Stantec Consulting Ltd.
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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: UR WC

Date: June 22, 2012 Field Personnel: C. Paylte

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	22	3	30%	none	rain

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 6-4

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☑ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			Blackwalnut >> Sugar maple
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER			

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N/O	<10	10 – 24	25 – 50	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	☑ MATURE	OLD GROWTH

VEGETATION TYPE: Blackwalnut CODE:

COMPLEX CODE:

Evidence of Disturbance / Notes:

residences Found all along Front of FOD
Cannot see any of the ground cover.

photo 37. behind res.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER
ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
Blackwalnut	A-D						
Sugar maple	R						
SHRUBS:							
GROUND:							

Quality Control: This form is complete ☐ & legible ☐.

Signature: _____ (Field Personnel)

Signature: _____ (Project Manager)

ELC Polygon: # _____ **Assessment Type:** ❑-Visual; no access / ❑-Walk through feature

Extent of Physical Investigation of Feature: ❑-Entire / ❑-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features: Contains potential bat roosting features?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests: Contains large stick nests?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC

Date: June 22, 2012 Field Personnel: C. Paquette

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	22	3	10-50%	none	rain

POLYGON DESCRIPTION

ELC – COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 6-5

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☑ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER			Reed canary grass > goldenrod > milkweed

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
		✓			

VEGETATION TYPE: Reed canary meadow marsh CODE:

COMPLEX CODE:

Evidence of Disturbance / Notes:

extends 2-3m on either side of Drain (dry)

Photo 38.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SHRUBS:							
GROUND:							
Reed canary grass				D			
goldenrod				A			
milkweed (common)				O			
Teasel				R-O			
Philadelphia Fleabane				R-O			

Quality Control: This form is complete ☐ & legible ☐.

Signature: _____ (Field Personnel)

Signature: _____ (Project Manager)

ELC Polygon: # _____ **Assessment Type:** ❑-Visual; no access / ❑-Walk through feature

Extent of Physical Investigation of Feature: ❑-Entire / ❑-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features: Contains potential bat roosting features?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests: Contains large stick nests?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
❑-Y* / ❑-N / ❑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

620000 620500 621000

4779000 4778500

Grimsby Woodlot (Thirty Mile Creek Section)

Kemp Road East

Mountainview Road

Walker Road

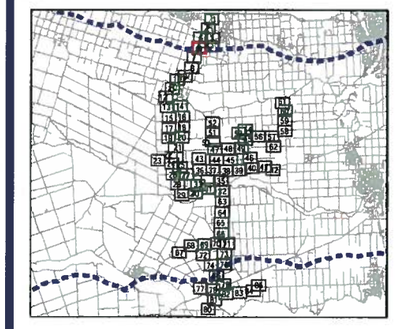
0 100 200 m
1:5,000

Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer

Turbines in Signed Lands
- Standard Turbine (105 dBA)
- Potential Turbine Locations

Turbines in Unsigned Lands
- Standard Turbine (105 dBA)
- 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary



Notes

1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

Stantec

June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
6

Title
Proposed Collector Route
Map 6

V:\01609\Active\160950269\planning\drawing\mxd\20120423_NHA_Fieldmaps\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bcrowper

Markups

NRWC roadside ELC

NRWC roadside ELC

Figures 1-6

Thirty Rd. complete.

Mountainview rd complete

June 22, 2012

C. Payette

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Coll. Tile 7; Poly 7-1

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	20	5 kph	none	none	none

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 7-1

START TIME: 8:30

END TIME: 9:20

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☑ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	3	1	SALNIGR
2	SUB-CANOPY	4	1	SALIX SP. >> CRASUCC
3	UNDERSTOREY	5	3	TYPLATI = DIPFULL
4	GRD. LAYER	6-7	4	grasses >> SOLCANA > ASCSYRI

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	✓ PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Cultural Meadow CODE: CUM1-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

Ditch area along road is MAS2-1 (Cattail Mineral Shallow Marsh Type Ecosite) - main ecosite is grass-dominated.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	DISTANCE FROM RD. ≤5 m	DISTANCE FROM RD. >5 m	COLL.
TREES:							
SALNIGR	N	O	O	N	O	N	
SHRUBS:							
SALIX SP.	N	O	O	N	O	N	
CRASUCC	N	O	O	N	O	N	
GROUND:							
TYPLATI	N	N	A	O	D	R	
DIPFULL	N	N	A	O	R	A	
SOLCANA	N	N	N	A	A	A	
ASCSYRI	N	N	N	A	A	O	
SYMLANC	N	N	N	O	R	O	
grasses	N	N	N	O	A	D	
sedges	N	N	N	O	O	O	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑.

