	S5	С	
	Maianthemum stellatum	star-flowered Solomon's seal			G5	S5	С	
	Muscari botryoides	grape hyacinth			G?	SE3	?	
*	Narcissus pseudonarcissus	daffodil			G?	SE2	lr	
*	Ornithogalum umbellatum	summer snowflake			G2?	SE3	lr	
	Polygonatum biflorum	hairy Solomon's seal			G5	S4	С	
	Polygonatum pubescens	hairy Solomon's seal			G5	S5	С	
	Streptopus roseus	rose twisted-stalk			G5	S5	?	
	Trillium grandiflorum	white trillium			G5	S5	С	
	Uvularia sessilifolia	sessile-leaved bellwort			G5	S4	R5	
	IRIDACEAE	IRIS FAMILY						
 	Iris virginica	southern blue-flag			G5	S5	С	
	Sisyrinchium albidum	white blue-eyed-grass			G5?	S1	R4	
	Sisyrinchium angustifolium	pointed blue-eyed-grass			G5	S4	С	
	SMILACACEAE	CATBRIER FAMILY						
	Smilax herbacea	herbaceous carrion flower			G5	S4	R1	
	Smilax hispida	bristly greenbrier			G5	S4	С	

APPENDIX B LIST OF VASCULAR PLANTS LOCATED IN THE AREA OF INVESTIGATION

	Scientific Name	Common Name	COSEWIC	COSSARO	Grank	Srank	Local Status	Legal Status
	Smilax lasioneura	hairy-nerved carrion flower			G5	S4	С	
	DIOSCOREACEAE	YAM FAMILY						
	Dioscorea quaternata	wild yam-root			G5	S4	С	
	ORCHIDACEAE	ORCHID FAMILY						
	<i>Cypripedium calceolus</i> var. <i>pubescens</i>	large yellow lady's slipper			G5T	S5	R2	
*	Epipactis helleborine	common helleborine			G?	SE5	lr	
	SAPINDACEAE	SOAPBERRY FAMILY						
*	Koelreuteria paniculata	Golden rain tree					?	
	TAMARICACEAE	TAMARISK FAMILY						
*	Tamarix ramosissima	Tamarisk					?	
	MORACEAE	FIG FAMILY						
*	<i>Ficus</i> sp.	Fig tree					?	

Note: Species status current to October 2007 * Species introduced to Ontario

Local Status Distribution and Status of the Vascular Plants of Southwestern Ontario

Status of the plants in Essex County was thoroughly investigated by the Ontario Ministry of Natural Resources through the use of plant stations. Plant stations are locations that are defined as a 1 km radius around a plant occurrence. Plant rarity is based on the number of stations for a native plant species. A variable cut-off is used for the number of stations based on the size of the municipality or site district and by the intensity of fieldwork that has been carried out in the area.

- R Native and rare, based on 5 or fewer recent (post-1963) stations. A station is a population separated by at least 1 kilometer from the nearest population of the same species.
- R# Rare, number of recent stations.
- R? Rare, exact number of stations not known.
- Rh Rare, known only from historic (pre-1964) record.
- VU Native and very uncommon, based on 6 to 8 recent stations.
- U Native and uncommon, based on 9 to 15 recent stations.
- C Native and common, based on more than 15 recent stations.
- I Introduced and persisting of cultivation.
- Ir Introduced and rare, based on 5 or fewer recent stations.
- Ivu Introduced and very uncommon, based on 6 to 8 recent stations.
- lu Introduced and uncommon, based on 9 to 15 recent stations.
- Ic Introduced and common, based on more than 15 recent stations.
- Ih Introduced and known only from historic (pre-1964) records
- ? Questionable record. These are typically literature reports for which no specimen is known, or other records for which there is some reason to doubt either the identity or origin of the record
- ? Not listed as present within Essex County, but was found by LGL staff in 2006.

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference						
	Terrestrial-Natural/Semi-Natural									
TPO	OPEN TALL-GRASS PRAIRIE									
TPO2-1	Fresh - Moist Tallgrass Prairie	Canopy: Eastern cottonwood (<i>Populus deltoides</i> ssp. deltoides) is dominant. Understorey: Silky dogwood (<i>Cornus amomum</i> ssp. <i>obliqua</i>) is dominant with gray dogwood (<i>Cornus foemina</i> ssp. <i>racemosa</i>) and multiflora rose (<i>Rosa multiflora</i>) as associates. Ground Cover: Big bluestem (<i>Andropogon gerardi</i>), Canadian tick-trefoil (<i>Desmodium canadense</i>), common reed (<i>Phragmites australis</i>), gray-headed coneflower (<i>Ratibida pinnata</i>), Indian grass (<i>Sorghastrum nutans</i>), ironweed (<i>Vernonia gigantea</i>), little bluestem (<i>Schizachyrium scoparium</i>), switch grass (<i>Panicum virgatum</i>), Virginia broom-sedge (<i>Andropogon virginicus</i>), Virginia mountain-mint (<i>Pycnanthemum virginianum</i>), wild bergamot (<i>Monarda fistulosa</i>) and wild carrot (<i>Daucus carota</i>) are abundant with occasional blood-red milkwort (<i>Polygala sanguinea</i>), butterfly-weed (<i>Asclepias tuberosa</i>), calico aster (<i>Aster lateriflorus</i> var. <i>lateriflorus</i>), Canada bluegrass (<i>Poa compressa</i>), Canada goldenrod (<i>Solidago canadensis</i>), colic-root (<i>Aletris farinosa</i>), cut-leaved water- horehound (<i>Lycopus americanus</i>), early goldenrod (<i>Solidago juncea</i>), field thistle (<i>Cirsium discolor</i>), flowering spurge (<i>Euphorbia corollata</i>), Kentucky bluegrass (<i>Poa pratensis</i> ssp. pratensis), large purple agalinis (<i>Agalinis purpurea</i>), New England aster (<i>Aster novae-angliae</i>), orchard grass (<i>Dactylis glomerata</i>), prickly raspberry (<i>Rubus flagellaris</i>), rough goldenrod (<i>Solidago rugosa</i> ssp. <i>rugosa</i>), rough-headed bush-clover (<i>Lespedeza capitata</i>), slender-leaved agalinis (Agalinis tenuifolia var. macrophylla), smooth blue aster (<i>Aster laevis</i> var. <i>laevis</i>), spiked blazing star (<i>Liatris spicata</i>), stiff-leaved goldenrod (<i>Solidago rigida</i> ssp. <i>rigida</i>), swamp milkweed (<i>Asclepias incarnata</i> ssp. <i>incarnata</i>), tall cord grass (<i>Spartina pectinata</i>), tall fescue (<i>Festuca arundinacea</i>), tall goldenrod (<i>Solidago altissima</i> var. <i>altissima</i>), tall tickseed (<i>Coreopsis tripteris</i>), tall wild sunflower (<i>Helianthus giganteus</i>), Vir	 Tree cover <= 25%; shrub cover <= 25%. Subject to seasonal extremes in moisture conditions; spring flooding and summer drought (TPO). Dominated by Prairie graminoids and forbs (2-1). Pioneer community resulting from, or maintained by, frequent disturbance by fire. 	ANS1A, BBA4EC, BBA4MB, ESA1, LAM1, MAL1D, MAL3B, NAR4A, NAR4B, NAR4B, NAR15, NAR16, NCH2E, NCH4B, NCH4Z, NCH12B, NSG7A, NSG7C, OAK3, OAK4, RED5, RED12, YWK1B						

¹ Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Sciences Section, Science Development and Transfer Branch. SCSS Field Guide FG-02. North Bay, Ontario.

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
TPS	TALL-GRASS	SAVANNAH	•	•
TPS2-1	Fresh - Moist Pin Oak - Bur Oak Tallgrass Savannah	Canopy: Pin oak (<i>Quercus palustris</i>) and bur oak (<i>Quercus macrocarpa</i>) are co-dominant with American elm (<i>Ulmus americana</i>), eastern cottonwood, red ash (<i>Fraxinus pennsylvanica</i>) and shagbark hickory (<i>Carya ovata</i> var. <i>ovata</i>) as associates. Understorey: American hazel (<i>Corylus americana</i>), black ash (<i>Fraxinus nigra</i>), black locust (<i>Robinia pseudo-acacia</i>), common buckthorn (<i>Rhamnus cathartica</i>), Drummond's dogwood (<i>Cornus drummondil</i>), gray dogwood, Manitoba maple (<i>Acer negundo</i>), red ash, staghorn sumac (<i>Rhus typhina</i>) and Tartarian honeysuckle (<i>Lonicera tatarica</i>). Ground Cover: Common dandelion (<i>Taraxacum officinale</i>), eastern cottonwood, gray goldenrod, Pennsylvania sedge (<i>Carex pensylvanica</i>), scarlet strawberry (<i>Fragaria virginiana</i> ssp. <i>virginiana</i>), spotted crane's bill (<i>Geranium maculatum</i>), tall tickseed, yellow avens (<i>Geum aleppicum</i>) and yellow trout lily (<i>Erythronium americanum</i> ssp. <i>americanum</i>).	 25% < Tree Cover <= 35% with prairie graminoids and forbs in the Ground Cover (TPS). Seasonal flooding followed by summer drought. Fresh - Moist conditions, dominated by Pin Oak and Bur Oak (2-1). Young Community. 	ESA5
TPW	TALL-GRASS			
TPW2-1	Fresh - Moist Black Oak - White Oak Tallgrass Woodland	Canopy: Black oak (<i>Quercus velutina</i>) and pin oak are dominant with black cherry (<i>Prunus serotina</i>), eastern cottonwood, freeman's maple (<i>Acer X freemanil</i>) and white oak (<i>Quercus alba</i>) as associates. Understorey: Black cherry is dominant with American hazel, gray dogwood, prairie rose (<i>Rosa setigera</i>), riverbank grape (<i>Vitis riparia</i>), sassafras (<i>Sassafras albidum</i>), staghorn sumac, thimble-berry (<i>Rubus occidentalis</i>) and white mulberry (<i>Morus alba</i>) as associates. Ground Cover: Eastern bracken-fern (<i>Pteridium aquilinum</i> var. <i>latiusculum</i>), four-flowered loosestrife (<i>Lysimachia quadriflora</i>), glaucous white rattlesnake-root (<i>Prenanthes racemosa</i> ssp. <i>racemosa</i>), many-flowered agrimony (<i>Agrimony parviflora</i>), orchard grass, spotted crane's bill and swamp white oak (<i>Quercus bicolor</i>).	 35% < Tree Cover <= 60% with prairie graminoids and forbs in the Ground Cover (TPS). Seasonal flooding followed by summer drought. Fresh - Moist conditions, dominated by Black Oak and White Oak (2-1). Mid-age to Mature Community. 	ANS1, ANS2C
TPW2-2	Fresh - Moist Pin Oak Tallgrass Woodland	Canopy: Pin oak is dominant with black cherry and freeman's maple as associates. Understorey: Black cherry is dominant with American hazel, gray dogwood, prairie rose, riverbank grape, sassafras, staghorn sumac, thimble-berry and white mulberry as associates. Ground Cover: Eastern bracken-fern, many-flowered agrimony, orchard grass, spotted crane's bill and swamp white oak.	 35% < Tree Cover <= 60% with prairie graminoids and forbs in the Ground Cover (TPS). Seasonal flooding followed by summer drought. Fresh - Moist conditions, dominated by Pin Oak (2-2). Mid-age to Mature Community. 	ANS2

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
FOD	DECIDUOUS	FOREST		
FOD1-3	Dry - Fresh Black Oak Deciduous Forest	 Canopy: Black oak, pin oak, freeman's maple and eastern cottonwood are dominant with American elm, black cherry and swamp white oak as associates. Subcanopy: American elm, black oak, black cherry and red maple (<i>Acer rubrum</i>). Understorey: Black cherry and common reed are co-dominant with American hazel, gray dogwood, narrow-leaved crabapple (<i>Malus coronaria</i>), red ash and sassafras as associates. Ground Layer: Common reed, eastern bracken-fern (<i>Pteridium aquilinum</i> var. <i>latiusculum</i>), inserted Virginiacreeper (<i>Parthenocissus inserta</i>), Pennsylvania sedge and riverbank grape are dominant with garlic mustard (<i>Alliaria petiolata</i>), spotted crane's bill and wood anemone (<i>Anemone quinquefolia</i> var. <i>quinquefolia</i>) as associates. 	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Black Oak is dominant (1-3). Sand and loam soils with rapid drainage in upper to middle slope positions (Dry-Fresh). Mature Community. 	MAL9, MAL11, YWK2
FOD1-4	Dry - Fresh Mixed Oak Deciduous Forest	 Canopy: Black oak and white oak are dominant with eastern cottonwood, pin oak and swamp white oak as associates. Subcanopy: Black oak and pin oak are dominant with abundant black cherry. Understorey: American hazel and gray dogwood are codominant. Ground Layer: Canada goldenrod, common reed, eastern bracken-fern, inserted Virginia-creeper, interrupted fern (<i>Osmunda claytoniana</i>), rose twisted-stalk (<i>Streptopus roseus</i>), Royal fern (<i>Osmunda regalis</i>) and spotted crane's bill are dominant. 	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). More than two Oak species are dominant (1-4). Sand and loam soils with rapid drainage in upper to middle slope positions (Dry-Fresh). Mid-age to Mature Community. 	MAL1, MAL1E
FOD2-2	Dry - Fresh Oak - Hickory Deciduous Forest	Canopy: Black oak, swamp white oak and shagbark hickory are dominant with bur oak, pin oak, red oak (Quercus rubra), freeman's maple and white oak as associates. Subcanopy: Black cherry and freeman's maple are co- dominant. Understorey: Black cherry and choke cherry (<i>Prunus</i> <i>virginiana</i> ssp. virginiana) are co-dominant with American elm and red ash as associates. Ground Layer: Garlic mustard, large-leaved aster (<i>Aster</i> <i>macrophyllus</i>), spotted crane's bill and yellowish enchanter's nightshade (<i>Circaea lutetiana</i> ssp. <i>canadensis</i>) are dominant with common blackberry (<i>Rubus</i> <i>allegheniensis</i>), inserted Virginia-creeper, Pennsylvania sedge, western poison-ivy (<i>Rhus rydbergil</i>), wild red raspberry (<i>Rubus idaeus</i> ssp. <i>melanolasius</i>) and yellow trout lily as associates.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Oak and Hickory are dominant (2-2). Sand and loam soils with rapid drainage in upper to middle slope positions (Dry-Fresh). Mature Community. 	ESA2

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

Vegetation Type LGL Polygon Reference ELC Code **Species Association** Comments

Code	туре			Reference
FOD4	Dry - Fresh Deciduous Forest	Canopy: Manitoba maple, black locust and eastern cottonwood are dominant with black cherry, freeman's maple, American elm and black walnut (<i>Juglans nigra</i>) as associates. Subcanopy: Black cherry, Manitoba maple and white mulberry. Understorey: Manitoba maple is dominant with abundant black cherry, prairie rose, Tartarian honeysuckle and white mulberry with some gray dogwood, poison-ivy (<i>Rhus</i> <i>radicans</i>), red ash, riverbank grape, smooth sumac (<i>Rhus</i> <i>glabra</i>), staghorn sumac and freeman's maple. Ground Layer: Garlic mustard is dominant with common dandelion (<i>Taraxacum officinale</i>), cleavers (<i>Galium</i> <i>aparine</i>) and inserted Virginia-creeper.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Tree species associations that are either relatively uncommon or a result of disturbance or management (4). Sand and loam soils with rapid drainage in upper to middle slope positions (Dry-Fresh). Young Community. 	BBA1A, BBA7,BBA8, BBA12, BBBA14, MAL5, NCH7H, NGM1
FOD7-1	Fresh - Moist White Elm Lowland Deciduous Forest	Canopy: American elm is dominant with abundant standing snags of red ash with some black cherry, eastern cottonwood, pin oak and swamp white oak. Subcanopy: American elm, pin oak and swamp white oak are dominant. Understorey: Gray dogwood is dominant with American hazel, choke cherry, prairie rose and Tartarian honeysuckle as associates. Ground Layer: Common dandelion, inserted Virginia- creeper, Manitoba maple, marsh bedstraw (<i>Galium</i> <i>palustre</i>), marsh fern (<i>Thelypteris palustris</i> var. <i>pubescens</i>) and Sensitive fern.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Lowland deciduous forest (7), dominated by White Elm (-1). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Mid-age community. 	NAR12
FOD7-2	Fresh - Moist Ash Lowland Deciduous Forest	Canopy: Red ash is dominant with American elm, eastern cottonwood, black cherry and red maple as associates. Subcanopy: American elm, black cherry, glossy buckthorn (<i>Rhamnus frangula</i>), Manitoba maple, pin oak and red ash. Understorey: Black walnut, common buckthorn, choke cherry, gray dogwood, multiflora rose, nannyberry (<i>Viburnum lentago</i>), prairie rose, red ash, staghorn sumac and Tartarian honeysuckle. Ground Layer: Common dandelion, inserted Virginia- creeper, Manitoba maple, wild parsnip (<i>Pastinaca sativa</i>) and yellowish enchanter's nightshade.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Lowland deciduous forest (7), dominated by Red Ash (-2). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Young to Mid-age Community. 	NAR13, NSG3

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
FOD7-3	Fresh - Moist Willow Lowland Deciduous Forest	 Canopy: Black willow (<i>Salix nigra</i>) is dominant with black cherry and Manitoba maple as associates. Subcanopy: Manitoba maple is dominant with black cherry, Drummond's dogwood, red ash and white mulberry as associates. Understorey: Common buckthorn, gray dogwood, and Tartarian honeysuckle are dominant with American elm, Black walnut, choke cherry, inserted Virginia-creeper, multiflora rose, nannyberry (<i>Viburnum lentago</i>), riverbank grape, prairie rose, red ash, red currant (<i>Ribes rubrum</i>) and staghorn sumac as associates. Ground Layer: Awnless brome (<i>Bromus inermis</i> ssp. <i>inermis</i>), Canada goldenrod, Canada thistle (<i>Cirsium arvense</i>), Common dandelion, inserted Virginia-creeper, Manitoba maple, orchard grass, upright yellow wood-sorrel (<i>Oxalis stricta</i>), wild parsnip (<i>Pastinaca sativa</i>) and yellowish enchanter's nightshade. 	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Lowland deciduous forest (7), dominated by Black Willow (-3). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Mature Community. 	LAM4A
FOD7-4	Fresh - Moist Black Walnut Lowland Deciduous Forest	Canopy: Black walnut is dominant with American elm, black cherry, black locust, common hackberry (<i>Celtis</i> occidentalis), eastern cottonwood, Manitoba maple, silver poplar (<i>Populus alba</i>) and freeman's maple as associates. Subcanopy: Black cherry, black walnut, common hackberry, Manitoba maple and white mulberry. Understorey: Black cherry, gray dogwood and Manitoba maple are dominant with amur honeysuckle (<i>Lonicera</i> <i>maackii</i>), black locust, choke cherry, common elderberry (<i>Sambucus canadensis</i>), common hackberry, narrow- leaved crabapple, poison-ivy, prairie rose, riverbank grape, sassafras, freeman's maple, Tartarian honeysuckle, thimble-berry and tree-of-heaven as associates. Ground Layer: Garlic mustard, lily-of-the-valley and inserted Virginia-creeper are dominant with Canada anemone (<i>Anemone canadensis</i>), cleavers, common burdock (<i>Arctium minus</i> ssp. <i>minus</i>), common motherwort (<i>Leonurus cardiaca</i> ssp. <i>cardiaca</i>), hound's-tongue (<i>Cynoglossum officinale</i>), Philadelphia fleabane (<i>Erigeron</i> <i>philadelphicus</i> ssp. <i>philadelphicus</i>), riverbank grape, scarlet strawberry, star-flowered Solomon's seal (<i>Maianthemum</i> <i>stellatum</i>), upright yellow wood-sorrel, white avens (<i>Geum</i> <i>canadense</i>) and yellow avens as associates.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Lowland deciduous forest (7), dominated by Black Walnut (-4). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Mid-age Community. 	BBA2, BBA13

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
FOD8	Fresh - Moist Poplar- Sassafras Deciduous Forest	 Canopy: Eastern cottonwood is dominant with abundant pin oak and freeman's maple with some black cherry, black oak, red ash, red oak and white oak. Subcanopy: Manitoba maple and red ash are dominant with black cherry, black willow, peach-leaved willow (<i>Salix amygdaloides</i>), pin oak, sassafras, freeman's maple and white mulberry as associates. Understorey: Gray dogwood, black cherry and Manitoba maple are dominant with black willow, choke cherry, common buckthorn, Drummond's dogwood, nannyberry, red ash, sassafras and wild black currant (<i>Ribes americanum</i>) as associates. Ground Layer: Canada bluegrass, Canada goldenrod, common reed, garlic mustard, inserted Virginia-creeper, Pennsylvania sedge, riverbank grape, spotted crane's bill and yellowish enchanter's nightshade. 	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Dominated by Poplars and Sassafras (8). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Young to Mature Community. 	MAL1B, NAR3A, NAR6A, NSG6, NSG10, OAK2
FOD8-1	Fresh - Moist Poplar Deciduous Forest	Canopy: Eastern cottonwood is dominant with American elm, Manitoba maple and trembling aspen (<i>Populus</i> <i>tremuloides</i>) as associates. Subcanopy: Gray dogwood and Manitoba maple are dominant. Understorey: American hazel, black cherry, choke cherry, common buckthorn, gray dogwood, Manitoba maple, prairie rose and red ash. Ground Layer: Common dandelion, inserted Virginia- creeper, old-field cinquefoil (<i>Potentilla simplex</i>), sensitive fern, yellow trout lily and yellowish enchanter's nightshade.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Dominated by Poplars (8-1). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Young Community. 	HCL2, NAR8, NAR9
FOD8-2	Fresh - Moist Sassafras Deciduous Forest	Canopy: Sassafras is dominant with black cherry, eastern cottonwood and pin oak. Subcanopy: Black cherry and sassafras are dominant. Understorey: Black cherry, choke cherry, common buckthorn and sassafras. Ground Layer: Cleavers, inserted Virginia-creeper, rose twisted-stalk, sessile-leaved bellwort (<i>Uvularia sessilifolia</i>), spotted crane's bill, wild columbine (<i>Aquilegia canadensis</i>) and yellow trout lily.	 Tree cover > 60 % (FO). Deciduous trees > 75 % of canopy cover (D). Dominated by Sassafras (8-2). Sand, loam and clay soils that are poorly drained, in lower slope, mid slope, and bottomland positions (Fresh-Moist). Young Community. 	HCL1A, HCL10

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Vegetation LGL Polygon Comments Species Association Code Туре Reference FOD9 Fresh -Canopy: Eastern cottonwood, pin oak and freeman's Tree cover > 60 % (FO). NAR7, Moist Oak maple are dominant with black cherry, black oak and red Deciduous trees > 75 % NAR10, Maple oak. of canopy cover (D). NAR11. Dominated by Oak and Hickory Subcanopy: American elm, black cherry, Manitoba maple, NAR20. Deciduous red ash and white mulberry. Maple (9). NSG12 Forest Understorey: American hazel, black cherry, gray dogwood Sand, loam and clay and multiflora rose. soils that are poorly drained, in lower slope, Ground Layer: Inserted Virginia-creeper, Pennsylvania sedge, prickly raspberry, riverbank grape and yellowish mid slope, and enchanter's nightshade. bottomland positions (Fresh-Moist). Young to Mid-age Community. Terrestrial/Cultural CULTURAL PLANTATION CUP CUP1-8 Red Oak Canopy: Red oak is dominant with freeman's maple as a Cultural communities NAR3B Deciduous secondary. (CU). Plantation Subcanopy: Red Oak is dominant. Planted tree cover > Understorey: Gray dogwood and red ash are co-dominant. 60% (P). Ground Layer: Kentucky bluegrass, choke cherry and Deciduous trees > 75% creeping Charlie (Glechoma hederacea) are dominant. of canopy cover (1), dominated by Red Oak (-8). Mid-age community. CUP3 Coniferous Canopy: Eastern white cedar (Thuja occidentalis) is Cultural communities NCH5 Plantation dominant with eastern white pine (Pinus strobus) and red (CU). Planted tree cover > ash as associates. Understorey: Red ash and riverbank grape are co-60% (P). Coniferous trees > 75% dominant. Ground Cover: Field horsetail (Equisetum arvense) is of canopy cover (3). Young community. dominant. CUP3-3 Canopy: Scotch pine (Pinus sylvestris) is dominant with Scotch Pine Cultural communities NAR2 Coniferous Manitoba maple, black oak and eastern cottonwood as (CU). Planted tree cover > Plantation associates. Subcanopy: Black cherry, red ash and common crabapple 60% (P). (Malus pumila). Coniferous trees > 75% Understorey: Red ash, American hazel and gray dogwood. of canopy cover (3), Ground Cover: Field horsetail is dominant. dominated by Scotch Pine (-3). Young community.

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
CUM	CULTURAL M	EADOW	l	
CUM1-1	Dry - Moist Old Field Meadow	Canopy: Wild carrot, common reed, tall goldenrod, orchard grass, Canada goldenrod, Kentucky bluegrass, Canada thistle, ribgrass (<i>Plantago lanceolata</i>), common St. John's- wort (<i>Hypericum perforatum</i>), common yarrow (<i>Achillea</i> <i>millefolium</i> ssp. <i>millefolium</i>), white heath aster white sweet- clover (<i>Melilotus alba</i>), wild bergamot, Canada bluegrass common motherwort (<i>Leonurus cardiaca</i> ssp. <i>cardiaca</i>), creeping Charlie, garlic mustard, awnless brome, common dandelion, field horsetail, ironweed, prickly raspberry, quack grass (<i>Elymus repens</i>), scarlet strawberry, sensitive fern (<i>Onoclea sensibilis</i>) and shepherd's purse (<i>Capsella</i> <i>bursa-pastoris</i>).	 Cultural communities (CU). Tree cover and shrub cover < 25% (M). Parent mineral material or mineral soils (1). This community can occur on a wide range of soil moisture regimes (Dry-Moist) (-1). Pioneer community resulting from, or maintained by, anthropogenic-based influences. 	BBA3A, BBA4E, BBA4E, BBA4F, BBA4G, BBA4G, BBA4H, BBA4I, BBA4J, BBA4K, BBA4K, BBA4K, BBA4K, BBA4K, BBA4K, BBA4K, BBA4K, BBA5, BBA5, BBA5, BBA7B, BBA8B, BBA16B, HCL7, HCL9, HWY1, HWY5, LAM4F, LAM4G, MAL1A, MAL3C, MAL8, NAR4C, NCH2A, NCH2A, NCH2B, NCH2C, NCH2D, NCH4A, NCH4Y, NSG7, OAK1A, RED15, YWK3, YWK3A, YWK6, YWK8
CUT	CULTURAL TI	HICKET		
CUT1	Mineral Cultural Thicket	Canopy: Eastern cottonwood, red ash, American elm, freeman's maple, Cockspur thorn (<i>Crataegus crus-gall</i>) and pin oak. Understorey: Gray dogwood, staghorn sumac, common buckthorn, Manitoba maple, red ash, riverbank grape, silky dogwood and Tartarian honeysuckle. Ground Cover: Scarlet strawberry, Canada goldenrod, common dandelion, garlic mustard and sensitive fern.	 Cultural communities (CU). Tree cover <= 25%; shrub cover > 25% (T). Parent mineral material or mineral soils (1). Young community resulting from, or maintained by, anthropogenic-based influences. 	BBA17, ESA3, ESA4, HWY4, NAR1, NAR3C, NAR5, NAR17, NAR19, NCH1B, NCH1B, NCH1C, NCH1E, NCH1F, NCH12, NSG1, NSG11, RED3, RED13

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Vegetation LGL Polygon Comments Species Association Code Туре Reference CUT1-4 Gray Canopy: Eastern cottonwood, red ash, pin oak, American Cultural communities BBA3, HCL3, HCL6, NAR6C, Dogwood elm and freeman's maple. (CU). Understorey: Gray dogwood is dominant with staghorn Cultural Tree cover $\leq 25\%$: Thicket sumac and Drummond's dogwood as associates. shrub cover > 25% (T). NCH1A. Ground Cover: Common reed, common cinquefoil Parent mineral material NCH1G, (Potentilla canadensis) and wild carrot. or mineral soils (1), NSG2 dominated by Gray Dogwood (-4). Young community resulting from, or maintained by, anthropogenic-based influences. CUS CULTURAL SAVANNAH CUS1 Cultural communities BBA1, BBA1B, Mineral Canopy: Manitoba maple, black walnut, eastern Cultural cottonwood, freeman's maple, tree-of-heaven (Ailanthus (CU). BBA4B, altissima) and white mulberry. 25% < Tree Cover <= BBA4C, Savannah BBA4D, Understorey: Manitoba maple, Tartarian honeysuckle, 35% (S). Drummond's dogwood, gray dogwood, prairie rose, Parent mineral material BBA4L, Siberian elm, American elm, red ash and staghorn sumac. or mineral soils (1). BBA4N, Ground Cover: Orchard grass, wild carrot, common Young community BBA4P, mullein (Verbascum thapsus), common reed, white clover resulting from, or BBA4R, (Trifolium repens), awnless brome, Canada goldenrod, maintained by, LAM3, MAL6, catnip (Nepeta cataria), common heal-all, inserted Virginiaanthropogenic-based NCH7, NCH7G, creeper, tall goldenrod and white heath aster. influences. NCH7J, NSG5 CUS1-1 Cultural communities Hawthorn Canopy: Eastern cottonwood is dominant with Manitoba MAL3 Mineral maple, red ash and black locust as associates. (CU). **Understorey:** Staghorn sumac is dominant with gray 25% < Tree Cover <= Cultural dogwood, cockspur thorn and eastern cottonwood as 35% (S). Savannah Parent mineral material associates. or mineral soils (1), Ground Cover: Common reed and Kentucky bluegrass are co-dominant with tall fescue, white sweet-clover, tall dominated by hawthorn goldenrod and Orchard grass as associates. and a mixture of other woody plants. Young community resulting from, or maintained by, anthropogenic-based influences.

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference			
CUW	CULTURAL WOODLAND						
CUW1	Mineral Cultural Woodland	Canopy: Eastern cottonwood, freeman's maple, Manitoba maple, red ash, American elm, black cherry, black locust, black oak, pin oak, Siberian elm, silver maple (<i>Acer saccharinum</i>), tree-of-heaven, weeping willow (<i>Salix X sepulcralis</i>) and white mulberry. Subcanopy: Manitoba maple, red ash, American elm, Drummond's dogwood, freeman's maple and white mulberry. Understorey: Black cherry, gray dogwood, white mulberry, common buckthorn, red ash, American elm, common crabapple, eastern red cedar, guelder rose (<i>Viburnum opulus</i>), Japanese barberry (<i>Berberis thunbergi</i>), Manitoba maple, multiflora rose, nanyberry (<i>Viburnum lentago</i>), prairie rose, riverbank grape, Siberian elm, silky dogwood, staghorn sumac, Tartarian honeysuckle and thimble-berry. Ground Cover: Garlic mustard, common reed, inserted Virginia-creeper, yellowish enchanter's nightshade, calico aster, Canada bluegrass, Canada goldenrod, common dandelion, Indian hemp (<i>Apocynum cannabinum</i> var. <i>cannabinum</i>), Kentucky bluegrass, many-flowered agrimony, old-field cinquefoil, orchard grass, scarlet strawberry, sensitive fern, spotted crane's-bill, tall goldenrod, tall hairy agrimony (<i>Agrimonia gryposepala</i>), wild carrot and yellow avens.	 Cultural communities (CU) 35% < Tree Cover <= 60% (W). Parent mineral material or mineral soils (1). Young community resulting from, or maintained by, anthropogenic-based influences. 	ABO1, BBA4A, BBA4JB, BBA5B, BBA6, BBA9, BBA16, HCL1, HWY2, LAM2, LAM4B, LAM4D, LAM4E, LAM5, LAM6, LAM7, MAL1C MAL12, , NAR3D, NAR14, NCH1, NCH1D, NCH3A, NCH7F, NCH			

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
Wetland				
SWD	DECIDUOUS		1	
SWD1-3	Pin Oak Mineral Deciduous Swamp	 Canopy: Pin oak is dominant with abundant eastern cottonwood with some American elm, big shellbark hickory, black cherry, black oak, bur oak, Manitoba maple, red ash, shumard oak (<i>Quercus shumardii</i>), freeman's maple, swamp white oak, trembling aspen and white oak. Subcanopy: Pin oak is dominant with American elm, Manitoba maple, red ash, freeman's maple and swamp white oak as associates. Understorey: American hazel, big shellbark hickory (<i>Carya laciniosa</i>), black cherry, choke cherry, common buckthorn, gray dogwood, Manitoba maple, narrow-leaved crabapple and red ash. Ground Cover: Eastern cottonwood seedlings, inserted Virginia-creeper, marsh fern, Pennsylvania sedge, prickly raspberry, sensitive fern, spotted crane's bill, western poison-ivy, wood anemone, yellowish enchanter's nightshade and yellow trout lily. 	 Standing water >20% of ground coverage dominated by hydrophytic shrub and tree species (SW). Tree cover > 25% with deciduous tree species > 75% of canopy cover (D). Mineral soil (1). Pin Oak is dominant (- 3). 	HCL5, RED2. RED4, RED8
SWD3-3	Freeman's Maple Mineral Deciduous Swamp	Canopy: Eastern cottonwood and freeman's maple are dominant with American basswood, American elm, black cherry, Manitoba maple, pin oak, red ash and trembling aspen as associates. Subcanopy: Swamp maple is dominant with American elm, Manitoba maple, pin oak and red ash as associates. Understorey: Red ash, silky dogwood and freeman's maple are dominant with Black cherry, common buckthorn, gray dogwood, guelder rose, Manitoba maple, Russian olive and staghorn sumac as associates. Ground Layer: Common reed, garlic mustard, inserted Virginia-creeper, riverbank grape, sensitive fern and wood anemone are dominant.	 Standing water >20% of ground coverage dominated by hydrophytic shrub and tree species (SW). Tree cover > 25% with deciduous tree species > 75% of canopy cover (D). Mineral soil (3). Freeman's Maple is dominant (-3). 	MAL10, NCH3, NCH3B, NSG8, OAK2A, RED6, RED7
MAM	MEADOW MA	ABSH		
MAM2	Mineral Meadow Marsh	Canopy: Common reed is dominant with broad-leaved cattail (<i>Typha latifolia</i>), gray dogwood, Manitoba maple, narrow-leaved cattail (Typha angustifolia) and riverbank grape as associates. Ground Cover: Common barnyard grass (<i>Echinochloa crusgalil</i>), eastern cottonwood, hairy aster (<i>Aster pilosus</i> var. pilosus), Indian hemp, ironweed, Philadelphia fleabane, riverbank grape, small-spiked barnyard grass (<i>Echinochloa microstachya</i>), straw-colored umbrella sedge (<i>Cyperus strigosus</i>), tall goldenrod, Torrey's rush (<i>Juncus torreyi</i>), tree-of-heaven and white heath aster.	 Seasonally flooded and is dominated by emergent hydrophytic macrophytes (MAM). Represents the wetland – terrestrial interface. Tree and shrub cover <= 25%. Mineral soil (2), dominated by common reed. Community age pioneer. 	BBA10, HCL4, MAL2, MAL7, NAR6D, NAR18, RED14, YWK7

SUMMARY OF ECOLOGICAL LAND CLASSIFICATION¹ VEGETATION COMMUNITIES

ELC Code	Vegetation Type	Species Association	Comments	LGL Polygon Reference
MAM2- 10	Forb Mineral Meadow Marsh	Canopy: European beggar-ticks (<i>Bidens tripartita</i>) is dominant with abundant devil's beggar-ticks (<i>Bidens</i> <i>frondosa</i>), spotted touch-me-not (<i>Impatiens capensis</i>) and tumor-curing cocklebur (<i>Xanthium strumarium</i>) as associates.	 Seasonally flooded and is dominated by emergent hydrophytic macrophytes (MAM). Represents the wetland – terrestrial interface. Tree and shrub cover <= 25%. Mineral soil (2), dominated by forbs (- 10). Community age pioneer. 	BBA15
MAS	SHALLOW M	ARSH	, , , , , , , , , , , , , , , , , , , ,	
MAS2-1	Cattail Mineral Shallow Marsh	Canopy: Narrow-leaved cattail is dominant with calico aster, Canada thistle, field sow-thistle (<i>Sonchus arvensis</i> ssp. <i>arvensis</i>), fowl meadow grass (<i>Poa palustris</i>), orchard grass and tumor-curing cocklebur as associates.	 Standing or flowing water for much of the growing season and hydrophytic emergent macrophyte cover >25 % (MAS). Tree and shrub cover <= 25%. Mineral soil (2). Narrow-leaved Cattail is dominant (-1). Community age pioneer. 	HCL8, YWK9
OAO	OPEN AQUA		1	
OAO	Open Aquatic	Ground Cover: Not applicable	 No Macrophyte vegetation, trees, or shrub cover. Water Depth > 2m 	HWY3

APPENDIX D

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
ABO1	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,60
ANS1	TPW2-1	Fresh-Moist Black Oak-White Oak Tallgrass Woodland	G2	S1	12	8,22,30,32,35,37, 39,48,52,55,60,62
ANS1A	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	4	8,9,16,35
ANS2	TPW2-2	Fresh-Moist Pin Oak Tallgrass Woodland	G1	S1	13	13,22,26,30, 32,37,39,42, 44,45,48,55,60
ANS2C	TPW2-1	Fresh-Moist Black Oak-White Oak Tallgrass Woodland	G2	S1	17	13,22,27,30,32,35,37, 39,42,44,45,47, 48,55,58,60,62
BBA1	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	5	3,14,38,39,60
BBA1A	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	0	
BBA1B	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	0	
BBA2	FOD7-4	Fresh-Moist Black Walnut Lowland Deciduous Forest	G4?	S2S3	1	48
BBA3	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	0	
BBA3A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
BBA4A	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	60
BBA4B	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	3	3,7,60
BBA4C	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	2	3,60
BBA4D	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	3	3,25,60
BBA4E	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	60
BBA4EB	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	60
BBA4EC	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	5	3,7,30,38,60
BBA4F	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	8	20,25,37-39,52,57,60
BBA4G	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		
BBA4H	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		

APPENDIX D PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

¹ Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources, Southcentral Sciences Section, Science Development and Transfer Branch. SCSS Field Guide FG-02. North Bay, Ontario.

² Numbers correspond with the species number listed in Table 2 of the main report.

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
BBA4I	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		
BBA4J	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		
BBA4JB	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked		
BBA4K	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked		
BBA4L	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked		
BBA4N	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked		
BBA4P	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked		
BBA4R	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked		
BBA4S	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	25
BBA4M	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	2	52,60
BBA4MB	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	5	30,37,38,52,60
BBA5	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
BBA5B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
BBA6	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
BBA7	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	1	48
BBA7B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
BBA8	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	0	
BBA8B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
BBA9	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
BBA10	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	1	3
BBA12	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	1	48
BBA13	FOD7-4	Fresh-Moist Black Walnut Lowland Deciduous Forest	G4?	S2S3	1	48
BBA14	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	2	25,48
BBA15	MAM2- 10	Forb Mineral Meadow Marsh	G5?	S5	0	
BBA16	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not	1	3

APPENDIX D PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
				ranked		
BBA16B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	3
BBA17	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	2	35,55
ESA1	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	4	37,38,57,60
ESA2	FOD2-2	Dry-Fresh Oak-Hickory Deciduous Forest	G4?	S3S4	5	16,25,37,39,55
ESA3	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	9	8,11,17,30,39, 52,55,57,60
ESA4	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	7	8,11,30,39,55,57,60
ESA5	TPS2-1	Fresh-Moist Pin Oak-Bur Oak Tallgrass Savannah	G1	<u>S1</u>	10	2,11,17,22,30, 37,39,55,57,60
HCL1	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	39
HCL1A	FOD8-2	Fresh-Moist Sassafras Deciduous Forest	not ranked	not ranked	1	55
HCL2	FOD8-1	Fresh-Moist Poplar Deciduous Forest	not ranked	not ranked	1	48
HCL3	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	10	8,17,30,37,39, 43,52,55,57,60
HCL4	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	3	22,52,60
HCL5	SWD1-3	Pin Oak Mineral Deciduous Swamp	G2	S2S3	3	39,55,57
HCL6	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	8	11,17,22,38, 39,55,57,60
HCL7	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
HCL8	MAS2-1	Cattail Mineral Shallow Marsh	G5	S5	1	18
HCL9	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	22
HCL10	FOD8-2	Fresh-Moist Sassafras Deciduous Forest	not ranked	not ranked	1	55
HWY1	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	4	22,39,52,60
HWY2	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
HWY3	OAO	Open Aquatic	NA	S5	0	
HWY4	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	0	
HWY5	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
LAM1	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	18	3,8,11,18,22,28, 30,32,35,37-39, 46,49,54,58-60
LAM2	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	11	8,11,18,22,30,37, 39,50,55,57,60

APPENDIX D PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
LAM3	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	6	18,39,42,55,58,60
LAM4A	FOD7-3	Fresh-Moist Willow Lowland Deciduous Forest	not ranked	not ranked	0	
LAM4B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	18,22
LAM4D	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	6	13,18,22,39,48,55
LAM4E	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
LAM4F	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
LAM4G	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
LAM5	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	39,55
LAM6	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
LAM7	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	39,55
MAL1	FOD1-4	Dry-Fresh Mixed Oak Deciduous Forest	G?	S3S4	6	22,37,44,49,53,55
MAL1A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
MAL1B	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	5	21,22,30,37,55
MAL1C	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
MAL1D	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	7	24,38,39,52, 57,59,60
MAL1E	FOD1-4	Dry-Fresh Mixed Oak Deciduous Forest	G?	S3S4	2	21,55
MAL2	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	0	
MAL3	CUS1-1	Hawthorn Cultural Savannah	not ranked	not ranked	7	22,30,37,39, 49,52,60
MAL3B	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	10	3,14,18,22,30, 37,39,49,52,60
MAL3C	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	39
MAL5	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	1	48
MAL6	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	0	
MAL7	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	0	
MAL8	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
MAL9	FOD1-3	Dry-Fresh Black Oak Deciduous Forest	G4?	S3	5	22,35,37,39,55
MAL10	SWD3-3	Freeman's Maple Mineral Deciduous	not ranked	not	5	22,35,37,39,55

APPENDIX D PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
		Swamp		ranked		
MAL11	FOD1-3	Dry-Fresh Black Oak Deciduous Forest	G4?	S3	5	22,35,37,39,55
MAL12	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,60
NAR1	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	10	4,14,22,30,38, 49,51,55,59,60
NAR2	CUP3-3	Scotch Pine Coniferous Plantation	not ranked	not ranked	0	
NAR3A	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	2	39,55
NAR3B	CUP1-8	Red Oak Deciduous Plantation	not ranked	not ranked	0	
NAR3C	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	0	
NAR3D	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	55
NAR4A	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	10	4,14,22,30, 37- 39,49,52,60
NAR4B	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	7	4,14,22,30,37,52,60
NAR4C	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	10	4,6,9,14,22, 30,32,37,52,60
NAR5	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	2	1,55
NAR6A	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	1	55
NAR6B	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	1	55
NAR6C	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	1	55
NAR6D	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	2	34,52
NAR7	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	0	
NAR8	FOD8-1	Fresh-Moist Poplar Deciduous Forest	not ranked	not ranked	1	36
NAR9	FOD8-1	Fresh-Moist Poplar Deciduous Forest	not ranked	not ranked	0	
NAR10	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	1	55
NAR11	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	0	
NAR12	FOD7-1	Fresh-Moist White Elm Lowland Deciduous Forest	not ranked	not ranked	4	10,37,39,55
NAR13	FOD7-2	Fresh-Moist Ash Lowland Deciduous Forest	not ranked	not ranked	0	
NAR14	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	3	22,37,39

APPENDIX D PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
NAR15	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	13	4,5,9,10,14,22,30, 37,38,49,55,59,60
NAR16	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	13	5,9,10,14,22,30,37- 39,49,55,59,60
NAR17	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	1	55
NAR18	MAM2-2	Reed-canary Grass Mineral Meadow Marsh	not ranked	not ranked	0	
NAR19	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	4	9,39,55,60
NAR20	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	1	55
NCH1	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	39
NCH1A	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	5	4,5,39,49,55
NCH1B	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	5	4,5,39,49,55
NCH1C	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	5	4,5,39,49,55
NCH1D	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	5	9,22,37,39,55
NCH1E	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	1	57
NCH1F	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	2	39,55
NCH1G	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	2	39,55
NCH2A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	4	5,37,39,60
NCH2B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	7	9,15,22,24,35,55,60
NCH2C	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	3	22,30,60
NCH2D	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	2	39,55
NCH2E	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	6	1,4,14,15,22,30
NCH3	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	1	39
NCH3A	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
NCH3B	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	0	
NCH4A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	2	39,60
NCH4B	TP02-1	Fresh-Moist Tallgrass Prairie	G2	S1	12	2,4,14,15,22,27, 30,37-39,59,60
NCH4Y	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not	3	27,39,60

APPENDIX D PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
				ranked		
NCH4Z	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	10	4,14,15,22,30,37- 39,59,60
NCH5	CUP3	Coniferous Plantations	not ranked	not ranked	0	
NCH7	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	2	39,59
NCH7B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	55
NCH7C	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	55
NCH7D	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
NCH7E	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	18,22
NCH7F	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	4	9,22,39,59
NCH7G	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	0	
NCH7H	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	1	39
NCH7J	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	2	39,55
NCH8	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	39,48
NCH11	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	39,55
NCH12	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	13	1,5,6,14,15,19,22, 29,30,37,49,52,60
NCH12B	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	7	15,18,22,30, 32,37,52,
NGM1	FOD4	Dry-Fresh Deciduous Forest Ecosite	not ranked	not ranked	5	23,55,59-61
NGM2	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	5	23,55,59-61
NGM3	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,60
NSG1	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	2	39,55
NSG2	CUT1-4	Gray Dogwood Cultural Thicket	not ranked	not ranked	3	11,22,39
NSG3	FOD7-2	Fresh-Moist Ash Lowland Deciduous Forest	not ranked	not ranked	2	39,55
NSG4	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
NSG5	CUS1	Mineral Cultural Savannah Ecosite	not ranked	not ranked	9	22,30,37- 39,49,53,55,60
NSG6	FOD8	Fresh-Moist Poplar-Sassafras Deciduous	not ranked	not	1	55

APPENDIX D PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
		Forest Ecosite		ranked		
NSG7	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	3	30,38,60
NSG7A	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	3	30,38,60
NSG7B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	55
NSG7C	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	3	30,38,60
NSG8	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	1	55
NSG10	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	1	55
NSG11	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	3	22,39,55
NSG12	FOD9	Fresh-Moist Oak-Maple-Hickory Deciduous Forest Ecosite	not ranked	not ranked	1	55
NSG13	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,55
NSG14	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	38,60
NSG15	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
OAK1A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	7	9,14,22,30,32,52,60
OAK1B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	9	4,21,23,30,39, 52,55,57,60
OAK2	FOD8	Fresh-Moist Poplar-Sassafras Deciduous Forest Ecosite	not ranked	not ranked	5	22,39,48,55,60
OAK2A	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	1	23
OAK2B	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	1	60
OAK2C	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	2	22,39
OAK3	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	5	1,14,30,32,33
OAK4	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	0	1,14,30,32,33
RED2	SWD1-3	Pin Oak Mineral Deciduous Swamp	G2	S2S3	7	22,36,39,41,55-57
RED2A	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	3	1,39,56
RED2B	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	4	1,9,15,55
RED3	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	3	22,59,60
RED4	SWD1-3	Pin Oak Mineral Deciduous Swamp	G2	S2S3	5	22,39,45,55,56
RED5	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	4	22,30,39,60
RED6	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	0	

APPENDIX D PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

LGL ID	ELC Code	ELC Description	Grank	Srank	# of S1-S3	S1-S3 Plant Species Identifier ²
RED7	SWD3-3	Freeman's Maple Mineral Deciduous Swamp	not ranked	not ranked	5	18,37,39,55,60
RED8	SWD1-3	Pin Oak Mineral Deciduous Swamp	G2	S2S3	7	18,22,37,39, 44,55,56
RED9	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	0	
RED10	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
RED11	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
RED12	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	9	8,14,15,19, 22,30,39,52,60
RED13	CUT1	Mineral Cultural Thicket Ecosite	not ranked	not ranked	9	8,14,15,19,22, 30,39,52,60
RED14	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	2	52,60
RED15	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
YWK1	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	11	4,22,30,32,37,39, 40,49,51,55,60
YWK1B	TPO2-1	Fresh-Moist Tallgrass Prairie	G2	S1	10	4,22,30,32,37,39, 40,49,51,60
YWK1C	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	11	4,22,30,32,37,39, 40,49,51,55,60
YWK2	FOD1-3	Dry-Fresh Black Oak Deciduous Forest	G4?	S3	4	22,48,55,60
YWK3	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	3	18,22,60
YWK3A	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	0	
YWK4	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	4	7,37,55,60
YWK5	CUW1	Mineral Cultural Woodland Ecosite	not ranked	not ranked	3	34,55,60
YWK6	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	1	34
YWK7	MAM2	Mineral Meadow Marsh Ecosite	not ranked	not ranked	2	55,60
YWK8	CUM1-1	Dry-Moist Old Field Meadow	not ranked	not ranked	3	7,37,60
YWK9	MAS2-1	Cattail Mineral Shallow Marsh	G5	S5	0	

APPENDIX D PROVINCIALLY RARE ELC VEGETATION COMMUNITIES¹ LOCATED IN THE AREA OF INVESTIGATION

Note: Shading indicates vegetation communities that are provincially rare.



				-				
Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel (chanr channeli: nati
Basin Drain	Upstream of E.C. Row	F	none	 piped upstream and downstream of Continental Drive open pooled water upstream of E.C. Row buried culvert? 	permanent	obstructed	none	chanr
Basin Drain	Downstream of E.C. Row	F	warmwater baitfish	 ditched watercourse morphology – flats with small riffle and pools near Spring Garden Road width 2 m, depth 30 cm more shallow and diverse downstream sparse instream cover upstream, more downstream riparian vegetation – trees, shrubs and herbaceous vegetation substrate – muck 	permanent	unobstructed	marginal	chanr
Benson Drain	Upstream of South Talbot Road	F	warmwater baitfish	 narrow ditched watercourse morphology – flats with dry areas width 0.5 m, depth 10 cm riparian vegetation – trees, shrubs, grasses and herbaceous vegetation good shade sparse instream cover substrate – clay 	intermittent	unobstructed	marginal	chanr
Broadway Drain	Upstream of Sandwich Street	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	intermittent	partially obstructed	marginal	chann
Broadway Drain	Downstream of Sandwich Street	F	warmwater	 seasonal ditched watercourse mostly dry – rip rap-lined pool at culvert receives warm effluent pool 2.5 m wide, 25 cm deep some channel definition riparian vegetation - cattails, <i>Phragmites</i> and trees channel accessible from Detroit River during high flows 	intermittent	partially obstructed	marginal	chanr
Burke Drain	South Talbot Road to Talbot Road	F	warmwater sportfish	 pooled water in roadside ditch width 2 m, depth 15 cm riparian vegetation – cattails substrate – detritus and muck 	intermittent	partially obstructed	marginal	chann
Burke Drain	Downstream of South Talbot Road	F	none	 roadside ditch dry lack of channel definition 	ephemeral	partially obstructed	none	chann
Cahill Drain	Upstream of confluence with Wolfe Drain	F	warmwater baitfish	 narrow ditched watercourse morphology – flats with some runs and riffles width 1.5 m, depth 20 cm sparse instream cover riparian vegetation – herbaceous vegetation and grasses substrate – clay 	permanent	unobstructed	marginal	chanr

el Structure nnelized, elized lined, atural)	Comments
nnelized	
nnelized	Water does not appear to be flowing.Water is pooled in a deep roadside ditch
nnelized	
nnelized	

Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel (chann channeliz natu
Cahill Drain	Downstream of Talbot Road	E	warmwater sportfish	 ditched watercourse with some naturalization morphology – flats with some runs and pools width 4 m, depth 40 cm riparian vegetation – trees, shrubs, herbaceous vegetation and grasses substrate – muck 	permanent	unobstructed	important	chanr
Collins Drain	Upstream of Confluence with Wolfe Drain	F	warmwater baitfish	 ditched watercourse morphology - flats width 1.5 m, depth 5 cm riparian vegetation – cattails and <i>Phragmites</i> substrate – clay/silt 	intermittent	unobstructed	marginal	chanr
Dickson Drain	Upstream of Confluence with Benson Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails 	ephemeral	partially obstructed	none	chann
Dickson Drain	Downstream of South Talbot Road	F	warmwater baitfish	 narrow ditched watercourse morphology – flats with dry areas width 1 m, depth 10 cm riparian vegetation – trees, shrubs, grasses and herbaceous vegetation good shade sparse instream cover substrate – clay 	intermittent	unobstructed	marginal	chann
Grand Marais Drain (Turkey Creek)	Upstream of Huron Church Road	unclassified	warmwater sportfish	 concrete lined channel morphology - runs width 2.2 m, depth 25 cm very sparse instream cover no riparian vegetation substrate – silt and sand over concrete 	permanent	unobstructed	marginal	channelize lin
Grand Marais Drain (Turkey Creek)	Downstream of Huron Church Road	E	warmwater sportfish	 concrete lined channel morphology – runs with small riffles width 2.2 m, depth 25 cm sparse instream cover no riparian vegetation for 100 m, then old field vegetation substrate – silt and sand over concrete 	permanent	unobstructed	marginal	channelize lin
Healy Drain	Upstream of Sandwich Street	F	none	 roadside ditch obstructed by buried culvert some standing water lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	intermittent	obstructed	none	chann
Healy Drain	Downstream of Sandwich Street	F	warmwater	 seasonal ditched watercourse dry riparian vegetation – cattails and <i>Phragmites</i> channel accessible from Detroit River during high flows 	intermittent	partially obstructed	marginal	chann
Howard Avenue Drain	Upstream of South Talbot Road	F	none	 roadside ditch dry lack of channel definition riparian vegetation - cattails 	ephemeral	partially obstructed	none	chanr

el Structure nnelized, lized lined, atural)	Comments
nnelized	
nnelized	
nnelized	
nnelized	
zed concrete lined	
zed concrete lined	
nnelized	
nnelized	
nnelized	

Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel (chann channelia natu
Lennon Drain	Upstream of Talbot Road	F	warmwater sportfish	 ditched watercourse morphology – flats width 2 m, depth 25 cm sparse instream cover riparian vegetation – manicured grass with some trees substrate – geotextile and clay 	permanent	unobstructed	important	chanr
Lennon Drain	Talbot Road to Huron Church Line	E	warmwater sportfish	 ditched watercourse morphology – runs with few riffles width 1.5 m, depth 20 cm riparian vegetation – herbaceous vegetation, grasses, and few shrubs substrate – rip rap good instream cover 	permanent	unobstructed	important	channelized
Lennon Drain	Downstream of Huron Church Line	E	warmwater sportfish	 ditched watercourse morphology – runs with few riffles width 1.5 m, depth 20 cm sparse instream cover riparian vegetation – manicured grass with some trees substrate - clay 	permanent	unobstructed	important	chanr
Marentette Drain	Upstream of Huron Church Road	F	none	Piped	intermittent	obstructed	none	chann
Marentette Drain	Downstream of Huron Church Road	F	none	 piped for ~60 m then open dry channel riparian vegetation – trees substrate – silt and detritus 	intermittent	obstructed	none	chann
McKee Drain	Upstream of Matchette Road	F	none	 piped upstream of Matchette Road across residential property open channel inaccessible to fish riparian vegetation – manicured grass 	intermittent	obstructed	none	chann
McKee Drain	Matchette Road to E.C. Row	F	warmwater sportfish	 ditched watercourse partially rip rap lined near E.C. Row morphology – flat width 1.5 m, depth 20 less water near Matchette Road riparian vegetation – <i>Phragmites</i> substrate – muck and detritus 	intermittent	unobstructed	important	chanr
McKee Drain	Downstream of E.C. Row	F	warmwater sportfish	 ditched watercourse rip rap lined morphology - flat width 2 m, depth 20 cm riparian vegetation – <i>Phragmites</i> substrate – muck and detritus 	intermittent	unobstructed	important	chanr
McKee Creek	Upstream of Sandwich Street	F	warmwater sportfish	 ditched watercourse lined with sheet piling morphology – flat width 3 m, depth 15 cm riparian vegetation – old field with vines substrate – muck 	permanent	unobstructed	important	chanr

el Structure nnelized, elized lined, atural)	Comments
nnelized	
ed rip rap lined	
nnelized	

Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel (chanr channeliz nati
McKee Creek	Downstream of Sandwich Street	E	warmwater sportfish	 ditched watercourse flows downstream of sandwich street into a canal on Van De Hogen property morphology – flat width 4 m, depth 25 cm riparian vegetation – <i>Phragmites</i> substrate – muck and silt 	permanent	partially obstructed	important	chanr
NoName Tributary of Dickson Drain along South Talbot Road	Upstream of Confluence with Dickson Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation - cattails 	ephemeral	partially obstructed	none	chanr
NoName Tributary of Susan Drain along Broadway Street	Upstream of Confluence with Susan Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	none	partially obstructed	none	chanr
No Name Tributary of Wolfe Drain along HWY 401	Upstream of confluence with Wolfe Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	ephemeral	partially obstructed	none	chanr
No Name Tributary of Wolfe Drain along Howard Avenue	Upstream of confluence with Wolfe Drain	F	none	 roadside ditch dry lack of channel definition riparian vegetation – cattails and <i>Phragmites</i> 	ephemeral	partially obstructed	none	chanı
Susan Drain	Downstream of Broadway Street to Confluence with NoName Tributary	F	none	 ditched watercourse dry riparian vegetation – Oak forest substrate - detritus 	intermittent	unobstructed	none	chanr
Talbot Drain	Upstream of confluence with Cahill Drain	F	none	 narrow ditched watercourse riparian vegetation – trees, shrubs, herbaceous vegetation and grasses substrate – clay perched above Cahill Drain at confluence 	intermittent	obstructed	none	chanr
Titcombe Drain	Downstream of E.C. Row	F	warmwater sportfish	 seasonal ditched watercourse no flow in September 2006 pockets of standing water near Chappus Road approximate width of channel 1.5 m riparian vegetation – trees, shrubs, herbaceous vegetation and manicured grass substrate – silt and detritus 	intermittent	unobstructed	important	chanr
Unnamed pond	West of Outer Drive, east of Howard Ave, South of Talbot Road	unclassified	warmwater sportfish	 pond habitat dimensions approximately 55x55 m riparian vegetation – cattails, trees and shrubs substrate – clay and muck 	permanent	Not connected	marginal	Man
Wolfe Drain	Upstream of Confluence with Collins Drain	F	warmwater baitfish	 ditched watercourse morphology – flats and runs width 1.5 m, depth 25 cm sparse instream cover riparian vegetation – herbaceous vegetation and grasses substrate - clay 	permanent	unobstructed	marginal	chanr

el Structure nnelized, elized lined, atural)	Comments
nnelized	
n made	Man made pondNot connected to watercourses
nnelized	

Watercourse/ Waterbody Name	Reach Location	Agricultural Municipal Drain Classification (A, B, C, D, E, F)	Fish Community (warmwater, coolwater, coldwater, baitfish, sportfish, migratory)	Habitat Summary	Flow Conditions (ephemeral, intermittent, permanent)	Drainage Connectivity (obstructed, partially obstructed, unobstructed)	Habitat Class (marginal, important, critical)	Channel S (chann channeliz natu
Wolfe Drain	Confluence with Collins Drain to Confluence with Cahill Drain	F	warmwater baitfish	 ditched watercourse morphology – flats with some runs, pools and riffles width 2 m, depth 25 cm sparse instream cover riparian vegetation – trees, shrubs, herbaceous vegetation and grasses well shaded for most of reach substrate - clay 	permanent	unobstructed	marginal	chann
Wolfe Drain	Confluence with Cahill Drain to Talbot Road Crossing	E	warmwater sportfish	 ditched watercourse morphology – flats with some runs, riffles and pools width 2 m, depth 15 cm sparse instream cover riparian vegetation –shrubs, herbaceous vegetation and grasses good shade for most of reach substrate - clay 	permanent	unobstructed	marginal	chann
Youngstown Drain	Upstream of Confluence with Basin Drain	F	warmwater baitfish	 narrow ditched watercourse morphology - flats width 0.3 m, depth 10 cm very little flow riparian vegetation – herbaceous vegetation and grasses substrate – clay 	intermittent	unobstructed	marginal	chann

el Structure nnelized, elized lined, atural)	Comments
nnelized	
nnelized	
nnelized	



APPENDIX F LIST OF WILDLIFE SPECIES RECORDED IN THE AREA OF INVESTIGATION

Wildlife	Scientific Name	Common Name	COSEWIC	COSSARO	Local	Legal Status	Others
Herpetofauna	Bufo americanus	American Toad					
	Pseudacris triseriata	Western Chorus Frog					
	Rana pipiens	Northern Leopard Frog					
	Rana clamitans	Green Frog					
	Chelydra serpentina	Snapping Turtle				FWCA(G)	
	Chrysemys picta marginata	Midland Painted Turtle				FWCA(P)	
	Thamnophis sirtalis	Eastern Gartersnake					
						SARA(1)/ OESA (4)/	
	Thamnophis butleri	Butler's Gartersnake	THR	THR		FWCA(P)	
	Storeria dekayi	Dekay's Brown Snake					
	Storeria occipitomaculata	Northern Red-bellied Snake					
	Elaphe gloydi	Eastern Fox Snake	THR	THR		SARA(1)/ OESA (4)/ FWCA(P)	
Birds	Branta canadensis	Canada Goose				MBCA	
	Aix sponsa	Wood Duck			BSC	MBCA	
	Anas platyrhynchos	Mallard				MBCA	
	Phasianus colchicus	Ring-necked Pheasant				MBCA / FWCA(G)	
	Phalacrocorax auritus	Double-crested Cormorant					
	Ardea herodias	Great Blue Heron				MBCA	
	Ardea alba	Great Egret				MBCA	
	Nycticorax nycticorax	Black-crowned Night Heron			BSC	MBCA	
	Cathartes aura	Turkey Vulture			BSC	FWCA(P)	
	Pandion haliaetus	Osprey			BSC	FWCA(P)	
	Accipiter striatus	Sharp-shinned Hawk				FWCA(P)	
	Accipiter cooperii	Cooper's Hawk				FWCA(P)	
	Accipiter gentilis	Northern Goshawk				FWCA(P)	
	Buteo platypterus	Broad-winged Hawk			BSC	FWCA(P)	
	Buteo jamaicensis	Red-tailed Hawk				FWCA(P)	
	Falco sparverius	American Kestrel			BSC	FWCA(P)	
	Charadrius vociferus	Killdeer				MBCA	
	Actitis macularius	Spotted Sandpiper			BSC	MBCA	
	Gallinago delicata	Wilson's Snipe			BSC	MBCA	
	Scolopax minor	American Woodcock			BSC	MBCA	
	Larus delawarensis	Ring-billed Gull				MBCA	
	Columba livia	Rock Pigeon					
	Zenaida macroura	Mourning Dove				MBCA	
	Coccyzus americanus	Yellow-billed Cuckoo		1	BSC	MBCA	*
	Megascops asio	Eastern Screech-Owl		1		FWCA(P)	
	Archilochus colubris	Ruby-throated Hummingbird		1	BSC	MBCA	
	Melanerpes erythrocephalus	Red-headed Woodpecker	SC	SC	BSC	OESA (5)/ MBCA	
	Melanerpes carolinus	Red-bellied Woodpecker			BSC	MBCA	
	Picoides pubescens	Downy Woodpecker		1	200	MBCA	
	Picoides villosus	Hairy Woodpecker		1		MBCA	*
	Colaptes auratus	Northern Flicker		1		MBCA	

¹ Denotes species that have been identified in the region by others and that suitable habitat exists in the area of investigation.

APPENDIX F LIST OF WILDLIFE SPECIES RECORDED IN THE AREA OF INVESTIGATION

Wildlife	Scientific Name	Common Name	COSEWIC	COSSARO	Local	Legal Status	Others ¹
	Contopus virens	Eastern Wood Pewee				MBCA	
	Empidonax traillii	Willow Flycatcher				MBCA	
	Empidonax minimus	Least Flycatcher				MBCA	
	Sayornis phoebe	Eastern Phoebe			BSC	MBCA	
	Myiarchus crinitus	Great Crested Flycatcher				MBCA	*
	Tyrannus tyrannus	Eastern Kingbird			BSC	MBCA	
	Vireo flavifrons	Yellow-throated Vireo				MBCA	
	Vireo solitarius	Blue-headed Vireo				MBCA	
	Vireo gilvus	Warbling Vireo				MBCA	
	Vireo olivaceus	Red-eyed Vireo				MBCA	
	Cyanocitta cristata	Blue Jay				FWCA(P)	
	Corvus brachyrhynchos	American Crow					
	Eremophila alpestris	Horned Lark			BSC	MBCA	
	Tachycineta bicolor	Tree Swallow			000	MBCA	
		Northern Rough-winged				MIDCA	
	Stelgidopteryx serripennis	Swallow			BSC	MBCA	
	Petrochelidon pyrrhonota	Cliff Swallow			BSC	MBCA	
	Hirundo rustica	Barn Swallow			BSC	MBCA	
					BSC		
	Poecile atricapillus	Black-capped Chickadee				MBCA	
	Sitta carolinensis	White-breasted Nuthatch			DCO	MBCA	
	Certhia americana	Brown Creeper			BSC	MBCA	
	Thryothorus Iudovicianus	Carolina Wren			BSC	MBCA	
	Troglodytes aedon	House Wren				MBCA	
	Regulus satrapa	Golden-crowned Kinglet				MBCA	
	Regulus calendula	Ruby-crowned Kinglet				MBCA	
	Polioptila caerulea	Blue-gray Gnatcatcher			BSC	MBCA	
	Sialia sialis	Eastern Bluebird			BSC	MBCA	
	Cathartes fuscescens	Veery			BSC	MBCA	
	Catharus guttatus	Hermit Thrush				MBCA	
	Hylocichla mustelina	Wood Thrush				MBCA	
	Turdus migratorius	American Robin				MBCA	
	Dumetella carolinensis	Gray Catbird			BSC	MBCA	
	Toxostoma rufum	Brown Thrasher			BSC	MBCA	
	Sturnus vulgaris	European Starling					
	Bombycilla cedrorum	Cedar Waxwing				MBCA	
		X				OESA (5)/	
	Vermivora chrysoptera	Golden-winged Warbler				MBCA	
	Vermivora peregrina	Tennessee Warbler				MBCA	
	Vermivora ruficapilla	Nashville Warbler				MBCA	
	Parula americana	Northern Parula				MBCA	
	Dendroica petechia	Yellow Warbler				MBCA	
	Dendroica pensylvanica	Chestnut-sided Warbler			BSC	MBCA	
	Dendroica perisylvanica Dendroica magnolia	Magnolia Warbler			000	MBCA	
	Dendroica magnolia Dendroica caerulescens	Black-throated Blue Warbler				MBCA	
	Dendroica caeruiescens Dendroica coronata	Yellow-rumped Warbler				MBCA	
		Black-throated Green Warbler				MBCA	
	Dendroica virens						
	Dendroica fusca	Blackburnian Warbler				MBCA	
	Dendroica pinus	Pine Warbler				MBCA	
	Dendroica palmarum	Palm Warbler				MBCA	
	Dendroica castanea	Bay-breasted Warbler				MBCA	<u> </u>
	Mniotilta varia	Black and White Warbler				MBCA	

APPENDIX F
LIST OF WILDLIFE SPECIES RECORDED IN THE AREA OF INVESTIGATION

Wildlife	Scientific Name	Common Name	COSEWIC	COSSARO	Local	Legal Status	Others
	Setophaga ruticilla	American Redstart			BSC	MBCA	
	Seiurus aurocapilla	Ovenbird			BSC	MBCA	*
	Oporornis philadelphia	Mourning Warbler			BSC	MBCA	
	Geothlypis trichas	Common Yellowthroat				MBCA	
	Wilsonia pusilla	Wilson's Warbler				MBCA	
	Piranga olivacea	Scarlet Tanager			BSC	MBCA	*
	Pipilo erythrophthalmus	Eastern Towhee			BSC	MBCA	
	Spizella passerina	Chipping Sparrow				MBCA	
	Spizella pusilla	Field Sparrow			BSC	MBCA	
	Pooecetes gramineus	Vesper Sparrow			BSC	MBCA	
	Passerculus sandwichensis	Savannah Sparrow			BSC	MBCA	
	Melospiza georgiana	Swamp Sparrow			BSC	MBCA	*
	Melospiza melodia	Song Sparrow				MBCA	
	Melospiza lincolnii	Lincoln's Sparrow				MBCA	
	Zonotrichia albicollis	White-throated Sparrow				MBCA	
	Zonotrichia leucophrys	White-crowned Sparrow				MBCA	
	Junco hyemalis	Dark-eyed Junco				MBCA	
	Cardinalis cardinalis	Northern Cardinal				MBCA	
	Pheucticus Iudovicianus	Rose-breasted Grosbeak				MBCA	
	Passerina cyanea	Indigo Bunting				MBCA	
	Agelaius phoeniceus	Red-winged Blackbird					
	Quiscalus quiscula	Common Grackle					
	Molothrus ater	Brown-headed Cowbird					
	Icterus spurius	Orchard Oriole			BSC	MBCA	
	Icterus galbula	Baltimore Oriole				MBCA	
	Carpodacus mexicanus	House Finch				MBCA	
	Carduelis tristis	American Goldfinch			BSC	MBCA	
	Passer domesticus	House Sparrow					
Mammals	Didelphis virginiana	Virginia Opossum				FWCA(F)	
	Blarina brevicauda	N. Short-tailed Shrew				FWCA(P)	
	Eptesicus fuscus	Big Brown Bat				FWCA(P)	*
	Lasiurus borealis	Eastern Red Bat				FWCA(P)	*
	Lasiurus cinereus	Hoary Bat				FWCA(P)	*
	Sylvilagus floridanus	Eastern Cottontail				FWCA(G)	
	Lepus europaeus	European Hare				FWCA(G)	
	Tamias striatus	Eastern Chipmunk				FWCA(P)	
	Marmota monax	Groundhog					
	Sciurus carolinensis	Gray Squirrel				FWCA(G)	
	Peromyscus leucopus	White-footed Mouse					
	Microtus pennsylvanicus	Meadow Vole					
	Ondatra zibethica	Muskrat				FWCA(F)	
	Rattus norvegicus	Norway Rat				/ - /	*
	Mus musculus	House Mouse					*
	Canis latrans	Coyote				FWCA(F)	
	Vulpes vulpes	Red Fox				FWCA(F)	
	Procyon lotor	Raccoon				FWCA(F)	
	Mephitis mephitis	Striped Skunk		1		FWCA(F)	
	Odocoileus virginianus	White-tailed Deer				FWCA(G)	

Note: Species status current to October 2007.

APPENDIX G

APPENDIX G
LIST OF BIRD SPECIES WITH BREEDING EVIDENCE

Scientific Name	Common Name	COSEWIC	COSSARO	Local	Legal Status	Others ¹	BBE
Branta canadensis	Canada Goose				MBCA		NE, FY
Aix sponsa	Wood Duck			BSC	MBCA		
Anas platyrhynchos	Mallard				MBCA		FY
					MBCA/		
Phasianus colchicus	Ring-necked Pheasant				FWCA(G)		T
Phalacrocorax auritus	Double-crested Cormorant						
Ardea herodias	Great Blue Heron				MBCA		
Ardea alba	Great Egret				MBCA		
Nycticorax nycticorax	Black-crowned Night Heron			BSC	MBCA		
Cathartes aura	Turkey Vulture			BSC	FWCA(P)		
Pandion haliaetus	Osprey			BSC	FWCA(P)		
Accipiter striatus	Sharp-shinned Hawk				FWCA(P)		
Accipiter cooperii	Cooper's Hawk				FWCA(P)		H
Accipiter gentilis	Northern Goshawk				FWCA(P)		
Buteo platypterus	Broad-winged Hawk			BSC	FWCA(P)		
Buteo jamaicensis	Red-tailed Hawk				FWCA(P)		NE
Falco sparverius	American Kestrel			BSC	FWCA(P)		CF
Charadrius vociferus	Killdeer				MBCA		T, A, FY
Actitis macularius	Spotted Sandpiper			BSC	MBCA		Τ, Α
Gallinago delicata	Wilson's Snipe			BSC	MBCA		
Scolopax minor	American Woodcock			BSC	MBCA		
Larus delawarensis	Ring-billed Gull				MBCA		
Columba livia	Rock Pigeon						
Zenaida macroura	Mourning Dove				MBCA		T, FY
Coccyzus americanus	Yellow-billed Cuckoo			BSC	MBCA	*	
Megascops asio	Eastern Screech-Owl				FWCA(P)		
Archilochus colubris	Ruby-throated Hummingbird			BSC	MBCA		
					OESA (5)/		
Melanerpes erythrocephalus	Red-headed Woodpecker	SC	SC	BSC	MBCA		
Melanerpes carolinus	Red-bellied Woodpecker			BSC	MBCA		
Dissidas nubasas	Downy Woodpoolear						N, CF,
Picoides pubescens Picoides villosus	Downy Woodpecker				MBCA	*	FY
	Hairy Woodpecker				MBCA		
Colaptes auratus	Northern Flicker				MBCA		D, FY
Contopus virens	Eastern Wood Pewee				MBCA		
Empidonax traillii	Willow Flycatcher				MBCA		NE, NY
Empidonax minimus	Least Flycatcher			DCC	MBCA		
Sayornis phoebe	Eastern Phoebe			BSC	MBCA	*	
Myiarchus crinitus	Great Crested Flycatcher			DCC	MBCA		Τ ^
Tyrannus tyrannus	Eastern Kingbird			BSC	MBCA		Т, А
Vireo flavifrons	Yellow-throated Vireo				MBCA		S
Vireo solitarius	Blue-headed Vireo		-		MBCA		C ^
Vireo gilvus	Warbling Vireo				MBCA		S, A
Vireo olivaceus	Red-eyed Vireo				MBCA		S, T
Cyanocitta cristata	Blue Jay				FWCA(P)		

¹ Denotes species that have been identified in the region by others and that suitable habitat exists in the area of investigation.

APPENDIX G LIST OF BIRD SPECIES WITH BREEDING EVIDENCE

Scientific Name	Common Name	COSEWIC	COSSARO	Local	Legal Status	Others ¹	BBE
Corvus brachyrhynchos	American Crow						
Eremophila alpestris	Horned Lark			BSC	MBCA		FY
Tachycineta bicolor	Tree Swallow				MBCA		AE
Stelgidopteryx serripennis	Northern Rough-winged Swallow			BSC	MBCA		
Petrochelidon pyrrhonota	Cliff Swallow			BSC	MBCA		AE
Hirundo rustica	Barn Swallow			BSC	MBCA		N, AE
Poecile atricapillus	Black-capped Chickadee				MBCA		FY
Sitta carolinensis	White-breasted Nuthatch				MBCA		
Certhia Americana	Brown Creeper			BSC	MBCA		
Thryothorus ludovicianus	Carolina Wren			BSC	MBCA		S
Troglodytes aedon	House Wren				MBCA		S
Regulus satrapa	Golden-crowned Kinglet				MBCA		
Regulus calendula	Ruby-crowned Kinglet				MBCA		
Polioptila caerulea	Blue-gray Gnatcatcher			BSC	MBCA		
Sialia sialis	Eastern Bluebird			BSC	MBCA		
Cathartes fuscescens	Veery			BSC	MBCA		
Catharus guttatus	Hermit Thrush				MBCA		
Hylocichla mustelina	Wood Thrush				MBCA		S, T, NE
Turdus migratorius	American Robin				MBCA		NE, NY, FY
Dumetella carolinensis	Gray Catbird			BSC	MBCA		N, NE, NY, CF
Toxostoma rufum	Brown Thrasher			BSC	MBCA		FY
Sturnus vulgaris	European Starling						AE, FY
Bombycilla cedrorum	Cedar Waxwing				MBCA		A, N, CF
Vermivora chrysoptera	Golden-winged Warbler				OESA (5)/ MBCA		
Vermivora peregrine	Tennessee Warbler				MBCA		
Vermivora ruficapilla	Nashville Warbler				MBCA		
Parula Americana	Northern Parula				MBCA		
Dendroica petechia	Yellow Warbler				MBCA		NE, CF
Dendroica pensylvanica	Chestnut-sided Warbler			BSC	MBCA		
Dendroica magnolia	Magnolia Warbler				MBCA		
Dendroica caerulescens	Black-throated Blue Warbler				MBCA		
Dendroica coronata	Yellow-rumped Warbler				MBCA		
Dendroica virens	Black-throated Green Warbler				MBCA		
Dendroica fusca	Blackburnian Warbler				MBCA	1	+
Dendroica pinus	Pine Warbler				MBCA	-	+
Dendroica palmarum	Palm Warbler				MBCA	-	+
Dendroica castanea	Bay-breasted Warbler				MBCA	-	+
Mniotilta varia	Black and White Warbler				MBCA		+
Setophaga ruticilla	American Redstart			BSC	MBCA		<u> </u>
Seiurus aurocapilla	Ovenbird			BSC	MBCA	*	
Oporornis Philadelphia	Mourning Warbler			BSC	MBCA	+	╂────
Geothlypis trichas	Common Yellowthroat			DSC	MBCA		
51							Α, Τ
Wilsonia pusilla	Wilson's Warbler				MBCA		1

APPENDIX G
LIST OF BIRD SPECIES WITH BREEDING EVIDENCE

Scientific Name	Common Name	COSEWIC	COSSARO	Local	Legal Status	Others ¹	BBE
Piranga olivacea	Scarlet Tanager			BSC	MBCA	*	
Pipilo erythrophthalmus	Eastern Towhee			BSC	MBCA		S, T
Spizella passerine	Chipping Sparrow				MBCA		Т
Spizella pusilla	Field Sparrow			BSC	MBCA		S, T
Pooecetes gramineus	Vesper Sparrow			BSC	MBCA		CF
Passerculus sandwichensis	Savannah Sparrow			BSC	MBCA		S, T
Melospiza melodia	Song Sparrow				MBCA		CF, FY
Melospiza lincolnii	Lincoln's Sparrow				MBCA		
Melospiza Georgiana	Swamp Sparrow			BSC	MBCA	*	
Zonotrichia albicollis	White-throated Sparrow				MBCA		
Zonotrichia leucophrys	White-crowned Sparrow				MBCA		
Junco hyemalis	Dark-eyed Junco				MBCA		
Cardinalis cardinalis	Northern Cardinal				MBCA		CF
Pheucticus Iudovicianus	Rose-breasted Grosbeak				MBCA		S, A, CF
Passerina cyanea	Indigo Bunting				MBCA		S, T, D, CF
Agelaius phoeniceus	Red-winged Blackbird						N, CF, FY
Quiscalus quiscula	Common Grackle						CF, FY
Molothrus ater	Brown-headed Cowbird						NY
Icterus spurious	Orchard Oriole			BSC	MBCA		D, CF
Icterus galbula	Baltimore Oriole				MBCA		NE, CF
Carpodacus mexicanus	House Finch				MBCA		T, FY
Carduelis tristis	American Goldfinch			BSC	MBCA		D
Passer domesticus	House Sparrow						AE, CF, FY

Note: Species status current to October 2007.

BBE - Breeding Bird Evidence (according to Bird Studies Canada):

Possible Breeding:

- H Species observed in its breeding season in suitable nesting habitat.
- S Singing male present in its breeding season in suitable nesting habitat.

Probable Breeding:

- T Permanent territory presumed through registration of territorial song on at least two days, a week or so apart, at the same place.
- D Courtship or display between male and female, including courtship feeding or copulation.
- A Agitated behavior or anxiety calls of an adult.
- N Nest-building or excavation of nest hole.

Confirmed Breeding:

- AE Adults leaving or entering nest site in circumstances indication occupied nest.
- NU Used nest or egg shell found (occupied or laid within the period of study).
- FY Recently fledged young or downy young, including young incapable of sustained flight.
- CF Adult carrying food for young.
- NE Nest containing eggs.
- NY Nest with young seen or heard.

APPENDIX H

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
1	0328060E 4681980N	Brighton Beach Broadway Street	Jun 5	Phasianus colchicusZenaida macrouraColaptes auratusVireo gilvusPoecile atricapillusSialia sialisHylocichla mustelinaTurdus migratoriusDumetella carolinensisSturnus vulgarisBombycilla cedrorumDendroica petechiaPipilo erythrophthalmusMelospiza melodiaCardinalis cardinalisQuiscalus quisculaIcterus galbula	Ring necked PheasantMourning DoveNorthern FlickerWarbling VireoBlack capped ChickadeeEastern BluebirdWood ThrushAmerican RobinGray CatbirdEuropean StarlingCedar WaxwingYellow WarblerEastern TowheeSong SparrowNorthern CardinalCommon GrackleBaltimore Oriole	Jun 15	<i>Phasianus colchicus</i> <i>Vireo gilvus</i> <i>Cyanocitta cristata</i> <i>Thryothorus ludovicianus</i> <i>Troglodytes aedon</i> <i>Turdus migratorius</i> <i>Dumetella carolinensis</i> <i>Melospiza melodia</i> <i>Cardinalis cardinalis</i> <i>Icterus galbula</i>	Ring necked Pheasant Warbling Vireo Blue Jay Carolina Wren House Wren American Robin Gray Catbird Song Sparrow Northern Cardinal Baltimore Oriole
2	0328248E 4682110N	Brighton Beach Scotten Road	Jun 5	Zenaida macroura Colaptes auratus Vireo gilvus Troglodytes aedon Turdus migratorius Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Passer domesticus	Mourning Dove Northern Flicker Warbling Vireo House Wren American Robin Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird House Sparrow	Jun 15	Zenaida macroura Colaptes auratus Vireo gilvus Corvus brachyrhynchos Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Quiscalus quiscula Molothrus ater Passer domesticus	Mourning Dove Northern Flicker Warbling Vireo American Crow House Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Common Grackle Brown headed Cowbird House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
3	0327940E 4682265N	Brighton Beach Road	Jun 5	Phasianus colchicus Zenaida macroura Vireo gilvus Cyanocitta cristata Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Agelaius phoeniceus	Ring necked Pheasant Mourning Dove Warbling Vireo Blue Jay House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Red winged Blackbird	Jun 15	Charadrius vociferus Colaptes auratus Vireo gilvus Stelgidopteryx serripennis Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Agelaius phoeniceus Quiscalus quiscula Molothrus ater Carduelis tristis Passer domesticus	Killdeer Northern Flicker Warbling Vireo Northern Rough winged Swallow House Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Red winged Blackbird Common Grackle Brown headed Cowbird American Goldfinch House Sparrow
4	0327720E 4682194N	Brighton Beach Broadway Street	Jun 5	Phasianus colchicus Colaptes auratus Vireo olivaceus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Cardinalis cardinalis Pheucticus Iudovicianus Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Ring necked Pheasant Northern Flicker Red eyed Vireo House Wren American Robin Gray Catbird Cedar Waxwing Yellow Warbler Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow	Jun 15	Phasianus colchicusPicoides pubescensColaptes auratusContopus virensVireo flavifronsVireo gilvusVireo olivaceusTroglodytes aedonTurdus migratoriusDumetella carolinensisBombycilla cedrorumDendroica petechiaMelospiza melodiaCardinalis cardinalisPheucticus ludovicianusPasserina cyaneaMolothrus aterIcterus galbulaCarduelis tristisPasser domesticus	Ring necked PheasantDowny WoodpeckerNorthern FlickerEastern Wood PeweeYellow throated VireoWarbling VireoRed eyed VireoHouse WrenAmerican RobinGray CatbirdCedar WaxwingYellow WarblerSong SparrowNorthern CardinalRose breasted GrosbeakIndigo BuntingBrown headed CowbirdBaltimore OrioleAmerican GoldfinchHouse Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
5	0327408E	Brighton Beach Broadway &	Jun 5	Zenaida macroura	Mourning Dove	Jun 15	Phasianus colchicus	Ring necked Pheasant
	4682286N	Sandwich		Colaptes auratus Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Pheucticus ludovicianus Passerina cyanea Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Carduelis tristis	Northern Flicker Warbling Vireo House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Rose breasted Grosbeak Indigo Bunting Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole American Goldfinch		Zenaida macroura Picoides pubescens Colaptes auratus Contopus virens Tachycineta bicolor Thryothorus ludovicianus Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker Northern Flicker Eastern Wood Pewee Tree Swallow Carolina Wren American Robin Gray Catbird Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow
6	0327278E 4682455N	Brighton Beach ? Road	Jun 5	Passer domesticusMegascops asioPicoides pubescensColaptes auratusEmpidonax trailliiVireo olivaceusCyanocitta cristataPoecile atricapillusThryothorus ludovicianusTroglodytes aedonTurdus migratoriusSturnus vulgarisBombycilla cedrorumDendroica petechiaMelospiza melodiaCardinalis cardinalisAgelaius phoeniceusMolothrus aterIcterus galbula	House Sparrow Eastern Screech Owl Downy Woodpecker Northern Flicker Willow Flycatcher Red eyed Vireo Blue Jay Black capped Chickadee Carolina Wren House Wren American Robin European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird Baltimore Oriole	Jun 15	Phasianus colchicus Picoides pubescens Colaptes auratus Troglodytes aedon Turdus migratorius Dumetella carolinensis Toxostoma rufum Bombycilla cedrorum Dendroica petechia Spizella passerina Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Ring necked Pheasant Downy Woodpecker Northern Flicker House Wren American Robin Gray Catbird Brown Thrasher Cedar Waxwing Yellow Warbler Chipping Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
7	0327080E 4682640N	Brighton Beach Detroit River	Jun 5	<i>Empidonax traillii</i> <i>Vireo gilvus</i> <i>Hirundo rustica</i> <i>Thryothorus ludovicianus</i> <i>Troglodytes aedon</i> <i>Turdus migratorius</i> <i>Dumetella carolinensis</i> <i>Sturnus vulgaris</i> <i>Dendroica petechia</i> <i>Melospiza melodia</i> <i>Cardinalis cardinalis</i> <i>Agelaius phoeniceus</i> <i>Icterus galbula</i> <i>Carduelis tristis</i>	Willow Flycatcher Warbling Vireo Barn Swallow Carolina Wren House Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 15	Picoides pubescens Empidonax traillii Hirundo rustica Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Icterus galbula Carduelis tristis	Downy Woodpecker Willow Flycatcher Barn Swallow American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Baltimore Oriole American Goldfinch
8	0327678E 4682590N	Brighton Beach Chappus & Sandwich	Jun 5	Phasianus colchicus Zenaida macroura Empidonax traillii Tyrannus tyrannus Vireo gilvus Troglodytes aedon Turdus migratorius Sturnus vulgaris Dendroica petechia Melospiza melodia Agelaius phoeniceus Quiscalus quiscula Molothrus ater	Ring necked Pheasant Mourning Dove Willow Flycatcher Eastern Kingbird Warbling Vireo House Wren American Robin European Starling Yellow Warbler Song Sparrow Red winged Blackbird Common Grackle Brown headed Cowbird	Jun 14	Zenaida macroura Empidonax traillii Vireo gilvus Hirundo rustica Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carpodacus mexicanus	Mourning Dove Willow Flycatcher Warbling Vireo Barn Swallow House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Baltimore Oriole House Finch

APPENDIX H RESULTS OF BIRD POINT COUNT SURVEYS

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
9	0328335E	Brighton Beach Chappus &	Jun 6	Charadrius vociferus	Killdeer	Jun 14	Charadrius vociferus	Killdeer
	4682365N	Scotten		Zenaida macroura Empidonax traillii Turdus migratorius Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus	Mourning Dove Willow Flycatcher American Robin Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird		Empidonax traillii Thryothorus ludovicianus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Agelaius phoeniceus Carduelis tristis Passer domesticus	Willow Flycatcher Carolina Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Red winged Blackbird American Goldfinch House Sparrow
10	0328448E 4681895N	Yawkey Ojibway & Broadway	Jun 6	Poecile atricapillus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Cardinalis cardinalis Passerina cyanea	Black capped Chickadee House Wren American Robin Gray Catbird Cedar Waxwing Northern Cardinal Indigo Bunting	Jun 15	Cyanocitta cristata Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Cardinalis cardinalis Passerina cyanea Icterus galbula Carduelis tristis Passer domesticus	Blue Jay Carolina Wren House Wren American Robin Gray Catbird Cedar Waxwing Northern Cardinal Indigo Bunting Baltimore Oriole American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
11	0328785E 4682010N	Yawkey Beech Street	Jun 6	Phasianus colchicus Picoides pubescens Vireo gilvus Vireo olivaceus Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Dendroica petechia Geothlypis trichas Spizella passerina Passerina cyanea Agelaius phoeniceus Molothrus ater Icterus galbula Carpodacus mexicanus Carduelis tristis Passer domesticus	Ring necked Pheasant Downy Woodpecker Warbling Vireo Red eyed Vireo Blue Jay House Wren American Robin European Starling Yellow Warbler Common Yellowthroat Chipping Sparrow Indigo Bunting Red winged Blackbird Brown headed Cowbird Baltimore Oriole House Finch American Goldfinch House Sparrow	Jun 16	Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Spizella passerina Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Molothrus ater Carduelis tristis	Warbling Vireo House Wren American Robin Gray Catbird European Starling Chipping Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Brown headed Cowbird American Goldfinch
12	0328630E 4682270N	Yawkey Chappus Street	Jun 6	Zenaida macroura Contopus virens Empidonax traillii Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Icterus galbula Passer domesticus	Mourning Dove Eastern Wood Pewee Willow Flycatcher Warbling Vireo House Wren American Robin Gray Catbird European Starling Yellow Warbler Northern Cardinal Red winged Blackbird Brown headed Cowbird Baltimore Oriole House Sparrow	Jun 16	Empidonax traillii Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Agelaius phoeniceus Passer domesticus	Willow Flycatcher Warbling Vireo House Wren American Robin Gray Catbird European Starling Yellow Warbler Red winged Blackbird House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
13	0329038E	Yawkey Matchette &	Jun 6	Zenaida macroura	Mourning Dove	Jun 16	Zenaida macroura	Mourning Dove
	4681910N	Armanda		Tyrannus tyrannus Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Cardinalis cardinalis Agelaius phoeniceus Quiscalus quiscula Icterus galbula Passer domesticus	Eastern Kingbird Blue Jay House Wren American Robin European Starling Northern Cardinal Red winged Blackbird Common Grackle Baltimore Oriole House Sparrow		Cyanocitta cristata Turdus migratorius Sturnus vulgaris Cardinalis cardinalis Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Passer domesticus	Blue Jay American Robin European Starling Northern Cardinal Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole House Sparrow
14	0328982E 4682330N	Yawkey S.Matchette & EC Row	Jun 6	Charadrius vociferus Hirundo rustica Turdus migratorius Dumetella carolinensis Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus	Killdeer Barn Swallow American Robin Gray Catbird Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird	Jun 16	Charadrius vociferus Vireo gilvus Turdus migratorius Sturnus vulgaris Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Geothlypis trichas Spizella passerina Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Carpodacus mexicanus Passer domesticus	Killdeer Warbling Vireo American Robin European Starling Gray Catbird Cedar Waxwing Yellow Warbler Common Yellowthroat Chipping Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole House Finch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
15	0329250E	Malden Park N.Matchette &	Jun 6	Charadrius vociferus	Killdeer	Jun 16	Charadrius vociferus	Killdeer
	4682566N	EC Row		Vireo gilvus	Warbling Vireo		Actitis macularius	Spotted Sandpiper
				Hirundo rustica	Barn Swallow		Zenaida macroura	Mourning Dove
				Turdus migratorius	American Robin		Picoides pubescens	Downy Woodpecker
				Sturnus vulgaris	European Starling		Empidonax traillii	Willow Flycatcher
				Dendroica petechia	Yellow Warbler		Hirundo rustica	Barn Swallow
				Geothlypis trichas	Common Yellowthroat		Turdus migratorius	American Robin
				Passerculus				
				sandwichensis	Savannah Sparrow		Sturnus vulgaris	European Starling
				Melospiza melodia	Song Sparrow		Bombycilla cedrorum	Cedar Waxwing
				Agelaius phoeniceus Carpodacus	Red winged Blackbird		Dendroica petechia Passerculus	Yellow Warbler
				mexicanus	House Finch		sandwichensis	Savannah Sparrow
				Carduelis tristis	American Goldfinch		Melospiza melodia	Song Sparrow
							Cardinalis cardinalis	Northern Cardinal
							Passerina cyanea	Indigo Bunting
							Agelaius phoeniceus	Red winged Blackbird
							Icterus galbula	Baltimore Oriole
							Carpodacus mexicanus	House Finch
							Carduelis tristis	American Goldfinch
							Passer domesticus	House Sparrow

APPENDIX H RESULTS OF BIRD POINT COUNT SURVEYS

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
16	0329276E 4682170N	North Chappus Road Chappus Road	Jun 6	Charadrius vociferus Actitis macularius Colaptes auratus Contopus virens Tyrannus tyrannus Vireo gilvus Thryothorus Iudovicianus Troglodytes aedon Hylocichla mustelina Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Geothlypis trichas Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carduelis tristis	Killdeer Spotted Sandpiper Northern Flicker Eastern Wood Pewee Eastern Kingbird Warbling Vireo Carolina Wren House Wren Wood Thrush American Robin Gray Catbird Cedar Waxwing Yellow Warbler Common Yellowthroat Song Sparrow Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 16	Actitis macularius Contopus virens Vireo gilvus Cyanocitta cristata Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater	Spotted Sandpiper Eastern Wood Pewee Warbling Vireo Blue Jay Carolina Wren House Wren American Robin Gray Catbird Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
17	0329380E 4681810N	North Chappus Road	Jun 6	Charadrius vociferus Melanerpes carolinus Picoides pubescens Colaptes auratus Contopus virens Vireo gilvus Cyanocitta cristata Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Pheucticus Iudovicianus Agelaius phoeniceus Quiscalus quiscula	Killdeer Red bellied Woodpecker Downy Woodpecker Northern Flicker Eastern Wood Pewee Warbling Vireo Blue Jay House Wren American Robin Gray Catbird Cedar Waxwing Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Common Grackle Baltimore Oriole	Jun 16	Zenaida macroura Picoides pubescens Colaptes auratus Empidonax traillii Vireo gilvus Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus Molothrus ater Istorus calbula	Mourning Dove Downy Woodpecker Northern Flicker Willow Flycatcher Warbling Vireo Carolina Wren House Wren American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole
				Icterus galbula Passer domesticus	House Sparrow		<i>Icterus galbula</i> Carduelis tristis	American Goldfinch
18	0329745E 4681758N	North Chappus Road ? Drain	Jun 6	Picoides pubescens Cyanocitta cristata Thryothorus Iudovicianus Troglodytes aedon Dumetella carolinensis Bombycilla cedrorum Pipilo erythrophthalmus Cardinalis cardinalis Passerina cyanea Quiscalus quiscula	Downy Woodpecker Blue Jay Carolina Wren House Wren Gray Catbird Cedar Waxwing Eastern Towhee Northern Cardinal Indigo Bunting Common Grackle	Jun 16	Phasianus colchicus Contopus virens Thryothorus Iudovicianus Troglodytes aedon Dumetella carolinensis Cardinalis cardinalis Passerina cyanea Molothrus ater	Ring necked Pheasant Eastern Wood Pewee Carolina Wren House Wren Gray Catbird Northern Cardinal Indigo Bunting Brown headed Cowbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
19	0329854E 4681940N	Chappus Woods	Jun 6	Zenaida macroura Colaptes auratus Empidonax traillii Thryothorus ludovicianus Turdus migratorius Sturnus vulgaris Dendroica petechia Geothlypis trichas Melospiza melodia Cardinalis cardinalis Pheucticus Iudovicianus Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Mourning Dove Northern Flicker Willow Flycatcher Carolina Wren American Robin European Starling Yellow Warbler Common Yellowthroat Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 16	Colaptes auratus Contopus virens Empidonax traillii Vireo gilvus Cyanocitta cristata Turdus migratorius Dumetella carolinensis Dendroica petechia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Northern Flicker Eastern Wood Pewee Willow Flycatcher Warbling Vireo Blue Jay American Robin Gray Catbird Yellow Warbler Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch
20	0329965E 4682016N	Chappus Woods	Jun 6	Archilochus colubris Empidonax traillii Vireo gilvus Cyanocitta cristata Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Geothlypis trichas Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Ruby throated Hummingbird Willow Flycatcher Warbling Vireo Blue Jay American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Common Yellowthroat Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch	Jun 19	Empidonax traillii Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Geothlypis trichas Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Molothrus ater Carduelis tristis	Willow Flycatcher American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Common Yellowthroat Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Brown headed Cowbird American Goldfinch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
21	0329615E 4682085N	Chappus Woods	Jun 6	Picoides pubescens Contopus virens Empidonax traillii Vireo gilvus Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Pipilo erythrophthalmus Spizella pusilla Melospiza melodia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Downy Woodpecker Eastern Wood Pewee Willow Flycatcher Warbling Vireo American Robin Gray Catbird Cedar Waxwing Yellow Warbler Eastern Towhee Field Sparrow Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 19	Picoides pubescens Empidonax traillii Tachycineta bicolor Thryothorus ludovicianus Turdus migratorius Dumetella carolinensis Dendroica petechia Spizella pusilla Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula	Downy Woodpecker Willow Flycatcher Tree Swallow Carolina Wren American Robin Gray Catbird Yellow Warbler Field Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Baltimore Oriole
22	0329530E 4681940N	Chappus Woods	Jun 6	Phasianus colchicus Charadrius vociferus Melanerpes carolinus Sayornis phoebe Cyanocitta cristata Turdus migratorius Dumetella carolinensis Dendroica petechia Spizella pusilla Melospiza melodia Agelaius phoeniceus Icterus galbula Carduelis tristis	Ring necked Pheasant Killdeer Red bellied Woodpecker Eastern Phoebe Blue Jay American Robin Gray Catbird Yellow Warbler Field Sparrow Song Sparrow Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 16	Empidonax traillii Tachycineta bicolor Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus Molothrus ater	Willow Flycatcher Tree Swallow American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Rose breasted Grosbeak Red winged Blackbird Brown headed Cowbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
23	0329904E	Chappus Woods	Jun 6	Anas platyrhynchos	Mallard	Jun 16	Phasianus colchicus Thryothorus	Ring necked Pheasant
	4681595N			Picoides pubescens	Downy Woodpecker		ludovicianus	Carolina Wren
				Contopus virens	Eastern Wood Pewee		Turdus migratorius	American Robin
				Thryothorus				
				ludovicianus	Carolina Wren		Dumetella carolinensis	Gray Catbird
				Troglodytes aedon	House Wren Wood Thrush		Cardinalis cardinalis	Northern Cardinal Yellow Warbler
				Hylocichla mustelina Turdus migratorius	American Robin		Dendroica petechia Agelaius phoeniceus	Red winged Blackbird
				Dumetella carolinensis	Gray Catbird		Ayeialus prioeniceus	Red winged blackbird
				Cardinalis cardinalis	Northern Cardinal			
				Molothrus ater	Brown headed Cowbird			
		North Spring						
24	0330365E	Garden	Jun 8	Aix sponsa	Wood Duck	Jun 20	Accipiter cooperii	Cooper's Hawk
	4681700N			Accipiter cooperii	Cooper's Hawk		Picoides pubescens	Downy Woodpecker
				Picoides pubescens	Downy Woodpecker		Vireo olivaceus	Red eyed Vireo
				Contopus virens Vireo gilvus	Eastern Wood Pewee Warbling Vireo		Poecile atricapillus Thryothorus ludovicianus	Black capped Chickadee Carolina Wren
				Troglodytes aedon	House Wren		Troglodytes aedon	House Wren
				Turdus migratorius	American Robin		Turdus migratorius	American Robin
				Dendroica petechia	Yellow Warbler		Dumetella carolinensis	Gray Catbird
				Geothlypis trichas	Common Yellowthroat		Melospiza melodia	Song Sparrow
				Melospiza melodia	Song Sparrow		Cardinalis cardinalis	Northern Cardinal
				Cardinalis cardinalis	Northern Cardinal		Pheucticus Iudovicianus	Rose breasted Grosbeak
				Agelaius phoeniceus	Red winged Blackbird		Passerina cyanea	Indigo Bunting
				Icterus galbula	Baltimore Oriole		Agelaius phoeniceus	Red winged Blackbird
							Molothrus ater	Brown headed Cowbird
							Icterus galbula	Baltimore Oriole

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
25	0330402E 4681855N	North Spring Garden	Jun 8	<i>Picoides pubescens</i> <i>Contopus virens</i> <i>Vireo gilvus</i> <i>Vireo olivaceus</i> <i>Troglodytes aedon</i> <i>Dumetella carolinensis</i> <i>Dendroica petechia</i> <i>Geothlypis trichas</i> <i>Melospiza melodia</i> <i>Agelaius phoeniceus</i>	Downy Woodpecker Eastern Wood Pewee Warbling Vireo Red eyed Vireo House Wren Gray Catbird Yellow Warbler Common Yellowthroat Song Sparrow Red winged Blackbird	Jun 20	Picoides pubescens Colaptes auratus Contopus virens Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Dendroica petechia Geothlypis trichas Melospiza melodia Agelaius phoeniceus Icterus galbula	Downy Woodpecker Northern Flicker Eastern Wood Pewee Warbling Vireo House Wren American Robin Gray Catbird Yellow Warbler Common Yellowthroat Song Sparrow Red winged Blackbird Baltimore Oriole
26	0330570E 4681804N	North Spring Garden	Jun 8	Poecile atricapillus Troglodytes aedon Turdus migratorius Dumetella carolinensis Dendroica petechia Cardinalis cardinalis Pheucticus ludovicianus Agelaius phoeniceus	Black capped Chickadee House Wren American Robin Gray Catbird Yellow Warbler Northern Cardinal Rose breasted Grosbeak Red winged Blackbird	Jun 20	Troglodytes aedon Hylocichla mustelina Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus Ouiscalus quiscula Icterus galbula Carduelis tristis	House Wren Wood Thrush Gray Catbird Cedar Waxwing Yellow Warbler Northern Cardinal Red winged Blackbird Common Grackle Baltimore Oriole American Goldfinch

APPENDIX H RESULTS OF BIRD POINT COUNT SURVEYS

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
27	0330755E 4681670N	North Spring Garden	Jun 7	Cyanocitta cristata Poecile atricapillus Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Passerina cyanea Carduelis tristis	Blue Jay Black capped Chickadee Carolina Wren House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Indigo Bunting American Goldfinch	Jun 20	Picoides pubescens Colaptes auratus Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Cardinalis cardinalis Quiscalus quiscula Molothrus ater Icterus galbula	Downy Woodpecker Northern Flicker Carolina Wren House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Northern Cardinal Common Grackle Brown headed Cowbird Baltimore Oriole
28	0330895E 4681745N	North Spring Garden	Jun 8	Gallinago delicata Picoides pubescens Turdus migratorius Dumetella carolinensis Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carduelis tristis	Wilson's Snipe Downy Woodpecker American Robin Gray Catbird Yellow Warbler Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 20	Picoides pubescens Turdus migratorius Dumetella carolinensis Dendroica petechia Pipilo erythrophthalmus Cardinalis cardinalis Agelaius phoeniceus	Downy Woodpecker American Robin Gray Catbird Yellow Warbler Eastern Towhee Northern Cardinal Red winged Blackbird
29	0330978E 4681694N	North Spring Garden	Jun 8	Turdus migratorius Dumetella carolinensis Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus	American Robin Gray Catbird Yellow Warbler Northern Cardinal Red winged Blackbird	Jun 20	<i>Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus</i>	American Robin Gray Catbird European Starling Yellow Warbler Northern Cardinal Red winged Blackbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
30	0330585E 4681450N	Lambton	Jun 7	Zenaida macroura Picoides pubescens Tyrannus tyrannus Vireo gilvus Corvus brachyrhynchos Stelgidopteryx serripennis Hirundo rustica Troglodytes aedon Turdus migratorius Sturnus vulgaris Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker Eastern Kingbird Warbling Vireo American Crow Northern Rough winged Swallow Barn Swallow House Wren American Robin European Starling Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch House Sparrow	Jun 19	Zenaida macroura Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Spizella passerina Spizella pusilla Agelaius phoeniceus Carpodacus mexicanus	Mourning Dove Warbling Vireo House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Chipping Sparrow Field Sparrow Red winged Blackbird House Finch
31	0330892E 4681394N	Lambton	Jun 7	Melanerpes carolinus Picoides pubescens Colaptes auratus Tyrannus tyrannus Vireo gilvus Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Quiscalus quiscula Icterus spurius Icterus galbula	Red bellied Woodpecker Downy Woodpecker Northern Flicker Eastern Kingbird Warbling Vireo Blue Jay House Wren American Robin European Starling Cedar Waxwing Song Sparrow Northern Cardinal Common Grackle Orchard Oriole Baltimore Oriole	Jun 20	Myiarchus crinitus Tyrannus tyrannus Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Pipilo erythrophthalmus Spizella pusilla Cardinalis cardinalis Passerina cyanea Ouiscalus quiscula Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Great Crested Flycatcher Eastern Kingbird Warbling Vireo House Wren American Robin Gray Catbird Eastern Towhee Field Sparrow Northern Cardinal Indigo Bunting Common Grackle Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
32	0331247E 4681434N	Lambton	Jun 8	Zenaida macroura Picoides pubescens Turdus migratorius Dumetella carolinensis Sturnus vulgaris Icterus galbula Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker American Robin Gray Catbird European Starling Baltimore Oriole American Goldfinch House Sparrow	Jun 19	Columba livia Zenaida macroura Picoides pubescens Cyanocitta cristata Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum	Rock Pigeon Mourning Dove Downy Woodpecker Blue Jay American Robin Gray Catbird European Starling Cedar Waxwing
33	0331450E 4681040N	Lambton	Jun 8	Buteo jamaicensis Picoides pubescens Vireo olivaceus Thryothorus Iudovicianus Turdus migratorius Dumetella carolinensis Cardinalis cardinalis Passerina cyanea Icterus galbula Carduelis tristis Passer domesticus	Red tailed Hawk Downy Woodpecker Red eyed Vireo Carolina Wren American Robin Gray Catbird Northern Cardinal Indigo Bunting Baltimore Oriole American Goldfinch House Sparrow	Jun 21	Charadrius vociferus Picoides pubescens Colaptes auratus Poecile atricapillus Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Pipilo erythrophthalmus Spizella passerina Cardinalis cardinalis Passerina cyanea Icterus galbula Carduelis tristis Passer domesticus	Killdeer Downy Woodpecker Northern Flicker Black capped Chickadee Carolina Wren House Wren American Robin Gray Catbird Cedar Waxwing Eastern Towhee Chipping Sparrow Northern Cardinal Indigo Bunting Baltimore Oriole American Goldfinch House Sparrow
34	0331678E 4680514N	North and South of Reddock Avenue	Jun 9	Tyrannus tyrannus Vireo gilvus Cyanocitta cristata Troglodytes aedon Cardinalis cardinalis Molothrus ater Icterus galbula	Eastern Kingbird Warbling Vireo Blue Jay House Wren Northern Cardinal Brown headed Cowbird Baltimore Oriole	Jun 23	<i>Cyanocitta cristata Troglodytes aedon</i> <i>Turdus migratorius</i> <i>Dumetella carolinensis</i> <i>Sturnus vulgaris</i> <i>Melospiza melodia</i> <i>Cardinalis cardinalis</i> <i>Passerina cyanea</i> <i>Agelaius phoeniceus</i> <i>Passer domesticus</i>	Blue Jay House Wren American Robin Gray Catbird European Starling Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird House Sparrow

APPENDIX H RESULTS OF BIRD POINT COUNT SURVEYS

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
35	0331780E 4680168N	North and South of Reddock Avenue	Jun 9	Zenaida macroura Picoides pubescens Cyanocitta cristata Poecile atricapillus Thryothorus ludovicianus Troglodytes aedon Hylocichla mustelina Turdus migratorius Sturnus vulgaris Cardinalis cardinalis Passerina cyanea Quiscalus quiscula Molothrus ater Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker Blue Jay Black capped Chickadee Carolina Wren House Wren Wood Thrush American Robin European Starling Northern Cardinal Indigo Bunting Common Grackle Brown headed Cowbird American Goldfinch House Sparrow	Jun 23	Charadrius vociferus Columba livia Picoides pubescens Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Spizella passerina Cardinalis cardinalis Molothrus ater	Killdeer Rock Pigeon Downy Woodpecker Blue Jay House Wren American Robin European Starling Chipping Sparrow Northern Cardinal Brown headed Cowbird
36	0331875E 4679910N	North and South of Reddock Avenue	Jun 9	Vireo gilvus Turdus migratorius Dumetella carolinensis Spizella passerina Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Carduelis tristis	Warbling Vireo American Robin Gray Catbird Chipping Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 23	Charadrius vociferus Tyrannus tyrannus Vireo gilvus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Spizella passerina Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Icterus spurius Icterus galbula Carduelis tristis	Killdeer Eastern Kingbird Warbling Vireo American Robin Gray Catbird European Starling Cedar Waxwing Chipping Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Orchard Oriole Baltimore Oriole American Goldfinch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
37	0332088E 4679970N	Oakwood Bush	Jun 9	Vireo gilvus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Agelaius phoeniceus Icterus galbula Carduelis tristis	Warbling Vireo American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Song Sparrow Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 23	Zenaida macroura Picoides pubescens Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Spizella passerina Melospiza melodia Agelaius phoeniceus Icterus galbula Carduelis tristis	Mourning Dove Downy Woodpecker American Robin Gray Catbird Cedar Waxwing Chipping Sparrow Song Sparrow Red winged Blackbird Baltimore Oriole American Goldfinch
38	0332157E 4679450N	Huron Church north of Cousineau Road	Jun 9	<i>Charadrius vociferus</i> Zenaida macroura Corvus brachyrhynchos <i>Turdus migratorius</i> <i>Sturnus vulgaris</i> Molothrus ater Carpodacus mexicanus Carduelis tristis	Killdeer Mourning Dove American Crow American Robin European Starling Brown headed Cowbird House Finch American Goldfinch	Jun 23	<i>Charadrius vociferus</i> <i>Actitis macularius</i> <i>Cyanocitta cristata</i> <i>Turdus migratorius</i> <i>Sturnus vulgaris</i> <i>Bombycilla cedrorum</i> <i>Melospiza melodia</i> <i>Icterus galbula</i> <i>Passer domesticus</i>	Killdeer Spotted Sandpiper Blue Jay American Robin European Starling Cedar Waxwing Song Sparrow Baltimore Oriole House Sparrow
39	0332494E 4679204N	Huron Church north of Cousineau Road	Jun 9	Zenaida macroura Vireo gilvus Vireo olivaceus Troglodytes aedon Turdus migratorius Sturnus vulgaris Melospiza melodia Cardinalis cardinalis Passerina cyanea Passer domesticus	Mourning Dove Warbling Vireo Red eyed Vireo House Wren American Robin European Starling Song Sparrow Northern Cardinal Indigo Bunting House Sparrow	Jun 23	Zenaida macroura Hirundo rustica Turdus migratorius Sturnus vulgaris Quiscalus quiscula Molothrus ater Carduelis tristis Passer domesticus	Mourning Dove Barn Swallow American Robin European Starling Common Grackle Brown headed Cowbird American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
40	0332868E 4679067N	Huron Church north of Cousineau Road	Jun 9	Picoides pubescens Colaptes auratus Empidonax traillii Vireo olivaceus Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Cardinalis cardinalis Agelaius phoeniceus Icterus galbula Carduelis tristis	Downy Woodpecker Northern Flicker Willow Flycatcher Red eyed Vireo Gray Catbird European Starling Cedar Waxwing Yellow Warbler Northern Cardinal Red winged Blackbird Baltimore Oriole American Goldfinch	Jun 22	Zenaida macroura Picoides pubescens Colaptes auratus Empidonax traillii Poecile atricapillus Troglodytes aedon Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Spizella passerina Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Icterus galbula Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker Northern Flicker Willow Flycatcher Black capped Chickadee House Wren American Robin Gray Catbird Cedar Waxwing Yellow Warbler Chipping Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Baltimore Oriole American Goldfinch House Sparrow
41	0331607E 4680690N	North and South of Reddock Avenue	Jun 9	Ardea herodias Charadrius vociferus Petrochelidon pyrrhonota Hirundo rustica Turdus migratorius Dumetella carolinensis Agelaius phoeniceus Passer domesticus	Great Blue Heron Killdeer Cliff Swallow Barn Swallow American Robin Gray Catbird Red winged Blackbird House Sparrow	Jun 22	Charadrius vociferus Petrochelidon pyrrhonota Hirundo rustica Sturnus vulgaris Agelaius phoeniceus Passer domesticus	Killdeer Cliff Swallow Barn Swallow European Starling Red winged Blackbird House Sparrow

APPENDIX H RESULTS OF BIRD POINT COUNT SURVEYS

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
42	0333138E 4678925N	Huron Church north of Cousineau Road	Jun 9	Empidonax traillii Poecile atricapillus Dendroica petechia Melospiza melodia Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Willow Flycatcher Black capped Chickadee Yellow Warbler Song Sparrow Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 22	Zenaida macroura Empidonax traillii Hirundo rustica Poecile atricapillus Turdus migratorius Dumetella carolinensis Dendroica petechia Passerculus sandwichensis Melospiza melodia Agelaius phoeniceus Molothrus ater Carduelis tristis	Mourning Dove Willow Flycatcher Barn Swallow Black capped Chickadee American Robin Gray Catbird Yellow Warbler Savannah Sparrow Song Sparrow Red winged Blackbird Brown headed Cowbird American Goldfinch
43	0333435E 4678741N	Huron Church north of Cousineau Road	Jun 9	Zenaida macroura Colaptes auratus Sturnus vulgaris Melospiza melodia Agelaius phoeniceus Carduelis tristis Passer domesticus	Mourning Dove Northern Flicker European Starling Song Sparrow Red winged Blackbird American Goldfinch House Sparrow	Jun 23	Charadrius vociferus Zenaida macroura Stelgidopteryx serripennis Hirundo rustica Melospiza melodia Agelaius phoeniceus Carduelis tristis	Killdeer Mourning Dove Northern Rough winged Swallow Barn Swallow Song Sparrow Red winged Blackbird American Goldfinch
44	0332450E 4679410N	St. Clair College ESA	Jun 13	Zenaida macroura Turdus migratorius Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Quiscalus quiscula Molothrus ater Carpodacus mexicanus Carduelis tristis Passer domesticus	Mourning Dove American Robin Cedar Waxwing Song Sparrow Northern Cardinal Common Grackle Brown headed Cowbird House Finch American Goldfinch House Sparrow	Jun 22	Zenaida macroura Hirundo rustica Turdus migratorius Sturnus vulgaris Spizella passerina Cardinalis cardinalis Quiscalus quiscula Molothrus ater Carpodacus mexicanus Carduelis tristis Passer domesticus	Mourning Dove Barn Swallow American Robin European Starling Chipping Sparrow Northern Cardinal Common Grackle Brown headed Cowbird House Finch American Goldfinch House Sparrow

APPENDIX H RESULTS OF BIRD POINT COUNT SURVEYS

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
45	0333225E 4679040N	St. Clair College ESA	Jun 13	Anas platyrhynchos Picoides pubescens Colaptes auratus Contopus virens Vireo olivaceus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Geothlypis trichas Spizella passerina Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Molothrus ater Carduelis tristis Passer domesticus	Mallard Downy Woodpecker Northern Flicker Eastern Wood Pewee Red eyed Vireo American Robin Gray Catbird European Starling Yellow Warbler Common Yellowthroat Chipping Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Brown headed Cowbird American Goldfinch House Sparrow	Jun 22	Anas platyrhynchos Zenaida macroura Picoides pubescens Colaptes auratus Vireo olivaceus Stelgidopteryx serripennis Hirundo rustica Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Spizella passerina Spizella passerina Spizella pusilla Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Quiscalus quiscula Molothrus ater Icterus galbula Carduelis tristis Passer domesticus	Mallard Mourning Dove Downy Woodpecker Northern Flicker Red eyed Vireo Northern Rough winged Swallow Barn Swallow House Wren American Robin Gray Catbird European Starling Cedar Waxwing Yellow Warbler Chipping Sparrow Field Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Common Grackle Brown headed Cowbird Baltimore Oriole American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
46	0334535E 4678090N	Montgomery Drive at Talbot Road	Jun 13	Zenaida macroura Cyanocitta cristata Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Spizella passerina Cardinalis cardinalis Quiscalus quiscula Molothrus ater Passer domesticus	Mourning Dove Blue Jay Carolina Wren House Wren American Robin European Starling Cedar Waxwing Yellow Warbler Chipping Sparrow Northern Cardinal Common Grackle Brown headed Cowbird House Sparrow	Jun 23	Zenaida macroura Picoides pubescens Cyanocitta cristata Thryothorus Iudovicianus Troglodytes aedon Turdus migratorius Sturnus vulgaris Spizella passerina Cardinalis cardinalis Ouiscalus quiscula Carduelis tristis Passer domesticus	Mourning Dove Downy Woodpecker Blue Jay Carolina Wren House Wren American Robin European Starling Chipping Sparrow Northern Cardinal Common Grackle American Goldfinch House Sparrow
47	0335150E 4677610N	Howard Avenue at Talbot Road	Jun 13	Zenaida macroura Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Cardinalis cardinalis Agelaius phoeniceus Ouiscalus quiscula Passer domesticus	Mourning Dove Blue Jay House Wren American Robin European Starling Cedar Waxwing Northern Cardinal Red winged Blackbird Common Grackle House Sparrow	Jun 24	Zenaida macroura Picoides pubescens Turdus migratorius Agelaius phoeniceus Ouiscalus quiscula Molothrus ater Passer domesticus	Mourning Dove Downy Woodpecker American Robin Red winged Blackbird Common Grackle Brown headed Cowbird House Sparrow
48	0335560E 4677615N	Highway 401 and Talbot Road	Jun 13	Zenaida macroura Empidonax traillii Troglodytes aedon Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Carduelis tristis	Mourning Dove Willow Flycatcher House Wren Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird American Goldfinch	Jun 22	Bombycilla cedrorum Dendroica petechia Melospiza melodia Agelaius phoeniceus Carduelis tristis Passer domesticus	Cedar Waxwing Yellow Warbler Song Sparrow Red winged Blackbird American Goldfinch House Sparrow

Appendix H
RESULTS OF BIRD POINT COUNT SURVEYS

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
49	0335700E 4677560N	Highway 401 and Talbot Road	Jun 13	Charadrius vociferus Zenaida macroura Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Agelaius phoeniceus Ouiscalus quiscula Molothrus ater Carduelis tristis	Killdeer Mourning Dove American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Red winged Blackbird Common Grackle Brown headed Cowbird American Goldfinch	Jun 22	Branta canadensis Anas platyrhynchos Charadrius vociferus Zenaida macroura Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Passerina cyanea Agelaius phoeniceus Ouiscalus quiscula Carduelis tristis	Canada Goose Mallard Killdeer Mourning Dove American Robin European Starling Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Common Grackle American Goldfinch
50	0336070E 4677385N	Highway 401 and Talbot Road	Jun 12	Anas platyrhynchos Charadrius vociferus Actitis macularius Eremophila alpestris Turdus migratorius Passerculus sandwichensis Passer domesticus	Mallard Killdeer Spotted Sandpiper Horned Lark American Robin Savannah Sparrow House Sparrow	Jun 24	Anas platyrhynchos Ardea alba Charadrius vociferus Zenaida macroura Eremophila alpestris Sturnus vulgaris Passerculus sandwichensis Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Passer domesticus	Mallard Great Egret Killdeer Mourning Dove Horned Lark European Starling Savannah Sparrow Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird House Sparrow

Appendix H
RESULTS OF BIRD POINT COUNT SURVEYS

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
51	0335677E 4677070N	Highway 401 and Talbot Road	Jun 12	Charadrius vociferus Zenaida macroura Tyrannus tyrannus Eremophila alpestris Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Killdeer Mourning Dove Eastern Kingbird Horned Lark American Robin Gray Catbird Cedar Waxwing Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch	Jun 24	Charadrius vociferus Zenaida macroura Tyrannus tyrannus Eremophila alpestris Turdus migratorius Dumetella carolinensis Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Killdeer Mourning Dove Eastern Kingbird Horned Lark American Robin Gray Catbird Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch
52	0335503E 4676542N	Highway 401 and Talbot Road	Jun 12	Buteo jamaicensis Charadrius vociferus Picoides pubescens Cyanocitta cristata Eremophila alpestris Troglodytes aedon Turdus migratorius Dumetella carolinensis Toxostoma rufum Sturnus vulgaris Pipilo erythrophthalmus Pooecetes gramineus Melospiza melodia Cardinalis cardinalis Passerina cyanea Ouiscalus quiscula Molothrus ater Carduelis tristis Passer domesticus	Red tailed Hawk Killdeer Downy Woodpecker Blue Jay Horned Lark House Wren American Robin Gray Catbird Brown Thrasher European Starling Eastern Towhee Vesper Sparrow Song Sparrow Northern Cardinal Indigo Bunting Common Grackle Brown headed Cowbird American Goldfinch House Sparrow	Jun 24	<i>Eremophila alpestris</i> <i>Hirundo rustica</i> <i>Turdus migratorius</i> <i>Dumetella carolinensis</i> <i>Sturnus vulgaris</i> <i>Pooecetes gramineus</i> <i>Passerculus</i> <i>sandwichensis</i> <i>Melospiza melodia</i> <i>Cardinalis cardinalis</i> <i>Passerina cyanea</i> <i>Agelaius phoeniceus</i> <i>Ouiscalus quiscula</i> <i>Icterus galbula</i> <i>Passer domesticus</i>	Horned Lark Barn Swallow American Robin Gray Catbird European Starling Vesper Sparrow Savannah Sparrow Song Sparrow Northern Cardinal Indigo Bunting Red winged Blackbird Common Grackle Baltimore Oriole House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
53	0336544E 4677424N	Highway 401 and Talbot Road	Jun 13	Zenaida macroura Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Spizella passerina Agelaius phoeniceus Ouiscalus quiscula Carduelis tristis Passer domesticus	Mourning Dove American Robin European Starling Cedar Waxwing Chipping Sparrow Red winged Blackbird Common Grackle American Goldfinch House Sparrow	Jun 24	Turdus migratorius Sturnus vulgaris Spizella passerina Passerculus sandwichensis Melospiza melodia Cardinalis cardinalis Passerina cyanea Ouiscalus quiscula Molothrus ater Carpodacus mexicanus Carduelis tristis Passer domesticus	American Robin European Starling Chipping Sparrow Savannah Sparrow Song Sparrow Northern Cardinal Indigo Bunting Common Grackle Brown headed Cowbird House Finch American Goldfinch House Sparrow
54	0336709E 4677960N	Highway 401 and Talbot Road	Jun 13	<i>Charadrius vociferus</i> <i>Actitis macularius</i> <i>Sturnus vulgaris</i> <i>Agelaius phoeniceus</i> <i>Quiscalus quiscula</i> <i>Passer domesticus</i>	Killdeer Spotted Sandpiper European Starling Red winged Blackbird Common Grackle House Sparrow	Jun 24	Charadrius vociferus Columba livia Zenaida macroura Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Melospiza melodia Agelaius phoeniceus Quiscalus quiscula Carduelis tristis Passer domesticus	Killdeer Rock Pigeon Mourning Dove American Robin European Starling Cedar Waxwing Song Sparrow Red winged Blackbird Common Grackle American Goldfinch House Sparrow
55	0327740E 4683580N	Brighton Beach area / Prospect Avenue	Jun 14	Charadrius vociferus Tyrannus tyrannus Vireo gilvus Hirundo rustica Turdus migratorius Dendroica petechia Melospiza melodia Agelaius phoeniceus Passer domesticus	Killdeer Eastern Kingbird Warbling Vireo Barn Swallow American Robin Yellow Warbler Song Sparrow Red winged Blackbird House Sparrow	Jun 24	Tyrannus tyrannus Vireo gilvus Hirundo rustica Turdus migratorius Dendroica petechia Melospiza melodia Agelaius phoeniceus	Eastern Kingbird Warbling Vireo Barn Swallow American Robin Yellow Warbler Song Sparrow Red winged Blackbird

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
56	0328260E 4684385N	Brighton Beach area / Russell Drive	Jun 14	Picoides pubescens Vireo olivaceus Thryothorus ludovicianus Troglodytes aedon Turdus migratorius Dumetella carolinensis Sturnus vulgaris Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Passerina cyanea Molothrus ater Icterus galbula	Downy Woodpecker Red eyed Vireo Carolina Wren House Wren American Robin Gray Catbird European Starling Cedar Waxwing Song Sparrow Northern Cardinal Indigo Bunting Brown headed Cowbird Baltimore Oriole	Jun 24	Accipiter cooperii Columba livia Zenaida macroura Vireo olivaceus Cyanocitta cristata Troglodytes aedon Turdus migratorius Sturnus vulgaris Bombycilla cedrorum Melospiza melodia Cardinalis cardinalis Passerina cyanea Passer domesticus	Cooper's Hawk Rock Pigeon Mourning Dove Red eyed Vireo Blue Jay House Wren American Robin European Starling Cedar Waxwing Song Sparrow Northern Cardinal Indigo Bunting House Sparrow
57	0329565E 4682340N	Malden Park	Jun 14	Passer domesticus Vireo gilvus Turdus migratorius Dumetella carolinensis Sturnus vulgaris Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Carduelis tristis	House Sparrow Warbling Vireo American Robin Gray Catbird European Starling Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird American Goldfinch	Jun 29	Vireo gilvus Troglodytes aedon Turdus migratorius Dumetella carolinensis Dendroica petechia Melospiza melodia Cardinalis cardinalis Agelaius phoeniceus Molothrus ater Carduelis tristis	Warbling Vireo House Wren American Robin Gray Catbird Yellow Warbler Song Sparrow Northern Cardinal Red winged Blackbird Brown headed Cowbird American Goldfinch

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
58	0329975E 4682225N	Malden Park	Jun 14	Zenaida macroura Picoides pubescens Contopus virens Tyrannus tyrannus Vireo gilvus Cyanocitta cristata Turdus migratorius Bombycilla cedrorum Dendroica petechia Spizella passerina Passerina cyanea Agelaius phoeniceus Molothrus ater Icterus galbula Carduelis tristis	Mourning Dove Downy Woodpecker Eastern Wood Pewee Eastern Kingbird Warbling Vireo Blue Jay American Robin Cedar Waxwing Yellow Warbler Chipping Sparrow Indigo Bunting Red winged Blackbird Brown headed Cowbird Baltimore Oriole American Goldfinch	Jun 29	Picoides pubescens Colaptes auratus Contopus virens Tyrannus tyrannus Vireo gilvus Stelgidopteryx serripennis Turdus migratorius Dumetella carolinensis Bombycilla cedrorum Dendroica petechia Geothlypis trichas Melospiza melodia Cardinalis cardinalis Passerina cyanea Molothrus ater Icterus spurius Icterus galbula Carduelis tristis	Downy Woodpecker Northern Flicker Eastern Wood Pewee Eastern Kingbird Warbling Vireo Northern Rough winged Swallow American Robin Gray Catbird Cedar Waxwing Yellow Warbler Common Yellowthroat Song Sparrow Northern Cardinal Indigo Bunting Brown headed Cowbird Orchard Oriole Baltimore Oriole American Goldfinch
59	0328635E 4682425N	Yawkey / Ojibway and EC Row	Jun 13	Buteo jamaicensis Tyrannus tyrannus Turdus migratorius Sturnus vulgaris Dendroica petechia Geothlypis trichas Melospiza melodia Agelaius phoeniceus Carduelis tristis	Red tailed Hawk Eastern Kingbird American Robin European Starling Yellow Warbler Common Yellowthroat Song Sparrow Red winged Blackbird American Goldfinch	Jun 29	Buteo jamaicensis Zenaida macroura Tyrannus tyrannus Turdus migratorius Bombycilla cedrorum Dendroica petechia Geothlypis trichas Melospiza melodia Passerina cyanea Agelaius phoeniceus Molothrus ater Carpodacus mexicanus Carduelis tristis Passer domesticus	Red tailed Hawk Mourning Dove Eastern Kingbird American Robin Cedar Waxwing Yellow Warbler Common Yellowthroat Song Sparrow Indigo Bunting Red winged Blackbird Brown headed Cowbird House Finch American Goldfinch House Sparrow

Site #	UTM's	Location	Date (2006)	Species	Common Name	Date (2006)	Species	Common Name
60	0328430E	Yawkey /	Jun 13	Picoides pubescens	Downy Woodpecker	Jun 29	Picoides pubescens	Downy Woodpecker
	4682450N	Ojibway and		Empidonax traillii	Willow Flycatcher		Empidonax traillii	Willow Flycatcher
		EC Row		Tyrannus tyrannus	Eastern Kingbird		Vireo gilvus	Warbling Vireo
							Thryothorus	
				Vireo gilvus	Warbling Vireo		ludovicianus	Carolina Wren
				Thryothorus	-			
				ludovicianus	Carolina Wren		Turdus migratorius	American Robin
				Turdus migratorius	American Robin		Dumetella carolinensis	Gray Catbird
				Dumetella carolinensis	Gray Catbird		Sturnus vulgaris	European Starling
				Dendroica petechia	Yellow Warbler		Cardinalis cardinalis	Northern Cardinal
		Melospiza melodia		Song Sparrow		Agelaius phoeniceus	Red winged Blackbird	
			Agelaius phoeniceus		Red winged Blackbird		Molothrus ater	Brown headed Cowbird
				Passer domesticus	House Sparrow		Passer domesticus	House Sparrow

Bold denotes verified breeding (species observed at both visits)



Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-BBA1	Brighton Beach Area	CUM	No evidence	No areas that would contain wildlife uncommon or rare	Unable to verify	Unable to confirm mammal corridors	Not able to verify – no access to property
W-BBA2	Brighton Beach Area	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	Unable to verify	 Unable to confirm mammal corridors Small part of larger north-south bird migration corridor 	 Not able to verify – no access to property
W-BBA3	Brighton Beach Area	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	Cooper's Hawk	Unable to confirm mammal corridors	 Not able to verify if Cooper's Hawk nesting or other wildlife species present – no access to property
W-BBA4	Brighton Beach Area	CUW	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	Cooper's HawkGray Catbird	 East-west mammal corridor s connecting residences on east side to factory property on west side Small part of migration corridor along Detroit River for migrating birds 	 Red Fox pups observed on factory property, opposite CUW, along tree row at south end of factory Cooper's Hawk, although observed in CUW, not nesting there
W-BBA5	Brighton Beach Area	CUW	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 mammal corridors connecting CUW with surrounding industrial property Small part of migration corridor along Detroit River for migrating birds 	Human adapted wildlife in area
W-BBA6	Brighton Beach Area	МАМ	No evidence	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 East-west mammal corridor from MAM to factory property west of Ojibway Parkway at south end of Russell Street 	Human adapted wildlife in area
W-BBA7	Brighton Beach Area	CUW	Unable to verify	Unable to verify	Unable to verify	Unable to verify	Not able to verify – no access to property
W-BBA8	Brighton Beach Area	CUM	Land bird migratory stopover area	 Habitat for breeding birds of conservation concern 	Eastern Kingbird	Unable to verify	Few observations made from outside fenced-in property
W-BBA9	Brighton Beach Area	CUS	Land bird migratory stopover area	Grasslands and forest in area	Carolina WrenGray CatbirdAmerican Goldfinch	 North-south corridor for red fox, raccoon, skunk and white-tailed deer moving through CUS. One section of a larger bird migration corridor that extends north-south along east side of Detroit River 	 Numerous species of wildlife use the area for feeding Red fox den located on Ontario Hydro property just north of BBA9 Brown snakes located in open area along north edge of FOD Large number of migratory bird nests
WBBA10	Brighton Beach Area	CUW	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 Mammal movement corridor along north forest edge Small part of migration corridor along Detroit River for migrating birds 	Foraging area for birds and mammals
WBBA11	Brighton Beach Area	CUS	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 Mammal movement corridors along roadsides and through CUS Small part of migration corridor along Detroit River for migrating birds 	Foraging area for birds and mammals
WBBA12	Brighton Beach Area	CUM	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 Mammal movement corridors along roadsides and through CUM Small part of migration corridor along Detroit River for migrating birds 	Foraging area for birds and mammals

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
WBBA13	Brighton Beach Area	CUS	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare Habitat for breeding birds of conservation concern 	Gray Catbird	 Mammal movement corridors along roadsides and through CUM Small part of migration corridor along Detroit River for migrating birds 	 Foraging area for birds and mammals Deer bedding area in southeast corner
WBBA14	Brighton Beach Area	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Some evidence of north-south mammal movement corridors through CUM	 Other than white-tailed deer and some small mammal activity, this area has limited amounts of wildlife due to its proximity to the highway
WBBA15	Brighton Beach Area	CUS	Land bird migratory stopover area	 Nno areas that would contain wildlife uncommon or rare No forested areas 	No species of conservation concern were recorded	 North-south corridor for red fox, raccoon, skunk and white-tailed deer moving through CUM Small part of migration corridor along Detroit River for migrating birds. 	Feeding zone for migrating birds.
WBBA16	Brighton Beach Area	FOD	 Land bird migratory stopover area Potential winter deer yard Amphibian breeding ponds in spring 	 Forest contains trees with numerous nest cavities deadfalls for breeding birds and mammals Pond inside forest for breeding amphibians 	 American Goldfinch Carolina Wren Gray Catbird 	 Mammal corridors for white-tailed deer, red fox, raccoon, and skunk One section of a larger bird migration corridor that extends north-south along east side of Detroit River 	 Breeding area for many species of migratory birds Amphibian breeding pond inside forest
WBBA17	Brighton Beach Area	CUM, TPO	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	Brown ThrasherAmerican Goldfinch	 East-west corridor for red fox, raccoon and white-tailed deer moving along south side of CUM Small part of migration corridor along Detroit River for migrating birds. 	 Feeding zone for migrating birds Brown snake and red-bellied snake located along roadside at west end of CUM
WBBA18	Brighton Beach Area	CUT	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	Gray CatbirdAmerican GoldfinchCarolina Wren	 Mammal corridors for white-tailed deer, red fox, raccoon, and skunk Small part of migration corridor along Detroit River for migrating birds 	Breeding area for migratory birds
WBBA19	Brighton Beach Area	CUM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	no species of conservation concern were recorded	 White-tailed deer corridor along northeast side of CUM Coyote, fox and raccoon corridor along roadway on east side of CUM 	Green frogs in ditches along north edge of CUM
WBBA20	Brighton Beach Area	CUM	Land bird migratory stopover area	 Lots of fall seed plants for passerine migrants to forage on 	Gray CatbirdAmerican Goldfinch	 East-west mammal movement corridors along north and south sides of CUM Small part of migration corridor along Detroit River for migrating birds 	Fall season foraging area for migrating birds
WBBA21	Brighton Beach Area	CUW	Potential land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	Not able to verify – no access to property	Unable to confirm mammal corridors	Not able to verify – no access to property

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-ANS1	ANSI south of Broadway St	TPW	 Land bird migratory stopover area Summer white-tailed deer bedding areas Potential winter deer yard 	 Habitat for breeding birds of conservation concern Forest contains trees with numerous nest cavities for breeding birds and mammals 	 American Goldfinch Gray Catbird Red-headed Woodpecker 	 Mammal corridors throughout ANSI for white-tailed deer, raccoon, red fox, coyote, striped skunk and opossum. Small part of larger north-south bird migration corridor 	 ANSI Deer bedding area Red-headed Woodpecker is SARA species
W-YWK1	Yawkey	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	East-west mammal corridor through center of CUM	This area has limited amounts of wildlife due to its proximity to the highway
W-YWK2	Yawkey	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 East-west mammal corridors through CUW Small part of larger north-south bird migration corridor 	 This area has limited amounts of wildlife due to its proximity to the highway and human disturbance
W-YWK3	Yawkey	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	North-south mammal corridors through CUM	This area has limited amounts of wildlife due to its proximity to the highway and human disturbance
W-YWK4	Yawkey	MAS	No evidence	Habitat for breeding birds of conservation concern	Gray Catbird	 North-south mammal corridors through CUM Small part of larger north-south bird migration corridor 	 This area has limited amounts of wildlife due to its proximity to the highway and human disturbance
W-YWK5	Yawkey	CUW	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	American GoldfinchGray Catbird	 Numerous north-south mammal corridors from residences to CUW, through to ANSI Small part of larger north-south bird migration corridor 	 Garter snakes found in north end of CUW Although it is surrounded by human disturbances, it offers good habitat for foraging and nesting
W-YWK6	Yawkey	CUW	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	Red-tailed Hawk	 East-west mammal corridors through CUW Small part of larger north-south bird migration corridor 	Active Red-tailed Hawk nest in woodlot
W-YWK7	Yawkey	CUM	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	American GoldfinchEastern Kingbird	 White-tailed deer and coyote corridor along east-west ridge on north side of CUM Small part of larger north-south bird migration corridor 	Minimal wildlife due to landfill site adjacent to CUM
W-YWK8	Yawkey	МАМ	Land bird migratory stopover area	Habitat for breeding birds of conservation concern	 American Goldfinch Eastern Kingbird 	 Mammal corridors along ditch area in marsh parallel to EC Row Expressway Small part of larger north-south bird migration corridor 	 Chain-link fence on north side parallel to EC Row Expressway and Ojibway Parkway intersection limits movement of mammals north-south
W-CH1	Chappus Street Area	CUM	Potential snake hibernaculum	 Habitat suitable for breeding birds of conservation concern and snakes 	Spotted Sandpiper	 East-west mammal corridors connecting Matchette Road west to CUW east Small part of larger north-south bird migration corridor 	 Possible garter snake hibernaculum at west end of CUM under tree

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-CH2	Chappus Street Area	FOD, CUW, CUS	 Land bird migratory stopover area Amphibian breeding areas in creek drains 	 Habitat suitable for breeding birds of conservation concern Temporary creek drains 	 Carolina Wren Eastern Towhee Gray Catbird Spotted Sandpiper 	 Large continuous corridor of mammal trails extending from Matchete Road and EC Row Expressway in the northwest to Malden Road and Spring Garden Road in the southeast Small part of larger north-south bird migration corridor 	 Creeks running east-west and north-south through center of corridor were breeding areas for American Toad, leopard frog and green frog. Potential Cooper's Hawk nesting site in CUW at south end of corridor (pair very active in spring around previous nest site).
W-CH3	Chappus Street Area	TPO	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Minor mammal corridors east-west 	 White-tailed deer bedding areas around the CUT 's in the TPO area no movement of mammals north due to chain-linked fence along EC Row Expressway
W-CH4	Chappus Street Area	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	 American Goldfinch Gray Catbird Ruby-throated Hummingbird 	 Mammal corridors connecting surrounding CUW's and CUT's Small part of larger north-south bird migration corridor 	 Human influenced by motorbike trails throughout the area Creek drain flows parallel to south side of CUT
W-CH5	Chappus Street Area	CUT	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No evidence	•
W-CH6	Chappus Street Area	CUP	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	• no evidence	•
W-CH7	Chappus Street Area	CUW, SWD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 East-west mammal corridor along north side of CUW1 and SWD parallel to fence line Small part of larger north-south bird migration corridor continuous with Malden Park Forest on north side of EC Row Expressway 	 No mammal corridors going north due to chain-linked fence along EC Row Expressway
W-CH8	Chappus Street Area	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	 American Goldfinch Gray Catbird 	 East-west mammal corridor connecting CUW on the west side to residences on the east side Small part of larger north-south bird migration corridor 	•
W-CH9	Chappus Street Area	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	 Mammal corridors connecting two CUW's on east and west sides Small part of larger north-south bird migration corridor 	Good area for breeding birds to nest
W-CH10	Chappus Street Area	TPO	Land bird migratory stopover area	 Habitat suitable for breeding birds of conservation concern Habitat suitable for snakes protected by SARA 	 Butler's Garter Snake Field Sparrow 	 White-tailed deer, coyote and raccoon corridors connecting CUS and CUT north of area to CUT and CUW south and east of area Small part of larger north-south bird migration corridor 	 Butler's Garter Snake is a SARA species It was only found in the TPO's of this section of the AOI.

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat	
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridor
W-CH11	Chappus Street Area	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	 American Goldfinch Eastern Towhee Field Sparrow Gray Catbird 	 Mammal corridors east-west th CUT and north-south connecti with CUW1 Small part of larger north-sout migration corridor
W-CH12	Chappus Street Area	CUM	Land bird migratory stopover area	 Habitat suitable for breeding birds of conservation concern and snakes 	 American Goldfinch Carolina Wren 	 Mammal and snake corridors connecting area toCUW1 and drain in center and CUW1 on s east and west sides Small part of larger north-soul migration corridor
W-CH13	Chappus Street Area	CUT	Land bird migratory stopover area	 habitat for breeding birds of conservation concern 	 American Goldfinch Carolina Wren Eastern Phoebe Gray Catbird 	 White-tailed deer, coyote and corridors connecting CUT and north and south of area Continuation of snake corridor Small part of larger north-sout migration corridor
W-CH14	Chappus Street Area	TPO	Land bird migratory stopover area	 Habitat suitable for breeding birds of conservation concern Habitat suitable for snakes protected by SARA 	 Butler's Garter Snake American Goldfinch Field Sparrow 	 White-tailed deer, coyote and corridors connecting FOD and north and south of area Small part of larger north-soul migration corridor
W-CH15	Chappus Street Area	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No evidence
W-CH16	Chappus Street Area	CUT	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Minor mammal corridors betwee FOD's and residences Small part of larger north-soul migration corridor
W-CH17	Chappus Street Area	CUM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Mammal corridors connecting east side to CUT1 on south si Small part of larger north-sout migration corridor
W-CH18	Chappus Street Area	МАМ	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Mammal corridors connecting surrounding CUT's to CUM on side Small part of larger north-soul migration corridor
W-CH19	Chappus Street Area	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Mammal corridors connecting residence yards in south to M FOD in north Small part of larger north-soul migration corridor

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t through cting TPO puth bird	•						
s Id creek n south,	 Garter snakes and Brown snakes inhabit area Mammals adapted to human activity using walking trails and 4v4 vehicle trails as agridare 						
outh bird	and 4x4 vehicle trails as corridors						
d raccoon nd FOD ors in TPO	Habitat connection with TPO that contains Butler's Garter Snake						
outh bird	White-tailed deer beds in east end of area						
d raccoon ind CUT outh bird	 Butler's Garter Snake is a SARA species It was only found in the TPO's of this section of the AOI. 						
	Human influenced area						
ween outh bird	Human influenced area						
ng MAM on side buth bird	•						
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ig MAM and puth bird	Human influenced area						

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-CH20	Chappus Street Area	МАМ	No evidence	 Habitat suitable for breeding birds of conservation concern 	American Woodcock	 East-west mammal corridors for white- tailed deer and raccoon connecting surrounding CUT, FOD, CUM and TPO areas. Small part of larger north-south bird migration corridor 	•
W-CH21	Chappus Street Area	TPO	No evidence	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 Mammal and snake corridors connecting CUW on north side to residences and FOD on south side 	 Lots of garter snakes in grassy areas Reports by local residents that fox snakes are common in area although none were observed by LGL field personnel
W-CH22	Chappus Street Area	TPO	No evidence	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 East-west mammal corridors along north side of TPO connecting FOD on east side to residence back yards on west side 	Lots of human influence
W-CH23	Chappus Street Area	TPO	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 Mammal corridors connecting surrounding CUW and FDO's Small part of larger north-south bird migration corridor 	 North-south creek drain on east side of TPO used by American toad, leopard frog and green frog for breeding
W-CH24	Chappus Street Area	CUT	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 Mammal corridors north-south between creek drain on west side and CUT connecting CUW on north side to TPO and FOD on south side Small part of larger north-south bird migration corridor 	 North-south creek drain on west side of CUT1 used by American toad, leopard frog and green frog for breeding
W-CH25	Chappus Street Area	CUP	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 Mammal corridors north-south connect CUW on north side to FOD on south side Small part of larger north-south bird migration corridor 	Human influence in this area
W-CH26	Chappus Street Area	CUT	Land bird migratory stopover area	 Habitat suitable for breeding birds of conservation concern 	Carolina WrenGray Catbird	 Mammal corridors north-south connect FOD to CUP Small part of larger north-south bird migration corridor 	•
W-CH27	Chappus Street Area	CUP	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 Mammal corridors north-south connect CUP to residence back yards Small part of larger north-south bird migration corridor 	Human influence in this area
W-NSG1	North of Spring Garden Road	CUS	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 East-west corridors connecting FOD on east side with Malden Road on west side Small part of larger north-south bird migration corridor 	 Mammal movement north blocked by chain-linked fence along EC Row Expressway

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-NSG2	North of Spring Garden Road	FOD	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 East-west mammal corridors connecting CUM on east side with CUS on west side Small part of larger north-south bird migration corridor 	 Mammal movement north blocked by chain-linked fence along EC Row Expressway
W-NSG3	North of Spring Garden Road	CUM, TPO	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	 Mammal corridors throughout CUM connecting FOD and SWD areas Small part of larger north-south bird migration corridor 	Lots of white-tailed deer bedding areas at south end of CUM
W-NSG4	North of Spring Garden Road	SWD	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	 Carolina Wren Cooper's Hawk Gray Catbird 	 Mammal corridors connecting CUM north to residence back yards south and FOD on east side Small part of larger north-south bird migration corridor 	Cooper's Hawk possibly nesting in area
W-NSG5	North of Spring Garden Road	FOD, CUW	 Land bird migratory stopover area Amphibian breeding ponds in forest 	 Habitat suitable for breeding birds of conservation concern Vernal ponds in forest 	Carolina WrenGray Catbird	 Mammal corridors east-west through forest connecting CUT on east side to CUM on west side Small part of larger north-south bird migration corridor 	 Cooper's Hawk possibly nesting in area Vernal ponds in west end of forest with breeding chorus frogs North movements impeded by chain-linked fence along EC Row Expressway Lots of white-tailed deer trails going east-west through FOD at south end
W-NSG6	North of Spring Garden Road	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchGray Catbird	 Mammal corridors east-west through CUT connecting FOD's on each side Small part of larger north-south bird migration corridor 	•
W-NSG7	North of Spring Garden Road	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	 American Goldfinch Eastern Towhee Gray Catbird 	 Lots of white-tailed deer trails running east-west through CUT connecting FOD on west side to CUT on east side Small part of larger north-south bird migration corridor 	 North movements impeded by chain-linked fence along EC Row Expressway Lots of breeding bird nests (old and new) found in CUT
W-NSG8	North of Spring Garden Road	CUW	Land bird migratory stopover area	 Habitat suitable for breeding birds of conservation concern 	Gray Catbird	 East-west mammal corridors connecting CUW to resident backyards and CUT on east and south sides Small part of larger north-south bird migration corridor 	 Huron Church Road is partial barrier to east side mammal movements
W-NSG9	North of Spring Garden Road	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 No mammal corridors evident Small part of larger north-south bird migration corridor 	 CUW surrounded by major highways making it unsuitable for mammals and herpetofauna

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-MAL1	Malden Park	MAM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Mammal corridor east-west through MAM along fence row Small part of larger north-south bird migration corridor 	 South movements impeded by chain-linked fence along EC Row Expressway
W-MAL2	Malden Park	CUM	No evidence	Habitat suitable for breeding birds of conservation concern	American Goldfinch	 Mammal corridors east-west along park roadway plus north-south connections from FOD on north side to MAM on south side Small part of larger north-south bird migration corridor 	 Large portion of this habitat is manicured
W-MAL3	Malden Park	FOD	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	 Mammal corridors connecting FOD to surrounding habitats Small part of larger north-south bird migration corridor 	• FOD is elevated and primarily a hillside forest
W-MAL4	Malden Park	CUS	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern and snakes	 American Goldfinch Eastern Kingbird Orchard Oriole Rough-winged Swallow 	 Mammal corridors east-west along park roadways connecting FOD to CUM Small part of larger north-south bird migration corridor 	 Brown Snakes migrating along east-west roadways in late September
W-MAL5	Malden Park	FOD	 Land bird migratory stopover area Amphibian breeding ponds 	 Habitat suitable for breeding birds of conservation concern Vernal ponds for amphibians 	Gray Catbird	 Mammal corridors throughout woodlot connecting CUS1 on west side to CUS1 on east side of Malden Road Small part of larger north-south bird migration corridor 	 Pond in center of FOD Chorus frogs using pond as breeding area in spring
W-MAL6	East of Malden Road	TPO	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Brown snake and garter snake corridors east-west through TPO	Brown snakes and garter snake found under rock and boards
W-MAL7	East of Malden Road	CUS	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	 Mammal corridors east-west connecting FOD on east side to FOD on west side across Malden Road Small part of larger north-south bird migration corridor 	White-tailed deer beds found in center of CUS
W-MAL8	East of Malden Road	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	 Mammal corridor connecting CUS to FOD on east-west sides Small part of larger north-south bird migration corridor 	•
W-MAL9	East of Malden Road	MAM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 No mammal corridor evidence Small part of larger north-south bird migration corridor 	Brown snake and garter snake found on north edge of MAM
W-MAL10	East of Malden Road	CUM	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No corridor evidence	•

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat	
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridor
W-MAL11	East of Malden Road	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Mammal corridors connecting east side to CUM on west side Small part of larger north-sout migration corridor
W-MAL12	East of Malden Road	TPO	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors at south en connecting FOD to CUW
W-MAL13	East of Malden Road	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 East-west mammal corridor connecting TPO to area along row of EC Row Expressway Small part of larger north-soul migration corridor
W-MAL14	East of Malden Road	CUW	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No corridor movements evider
WABO1	NE Quadrant of EC Row and Huron Church	CUW	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	No corridor movements evider
W-LAM1	North of Lambton Street	TPO	No evidence	 Grasslands around creek are suitable habitat for fox snake and garter snake Habitat suitable for breeding birds of conservation concern 	Fox snakeEastern Kingbird	 East-west snake and mammal corridors connecting creek on side to CUW on east side Mammal corridors connecting residence yards on north side Spring Garden Park on south side
W-LAM2	North of Lambton Street	CUW	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	 Orchard Oriole Red-bellied Woodpecker 	 East-west snake and mammal corridors connecting creek on side to CUW on east side North-south snake and mamm corridors connecting creek alo side of CUW to Spring Garder south side Small part of larger north-sou migration corridor
W-LAM3	North of Lambton Street	CUS	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridor on west side CUS connecting CUW's on no south sides
W-LAM4	North of Lambton Street	CUW	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	Small part of larger north-soul migration corridor
W-LAM5	North of Lambton Street	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 East-west mammal corridors a forest edges Small part of larger north-sout migration corridor
W-LAM6	North of Lambton Street	CUM	No evidence	Habitat suitable for breeding birds of conservation concern	American Goldfinch	North-south mammal corridors from CUM to FOD north and C south

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end	•
ng fence outh bird	•
ent	Wildlife presence limited by highways completely surrounding the habitat.
ent	Wildlife presence limited by highways completely surrounding the habitat.
nal un west ig le with h side	Fox snake is a SARA species.Bicycle trails along west and south sides of TPO
nal in west imal ilong north en Park on puth bird	•
de of north and	•
outh bird	Area enclosed by residences and businesses limiting the type of wildlife to human adapted species
s along outh bird	•
ors leading CUW	White-tailed deer beds in areaWhite-tailed deer feeding areas

Reference Number	Location	Habitats (ELC's)		Comments			
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-LAM7	North of Lambton Street	CUW	 Land bird migratory stopover area Potential deer wintering yard 	 Habitat suitable for breeding birds of conservation concern 	Gray CatbirdCarolina Wren	 Numerous mammal corridors, especially of White-tailed deer, throughout woodlot Small part of larger north-south bird migration corridor 	Deer beds found inside woodlot
W-LAM8	North of Lambton Street	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors from CUM to surrounding CUW	•
W-LAM9	North of Lambton Street	CUM	No evidence	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	Mammal corridors across CUM and into surrounding CUW	•
W-NGM1	North of Grand Marais Road	CUW	No evidence	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	No corridor movements evident	Area surrounded by heavy traffic
W-NGM2	North of Grand Marais Road	CUW	No evidence	 No areas that would contain wildlife uncommon or rare 	American GoldfinchGray Catbird	 Mammal corridors throughout bush connecting to surrounding residences Small part of larger north-south bird migration corridor 	Wildlife in area human influenced
W-TC1	Turkey Creek (Bridge and Creek Riparian)	Riparian	Colonial bird breeding colony on Turkey Creek Bridge	 Habitat suitable for breeding birds of conservation concern Habitat suitable for fox snakes 	Fox Snake	No corridors observed	 Fox snakes observed along creek just west of Turkey Creek bridge Fox snake is a SARA species Cliff Swallow nesting colony on ceiling of bridge Barn Swallow nesting colony on ceiling of bridge
W-RED1	North and South of Reddock Avenue	TPO	No evidence	 Habitat suitable for breeding birds of conservation concern 	Eastern Kingbird	 Mammal corridors running north-south through TPO connecting CUT and SWD on south side to SWD and another TPO on north side Snake corridors east-west and north- south through TPO 	 White-tailed deer foraging zone Garter snake foraging zone
W-RED2	North and South of Reddock Avenue	SWD, FOD, CUW	 Land bird migratory stopover area Potential winter deer yard Vernal ponds for breeding amphibians 	 Habitat suitable for breeding birds of conservation concern Habitat suitable for fox snakes Vernal ponds 	 Fox Snake American Goldfinch Carolina Wren Gray Catbird 	 Mammal corridors connecting SWD to surrounding TPO, residences to FOD and FOD to CUM on east side Small part of larger north-south bird migration corridor 	 White-tailed deer foraging zone White-tailed deer using SWD at north end of unit in TPO area (RED-1) for beds Chorus frog breeding ponds in woodlots Fox snake is a SARA species (reported in residence backyard and verified by local biologists)
W-RED3	North and South of Reddock Avenue	CUT	Land bird migratory stopover area	 Habitat suitable for breeding birds of conservation concern 	Eastern Kingbird	 Mammal corridors connecting TPO to SWD Small part of larger north-south bird migration corridor 	White-tailed deer bedding area
W-RED4	North and South of Reddock Avenue	CUM	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors from CUM into SWD	•

Reference Number	Location	Habitats (ELC's)	Significant Wildlife Habitat			
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridor
W-RED5	North and South of Reddock Avenue	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Mammal corridors connecting residence backyards on north CUT on south side Small part of larger north-sout migration corridor
W-RED6	North and South of Reddock Avenue	CUT	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors connecting north side to SWD on south side
W-RED7	North and South of Reddock Avenue	СИМ	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	 American Goldfinch Eastern Kingbird Gray Catbird Orchard Oriole 	 East-west mammal corridors a north section of FOD
W-RED8	North and South of Reddock Avenue	МАМ	 Land bird migratory stopover area Vernal pond in fragmite patch 	 No areas that would contain wildlife uncommon or rare Small pond in fragmite patch suitable for breeding amphibians 	No species of conservation concern were recorded	 Mammal corridors connecting surrounding CUM Small part of larger north-soul migration corridor
W-OAK1	Oakwood Bush	CUW, FOD	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchGray Catbird	 Mammal corridors connecting woodlots to surrounding CUM North-south mammal corridor connecting Cabana Road area south end to FOD at north er Small part of larger north-sout migration corridor
W-OAK2	Oakwood Bush	СИМ	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Mammal corridors connecting forest to surrounding CUM Small part of larger north-soul migration corridor
W-HCL1	Between Huron Church Line and Huron Church Road	CUW	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Mammal corridors throughout connecting to FOD on southea and surrounding residences Small part of larger north-sout migration corridor
W-HCL2	Between Huron Church Line and Huron Church Road	FOD	Land bird migratory stopover area	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	 Mammal corridors throughout connect to CUT on east side a residences on north, west and sides Small part of larger north-sout migration corridor
W-HCL3	Between Huron Church Line and Huron Church Road	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchGray Catbird	 Mammal corridors connecting south side to MAM on north si SWD on east side Small part of larger north-sout migration corridor

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ig th side to buth bird	•
ig CUW on side	•
s along	White-tailed deer foraging area
ig area to outh bird	 No evidence of movements to the east because of Huron Church Road Green frogs breeding in fragmite patch next to Huron Church Road
ng inside of IM's or eaa in end outh bird	Small creek drain east-west through center of CUW1
ng inside of buth bird	•
ut CUW east side outh bird	 Human adapted wildlife found in this area
ut forest e and nd south puth bird	Cahill Drain flows along south side of forest
ng FOD on side and outh bird	 Cahill Drain flows along south side of CUW evidence mammals crossing from CUW to ESA on north side of Huron Church Road

APPENDIX I WILDLIFE HABITAT ASSESSMENT SUMMARY

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-HCL4	Between Huron Church Line and Huron Church Road	MAM	Land bird migratory stopover area	 No areas that would contain wildlife uncommon or rare 	No species of conservation concern were recorded	 Mammal corridors from MAM to CUT and SWD Small part of larger north-south bird migration corridor 	 Evidence that mammals crossing from MAM to ESA on north side of Huron Church Road
W-HCL5	Between Huron Church Line and Huron Church Road	SWD	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	Cahill Drain is a mammal corridor connecting W-ESA to W-HCL5	 Cahill Drain flows east-west through south side of SWD Track and trail evidence showed muskrat, raccoon, red fox, coyote and white-tailed deer using Cahill Drain as a corridor year-round
W-HCL6	Between Huron Church Line and Huron Church Road	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	 Cahill Drain is a mammal corridor connecting W-ESA to W-HCL6 Snake corridors throughout center of CUT Small part of larger north-south bird migration corridor 	 Cahill Drain flows east-west along north side of CUT Track and trail evidence showed muskrat, raccoon, red fox, coyote and white-tailed deer using Cahill Drain as a corridor year-round Lots of eastern garter snakes foraging in grassy areas of CUT
W-HCL7	Between Huron Church Line and Huron Church Road	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Savannah Sparrow	 East-west mammal corridors connecting CUT to MAS and CUM to residences on south side Small part of larger north-south bird migration corridor 	 Entire CUM being cut in mid-June. Recommend not cutting until late July/early August when Savannah Sparrow young have fledged.
W-HCL8	Between Huron Church Line and Huron Church Road	MAS	Land bird migratory stopover areaamphibian breeding pond	 No areas that would contain wildlife uncommon or rare breeding pond/marsh habitat 	No species of conservation concern were recorded	 Mammal corridors connecting marsh to surrounding CUM Small part of larger north-south bird migration corridor 	 American toad and chorus frogs seasonal breeding area within 20 m of Talbot Road
W-ESA1	St. Clair College	CUT	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	Gray Catbird	 Cahill Drain is a mammal corridor connecting W-ESA1 to W-HCL5 and W-HCL6 Mammal corridors throughout CUT connecting it to St. Clair College and residences 	 Lots of human influence throughout CUT from St. Clair College (jogging trails, aerobics fitness center)
W-HWY1	Highway 401	CUM	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	 Mammal corridors connecting CUW east to residences west. Mammal corridors connecting CUM to agricultural areas south and east. 	 Foraging zone for migratory land birds during spring and fall migrations.
W-HWY2	Highway 401	CUS	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchGray Catbird	 Mammal corridors connecting CUS to surrounding agricultural lands and CUM Small part of larger north-south bird migration corridor 	 White-tailed deer foraging and bedding area
W-HWY3	Highway 401	CUW	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American GoldfinchEastern KingbirdGray Catbird	Mammal corridors north-south through CUW rows giving protection and access to surrounding habitats	Tree rows next to open fields used for nesting
W-HWY4	Highway 401	OAO	Land bird migratory stopover area	No evidence	No species of conservation concern were recorded	Mammal corridors to and from pond continuous with surrounding tree rows	Green frog breeding pond

APPENDIX I WILDLIFE HABITAT ASSESSMENT SUMMARY

Reference Number	Location	Habitats (ELC's)		Significant Wildlife	Habitat		Comments
			Seasonal Concentration of Animals ¹	Rare Vegetation Communities ² or Specialized Habitats to Wildlife ³	Species of Conservation Concern ⁴	Animal Movement Corridors ⁵	
W-HWY5	Highway 401	CUT	Land bird migratory stopover area	 Habitat suitable for breeding birds of conservation concern 	Gray Catbird	 Mammal corridors along creek through woodlot and in ditches connecting both sides of Talbot Road and agricultural fields. Small part of larger north-south bird migration corridor 	 Thicket and creek combination is excellent habitat containing species such as Brown Thrasher, Song Sparrow, Northern Cardinal, Indigo Bunting
W-HWY6	Highway 401	CUM1-1	Land bird migratory stopover area	Habitat suitable for breeding birds of conservation concern	American Goldfinch	Mammal corridors in creek drain along north side of cemetery	Human influenced wildlife present
W-AGR1	Outer Drive	Agricultural	Land bird migratory stopover area	 Habitat suitable for breeding birds of conservation concern 	 American Goldfinch Horned Lark Savannah Sparrow 	 Mammal corridors along field edges next to CUT and creek drains 	 Abandoned fields from previous season are excellent nesting areas for bird species such as Killdeer, Horned Lark and Vesper Sparrow. Feeding area for geese, doves, blackbirds, etc.
W-AGR2	Outer Drive	Agricultural	No evidence	No areas that would contain wildlife uncommon or rare	no species of conservation concern were recorded	Mammal corridors along field edges next to CUT and creek drains	 Field edges next to drain were nesting areas for geese and ducks
W-AGR3	Outer Drive	Agricultural	No evidence	No areas that would contain wildlife uncommon or rare	No species of conservation concern were recorded	Mammal corridors along field edges next to CUT and creek drains	 Abandoned fields from previous season are excellent nesting areas for bird species
W-AGR4	South Talbot Road east of Outer Drive	Agricultural	No evidence	Habitat suitable for breeding birds of conservation concern	Horned LarkVesper Sparrow	Mammal corridors along field edges connecting to CUT and creek within	 Abandoned fields from previous season are excellent nesting areas for bird species
W-RES1	Montgomery Drive	Urban	No evidence	Habitat suitable for breeding birds of conservation concern	American GoldfinchCarolina Wren	 Mammal movements in and around residences 	 Wildlife adapted to human presence (bird feeders, human structures for dwellings and surrounding woodlots as suitable nesting areas for migratory birds) Mammals, such as eastern cottontails, forage on residence lawns.
W-RES2	Chelsea Drive	Urban	No evidence	Habitat suitable for breeding birds of conservation concern	American GoldfinchCarolina Wren	 Mammal movements in and around residences 	 Wildlife adapted to human presence (bird feeders, human structures for dwellings and surrounding woodlots as suitable nesting areas for migratory birds) Mammals, such as eastern cottontails, forage on residence lawns.

Notes:

¹ Seasonal concentration of animals includes: winter deer yards; moose late winter habitat; colonial bird nesting sites; waterfowl stopover and staging areas; shorebird migratory stopover areas; landbird migratory stopover areas; raptor winter feeding and roosting areas; wild turkey winter range; turkey vulture summer roosting areas; reptile hibernacula; bat hibernacula; bullfrog concentration areas; and, migratory butterfly stopover areas.

² Rare vegetation communities include: alvars; tall-grass prairies; savannahs; rare forest types; talus slopes; rock barrens; sand barrens; and, Great Lakes dunes.

³ Specialized habitats for wildlife include: habitat for area-sensitive species; forests providing a high diversity of habitats; old-growth or mature forest stands; foraging areas with abundant mast; amphibian woodland breeding ponds; turtle nesting habitat; specialized raptor nesting habitat; special moose habitat (calving areas, aquatic feeding areas and mineral licks); and, mink, otter, marten or fisher denning sites; cliffs and caves; and, seeps and springs.

⁴ Species of conservation concern include: globally rare; nationally rare; provincially rare; regionally rare; locally rare; and, species of concern to the planning authority.

⁵ Animal movement corridors include dwelling habitat for plants and animals; and, conduits for daily and seasonal movements of animals, dispersal of organisms and genes and long-distance range shifts of species.



PRACTICAL ALTERNATIVE EVALUATION	Factor: F	rotect the Natural Environment									Natural Alterna	ative 1A Plaza A										
											Segments-Malden R	oad to North Talbot Rd										
				Malden Rd to Pulfo	rd		Pulford north of Lennon	Drain	Nort	th of Lennon Drain to Cous	ineau Rd		Cousineau Rd to Howa	ırd Ave		Howard Ave to Highwa	/ 401		Highway 3 to North Talk	pot Rd		
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M			
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Total Area	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, Type/Area and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spr	ing Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low		í
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	e Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low					
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Ga		Moderate	Burke Drain	Stream Corridor	Low								1
			Grand Marais Drain	Stream Corridor	Moderate				Remnant to Spring Ga Cahill Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low								í
			North of Spring Garden	Matrix	Low							Burke Draine Howard Avenue Drain	Stream Corridor	Low								1
			Road		-	-																i'
												Benson Drain	Stream Corridor	LOW								l
												Dickson Drain	Stream Corridor	Low								1
				1		1	1		1			No Name Tributary of	Stream Corridor	Low	1			1				í
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0	0	Total High
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0	3	Total Moderate
Communities/Ecosystems	Impacts to Terrestrial	Community Type/Area, area, significance and	Area Displaced	Total Low 1.35	4 High	Area Displaced	Total Low	2 High	Area Displaced	Total Low 0.08	2 High	Area Displaced	Total Low	8 High	Area Displaced	Total Low	2 High	Area Displaced	Total Low 0.00	1 High	19	Total Low
,,	Communities/ Ecosystems	sensitivity			5			-			-			5			5				1.43	Total High
			Area Displaced Area Displaced	6.29	Moderate Low	Area Displaced Area Displaced	2.51	Moderate Low	Area Displaced Area Displaced	3.06	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.66	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	16.34	Total Moderate Total Low
			Total Area Displaced	17.75		Total Area Displaced	2.81		Total Area Displaced	3.81		Total Area Displaced	0.00		Total Area Displaced	0.66		Total Area Displaced	0.00		25.03	Total Area Displaced
	Impacts to Aquatic Communities/	Community Type/Area, area, significance and sensitivity	Basin Drain Basin Drain	0.11	Low	Basin Drain Basin Drain		Low	Basin Drain Basin Drain		Low	Basin Drain Basin Drain		Low	Basin Drain Basin Drain		Low	Basin Drain Basin Drain		Low None		l'
			Cahill Drain	0.03	Low	Cahill Drain		Low	Cahill Drain	0.02	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain		Low		í
			Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain	0.01	Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate		i'
			Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain	0.00	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low		í
			Lennon Drain Marentette Drain	0.03	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain	0.06	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None		i'
			Wolfe Drain	0.05	Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.54	Low	Wolfe Drain		Low	Wolfe Drain		Low		í
			Wolfe Drain	0.08	Moderate Low	Wolfe Drain		Moderate Low	Wolfe Drain	0.29	Moderate Low	Wolfe Drain		Moderate Low	Wolfe Drain	-	Moderate	Wolfe Drain		Moderate Low		i'
			Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.39	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	0.39	Total Moderate
			Area Displaced	0.28	Low	Area Displaced Area Displaced	0.00	Low None	Area Displaced	0.02	Low None	Area Displaced	0.54	Low	Area Displaced	0.00	Low None	Area Displaced	0.00	Low None	0.85	Total Low Total None
			Area Displaced Total Area Displaced	0.06	1.34	Total Area Displaced	0.00	None 20	Area Displaced Total Area Displaced	0.00		Area Displaced Total Area Displaced	0.00	None 0.54	Area Displaced Total Area Displaced	0.00	none 00	Area Displaced Total Area Displaced	0.00	.00	1.29	Total Area Displaced
Populations/Species	Risk	Species name, Type/Area and significance	Provincially Rare Specimens/Colonies		85 High	Provincially Rare Specimens/Colonies		6 High	Provincially Rare Specimens/Colonies		51 High	Provincially Rare Specimens/Colonies		0 High	Provincially Rare Specimens/Colonies		0 High	Provincially Rare Specimens/Colonies		0 High	142	Total Provincially Rare Specimens/Colonies
Surface Water	Changes in surface wate conditions (quality and	area of surface drainage altered by each alternative				1			1						1							1
	quantity)	number of surface water drainages crossings			1	1	1		1				1		1	1		1				ĺ
		by stream Type/Area number of encroachments on or severances of				+	-	-	+				+		+			+				·'
		surface water drainages				1			1						1							1
		degree of compliance with Provincial and Federal Water Quality Guidelines and																				
		Stormwater Management requirements				1			1						1							1
Groundwater	Change in groundwater	area of infiltration zones affected						1														í
	conditions (quality and quantity)	area of groundwater recharge affected areas of seepage affected			-	+							+									i'
		areas of seepage affected area of water table affected by each alternativ		1	+	+			+	-			1		+	1	+	+				
		(draw down zone) proximity of alternative to public and private		+	_						+	+						-	-			·
		drinking water wells																				1
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easemen	Area in ha within ROW																				
	l	I																				<u>. </u>
Factor Summary: Factor Score:	1		1			1		1	1		1	1	1			1	1	1	1			
1 40101 00010.			1	1		1			1				1	1	1		1	1		1		

Ecological Landscapes Impacts to E Landscapes	eria/Indicator Measurement/Units to Ecological Landscape name, type and significance spes	Name Basin Drain Youngstown Drain Marentette Drain Grand Marais Drain North of Spring Gard Road		Significance Low Low	Pu Name Oakwood Bush to Spring Garden ANSI Lennon Drain	Hord north of Lennor H-I Type Strip Corridor Stream Corridor	n Drain Significance	Name	of Lennon Drain to Cou	Segments-Malden Roa sineau Rd		usineau Rd to Howard /	Ave		Howard Ave to Highwa	ay 401	н	lighway 3 to North Talbo	ot Rd
Ecological Landscapes Impacts to E Landscapes Communities/Ecosystems Impacts to T Communities/Ecosystems	to Ecological Landscape name, type and significance	Basin Drain Youngstown Drain Marentette Drain Grand Marais Drain	G-H Type Stream Corridor Stream Corridor Stream Corridor Stream Corridor	Significance Low Low	Name Oakwood Bush to Spring Garden ANSI	H-I Type Strip Corridor		Name		sineau Rd	Co	usineau Rd to Howard A	Ave			ay 401	н	lighway 3 to North Talb	ot Rd
Ecological Landscapes Impacts to E Landscapes Communities/Ecosystems Impacts to T Communities/Ecosystems	to Ecological Landscape name, type and significance	Basin Drain Youngstown Drain Marentette Drain Grand Marais Drain	Type Stream Corridor Stream Corridor Stream Corridor Stream Corridor	Low Low Low	Oakwood Bush to Spring Garden ANSI	Type Strip Corridor	Significance Low	Nume	ŀJ										
Landscapes Communities/Ecosystems Communities/Ecosystems		Basin Drain Youngstown Drain Marentette Drain Grand Marais Drain	Stream Corridor Stream Corridor Stream Corridor Stream Corridor	Low Low Low	Oakwood Bush to Spring Garden ANSI	Strip Corridor	Significance Low	Nume				J-K			K-L			L-M	
Landscapes Communities/Ecosystems Communities/Ecosystems		Youngstown Drain Marentette Drain Grand Marais Drain	Stream Corridor Stream Corridor Stream Corridor	Low	Garden ANSI		Low		Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Communities/Ecosystems Impacts to T Communitie Ecosystems	juos	Marentette Drain Grand Marais Drain	Stream Corridor Stream Corridor	Low	Lennon Drain	Stream Corridor	1	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
Communitie Ecosystems		Grand Marais Drain	Stream Corridor	2010		Suedin Comuor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			-
Communitie Ecosystems		Grand Marais Drain	Stream Corridor	2010				Remnant	Otria Cassidan	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain					
Communitie Ecosystems				Madazata				St. Clair college Prairie Remnant to Spring Gard	en	Moderate	Burke Drain	Stream Corndor	LOW						
Communitie Ecosystems		North of Spring Garde Road	en Matrix	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
Communitie Ecosystems		Road	und in a	Low							Burke Draine Howard Avenue Drain	Stream Corridor	Low						
Communitie Ecosystems				2010									2011						
Communitie Ecosystems											Benson Drain	Stream Corridor	Low						
Communitie Ecosystems					1						Dickson Drain	Stream Corridor	Low					+	+
Communitie Ecosystems																			
Communitie Ecosystems		1									No Name Tributary of Dickson Drain	Stream Corridor	Low						
Communitie Ecosystems			Total High	0		Total High	0		Total High	0	2.2.100m Brain	Total High	0		Total High	0		Total High	0
Communitie Ecosystems			Total Moderate Total Low	1		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	0		Total Moderate Total Low	0
Communitie Ecosystems	to Terrestrial Community type, area, significance and	Area Displaced	0.36	4 High	Area Displaced	0.00	2 High	Area Displaced	0.08	2 High	Area Displaced	0.00	High	Area Displaced	0.00	2 High	Area Displaced	0.00	High
Impacts to J	nities/ sensitivity	Area Displaced	2.18	Moderate	Area Displaced	0.30	Moderate	Area Displaced	0.66	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
Impacts to /		Area Displaced	2.10	Woderate	Area Displaced	0.00	MODELATE	Area Displaced	0.00	Woderate	Area Displaced	0.00	Moderate	Alea Displaced	0.00	Moderate	Area Displaced	0.00	Woderate
Impacts to ,		Area Displaced	7.28	Low	Area Displaced	2.51	Low	Area Displaced	3.06	Low	Area Displaced	0.00	Low	Area Displaced	0.66	Low	Area Displaced	0.00	Low
impeus o .	to Aquatic Community type, area, significance and	Total Area Displaced Basin Drain	9.82	Low	Total Area Displaced Basin Drain	2.81	Low	Total Area Displaced Basin Drain	3.81	Low	Total Area Displaced Basin Drain	0.00	Low	Total Area Displaced Basin Drain	0.66	Low	Total Area Displaced Basin Drain	0.00	Low
	to Aquatic Community type, area, significance and	Cahill Drain	0.04	Low	Cahill Drain		Low	Cahill Drain	0.02	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	-	Low
		Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.01	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
		Cahill Drain Grand Marais Drain	0.09	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain	0.03	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low
		Lennon Drain	0.00	Moderate	Lennon Drain		Moderate	Lennon Drain	0.06	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
1		Marentette Drain	0.03	None	Marentette Drain		None	Marentette Drain	0.01	None	Marentette Drain	0.54	None	Marentette Drain		None	Marentette Drain		None
		Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain	0.01	Low Moderate	Wolfe Drain Wolfe Drain	0.54	Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate
		Youngstown Drain	0.04	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
		Area Displaced Area Displaced	0.00	Moderate	Area Displaced Area Displaced	0.00	Moderate	Area Displaced Area Displaced	0.39	Moderate	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate	Area Displaced Area Displaced	0.00	Moderate
		nica Diopiacoa	0.17	2010	nica Displaced	0.00	2011	nica Bioplacea	0.02	2011	nica Displaced	0.04	2011	/ Tod Diopidood	0.00	2011	ning pippinon	0.00	2011
		Area Displaced			Area Displaced			Area Displaced			Area Displaced			Area Displaced			Area Displaced	-	
			0.03	None		0.00	None		0.00	None		0.00	None		0.00	None		0.00	None
		Total Area Displaced	0.	.20	Total Area Displaced	0	0.00	Total Area Displaced	0.	41	Total Area Displaced	0.5	54	Total Area Displaced	0	0.00	Total Area Displaced	0.0	00
Populations/Species Impacts to S	to Species at Species name, Type/Area and significance	Provincially Rare		45	Provincially Rare		6	Provincially Rare		51	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Risk		Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies		
Surface Water Changes in conditions (or conditions (or conditions)	s in surface water area of surface drainage altered by each ns (quality and alternative								1										
quantity)) number of surface water drainages crossi	gs																1	
1 1	by stream type number of encroachments on or severance														_			+	
1 1	surface water drainages	13 0							1										
1 1	degree of compliance with Provincial and												·						
1 1	Federal Water Quality Guidelines and Stormwater Management requirements																		
Groundwater Change in g	in groundwater area of infiltration zones affected		İ	İ	İ	ĺ					İ		İ	İ	1		İ	1	1
conditions (o quantity)	ns (quality and																		
quantity)) area of groundwater recharge affected																		
	areas of seepage affected																	-	
1 1																			
1 1																			
1 1	area of water table affected by each altern	ativ	_												_			+	
1 1	(draw down zone)																		
1				1					1						1				
1	proximity of alternative to public and private	9																1	
Other Natural Resources Impacts to n	to mineral, Area in ha within ROW	+					-	1	+	1					+			+	+
Factor Summary:	to mineral, Area in na within ROW																		
Factor Score: 1-High Impact 2-Medium Impact 3-Low	to mineral, Area in na within KOW											-							

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment								N	atural Alternative	1A Option 2 Plaz	za A							
											Segments-Malden Ro	ad to North Talbot Rd								
				Malden Rd to Pulfore	d		Pulford north of Lennon	Drain	North c	of Lennon Drain to Cou	sineau Rd		Cousineau Rd to Howar	d Ave		Howard Ave to Highwa	ay 401		Highway 3 to North Talb	ot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	f Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garde	Strip Corridor n	Moderate	Burke Drain	Stream Corridor	Low	Wolle Dialit					1
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine		Low						
			North of Spring Garder Road	n Matrix	Low							Howard Avenue Drain		Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain No Name Tributary of	Stream Corridor	Low						!
												Dickson Drain		LOW						!
				Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	2		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0
				Total Low	4		Total Low	2		Total Low	2		Total Low	8		Total Low	2		Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.40	High	Area Displaced	0.00	High	Area Displaced	0.13	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
			Area Displaced Area Displaced	6.29	Moderate	Area Displaced	0.30	Moderate Low	Area Displaced	1.20 3.94	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Total Area Displaced	17.90	LOW	Area Displaced Total Area Displaced	2.81	LOW		5.26	LOW	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced		Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.11	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain	0.04	Low	Basin Drain		Low	Basin Drain		Low
			Basin Drain Cahill Drain	0.03	None Moderate	Basin Drain Cahill Drain		None Moderate	Basin Drain Cahill Drain	0.01	None Moderate	Basin Drain Cahill Drain		None Moderate	Basin Drain Cahill Drain		None Moderate	Basin Drain Cahill Drain		None Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.04	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain Lennon Drain	0.09	Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain	0.06	Low Moderate	Grand Marais Drain Lennon Drain	0.09	Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate
			Marentette Drain	0.03	None	Marentette Drain		None	Marentette Drain	0.00	None	Marentette Drain	0.03	None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain Youngstown Drain	0.08	Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain	0.21	Moderate Low	Wolfe Drain Youngstown Drain	0.04	Moderate Low	Wolfe Drain Youngstown Drain		Moderate I ow	Wolfe Drain Youngstown Drain		Moderate Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.31	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced	0.28	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.17	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
			Area Displaced Total Area Displaced	0.06	None	Area Displaced Total Area Displaced		None	Area Displaced Total Area Displaced	0.00	None	Area Displaced Total Area Displaced		None	Area Displaced Total Area Displaced		inone	Area Displaced Total Area Displaced	0.00	None
Populations/Species	Impacts to Species at Risk	Species name, type and significance	Provincially Rare Specimens/Colonies	87.0	00	Provincially Rare Specimens/Colonies	6.0	00	Provincially Rare Specimens/Colonies	41	00	Provincially Rare Specimens/Colonies	0.	00	Provincially Rare Specimens/Colonies	(.00	Provincially Rare Specimens/Colonies	0.	00
Surface Water		area of surface drainage altered by each	1					1		1		1			1	1		1	1	
	conditions (quality and quantity)	alternative number of surface water drainages crossings	5																	
		by stream type number of encroachments on or severances	a																	_
		surface water drainages																		- '
		degree of compliance with Provincial and Federal Water Quality Guidelines and																		
O	Obarana in annual d	Stormwater Management requirements					_				_						_			_ '
Groundwater	Change in groundwater conditions (quality and	area of infiltration zones affected area of groundwater recharge affected		+			+			+	+			-			+			- <u>+</u> ^j
	quantity)	areas of seepage affected	1																	¹
		area of water table affected by each alternation (draw down zone)	v																	1
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular	Area in ha within ROW																		
	(quarry) lands/easement	9																		
Factor Summary:				1	1			1												
Factor Score:	1		1		1	1	1	1	1			1	1	1	1		1	1	1	′

NameNaNameNameNameNameNameNameNameNameNameNameNameNameNameNameNameNameNameName	PRACTICAL ALTERNATIVE EVALUATION	Factor: Pro	ptect the Natural Environment								Nat	ural Alternative 1A	Option 2 Plaza E	3 or C							
<table-container> Annual Interview Interview</table-container>												Segments-Malden Ro	ad to North Talbot F	۲d							
					Malden Rd to Pulfore	1		Pulford north of Lennor	a Drain	North o	f Lennon Drain to Cou	isineau Rd	c	Cousineau Rd to Howa	rd Ave	1	Howard Ave to Highway	y 401		Highway 3 to North Talbo	t Rd
Name:Na<	Performance Measure	Criteria/Indicator	Measurement/Units		G-H			н-і			ŀJ			Ј-К	-		K-L			L-M	
NameParticipantPartic	Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance				Oakwood Bush to Spi		Significance Low						Significance Low			•			
Name		Landscapes		Youngstown Drain	Stream Corridor	Low		Stream Corridor	Low		Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			-
				Marentette Drain	Stream Corridor	Low					Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
Name Name <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Cahill Drain</td><td>Stream Corridor</td><td>Low</td><td>Burke Draine</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td></t<>										Cahill Drain	Stream Corridor	Low	Burke Draine								_
Name Name </td <td></td> <td></td> <td></td> <td>North of Spring Garder Road</td> <td>n Matrix</td> <td>Low</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				North of Spring Garder Road	n Matrix	Low															
<table-container> Name <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2011</td><td></td><td></td><td></td><td></td><td></td><td></td></t<></table-container>															2011						
														Stream Corridor	Low						
Name Name </td <td></td> <td></td> <td></td> <td></td> <td>Total High</td> <td>0</td> <td></td> <td>Total High</td> <td>0</td> <td></td> <td>Total High</td> <td>0</td> <td>Dickson Drain</td> <td>Total High</td> <td>0</td> <td></td> <td>Total High</td> <td>0</td> <td></td> <td>Total High</td> <td>0</td>					Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
Remain Name Name Name Name Name Name Name Name Name Name Name Name Name Name Name 						4	-		2			2			8			2	-		1
Number Number	Communities/Ecosystems	Communities/		Area Displaced		High	Area Displaced		High	Area Displaced		High	Area Displaced		High	Area Displaced		High	Area Displaced		High
Name Name <t< td=""><td></td><td>Ecosystems</td><td></td><td>Area Displaced</td><td>2.18</td><td>Moderate</td><td>Area Displaced</td><td>0.30</td><td>Moderate</td><td>Area Displaced</td><td>1.20</td><td>Moderate</td><td>Area Displaced</td><td>0.00</td><td>Moderate</td><td>Area Displaced</td><td>0.00</td><td>Moderate</td><td>Area Displaced</td><td>0.00</td><td>Moderate</td></t<>		Ecosystems		Area Displaced	2.18	Moderate	Area Displaced	0.30	Moderate	Area Displaced	1.20	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
Name Name <t< td=""><td></td><td></td><td></td><td></td><td>7.30</td><td></td><td></td><td></td><td>Low</td><td></td><td>3.94</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>					7.30				Low		3.94										
Name And And </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Total Area Displaced</td> <td>2.81</td> <td></td> <td></td> <td>5.26</td> <td></td> <td>Total Area Displaced</td> <td>0.00</td> <td></td> <td></td> <td>0.66</td> <td></td> <td>Total Area Displaced</td> <td>0.00</td> <td></td>							Total Area Displaced	2.81			5.26		Total Area Displaced	0.00			0.66		Total Area Displaced	0.00	
Processe Processe			Community type, area, significance and sensitivity		0.04						0.01										
PrimePrim				Cahill Drain Cahill Drain								Moderate	Cahill Drain Cahill Drain		Moderate	Cahill Drain Cahill Drain			Cahill Drain		
h h				Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
<table-container> Normal Norma <</table-container>					0.03						0.06										
<table-container> Normal Normal</table-container>					0.03						0.21										
				Youngstown Drain	0.04	Low	Youngstown Drain		Low	Youngstown Drain	-	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
<table-container> Image: sector -container>				Area Displaced	0.00		Area Displaced	0.00		Area Displaced	0.31			0.00		Area Displaced	0.00		Area Displaced	0.00	
openal mail not be special m														0.00						0.00	
Rd Specimes/Coloris Specimes/Col				Total Area Displaced			Total Area Displaced			Total Area Displaced	0		Total Area Displaced	(Total Area Displaced	0.	00	Total Area Displaced	0.0	ō
notice (a) and not not solve (a) and not not solve (a) and solve (a)		Risk			4	5			6			41			0			0)
Image: strain	Surface Water	conditions (quality and	alternative																		
h indicesting indicit indict indict <th< t<="" td=""><td></td><td>. ,,</td><td>by stream type</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td><u> </u></td></th<>		. ,,	by stream type																		<u> </u>
Image: Single College College And Segments Image: Single College And Segments Image:			surface water drainages	1								_									<u> </u>
And product And product			Federal Water Quality Guidelines and																		
condition (quility head) image and accord and are lefted do to a lega and accord	Groundwater	Change in groundwater	area of infiltration zones affected		1	1	1	1			1	1	1	1		1		1	1	1	1
and as below and table and and table and and table and		conditions (quality and	area of groundwater recharge affected																		
Image: heat state in the s																					
Image: series of the series			(draw down zone)																		
petroleum, granular (quary) lands/easements			drinking water wells																		
	Other Natural Resources	petroleum, granular	Area in ha within ROW																		
	Factor Summary:			I	1	1	<u> </u>		1	1	1		1	1		1	1	1		1	<u> </u>
	Factor Score:									1											T

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment									Natural Alterna	tive 1B Plaza A								
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfore	d		Pulford north of Lennon	Drain	North	f Lennon Drain to Cou	sineau Rd	с	ousineau Rd to Howa	ard Ave		Howard Ave to Highw	ay 401		lighway 3 to North Tall	ot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			HI			ŀJ			J-K			K-L			L-M	
			Name	Type	Significance	Name	Type	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wone Brain					
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garder Road	n Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High Total Moderate	0		Total High	0	-	Total High	0		Total High	0		Total High Total Moderate	0
				Total Moderate Total Low	4	-	Total Low	2		Total Moderate Total Low	2	-	Total Moderate Total Low	8		Total Moderate Total Low	2		Total Low	0
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.40	High	Area Displaced	0.00	High	Area Displaced	0.06	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
			Area Displaced Area Displaced	6.29 10.65	Moderate	Area Displaced Area Displaced	0.33	Moderate	Area Displaced Area Displaced	0.66	Moderate	Area Displaced Area Displaced	0.00	Moderate	Area Displaced Area Displaced	0.00	Moderate	Area Displaced Area Displaced	0.00	Moderate
			Total Area Displaced	18.34	LOW	Total Area Displaced	3.24	LOW	Total Area Displaced	3.54	Low		0.00	Low	Total Area Displaced	0.66	Low	Total Area Displaced	0.00	Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.11	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
			Basin Drain	0.03	None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None
			Cahill Drain Cahill Drain		None Moderate	Cahill Drain Cahill Drain		None Moderate	Cahill Drain Cahill Drain	0.01	None Moderate	Cahill Drain Cahill Drain		None Moderate	Cahill Drain Cahill Drain		None Moderate	Cahill Drain Cahill Drain		None Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.03	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain	0.09	Low	Grand Marais Drain		Low	Grand Marais Drain	0.00	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain		Moderate	Lennon Drain	0.02	Moderate	Lennon Drain	0.06	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain Wolfe Drain	0.04	None Low	Marentette Drain Wolfe Drain		None	Marentette Drain Wolfe Drain	0.01	None	Marentette Drain Wolfe Drain	0.54	None	Marentette Drain Wolfe Drain		None	Marentette Drain Wolfe Drain		None Low
			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain	0.04	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain	0.08	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain Area Displaced		Low	Youngstown Drain Area Displaced		Low
			Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.02	Moderate Low	Area Displaced Area Displaced	0.39	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Area Displaced	0.07	None	Area Displaced	0.00	None	Area Displaced	0.01	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
			Total Area Displaced	0.3	35	Total Area Displaced	0.0	02	Total Area Displaced	0.	41	Total Area Displaced	(0.54	Total Area Displaced		0.00	Total Area Displaced	0	00
Populations/Species	Impacts to Species at Risk	Species name, type and significance	Provincially Rare Specimens/Colonies	8	35	Provincially Rare Specimens/Colonies	1	16	Provincially Rare Specimens/Colonies		51	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		0
Surface Water		area of surface drainage altered by each alternative																		
	quantity)	number of surface water drainages crossings by stream type																		
		number of encroachments on or severances surface water drainages	d																	
		degree of compliance with Provincial and Federal Water Quality Guidelines and																		
		Stormwater Management requirements	1																	
Groundwater		area of infiltration zones affected																		
	conditions (quality and quantity)	area of groundwater recharge affected	1	1				1	1	1		-	1	-				1		-
	gaaniny)	areas of seepage affected		_							_									
		area of water table affected by each alternati (draw down zone)	~											_						
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW																		
Factor Summary:								<u> </u>												
Factor Score:	1		1						Т	1	1	1			1	1		1		

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment									Natural Alternativ		•							
											Segments-Malden Ro	oad to North Talbot Rd								-
				Malden Rd to Pulfor	d		Pulford north of Lennor	Drain	North o	f Lennon Drain to Cou	isineau Rd	c	Cousineau Rd to Howa	ard Ave	•	Howard Ave to Highw	ay 401	ŀ	lighway 3 to North Ta	lbot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	wone brain					
			Grand Marais Drain	Stream Corridor	Moderate				Remnant to Spring Garder Cahill Drain	n Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
					1						-	Burke Draine	Otanam Canidaa	Low						
			North of Spring Garde Road	n Matrix	Low							Howard Avenue Drain		Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						-
												No Name Tributary of Dickson Drain	Stream Corridor	Low						-
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0
Communities/Ecosystems	Impacts to Terrestrial	Community type, area, significance and	Area Displaced	Total Low	4 High	Area Displaced	Total Low 0.00	2 High	Area Displaced	Total Low 0.06	2 High	Area Displaced	Total Low 0.00	8 High	Area Displaced	Total Low	2 High	Area Displaced	Total Low	High
Communicateosystems	Communities/ Ecosystems	sensitivity		0.57	riigii			i ligit		0.00				i iigii		0.00	i iigii		0.00	riigii
			Area Displaced	2.18	Moderate	Area Displaced	0.33	Moderate	Area Displaced	0.66	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	7.30	Low	Area Displaced Total Area Displaced	2.91	Low	Area Displaced Total Area Displaced	2.82	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Basin Drain	0.04	Low	Basin Drain	U.L.I	Low	Basin Drain	0.04	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
	Communities/	sensitivity	Cahill Drain		low	Cahill Drain		Low	Cahill Drain	0.01	Low	Cahill Drain		low	Cahill Drain		Low	Cahill Drain		low
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.01	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.03	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain	0.09	Low Moderate	Grand Marais Drain Lennon Drain	0.02	Low Moderate	Grand Marais Drain Lennon Drain	0.06	Low Moderate	Grand Marais Drain		Low Moderate	Grand Marais Drain		Low Moderate	Grand Marais Drain		Low Moderate
			Lennon Drain Marentette Drain	0.03	None	Marentette Drain	0.02	None	Marentette Drain	0.00	None	Lennon Drain Marentette Drain		None	Lennon Drain Marentette Drain		None	Lennon Drain Marentette Drain		None
			Wolfe Drain		Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.54	Low	Wolfe Drain		Low	Wolfe Drain		Low
			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain	0.04	Low Moderate	Youngstown Drain	0.02	Low Moderate	Youngstown Drain	0.20	Low Moderate	Youngstown Drain	0.00	Low Moderate	Youngstown Drain	0.00	Low Moderate	Youngstown Drain	0.00	Low Moderate
			Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.02	Low	Area Displaced Area Displaced	0.02	Low	Area Displaced Area Displaced	0.54	Low	Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.00	Low
			Area Displaced	0.03	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
		-	Total Area Displaced	0.	20	Total Area Displaced	0.	.02	Total Area Displaced	0	.41	Total Area Displaced	(0.54	Total Area Displaced		0.00	Total Area Displaced		0.00
Populations/Species	Risk	Species name, type and significance	Provincially Rare Specimens/Colonies		45	Provincially Rare Specimens/Colonies		16	Provincially Rare Specimens/Colonies		51	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		0	Provincially Rare Specimens/Colonies		U
Surface Water	Changes in surface wate conditions (quality and	area of surface drainage altered by each alternative	1				Ì	Î												
	quantity)	number of surface water drainages crossings	5	+				+				+	+		+	+		+	+	
	,	by stream type	-																	
		number of encroachments on or severances	c																	
		surface water drainages			-															
		degree of compliance with Provincial and Federal Water Quality Guidelines and			1		1		1	1	1									
		Stormwater Management requirements			1		1		1		1		1			1			1	
Groundwater	Change in groundwater	area of infiltration zones affected								1										
	conditions (quality and	area of groundwater recharge affected																		
	quantity)	areas of seepage affected																		
	1	area of water table affected by each alternati	iv										1			1			1	
		(draw down zone) proximity of alternative to public and private drinking water wells													1					
Other Natural Resources	Impacts to mineral,	drinking water wells Area in ha within ROW																		
	petroleum, granular (quarry) lands/easement	4																		
Factor Summary:																				
Factor Score:			1		1	-	1		_						-					_

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment								N	atural Alternative	1B Option 2 Plaz	za A							
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulford	d		Pulford north of Lennon	Drain	North c	of Lennon Drain to Cou	sineau Rd		Cousineau Rd to Howar	d Ave		Howard Ave to Highwa	ay 401		Highway 3 to North Talb	ot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ĿJ			Ј-К			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garde	n	Moderate	Burke Drain	Stream Corridor	Low	Wone Brain					-
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine		Low						
			North of Spring Garder Road	n Matrix	Low							Howard Avenue Drain		Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain		Low						
				Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0
				Total Low	4		Total Low	2		Total Low	2		Total Low	8	1	Total Low	2		Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.40	High	Area Displaced	0.00	High	Area Displaced	0.06	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
			Area Displaced	6.29	Moderate	Area Displaced	0.33	Moderate	Area Displaced	0.66	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	10.65	LOW	Area Displaced Total Area Displaced	3.24	Low	Area Displaced Total Area Displaced	3.54	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.11	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
			Basin Drain Cahill Drain	0.03	None	Basin Drain Cahill Drain		None Low	Basin Drain Cabill Drain	0.01	None	Basin Drain Cahill Drain		None	Basin Drain Cahill Drain		None	Basin Drain Cahill Drain		None
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.01	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.03	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain Lennon Drain	0.09	Low Moderate	Grand Marais Drain Lennon Drain	0.02	Low Moderate	Grand Marais Drain Lennon Drain	0.06	Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate
			Marentette Drain	0.04	None	Marentette Drain	0.02	None	Marentette Drain	0.00	None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain		Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.54	Low	Wolfe Drain		Low	Wolfe Drain		Low
			Wolfe Drain	0.08	Moderate Low	Wolfe Drain		Moderate Low	Wolfe Drain	0.29	Moderate Low	Wolfe Drain		Moderate Low	Wolfe Drain		Moderate I ow	Wolfe Drain		Moderate Low
			Youngstown Drain Area Displaced	0.08	Moderate	Youngstown Drain Area Displaced	0.02	Moderate	Youngstown Drain Area Displaced	0.39	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate	Youngstown Drain Area Displaced	0.00	Moderate
			Area Displaced	0.28	Low	Area Displaced	0.00	Low	Area Displaced	0.02	Low	Area Displaced	0.54	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
			Area Displaced	0.07	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
Populations/Species	Impacts to Species at	Species name, type and significance	Total Area Displaced Provincially Rare	0.3	35	Total Area Displaced Provincially Rare	0.0	16	Total Area Displaced Provincially Rare	0	51	Total Area Displaced Provincially Rare	0.	0	Total Area Displaced Provincially Rare	0	0	Total Area Displaced Provincially Rare	0.	0
Surface Water	Risk	area of surface drainage altered by each	Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies		0	Specimens/Colonies			Specimens/Colonies		
Surface Water		alternative																		
	quantity)	number of surface water drainages crossings by stream type	i																	
		number of encroachments on or severances surface water drainages	c																	
		degree of compliance with Provincial and Federal Water Quality Guidelines and																		
		Stormwater Management requirements								1		1			1			1		
Groundwater		area of infiltration zones affected																		
	conditions (quality and quantity)	area of groundwater recharge affected																		
	quantity)	areas of seepage affected																		
		area of water table affected by each alternativ (draw down zone)	v																	
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW																		
	(quarry) lanus/easement:																			
Factor Summary:					-	-1							-1							
Factor Score:					1	1			1		1	1		1	1			1		

Norm Norm <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>or C</th><th>Option 2 Plaza B</th><th>ural Alternative 1B</th><th>Na</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>otect the Natural Environment</th><th>Factor: Pr</th><th>PRACTICAL ALTERNATIVE EVALUATION</th></t<>									or C	Option 2 Plaza B	ural Alternative 1B	Na								otect the Natural Environment	Factor: Pr	PRACTICAL ALTERNATIVE EVALUATION
<table-container> Number Number</table-container>									Rd	ad to North Talbot R	Segments-Malden Ro											
Ref N	arth Talbot Rd	Highway 3 to North Tall		401	loward Ave to Highway	1		ward Ave	ousineau Rd to How	c	usineau Rd	of Lennon Drain to Co	North	Drain	Pulford north of Lennor		I	Malden Rd to Pulford				
Normal Normal	1	L-M		-	K-L				J-K			ŀJ		_	н-і			G-H		Measurement/Units	Criteria/Indicator	Performance Measure
Refer biaRefer biaRefer biaRef bi							ignificance	Signif Low						Significance Low		Oakwood Bush to Spr				Landscape name, type and significance	Impacts to Ecological	Ecological Landscapes
Number Number				Low	Stream Corridor	No Name Tributary of Wolfe Drain		Low	Stream Corridor	Collins Drain	Moderate	Patch		Low	Stream Corridor		Low	Stream Corridor	Youngstown Drain		Landscapes	
Number of the sector								Low	Stream Corridor	Burke Drain	Moderate						Low	Stream Corridor	Marentette Drain			
Name Name </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Low</td> <td></td> <td>Burke Draine</td> <td>Low</td> <td>Stream Corridor</td> <td>Cahill Drain</td> <td></td> <td></td> <td></td> <td>Moderate</td> <td></td> <td></td> <td></td> <td></td> <td></td>								Low		Burke Draine	Low	Stream Corridor	Cahill Drain				Moderate					
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Name Name </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2011</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								2011														
Name Image Image <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																						
Number of the state Number of the state	0	Total High		0	Total High			0	Total High		0	Total High		0	Total High		0	Total High				
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Norm Print Prin Print Print P	1 High		Area Displaced	2 High		Area Displaced		8 High		Area Displaced	2 High		Area Displaced	2 High		Area Displaced	4 High		Area Displaced	Community type area significance and	Impacts to Terrestrial	Communities/Ecosystems
Number Number								5				0.10		~			·	-			Communities/	
Partial <	Moderate Low						te					1.20		Moderate				2.29	Area Displaced			
Participant Problem	LOW			LOW				LOW	0.00		LOW	5.26		Low	3.24	Total Area Displaced	LOW	10.12	Total Area Displaced			
Normal Normal<	Low		Basin Drain	Low		Basin Drain		Low		Basin Drain	Low		Basin Drain	Low		Basin Drain	Low	0.04	Basin Drain	Community type, area, significance and sensitivity	Impacts to Aquatic Communities/	
Partial Partial <t< td=""><td>Moderate</td><td></td><td>Cahill Drain</td><td></td><td></td><td>Cahill Drain</td><td>te</td><td>Moderate</td><td></td><td>Cahill Drain</td><td>Moderate</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Cahill Drain</td><td></td><td></td><td></td></t<>	Moderate		Cahill Drain			Cahill Drain	te	Moderate		Cahill Drain	Moderate								Cahill Drain			
Prescription Prescriptic Prescription Prescription<	Moderate Low						le					0.04						0.09				
Norm Norm </td <td>Moderate</td> <td></td> <td>Lennon Drain</td> <td>Moderate</td> <td></td> <td>Lennon Drain</td> <td>te</td> <td>Moderate</td> <td></td> <td>Lennon Drain</td> <td>Moderate</td> <td>0.06</td> <td>Lennon Drain</td> <td>Moderate</td> <td>0.02</td> <td>Lennon Drain</td> <td>Moderate</td> <td></td> <td>Lennon Drain</td> <td></td> <td></td> <td></td>	Moderate		Lennon Drain	Moderate		Lennon Drain	te	Moderate		Lennon Drain	Moderate	0.06	Lennon Drain	Moderate	0.02	Lennon Drain	Moderate		Lennon Drain			
Problem Product of the state o	None Moderate						to					0.16						0.03				
Normal Normal<	Low		Youngstown Drain			Youngstown Drain	le					0.10						0.04				
<table-container> Angle and biase <t< td=""><td>Moderate</td><td>0.00</td><td>Area Displaced</td><td>Moderate</td><td>0.00</td><td>Area Displaced</td><td>te</td><td></td><td>0.00</td><td>Area Displaced</td><td>Moderate</td><td>0.27</td><td>Area Displaced</td><td></td><td>0.02</td><td>Area Displaced</td><td></td><td>0.00</td><td>Area Displaced</td><td></td><td></td><td></td></t<></table-container>	Moderate	0.00	Area Displaced	Moderate	0.00	Area Displaced	te		0.00	Area Displaced	Moderate	0.27	Area Displaced		0.02	Area Displaced		0.00	Area Displaced			
bit is based in the Species rate Ase Degineed 0.02 rate Ase Degineed 0.03 rate Ase Degineed 0.03<	Low	0.00							0.00			0.00										
Paperial Space Space and s	0.00	0.00	Total Area Displaced	INONE IO		Total Area Displaced			0.00			0.00	Total Area Displaced			Total Area Displaced			Total Area Displaced			
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<table-container> quarky mask constraints or straints o</table-container>		<u> </u>	Specimens/Colonies			Specimens/Colonies				Specimens/Colonies			Specimens/Colonies			Specimens/Colonies		-	Specimens/Colonies		Risk	Surface Water
head of the second se																						
Image: space operation of the space operation of the space operation oper																				by stream type number of encroachments on or severances		
Image of the second s																				degree of compliance with Provincial and		
condition (quality and productor recharge affected image and groundwatere image and groundwatere																				Stormwater Management requirements		
quarkiy area of seepage affected area of seepage affected by each attenuity area of seepage affected by each att												_										Groundwater
Image and decomposition Image and decomposition <td></td> <td>+</td> <td>+</td> <td>+</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td> <td>+</td> <td></td> <td></td> <td>+</td> <td> </td> <td></td> <td></td> <td></td>		+	+	+		1								+	+			+				
Image: discriminant di denteriminante discriminant discriminant discriminant d																					. ,	
Image: Instant and analysis Image: Instantand and analysis Image: Instant and analysis														_						(draw down zone)		
perfoleum, granular (quary) lands/easements Image: Comparison of the com														1						drinking water wells		Other Natural Deserves
																				Area in na within KOW	petroleum, granular	Other Natural Resources
		_ _		<u> </u>	1	1										1			1	I	1	Factor Summary:
Factor Score:										1			1									Factor Score:

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protec	t the Natural Environment									Natural Altern	ative 2A Plaza A								
											Segments-Malden R	oad to North Talbot Rd								
				Malden Rd to Pulfo	ord	P	ulford north of Lenno	n Drain	North o	f Lennon Drain to Co			Cousineau Rd to Howa	ard Ave		Howard Ave to Highv	ray 401		Highway 3 to North Talb	ət Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological Landscapes	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spring Garden ANSI	Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Lanuscapes	agnitearce	Youngstown Drain	Stream Corridor	Low	Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Remnant to Spring Garden Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garden Road	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0		Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	1		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	0		Total Moderate Total Low	0
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.61	High	Area Displaced	0.25	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
			Area Displaced	6.31	Moderate	Area Displaced	0.29	Moderate	Area Displaced	1.04	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	11.01	Low	Area Displaced Total Area Displaced	4.23	Low	Area Displaced Total Area Displaced	2.46 3.86	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity		0.11	Low	Basin Drain	4.77	Low	Basin Drain	3.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
			Basin Drain	0.03	None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None
			Cahill Drain Cahill Drain		Low	Cahill Drain Cahill Drain		Low	Cahill Drain Cahill Drain	0.02	Low	Cahill Drain Cahill Drain		Low	Cahill Drain Cahill Drain		Low	Cahill Drain Cahill Drain		Low
			Canill Drain Cahill Drain		Moderate Moderate	Canill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain	0.00	Moderate Moderate	Cahill Drain		Moderate Moderate	Cahill Drain		Moderate Moderate	Cahill Drain		Moderate Moderate
			Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain	0.02	Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain Marentette Drain		Moderate	Lennon Drain		Moderate	Lennon Drain Marentette Drain		Moderate
			Marentette Drain Wolfe Drain	0.02	None Low	Marentette Drain Wolfe Drain		None	Marentette Drain Wolfe Drain	0.01	None Low	Wolfe Drain	0.58	None Low	Marentette Drain Wolfe Drain		None Low	Wolfe Drain		None Low
			Wolfe Drain		Moderate	Wolfe Drain		Low Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain	0.50	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain	0.09	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced	0.00 0.26	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.38	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced	0.00	Moderate Low
			Area Displaced Area Displaced	0.26	None	Area Displaced Area Displaced	0.00	None	Area Displaced	0.02	None	Area Displaced Area Displaced	0.58	None	Area Displaced	0.00	None	Area Displaced Area Displaced	0.00	None
			Total Area Displaced		0.31	Total Area Displaced		0.00	Total Area Displaced		0.40	Total Area Displaced		0.58	Total Area Displaced		0.00	Total Area Displaced		00
Populations/Species		Species name, type and significance	e Provincially Rare		94	Provincially Rare		35	Provincially Rare		33	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water		r area of surface drainage altered by each alternative number of surface water drainages																		
		crossings by stream type number of encroachments on or severances of surface water																		
		degree of compliance with Provincia and Federal Water Quality	1																	
Groundwater	Change in groundwater	Guidelines and Stormwater area of infiltration zones affected										-	-							
o. cauwater	conditions (quality and	area of groundwater recharge																		+
	quantity)	areas of seepage affected	1			1			1			1	1							1
		area of water table affected by each alternative (draw down zone)																		
		proximity of alternative to public and private drinking water wells	1																	
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW																		
Factor Summary:	1		I	I		I	I			I										
Factor Score:	1																			T
	act 3 low Impact 4 M	leutral/No Impact 5-Low Benefit	6 Modium Bonofit 7 k	Jigh Ropofit																

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment									Natural Alternativ		;							
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulford	1	1	Pulford north of Lennon	Drain	North o	f Lennon Drain to Cou	sineau Rd	c	ousineau Rd to Howa	ırd Ave	1	Howard Ave to Highwa	y 401		Highway 3 to North Talb	ot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			Ы			J-K			K-L			L-M	
			Name	Type	Significance	Name	Туре	Significance	Name	Type	Significance	Name	Type	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spri	ng Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
			-						Remnant						Wolfe Drain					
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garder	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
			North of Spring Garder	n Matrix	Low							Burke Draine Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0
Communities/Ecosystems	Impacts to Terrestrial	Community type, area, significance and	Area Displaced	Total Low 0.58	4 High	Area Displaced	Total Low 0.25	2 High	Area Displaced	Total Low 0.36	2 High	Area Displaced	Total Low 0.00	8 Hiah	Area Displaced	Total Low 0.00	2 High	Area Displaced	Total Low 0.00	1 High
001111111100,2000,0101110	Communities/ Ecosystems	sensitivity	nica Displaced	0.00	. igii	, and Displaced	0.20		nica Displaced	0.00	. iigii	niou Displaced	0.00		riou Displaced	0.00		, aca Bioplaced	0.00	g
			Area Displaced	2.31	Moderate	Area Displaced	0.29	Moderate	Area Displaced	1.04	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	7.57	Low	Area Displaced Total Area Displaced	4.23 4.77	Low	Area Displaced Total Area Displaced	2.46	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Basin Drain	0.04	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
	Communities/	sensitivity	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	0.02	Low	Cahill Drain	-	Low	Cahill Drain		Low	Cahill Drain		Low
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.02	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain	0.00	Moderate	Cahill Drain		Moderate	Cahill Drain	0.04	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain Lennon Drain	0.06	Moderate	Grand Marais Drain Lennon Drain		Moderate	Grand Marais Drain Lennon Drain	0.05	Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate
			Marentette Drain	0.02	None	Marentette Drain		None	Marentette Drain	0.01	None	Marentette Drain	0.58	None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain	0.29	Low Moderate	Wolfe Drain Wolfe Drain	0.58	Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate
			Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.38	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Area Displaced	0.02	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None	Area Displaced	0.00	None
Populations/Species	Impacts to Species at	Species name, type and significance	Total Area Displaced Provincially Rare	0.1	3	Total Area Displaced Provincially Rare	0.0	35	Total Area Displaced Provincially Rare	0.	40 33	Total Area Displaced Provincially Rare	(0.58	Total Area Displaced Provincially Rare	0.	00	Total Area Displaced Provincially Rare	0.0	0
Surface Water	Changes in surface wate	area of surface drainage altered by each				Stribbary rears	Ì			1				-		1	-	Stribuly rule		-
	conditions (quality and quantity)	alternative number of surface water drainages crossings			-															
	,	by stream type																		
		number of encroachments on or severances or surface water drainages	c																	
		degree of compliance with Provincial and				-														
		Federal Water Quality Guidelines and														1				1
Groundwater	Change in groundwater	Stormwater Management requirements area of infiltration zones affected																		
	conditions (quality and	area of groundwater recharge affected			1				1	1			1			1				1
	quantity)	areas of seepage affected																		
		area of water table affected by each alternativ (draw down zone)	v													1				1
		proximity of alternative to public and private						1	1			1							1	
Other Natural Resources	Impacts to mineral,	drinking water wells Area in ha within ROW																		
	petroleum, granular (quarry) lands/easements																			
1																				
Factor Summary:																				
Factor Score: 1-High Impact 2-Medium Impa		Neutral/No Impact 5-Low Benefit 6-Med	lium Benefit 7-High B						1				1		1	1				

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment								N	atural Alternative	2A Option 2 Plaza	a A							
											Segments-Malden Ro	ad to North Talbot Rd								
				Malden Rd to Pulfor	d		Pulford north of Lenno	n Drain	North o	f Lennon Drain to Cou	•		ousineau Rd to Howa	ard Ave		Howard Ave to Highway	y 401		Highway 3 to North Talb	ot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ĿЈ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological Landscapes	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spri Garden ANSI	ing Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				Remnant St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain					
			Grand Marais Drain	Stream Corridor	Moderate				Remnant to Spring Garder Cahill Drain	n Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
			North of Spring Garden									Burke Draine Howard Avenue Drain								
			North of Spring Garden Road	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0	-	Total High	0	_	Total High	0
				Total High Total Moderate	1		Total High Total Moderate	0		Total High Total Moderate	2		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0
Communities/Ecosystems	Impacts to Terrestrial	Community type, area, significance and	Area Displaced	Total Low 1.61	4 High	Area Displaced	Total Low 0.25	2 High	Area Displaced	Total Low 0.36	2 High	Area Displaced	Total Low 0.00	8 High	Area Displaced	Total Low 0.00	2 High	Area Displaced	Total Low 0.00	1 High
Communities/ECosystems		sensitivity		1.01	5			5		0.30	5						rigii			ngn
			Area Displaced Area Displaced	6.31 10.78	Moderate	Area Displaced Area Displaced	0.29 4.23	Moderate	Area Displaced Area Displaced	1.19	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate	Area Displaced Area Displaced	0.00	Moderate Low
			Total Area Displaced		2011	Total Area Displaced		cow	Total Area Displaced	4.55	Lon	Total Area Displaced		2011	Total Area Displaced		com	Total Area Displaced		2011
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.11	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
			Basin Drain Cahill Drain	0.03	None Moderate	Basin Drain Cahill Drain		None Moderate	Basin Drain Cahill Drain	0.04	None Moderate	Basin Drain Cahill Drain		None	Basin Drain 7 Cahill Drain		None Moderate	Basin Drain Cahill Drain		None Moderate
			Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain	0.04	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain	0.00	Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain Youngstown Drain	0.02	None Low	Marentette Drain Youngstown Drain		None Low	Marentette Drain Youngstown Drain		None Low	Marentette Drain Youngstown Drain		None Low	Marentette Drain Youngstown Drain		None Low	Marentette Drain Youngstown Drain		None Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.08	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.26	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low		0.00	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low None
			Total Area Displaced	0.05		Total Area Displaced		0.00	Total Area Displaced	0.00	None 08	Total Area Displaced		0.00	Total Area Displaced		00	Total Area Displaced		
Populations/Species		Species name, type and significance	Provincially Rare	9	94	Provincially Rare		35	Provincially Rare		26	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water	conditions (quality and	area of surface drainage altered by each alternative																		
	quantity)	number of surface water drainages crossings by stream type																		
		number of encroachments on or severances of																		
		surface water drainages degree of compliance with Provincial and																		
		Federal Water Quality Guidelines and Stormwater Management requirements																		
Groundwater		Stormwater Management requirements area of infiltration zones affected												-		1	-			+
	conditions (quality and	area of groundwater recharge affected										1								
		areas of seepage affected																		
		area of water table affected by each alternativ (draw down zone)																		
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular	Area in ha within ROW																		
	petroleum, granular (quarry) lands/easements																			
Factor Summary:			1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1	1	I
Factor Score:																				

PRACTICAL ALTERNATIVE EVALUATION	Factor: F	rotect the Natural Environment								Nat	ural Alternative 2A	Option 2 Plaza E	3 or C							
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfo	ord		Pulford north of Lenno	on Drain	North o	f Lennon Drain to Co	usineau Rd	c	Cousineau Rd to How	ard Ave	ŀ	Howard Ave to Highw	ay 401	1	Highway 3 to North Tal	bot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			IJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological Landscapes	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sp Garden ANSI	• •	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
			Youngstown Drain	Stream Corridor	Low	Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garder	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garden	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	Low						
					-		-					Dickson Drain	Stream Corridor	Low		1			1	
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	4		Total Moderate Total Low	2		Total Moderate Total Low	2		Total Moderate Total Low	8		Total Moderate Total Low	2		Total Moderate Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	0.58	High	Area Displaced	0.25	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	2000/010110		Area Displaced Area Displaced	2.31	Moderate	Area Displaced	0.29 4.23	Moderate	Area Displaced	1.19	Moderate	Area Displaced Area Displaced	0.00	Moderate	Area Displaced Area Displaced	0.00 0.66	Moderate	Area Displaced	0.00	Moderate
				10.46	Low	Area Displaced Total Area Displaced		Low	Area Displaced Total Area Displaced	4.55	Low		0.00	Low	Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced		Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.04	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
			Cahill Drain Grand Marais Drain	0.06	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain	0.04	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low
			Lennon Drain	0.00	Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain	0.02	None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None
			Youngstown Drain	0.05	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.08	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced	0.16	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
			Area Displaced Total Area Displaced	0.02	None 0.17	Area Displaced Total Area Displaced	0.00	None 0.00	Area Displaced Total Area Displaced	0.00	None 08	Area Displaced Total Area Displaced	0.00	None 0.00	Area Displaced Total Area Displaced	0.00	None 0.00	Area Displaced Total Area Displaced	0.00	None 0.00
Populations/Species	Impacts to Species at	Species name, type and significance	Provincially Rare		55	Provincially Rare		35	Provincially Rare	-	26	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water		area of surface drainage altered by each	r tornolally reard			r to viridially reare			r tovinoidaly rearo		20	riotinioiany reare		0	r tovindially reard		0	Trovindally reard		
	quantity)	number of surface water drainages crossings	5																	
		by stream type number of encroachments on or severances	d																	_
		surface water drainages																		
		degree of compliance with Provincial and																		
		Federal Water Quality Guidelines and Stormwater Management requirements																		
Groundwater	Change in groundwater																			
C. Canamator	conditions (quality and	area of groundwater recharge affected	+	1		1	-		1	1	-		1		1	1	-		-	
	quantity)	areas of seepage affected	1	1		1		-	1	1	-		1		1	1		-	1	
		area of water table affected by each alternati	v																	
		(draw down zone) proximity of alternative to public and private																-		+
Other Natural Resources	Imposts to minors!	drinking water wells Area in ha within ROW																_	_	
Uther Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easemen																			
Factor Summary:																				<u> </u>
Factor Score:																				
	and Olevelerand 4	Neutral/No Impact 5-Low Benefit 6-Me	diver Desselft 7 Llink D																	

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment									Natural Alterna									
						-					Segments-Malden Ro	ad to North Talbot Rd								
				Malden Rd to Pulfor	1	Р	ulford north of Lennon	Drain	North c	of Lennon Drain to Cou	ineau Rd	c	ousineau Rd to Howa	rd Ave	н	loward Ave to Highwa	ay 401	i	Highway 3 to North Talbo	t Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			Ы			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological Landscapes	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sprin Garden ANSI	g Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Lanuscapes		Youngstown Drain	Stream Corridor	Low	Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low		Stream Corridor	Low			-
			Marentette Drain	Stream Corridor	Low				Remnant St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain				-	
					LOW				Remnant to Spring Garde	n	Moderate		Stream Comdon	LOW						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garden Road	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0		Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	4		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	0		Total Moderate Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/	Community type, area, significance and sensitivity	Area Displaced	1.41	High	Area Displaced	0.09	High	Area Displaced	0.36	- High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Ecosystems		Area Displaced	6.29	Moderate	Area Displaced	0.27	Moderate	Area Displaced	1.04	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced	10.91	Low	Area Displaced	3.58	Low	Area Displaced	2.46	Low	Area Displaced	0.00	Low	Area Displaced	0.66	Low	Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Total Area Displaced Basin Drain	18.61 0.11	Low	Total Area Displaced Basin Drain	3.94	Low	Total Area Displaced Basin Drain	3.86	Low	Total Area Displaced Basin Drain	0.00	Low	Total Area Displaced Basin Drain	0.66	Low	Total Area Displaced Basin Drain	0.00	Low
	Communities/	sensitivity	Basin Drain	0.03	None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None
			Cahill Drain	0.00	Low	Cahill Drain		Low	Cahill Drain	0.02	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain		Low
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.00	Moderate	Cahill Drain	-	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Cahill Drain Grand Marais Drain	0.06	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain	0.05	Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low	Cahill Drain Grand Marais Drain		Moderate Low
			Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain	0.02	None	Marentette Drain		None	Marentette Drain	0.04	None	Marentette Drain	0.50	None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain	0.01	Low Moderate	Wolfe Drain Wolfe Drain	0.59	Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate	Wolfe Drain Wolfe Drain		Low Moderate
				0.09	Low	Youngstown Drain		Low	Youngstown Drain	0.20	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.38	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.26	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.02	Low None	Area Displaced Area Displaced	0.59	Low None	Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.00	Low None
			Total Area Displaced	0.05	2	Total Area Displaced	0.00	10	Total Area Displaced	0.00	10	Total Area Displaced	0.00	0.59	Total Area Displaced	0.00	0.00	Total Area Displaced	0.00	
Populations/Species	Impacts to Species at	Species name, type and significance	Provincially Rare	8	9	Provincially Rare	2	:3	Provincially Rare		13	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water	Changes in surface wate conditions (quality and																			
	quantity)	number of surface water drainages crossings by stream type	s																	1
	1	by stream type number of encroachments on or severances		+	+	-		+	-	1		+		+			-	+		+
	1	surface water drainages												_			_			<u> </u>
	1	degree of compliance with Provincial and Federal Water Quality Guidelines and								1		1								
		Stormwater Management requirements																		
Groundwater	Change in groundwater	area of infiltration zones affected																		
	conditions (quality and quantity)																			
	my/	areas of seepage affected area of water table affected by each alternati	in																	+
		(draw down zone) proximity of alternative to public and private																		
		drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easement	Area in ha within ROW																		
	(,									1								1		1
Factor Summary:																				
Factor Score:											1	1						1	1	1

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment										ive 2B Plaza B or								
		Γ				1			1		Segments-Malden R	Road to North Talbot Rd			T			Т		
				Malden Rd to Pulfor	d	Ρ	ulford north of Lennon	Drain	North o	f Lennon Drain to Cou	sineau Rd		Cousineau Rd to Howard	l Ave		Howard Ave to Highwa	ıy 401		Highway 3 to North Tall	oot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			н-і			ĿJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Sprin	g Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low			
			-		-			-	Remnant						Wolfe Drain					
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of	Stream Corridor	Low						
			North of Spring Garden	Matrix	Low							Burke Draine Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	low						
												Dickson Drain		Low						
													Stream Corridor							
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0		Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	4		Total Moderate Total Low	2		Total Moderate Total Low	2		Total Moderate Total Low	8		Total Moderate Total Low	2	-	Total Moderate Total Low	0
Communities/Ecosystems	Impacts to Terrestrial Communities/	Community type, area, significance and sensitivity	Area Displaced	0.37	High	Area Displaced	0.09	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Ecosystems		Area Displaced	2.29	Moderate	Area Displaced	0.27	Moderate	Area Displaced	1.04	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced	7.58	Low	Area Displaced	3.58	Low	Area Displaced	2.46	Low	Area Displaced	0.00	Low	Area Displaced	0.66	Low	Area Displaced	0.00	Low
	Impacts to Aquatic	Community type, area, significance and	Total Area Displaced Basin Drain	10.24	low	Total Area Displaced Basin Drain	3.94	low	Total Area Displaced Basin Drain	3.86	Low	Total Area Displaced Basin Drain	0.00	Low	Total Area Displaced Basin Drain	0.66	low	Total Area Displaced Basin Drain	0.00	Low
	Communities/	sensitivity																		
			Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain	0.02	Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.05	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain	0.05	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain Marentette Drain	0.02	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain	0.05	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None
			Wolfe Drain		Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.59	Low	Wolfe Drain		Low	Wolfe Drain		Low
			Wolfe Drain Youngstown Drain	0.05	Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain	0.29	Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.38	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.16	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.02	Low None	Area Displaced Area Displaced	0.59 0.00	Low None	Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.00	Low None
			Total Area Displaced	0.	18	Total Area Displaced	0.0	00	Total Area Displaced	0	40	Total Area Displaced	0.5	9	Total Area Displaced	0	.00	Total Area Displaced	0	.00
Populations/Species		Species name, type and significance	Provincially Rare		49	Provincially Rare	2	23	Provincially Rare		33	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water	Changes in surface wate conditions (quality and quantity)	area of surface drainage altered by each alternative																		
	/my/	number of surface water drainages crossings by stream type	5		1	1									1					
		number of encroachments on or severances	a																	
		surface water drainages degree of compliance with Provincial and											-							
		Federal Water Quality Guidelines and				1	1							1	1					
0		Stormwater Management requirements			_															
Groundwater	Change in groundwater conditions (quality and	area of infiltration zones affected area of groundwater recharge affected	+	1	+			+			-					+		+	-	
	quantity)	areas of seepage affected	1	1			1	1	1	1			1		1		-			
		area of water table affected by each alternati	v																	
		(draw down zone) proximity of alternative to public and private			-							-								
0/1		drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW																		
														<u> </u>						
Factor Summary: Factor Score:																				
		Neutral/No Impact 5-Low Benefit 6-Me	dium Renefit 7-High Re			1	1		1	l		1		1		1				

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment								N	atural Alternative	•	A							
									-		Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfore	d		Pulford north of Lennon	Drain	North o	f Lennon Drain to Cou	sineau Rd	c	ousineau Rd to Howa	ırd Ave		Howard Ave to Highwa	y 401		lighway 3 to North Talbo	t Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spri		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				Remnant St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	wolle brain					
			Grand Marais Drain	Otazara Carridan	Madaaata				Remnant to Spring Garder Cahill Drain	n	1	No News Tributes of	Otragen Consider	1						
			Grand Marais Drain	Stream Corridor	Moderate				Canili Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garder Road	n Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
			-			_						Dickson Drain No Name Tributary of	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	LOW						
				Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0		Total High Total Moderate	0
				Total Low	4		Total Low	2		Total Low	2		Total Low	8		Total Low	2		Total Low	1
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.41	High	Area Displaced	0.09	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
			Area Displaced	6.29	Moderate	Area Displaced	0.27	Moderate	Area Displaced	1.19	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Total Area Displaced	10.91	Low	Area Displaced Total Area Displaced	3.57	Low	Area Displaced Total Area Displaced	3.09	Low	Area Displaced Total Area Displaced	0.00	Low	Area Displaced Total Area Displaced	0.66	Low	Area Displaced Total Area Displaced	0.00	Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.11	Low	Basin Drain	0.00	Low	Basin Drain	1.01	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low	Basin Drain	0.00	Low
			Basin Drain	0.03	None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None	Basin Drain		None
			Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain	0.02	Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate	Cahill Drain Cahill Drain		Low Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.05	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain	0.05	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain Marentette Drain	0.02	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain	0.05	Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None	Lennon Drain Marentette Drain		Moderate None
			Wolfe Drain		Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.59	Low	Wolfe Drain		Low	Wolfe Drain		Low
			Wolfe Drain Youngstown Drain	0.09	Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain	0.29	Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.38	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.26	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.02	Low None	Area Displaced Area Displaced	0.59	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low None
			Total Area Displaced	0.05	32	Total Area Displaced	0.00	00	Total Area Displaced	0.00	40	Total Area Displaced	0.00	0.59	Total Area Displaced		.00	Total Area Displaced	0.00	
Populations/Species		Species name, type and significance	Provincially Rare	8	39	Provincially Rare	2	23	Provincially Rare		33	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water	Changes in surface wate conditions (quality and	area of surface drainage altered by each alternative																		
	quantity)	number of surface water drainages crossing	IS																	
		by stream type																		
		number of encroachments on or severances surface water drainages	5 C																	
		degree of compliance with Provincial and	-				-													
		Federal Water Quality Guidelines and	1				1		1			1								
Groundwater	Change in groundwater	Stormwater Management requirements area of infiltration zones affected					-					+						+		
S. Sullumator	conditions (quality and	area of groundwater recharge affected								1			1							<u> </u>
	quantity)	areas of seepage affected	1									1						1		
		area of water table affected by each alternat	tiv																	
		(draw down zone) proximity of alternative to public and private																		
Other Natural Deservoirs	Imposto to minant	drinking water wells Area in ha within ROW																		<u> </u>
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements																			
Factor Summary: Factor Score:	+			T	Т	1		T		1		1	1		1	T	-1	T	T	,
Factor SCORE:	1				1			1	1				1		1			1	1	

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment								Natu	ral Alternative 2B	•	or C							
											Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulford	l		Pulford north of Lennon	Drain	North c	f Lennon Drain to Cou	sineau Rd	c	ousineau Rd to Howa	Ird Ave	1	Howard Ave to Highway	/ 401		Highway 3 to North Talbo	t Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes		Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spri	ing Strip Corridor	Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low		Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low	Wolfe Drain					
									Remnant to Spring Garde	1		N.N. 73.4								
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garde Road	n Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0															
				Total Moderate Total Low	4		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0
Communities/Ecosystems	Impacts to Terrestrial Communities/	Community type, area, significance and sensitivity	Area Displaced	0.37	High	Area Displaced	0.09	High	Area Displaced	0.36	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High
	Ecosystems		Area Displaced	2.20	Moderate	Area Displaced	0.27	Moderate	Area Displaced	1.19	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced	7.58	Low	Area Displaced	3.57	Low	Area Displaced	3.09	Low	Area Displaced	0.00	Low	Area Displaced	0.66	Low	Area Displaced	0.00	Low
			Total Area Displaced	10.24		Total Area Displaced	3.93			4.64		Total Area Displaced	0.00			0.66		Total Area Displaced	0.00	
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.04	Low	Basin Drain		Low												
			Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	0.02	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain		Low
			Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain	0.00	Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate
			Grand Marais Drain	0.06	Low	Grand Marais Drain		Low	Grand Marais Drain	0.00	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain Wolfe Drain	0.02	None Low	Marentette Drain Wolfe Drain		None	Marentette Drain Wolfe Drain	0.01	None Low	Marentette Drain Wolfe Drain	0.59	None Low	Marentette Drain Wolfe Drain		None Low	Marentette Drain Wolfe Drain		None Low
			Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain	0.29	Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate	Wolfe Drain		Moderate
			Youngstown Drain Area Displaced	0.05	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain	0.38	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate	Youngstown Drain Area Displaced	0.00	Low Moderate
			Area Displaced	0.16	Low	Area Displaced	0.00	Low	Area Displaced Area Displaced	0.02	Low	Area Displaced	0.59	Low	Area Displaced	0.00	Low	Area Displaced	0.00	Low
			Area Displaced	0.02	None	Area Displaced	0.00	None												
Populations/Species	Impacts to Species at	Species name, type and significance	Total Area Displaced Provincially Rare	0.1	9	Total Area Displaced Provincially Rare	0.0	23	Total Area Displaced Provincially Rare		40 33	Total Area Displaced Provincially Rare	(0.59	Total Area Displaced Provincially Rare	0.	0	Total Area Displaced Provincially Rare	0.0	0
Surface Water	Changes in surface water	area of surface drainage altered by each								t i			1			1				
	conditions (quality and quantity)	alternative number of surface water drainages crossings	5																	
		by stream type																		
		number of encroachments on or severances surface water drainages	c																	
		degree of compliance with Provincial and																		
		Federal Water Quality Guidelines and Stormwater Management requirements	1									1					1			
Groundwater		area of infiltration zones affected	1		1				1	1	1	1	1		1	1	1	1	1	
	conditions (quality and quantity)	area of groundwater recharge affected																		
	quantity)	areas of seepage affected																		
		area of water table affected by each alternativ (draw down zone)	v			1														
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW										1							1	
	(1									1					1	1		
Factor Summary:			•	·	•		·		·	·	·	·	·		·	·		·	·	·
Factor Score:		Jautral/No Impact 5-Low Benefit 6-Mar	dium Benefit 7-High F																	

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	otect the Natural Environment									Natural Altern	native 3 Plaza A								
											Segments-Malden R	oad to North Talbot Rd								
				Malden Rd to Pulfor	rd	Pu	ulford north of Lennon	Drain	North o	f Lennon Drain to Cou	usineau Rd		Cousineau Rd to Howard	l Ave		Howard Ave to Highway	401		Highway 3 to North Talk	oot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance	Name	Type	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spring		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes			Stream Corridor		Garden ANSI	Stream Corridor	Low	0.01.01.01.0.0	Patch	Moderate	Collins Drain	a. a. : i			Stream Corridor				
			Youngstown Drain	Stream Comdor	Low	Lennon Drain	Stream Comdor	LOW	Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Comdor	LOW			
			Marentette Drain	Stream Corridor	Low				St. Clair college Prairie	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Remnant to Spring Garder Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garden	Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
			Road									Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0	Dickson Drain	Total High	0		Total High	0		Total High	0
				Total Moderate	1		Total Moderate	0		Total Moderate	2		Total Moderate	0		Total Moderate	0		Total Moderate	0
Communities/Ecosystems	Impacts to Terrestrial	Community type, area, significance and	Area Displaced	Total Low 1.40	4 High	Area Displaced	Total Low 0.00	2 High	Area Displaced	Total Low 0.09	2 High	Area Displaced	Total Low 0.00	8 High	Area Displaced	Total Low 0.00	2 High	Area Displaced	Total Low 0.00	1 High
,,	Communities/ Ecosystems	sensitivity			Ť						-			-						
			Area Displaced Area Displaced	6.29 9.43	Moderate Low	Area Displaced Area Displaced	0.26	Moderate Low		0.85	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00 0.66	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Total Area Displaced		LOW		2.09	LOW		3.38	LOW	Total Area Displaced		LOW	Total Area Displaced		LOW	Total Area Displaced		Low
	Impacts to Aquatic Communities/	Community type, area, significance and sensitivity	Basin Drain	0.11	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
			Basin Drain Cahill Drain	0.03	None	Basin Drain Cahill Drain		None	Basin Drain Cahill Drain	0.00	None	Basin Drain Cahill Drain		None	Basin Drain Cahill Drain		None	Basin Drain Cahill Drain		None
			Cahill Drain		Low Moderate	Cahill Drain		Low Moderate	Cahill Drain	0.00	Low Moderate	Cahill Drain		Low Moderate	Cahill Drain		Low Moderate	Cahill Drain		Low Moderate
			Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain	0.03	Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate	Cahill Drain		Moderate
			Grand Marais Drain Lennon Drain	0.08	Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain	0.05	Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate	Grand Marais Drain Lennon Drain		Low Moderate
			Marentette Drain	0.03	None	Marentette Drain		None	Marentette Drain	0.05	None	Marentette Drain		None	Marentette Drain		None	Marentette Drain		None
			Wolfe Drain		Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low	Wolfe Drain	0.12	Low	Wolfe Drain		Low	Wolfe Drain		Low
			Wolfe Drain Youngstown Drain	0.08	Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain	0.29	Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low	Wolfe Drain Youngstown Drain		Moderate Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.37	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.27	Low None	Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.01	Low	Area Displaced Area Displaced	0.12	Low	Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.00	Low
			Total Area Displaced		.32	Total Area Displaced	0.00		Total Area Displaced	0.00	.38	Total Area Displaced	0.00		Total Area Displaced	0.00		Total Area Displaced		00
Populations/Species		Species name, type and significance	Provincially Rare		84	Provincially Rare		6	Provincially Rare		41	Provincially Rare		0	Provincially Rare		0	Provincially Rare		0
Surface Water	changes in surface wate conditions (quality and	area of surface drainage altered by each alternative																		
	quantity)	number of surface water drainages crossings																		
		by stream type																		
		number of encroachments on or severances or surface water drainages	q																	
		degree of compliance with Provincial and																		
		Federal Water Quality Guidelines and Stormwater Management requirements																		
Groundwater	Change in groundwater	area of infiltration zones affected	1				1	1	1	1				1	1		1	1		+
	conditions (quality and	area of groundwater recharge affected								1					1					
	quantity)	areas of seepage affected				_					_	_								
		area of water table affected by each alternativ (draw down zone)	~																	
		proximity of alternative to public and private						1						1				1		
01 N.(15		drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW																		
Factor Summary:																				
				1			T													
Factor Score:														1						
1-High Impact 2-Medium Im	pact 3-Low Impact 4-	veutral/No Impact 5-Low Benefit 6-Med	dium Benefit 7-High Ber	nefit	•		•		•										•	· · ·

PRACTICAL ALTERNATIVE EVALUATION	Factor: Pr	rotect the Natural Environment									Natural Alternati	ive 3 Plaza B or C								
		•							-		Segments-Malden Ro	oad to North Talbot Rd								
				Malden Rd to Pulfor	d		Pulford north of Lenn	ion Drain	North c	f Lennon Drain to Co	usineau Rd	c	ousineau Rd to Howa	ard Ave	,	Howard Ave to Highwa	y 401		Highway 3 to North Talb	ot Rd
Performance Measure	Criteria/Indicator	Measurement/Units		G-H			H-I			ŀJ			J-K			K-L			L-M	
			Name	Туре	Significance	Name	Туре	Significance	Name	Type	Significance	Name	Туре	Significance	Name	Туре	Significance	Name	Туре	Significance
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Basin Drain	Stream Corridor	Low	Oakwood Bush to Spi		Low	Lennon Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low	Wolfe Drain	Stream Corridor	Low
	Landscapes		Youngstown Drain	Stream Corridor	Low	Garden ANSI Lennon Drain	Stream Corridor	Low	St. Clair College Prairie Remnant	Patch	Moderate	Collins Drain	Stream Corridor	Low	No Name Tributary of Wolfe Drain	Stream Corridor	Low			
			Marentette Drain	Stream Corridor	Low				St. Clair College Prairie Remnant to Spring Garde	Strip Corridor	Moderate	Burke Drain	Stream Corridor	Low						
			Grand Marais Drain	Stream Corridor	Moderate				Cahill Drain	Stream Corridor	Low	No Name Tributary of Burke Draine	Stream Corridor	Low						
			North of Spring Garde Road	n Matrix	Low							Howard Avenue Drain	Stream Corridor	Low						
												Benson Drain	Stream Corridor	Low						
												Dickson Drain	Stream Corridor	Low						
												No Name Tributary of Dickson Drain	Stream Corridor	Low						
				Total High	0		Total High	0		Total High	0		Total High	0		Total High	0		Total High	0
				Total Moderate Total Low	1		Total Moderate Total Low	0		Total Moderate Total Low	2		Total Moderate Total Low	0		Total Moderate Total Low	0		Total Moderate Total Low	0
Communities/Ecosystems	Impacts to Terrestrial	Community type, area, significance and	Area Displaced	0.41	4 High	Area Displaced	0.00	2 High	Area Displaced	0.09	2 Hiah	Area Displaced	0.00	8 Hiah	Area Displaced	0.00	2 Hiah	Area Displaced	0.00	High
	Communities/ Ecosystems	sensitivity												5						
			Area Displaced Area Displaced	2.29 6.53	Moderate	Area Displaced Area Displaced	0.26	Moderate Low	Area Displaced Area Displaced	0.85	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low	Area Displaced Area Displaced	0.00	Moderate Low
			Total Area Displaced		2011	Total Area Displaced		2011	Total Area Displaced	3.38	2011	Total Area Displaced		2011		0.66	2011	Total Area Displaced		2011
	Impacts to Aquatic Communities/ Ecosystems	Community type, area, significance and sensitivity	Basin Drain	0.04	Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low	Basin Drain		Low
			Cahill Drain		Low	Cahill Drain		Low	Cahill Drain	0.00	Low	Cahill Drain		Low	Cahill Drain		Low	Cahill Drain		Low
			Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain	0.00	Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate	Cahill Drain Cahill Drain		Moderate Moderate
			Grand Marais Drain	0.08	Low	Grand Marais Drain		Low	Grand Marais Drain	0.03	Low	Grand Marais Drain		Low	Grand Marais Drain		Low	Grand Marais Drain		Low
			Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain	0.05	Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate	Lennon Drain		Moderate
			Marentette Drain Wolfe Drain	0.02	None	Marentette Drain Wolfe Drain		None	Marentette Drain Wolfe Drain	0.01	None	Marentette Drain Wolfe Drain	0.12	None	Marentette Drain Wolfe Drain		None	Marentette Drain Wolfe Drain		None
			Wolfe Drain		Low	Wolfe Drain		Low	Wolfe Drain	0.01	Low Moderate	Wolfe Drain	0.12	Moderate	Wolfe Drain		Low Moderate	Wolfe Drain		Low Moderate
			Youngstown Drain	0.03	Low	Youngstown Drain		Low	Youngstown Drain	0.20	Low	Youngstown Drain		Low	Youngstown Drain		Low	Youngstown Drain		Low
			Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.37	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate
			Area Displaced Area Displaced	0.15 0.02	Low None	Area Displaced Area Displaced	0.00	Low	Area Displaced Area Displaced	0.01	Low None	Area Displaced Area Displaced	0.12	Low None	Area Displaced Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.00	Low None
			Total Area Displaced		None	Total Area Displaced		None	Total Area Displaced	0.38	INDITE	Total Area Displaced		None	Total Area Displaced		None	Total Area Displaced		None
Populations/Species	Impacts to Species at	Species name, type and significance	Provincially Rare	45.	00	Provincially Rare		6.00	Provincially Rare	41	.00	Provincially Rare	(0.00	Provincially Rare	0.	.00	Provincially Rare	0.0	00
Surface Water		area of surface drainage altered by each alternative																		1
	quantity)	number of surface water drainages crossings	5																	-
		by stream type number of encroachments on or severances	a								-					-	-			+
		surface water drainages																		
		degree of compliance with Provincial and Federal Water Quality Guidelines and							1							1	1			1
		Stormwater Management requirements																		
Groundwater	Change in groundwater	area of infiltration zones affected															_			<u> </u>
	conditions (quality and quantity)	area of groundwater recharge affected areas of seepage affected																		+
		areas of seepage affected area of water table affected by each alternation	v																	+
		(draw down zone)	1				_													
		proximity of alternative to public and private drinking water wells																		
Other Natural Resources	Impacts to mineral, petroleum, granular	Area in ha within ROW																		
	(quarry) lands/easements																			
Factor Summary:	1	L																		
Factor Score:																				

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment	Natural Nev	v Alternative Pa	rkway Plaza A		
Performance Measure	Criteria/Indicator	Measurement/Units		New Parkway			
			Name	Type/Area	Significance	Total Area	Significance
cological Landscapes	Impacts to Ecological Landscapes	Landscape name, Type/Area and significance		Stream Corridor	Low		
			Youngstown Drain	Stream Corridor	Low		
			Marentette Drain	Stream Corridor	Low		
			Grand Marais Drain	Stream Corridor	Moderate		
			North of Spring Garden Road	Matrix	Low		
				Total High Total Moderate	0		Total High Total Moderate
				Total Low	4		Total Low
ommunities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community Type/Area, area, significance and sensitivity	Area Displaced	2.54	High		Total High
			Area Displaced	1.05	Moderate	1.05	Total Moderate
			Area Displaced	39.00	Low	39.00	Total Low
			Total Area Displaced	42.59		42.59	Total Area Displaced
	Impacts to Aquatic Communities/	Community Type/Area, area, significance and sensitivity	Basin Drain	0.11	Low		
			Basin Drain	0.03	None		
			Burk Drain	0.11	Low		
			Burk Drain	0.00	None		
			Cahill Drain Cahill Drain	0.01 0.00	Low Moderate		
			Cahill Drain	0.08	Moderate		
			Collins Drain	0.01	Low		
			Grand Marais Drain	0.13	Low		
			Lennon Drain	0.10	Moderate		
			Marentette Drain	0.04	None		
			No Name3	0.01	None		
			No Name4	0.11	None		
			No Name5	0.00 1.03	None		
			Wolfe Drain Wolfe Drain	0.29	Low Moderate		
			Youngstown Drain	0.29	Low		
			Area Displaced	0.47	Moderate	0 47	Total Moderate
				19111	modorato	1.47	

			Area Displaced	0.20	None	0.20 Total None
			Total Area Displaced	2.14		2.14 Total Area Displaced
Populations/Species	Impacts to Species at Risk	Species name, Type/Area and significance	Provincially Rare Specimens/Colonies	180	High	Total Provincially Rare 180 Specimens/Colonies
Surface Water	conditions (quality and	area of surface drainage altered by each alternative				
	quantity)	number of surface water drainages crossings by stream Type/Area				
		number of encroachments on or severances of surface water drainages				
		degree of compliance with Provincial and Federal Water Quality Guidelines and Stormwater Management requirements				
Groundwater		area of infiltration zones affected				
		area of groundwater recharge affected				
	quantity)	areas of seepage affected				
		area of water table affected by each alternative (draw down zone)				
		proximity of alternative to public and private drinking water wells				
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW				
Factor Summary:						
Factor Score:						

PRACTICAL ALTERNATIVE EVALUATION	Factor: P	rotect the Natural Environment	Natural New Alt	ernative Parkw	vay Plaza B, B1 or C		
Performance Measure	Criteria/Indicator	Measurement/Units		New Parkway			
			Name	Туре	Significance	Total Area	Significance
Ecological Landscapes	Impacts to Ecological Landscapes	Landscape name, type and significance	Basin Drain	Stream Corridor	Low		
			Youngstown Drain	Stream Corridor	Low		
			Marentette Drain	Stream Corridor	Low		
			Grand Marais Drain	Stream Corridor	Moderate		
			North of Spring Garden Road	Matrix	Low		
				Total High	0	0	Total High
				Total Moderate Total Low	1 4		Total Moderate Total Low
Communities/Ecosystems	Impacts to Terrestrial Communities/ Ecosystems	Community type, area, significance and sensitivity	Area Displaced	1.47	High		Total High
	2000)0101110		Area Displaced	1.26	Moderate	1.26	Total Moderate
			Area Displaced Total Area Displaced	34.48 37.21	Low		Total Low Total Area Displaced
	Impacts to Aquatic	Community type, area, significance and	Basin Drain	0.05	Low	•••	
			Burk Drain	0.11	Low		
			Burk Drain	0.00	None		
			Cahill Drain	0.01	Low		
			Cahill Drain	0.00	Moderate		
			Cahill Drain	0.08	Moderate		
			Collins Drain Grand Marais Drain	0.01 0.13	Low		
			Lennon Drain	0.10	Low Moderate		
			Marentette Drain	0.04	None		
			No Name3	0.01	None		
			No Name4	0.11	None		
			No Name5	0.00	None		
			Wolfe Drain	1.03	Low		
			Wolfe Drain	0.29	Moderate		
			Youngstown Drain	0.04	Low		
			Area Displaced	0.47	Moderate	0.47	Total Moderate

			Area Displaced	1.39	Low		
						1.39	Total Low
			Area Displaced				
				0.17	None	0.17	Total None
			Total Area Displaced	2.03	3	2.03	Total Area Displaced
Populations/Species	Impacts to Species at Risk	Species name, Type/Area and significance	Provincially Rare Specimens/Colonies	14	1	141	Total Provincially Rare Specimens/Colonies
Surface Water	Changes in surface water conditions (quality and	area of surface drainage altered by each alternative					
	quantity)	number of surface water drainages crossings by stream type					
		number of encroachments on or severances of surface water drainages					
		degree of compliance with Provincial and					
		Federal Water Quality Guidelines and					
		Stormwater Management requirements					
Groundwater	conditions (quality and	area of infiltration zones affected					
	quantity)	area of groundwater recharge affected					
		areas of seepage affected					
		area of water table affected by each alternative (draw down zone)					
		proximity of alternative to public and private drinking water wells					
Other Natural Resources	Impacts to mineral,	Area in ha within ROW			<u>├</u>		
Factor Summary:			-	=			-
Factor Score:							
1-High Impact 2-Medium Im	npact 3-Low Impact 4-N	eutral/No Impact 5-Low Benefit 6-Mediu	m Benefit 7-High Ben	ofit	<u> </u>		•

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect th	e Natural Environment		Natural Plazas and Crossings													
								Pla	aza A								
			F	rom Crossing A		F	rom Crossing B		F	rom Crossing C		From Crossing C					
Performance Measure	Criteria/ Indicator	Measurement/ Units		A-G			B-G			C-E-G		C-G					
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance			
	Impacts to Ecological	Landscape name, type and significance	Detroit River	Stream Corridor	High	Detroit River	Stream Corridor	High	Detroit River	Stream Corridor	High	Detroit River	Stream Corridor	High			
			Healy Drain	Stream Corridor	Low	Healy Drain	Stream Corridor	Low	McKee Creek	Stream Corridor	Low	McKee Creek	Stream Corridor	Low			
			North of Amanda Street	Matrix	Moderate	North of Amanda Street	Matrix	Moderate	Healy Drain	Stream Corridor	Low	North of Amanda Street	Matrix	Moderate			
			Malden Park to Prairie Remnants ANSI	Strip Corridor	Moderate	Malden Park to Prairie Remnants ANSI	Strip Corridor	Moderate	North of Amanda Street	Matrix	Moderate	Malden Park to Prairie Remnants ANSI	Strip Corridor	Moderate			
			Chappus Street West of Sandwich Street NHF	Patch	Low	Ontario Power Generation NHF	Patch	Low	Malden Park to Prairie Remnants ANSI	Strip Corridor	Moderate						
									Sterling Marine Fuels NHF	Patch	Low						
Communities/ Ecosystems		Community type, area, significance and sensitivity															
	Ecosystems	sensitivity	Area Displaced	2.98	High	Area Displaced	2.70	High	Area Displaced	2.69	High	Area Displaced	2.70	High			
			Area Displaced	1.83	Moderate	Area Displaced	1.82	Moderate	Area Displaced	2.74	Moderate	Area Displaced	2.73	Moderate			
			Area Displaced	27.77	Low	Area Displaced	26.24	Low	Area Displaced	25.44	Low	Area Displaced	22.86	Low			
			Total Area Displaced	32.58		Total Area Displaced	30.77		Total Area Displaced	30.87		Total Area Displaced	28.29				
	Impacts to Aquatic Communities/	Community type, area, significance and	Healy Drain	0.01	Low	Healy Drain	0.03	Low	Healy Drain	0.03	Low	McKee Creek	0.03	Moderate			
				0.05	Moderate	Healy Drain	0.07	None	Healy Drain	0.04	None	McKee Drain	0.05	Moderate			
			McKee Drain	0.11	None	McKee Drain	0.05	Moderate	McKee Creek	0.03	Moderate	McKee Drain	0.11	None			
			Titcombe Drain Detroit River	0.05 Pier	Moderate Moderate	McKee Drain Titcombe Drain	0.11 0.05	None Moderate	McKee Drain McKee Drain	0.05	Moderate None	Titcombe Drain No Name Tributary	0.05 0.01	Moderate Low			
					Moderate	Detroit River	Pier	Moderate	Titcombe Drain	0.05	Moderate		0.01	LOW			
			Area Displaced	0.10	Moderate	Area Displaced	0.10	Moderate	Area Displaced	0.13	Moderate	Area Displaced	0.13	Moderate			
			Area Displaced	0.01	Low	Area Displaced	0.03	Low	Area Displaced	0.03	Low	Area Displaced	0.01	Low			
			Area Displaced	0.11	None	Area Displaced	0.18	None	Area Displaced	0.15	None	Area Displaced	0.11	None			
			Total Area Displaced	0.2		Total Area Displaced	0.3		Total Area Displaced		1 Low	Total Area Displaced	0.2				
Populations/ Species	Impacts to Species at Risk	Species name, type and significance	Provincially Rare Specimens/Colonies	23	82 High	Provincially Rare Specimens/Colonies	22	3 High	Provincially Rare Specimens/Colonies	23	1 High	Provincially Rare Specimens/Colonies	18	6 High			
		area of surface drainage															
	water conditions (quality and quantity)	altered by each number of surface water															
		drainages crossings by number of															
		encroachments on or															
		degree of compliance															
		with Provincial and															
One un deveter		Federal Water Quality															
	Change in groundwater	area of infiltration zones area of groundwater															
	/	areas of seepage															
	and auantity)	area of water table															
		affected by each															
		proximity of alternative to public and private															
Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW															
Factor Summary:		I	I	1		I	I		1	I	1	<u>I</u>	1	1			
actor Score:	1							1									
	dium Impact 3-Lov	v Impact 4-Neutral/No I	mpact 5-Low Benefit	6-Medium Bene	fit 7-High Benefit	<u>+</u>	•	-	<u>.</u>	•	-	ł	<u>₽</u>	<u>.</u>			

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect th	e Natural Environment					Ν	atural Plazas	and Crossings		
								Pla	za A		
	easure Criteria/Indicator Mea	Measurement/ Units	Fr	om Crossing A		Fr	rom Crossing B		Fi	om Crossing C	
Performance Measure				A-G			B-G	C-E-G			
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Signi

	Fr	om Crossing C	
		C-G	
gnificance	Name	Type/Area	Significance

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect th	ne Natural Environment	Natural Plazas and Crossings													
		•					Plaza B									
						F	From Crossing C									
Performance Measure	Criteria/ Indicator	Measurement/ Units		C-E			E-F		F-G							
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance					
Ecological Landscapes	Impacts to Ecological	Landscape name, type and significance	Detroit River	Stream Corridor	High	Broadway Drain	Stream Corridor	Low	McKee Drain	Stream Corridor	Low					
			McKee Creek	Stream Corridor	Low				Titcombe Drain	Stream Corridor	Low					
			Healy Drain	Stream Corridor	Low				North of Amanda Street	Matrix	Moderate					
			Broadway Drain	Stream Corridor	Low				Malden park to Prairie Remnants ANSI	Strip Corridor	Moderate					
			Sterling Marine Fuels NHF	Patch	Moderate											
Communities/	Impacts to	Community type, area,			High											
Ecosystems Ten Co	Terrestrial Communities/	significance and sensitivity			Figh											
	Ecosystems	,	Area Displaced	1.12		Area Displaced	0.01	High	Area Displaced	0.89	High					
			Area Displaced	0.90	Moderate	Area Displaced	0.70	Moderate	Area Displaced	0.49	Moderate					
			Area Displaced	16.83	Low	Area Displaced	6.18	Low	Area Displaced	13.55	Low					
			Total Area Displaced	18.86		Total Area Displaced	6.89		Total Area Displaced	14.93						
	Impacts to Aquatic Communities/	Community type, area, significance and	Broadway Drain	0.05	Low	Healy Drain	0.03	None	McKee Drain	0.02	Moderate					
			Healy Drain	0.08	Low	McKee Drain	0.07	Moderate	McKee Drain	0.11	None					
			Healy Drain	0.16	None	McKee Drain	0.07	Moderate	Titcombe Draine	0.02	Moderate					
			McKee Creek	0.03	Moderate											
			Detroit River	Pier	Moderate											
			No Name Tributary	0.00	Low											
			Area Displaced	0.03	Moderate	Area Displaced	0.14	Moderate	Area Displaced	0.04	Moderate					
			Area Displaced	0.03	Low	Area Displaced	0.14	Low	Area Displaced Area Displaced	0.04	Low					
			Area Displaced	0.16	None	Area Displaced	0.03	None	Area Displaced	0.00	None					
			Total Area Displaced	0.32		Total Area Displaced	0.1		Total Area Displaced	0.1						
Populations/ Species	Impacts to Species at Risk	Species name, type and significance	Provincially Rare Specimens/Colonies	83	3 High	Provincially Rare Specimens/Colonies	30	0 High	Provincially Rare Specimens/Colonies	8	2 High					
Surface Water	Changes in surface	area of surface drainage														
	water conditions	altered by each														
	(quality and quantity)	number of surface water														
		drainages crossings by														
		number of encroachments on or														
		degree of compliance with Provincial and														
		Federal Water Quality														
Groundwater	Change in	area of infiltration zones														

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect th	e Natural Environment	Natural Plazas and Crossings												
			Plaza B												
			From Crossing C												
Performance Measure	Criteria/ Indicator	Measurement/ Units	C-E				E-F		F-G						
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance				
	groundwater	area of groundwater													
	conditions (quality and quantity)	areas of seepage													
		area of water table affected by each													
		proximity of alternative to public and private													
Other Natural Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW													
Factor Summary:		<u> </u>		<u> </u>	<u> </u>						<u></u>				
Factor Score:															
1-High Impact 2-Me	dium Impact 3-Low	/ Impact 4-Neutral/No Imp	oact 5-Low Benefi	t 6-Medium Benefit	7-High Benefit										

PRACTICAL ALTERNATIVE	Factor: Protect th	e Natural Environment		Natural Plazas and Crossings													
EVALUATION								Pla	za B1								
					From C	rossing B			From Crossing C								
Performance Measure	Criteria/ Indicator	Measurement/ Units		B-F		F-G				C-F		F-G					
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance			
	Impacts to Ecological	Landscape name, type and significance	Detroit River	Stream Corridor	High	McKee Drain	Stream Corridor	Low	Detroit River	Stream Corridor	High	McKee Drain	Stream Corridor	Low			
			Healy Drain	Stream Corridor	Low	Titcombe Drain	Stream Corridor	Low	McKee Creek	Stream Corridor	Low	Titcombe Drain	Stream Corridor	Low			
			Broadway Drain	Stream Corridor	Low	North of Amanda Street		Moderate	Healy Drain	Stream Corridor	Low	North of Amanda Street	Matrix	Moderate			
			Ontario Power Generation NHF	Patch	Low	Malden Park to Prairie Remnants ANSI	Strip Corridor	Moderate	Broadway Drain	Stream Corridor	Low	Malden Park to Prairie Remnants ANSI	Strip Corridor	Moderate			
									Sterling Marine Fuels NHF	Patch	Low						
Communities/ Ecosystems	Impacts to Terrestrial Communities/	Community type, area, significance and sensitivity															
	Ecosystems		Area Displaced	0.20	High	Area Displaced	0.89	High	Area Displaced	0.20	High	Area Displaced	0.89	High			
			Area Displaced	0.70	Moderate	Area Displaced	0.49	Moderate	Area Displaced	1.60	Moderate		0.49	Moderate			
			Area Displaced Total Area Displaced	28.58 29.48	Low	Area Displaced Total Area Displaced	14.21 15.59	Low	Area Displaced Total Area Displaced	27.77 29.57	Low		14.21 15.59	Low			
			Total Alea Displaced			•	15.59		Total Alea Displaced								
	Impacts to Aquatic Communities/	Community type, area, significance and	Healy Drain	0.07	Low	McKee Drain	0.02	Moderate	Healy Drain	0.05	Low	McKee Drain	0.02	Moderate			
			Healy Drain	0.24	None	McKee Drain	0.11	None	Healy Drain	0.22	None		0.11	None			
			McKee Drain McKee Drain	0.06	Moderate Moderate	Titcombe Drain	0.02	Moderate	McKee Creek McKee Drain	0.03	Moderate Moderate	Titcombe Drain	0.02	Moderate			
			Detroit River	Pier	Moderate				McKee Drain	0.08	Moderate						
			Boulou Huvor		modorato				Detroit River	Pier	Moderate						
									No Name Tributary	0.00	Low						
			Area Displaced	0.13	Moderate	Area Displaced	0.04	Moderate	Area Displaced	0.16	Moderate		0.04	Moderate			
			Area Displaced	0.07	Low	Area Displaced	0.00	Low	Area Displaced	0.05	Low		0.00	Low			
			Area Displaced Total Area Displaced	0.24	None	Area Displaced Total Area Displaced	0.11	None	Area Displaced Total Area Displaced	0.22	None	Area Displaced Total Area Displaced	0.11 0.1	None			
Populations/ Species	Impacts to Species	Species name, type and	Provincially Rare		4 0 High	Provincially Rare		, i High	Provincially Rare		0 High	Provincially Rare		5 5 High			
Populations/ Species	at Risk	significance	Specimens/Colonies	10	Unign	Specimens/Colonies		i lign	Specimens/Colonies	10	Ullight	Specimens/Colonies	0	5 Tilgit			
Surface Water	Changes in surface	area of surface drainage															
	water conditions	altered by each															
	(quality and quantity)	number of surface water															
		drainages crossings by number of															
		encroachments on or															
		degree of compliance															
		with Provincial and															
		Federal Water Quality															
	Change in	area of infiltration zones															
	groundwater conditions (quality	area of groundwater															
	and quantity)	areas of seepage															
	and quantity)	area of water table affected by each															
		proximity of alternative to public and private															
Resources	Impacts to mineral, petroleum, granular (quarry) lands/easements	Area in ha within ROW															
	ianus/easements																
Factor Summary:			1		T		<u> </u>	T		1	T	1	1				
Factor Score: 1-High Impact 2-Med	dium Impact 3-Lov	/ Impact 4-Neutral/No I	mpact 5-Low Benefit	6 Modium Porch	fit 7-High Benefit	<u> </u>		<u> </u>	<u> </u>	<u>I</u>	<u> </u>	<u>I</u>	<u> </u>	<u>I</u>			

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect th	e Natural Environment					Ν	atural Plazas	and Crossings					
				Plaza B1										
					From Cr	ossing B								
Performance Measure	erformance Measure Criteria/ Indicator Measurement/ U			B-F		F-G				C-F				
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Signi			

From Cr	ossing C		
		F-G	
gnificance	Name	Type/Area	Significance

PRACTICAL ALTERNATIVE EVALUATION	Factor: Protect th	e Natural Environment		Natural Plazas and Crossings												
EVALUATION								Pla	za C							
								From C	rossing C							
Performance Measure	Criteria/ Indicator	Measurement/ Units		C-D		D-E				E-F		F-G				
			Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Name	Type/Area	Significance	Total Area	Significance
Ecological Landscapes	Impacts to Ecologica Landscapes	Landscape name, type and significance	Detroit River	Stream Corridor	High	Healy Drain	Stream Corridor	Low				McKee Drain	Stream Corridor	Low		
			McKee Creek	Stream Corridor	Low	Ontario Power Generation NHF	Patch	Low				Titcombe Drain	Stream Corridor	Low		
			Healy Drain	Stream Corridor	Low							North of Amanda Street	Matrix	Moderate		
			Sterling Marine Fuels NHF	Patch	Low							Malden Park to Prairie Remnants ANSI	Strip Corridor	Moderate		
Communities/	Impacts to Terrestria	Community type, area,														
Ecosystems	Communities/	significance and													16.16	Total High
	Ecosystems	sensitivity	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.00	High	Area Displaced	0.89	High		-
			Area Displaced	1.62	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced	0.49	Moderate	16.60	Total Moderate
			Area Displaced	6.97	Low	Area Displaced	2.76	Low	Area Displaced	10.09	Low	Area Displaced	13.41	Low		Total Low
			Total Area Displaced	8.59		Total Area Displaced	2.76		Total Area Displaced	10.09		Total Area Displaced	14.79		289.65	Total Area Displaced
	Impacts to Aquatic Communities/	Community type, area, significance and	Healy Drain	0.02	None	Healy Drain	0.05	None	Healy Drain	0.04	Low	McKee Drain	0.02	Moderate		
			McKee Drain	0.07	Moderate							McKee Drain	0.11	None		
			McKee Drain	0.08	Moderate							Titcombe Drain	0.02	Moderate		
			Detroit River	Pier	Moderate											
			No Name Tributary	0.15	Low											
			Area Displaced	0.15 0.15	Moderate	Area Displaced Area Displaced	0.00	Moderate	Area Displaced	0.00	Moderate	Area Displaced Area Displaced	0.04	Moderate		Total Moderate Total Low
			Area Displaced Area Displaced	0.15	Low None	Area Displaced	0.00	Low None	Area Displaced Area Displaced	0.04	Low None	Area Displaced	0.00	Low None		Total None
			Total Area Displaced	0.02		Total Area Displaced	0.03		Total Area Displaced	0.00		Total Area Displaced	0.11		3.46	Total Area
Populations/ Species		Species name, type and	Provincially Rare	2	5 High	Provincially Rare	4	3 High	Provincially Rare		3 High	Provincially Rare	82	2 High		Total Provincially
0	at Risk	significance	Specimens/Colonies			Specimens/Colonies			Specimens/Colonies			Specimens/Colonies				Rare
Surface Water	Changes in surface water conditions	area of surface drainage altered by each														
	(quality and quality)	number of surface water drainages crossings by														
		number of encroachments on or														
		degree of compliance														
		with Provincial and Federal Water Quality														
	Change in	area of infiltration zones														
	groundwater	area of groundwater														
	conditions (quality and quantity)	areas of seepage														
	and quantity)	area of water table affected by each														
		proximity of alternative to public and private						1								
Other Natural	Impacts to mineral,	Area in ha within ROW	1			1						1				
	petroleum, granular (quarry)															
	lands/easements															
Factor Summary:			r		1				1					1		
Factor Score:	liver lean ant 2 Law	Impact 4-Neutral/No Im	Depart El eur Departit	C Madium Danafit	7-High Benefit											