Signature: (Project Manager)

ELC Polygon: # 7_1 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. Tile 7; Poly. 7-2

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	20	5 kph	none	none	none

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 7-2

START TIME: 9:35

END TIME: 9:55

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☐ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☑ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	SALNIGR > FAGGRAN
2	SUB-CANOPY	3	2	FAGGRAN > SALNIGR
3	UNDERSTOREY	4-5	4	SOLCANA > TYPLATI > DIPFULL
4	GRD. LAYER	6-7	4	SOLCANA > grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	✓ YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Meadow Marsh or Fresh-Moist Tallgrass Savannah — CODE: MAM2 or TPS2

COMPLEX — CODE:

Evidence of Disturbance / Notes:

Ditch area along road is MAS 2-1.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SALNIGR	O	O	N	N	O	O	
FAGGRAN	R	O	N	N	O	O	
SHRUBS:							
GROUND:							
SOLCANA	N	N	D	D	A	D	
TYPLATI	N	N	A	O	D	N	
DIPFULL	N	N	O	O	O	O	
grasses/sedges	N	N	O	O	A	O	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑

Signature: (Project Manager)

ELC Polygon: # 72 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. Tile 7; Poly. 7-3

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	20	5 kph	none	none	none

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 7-3

START TIME: 10:00

END TIME: 10:30

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE

- ☐ LACUSTRINE
- ☐ RIVERINE
- ☐ BOTTOMLAND
- ☐ TERRACE
- ☐ VALLEY SLOPE
- ☐ TABLELAND
- ☑ ROLL. UPLAND
- ☐ CLIFF
- ☐ TALUS
- ☐ CREVICE / CAVE
- ☐ ALVAR
- ☐ ROCKLAND
- ☐ BEACH / BAR
- ☐ SAND DUNE
- ☐ BLUFF

HISTORY

- ☑ NATURAL
- ☐ CULTURAL

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	QUEMACR > SALNIGR
2	SUB-CANOPY	3	3	SALNIGR = QUEMACR > FAGGRAN
3	UNDERSTOREY	4-5	4	CORRACE = VITVINI
4	GRD. LAYER	6-7	3	TYPLATI > SOLCANA > grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	✓ YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Deciduous Forest CODE: FOD (7?)

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SALNIGR	R	A	R	N	O	A	
QUEMACR	A	A	R	N	O	A	
FRAAMER	N	O	R	N	N	O	
FAGGRAN	N	O	R	N	N	O	
SHRUBS:							
CORRACE	N	N	D	N	D	A	
VITVINI	N	N	A	O	A	R	
SALIX SP.	N	N	O	R	O	O	
PARQUIN	N	N	O	O	O	O	
GROUND:							
TYPLATI	N	N	N	A	A	R	
SOLCANA	N	N	N	O	O	R	
grasses	N	N	N	O	O	R	
AGRSCS/RI	N	N	N	R	R	N	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 7-3 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests:

Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. Tile 7; Poly 7-4

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	20	5 kph	none	none	none

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 7-4

START TIME: 10:30

END TIME: 11:00

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☑ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	3	SALNIGR = FAGGRAN > PRUSERO
2	SUB-CANOPY	3	3	PRUSERO > SALNIGR > FAGGRAN
3	UNDERSTOREY	4-5	3	CORRACE > VITVINI
4	GRD. LAYER	6-7	4	TYPLATI > SOLCANA > DIPFULL > ASCSYRI

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	✓ YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Cultural Meadow / Woodland CODE: CUM1-1 / CUW1

COMPLEX CODE:

Evidence of Disturbance / Notes:

Debris - old building, roof partial (see photo)
- old trailer / truck - abandoned dilapidated.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	DISTANCE FROM RD. ≤5 m	DISTANCE FROM RD. >5 m	COLL.
TREES:							
SALNIGR	O	A	R	N	R	O	
FAGGRAN	O	O	A	N	O	O	
PRUSERO	R	A	O	N	R	O	
SHRUBS:							
CORRACE	N	N	A	R	A	A	
VITVINI	N	N	O	O	O	O	
GROUND:							
TYPLATI	N	N	N	D	D	R	
SOLCANA	N	N	N	A	A	A	
DIPFULL	N	N	N	O	O	O	
ASCSYRI	N	N	N	O	R	O	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑.

Signature: (Project Manager)

ELC Polygon: # 7-4 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

- Debris - abandoned shed and trailer / truck (see photo).

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. File 7; Poly. 7-5

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	20	light	—	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 7-5

START TIME: 11:30

END TIME: 12:00

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☐ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☑ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	—
2	SUB-CANOPY	3	2	SALNIGR > FAGGRAN
3	UNDERSTOREY	4-5	4	TYPANGU > Grasses
4	GRD. LAYER	6-7	4	TYPANGU = Grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Shallow Cattail Marsh CODE: MAS2-1 or 3-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	DISTANCE FROM RD. ≤5 m	DISTANCE FROM RD. >5 m	COLL.
TREES:							
SALNIGR	—	O	R	N			
FAGGRAN	—	O	R	N			
SHRUBS:							
CORRACE	—	N	O	N			
GROUND:							
TYPANGU	—	N	D	A			
grasses	—	N	A	A			

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑

Signature: (Project Manager)

ELC Polygon: # 7-5 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. Tile 7; Poly 7-6

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: _____ Project Name: _____

Date: _____ Field Personnel: _____

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 7-6

START TIME: 12:00

END TIME: 12:30

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☐ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☑ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2-3	4	QUEMACR = FAGGRAN
2	SUB-CANOPY	4	4	ROBPSEU > RHUTYPH
3	UNDERSTOREY	5-6	4	ROBPSEU > SOLCANA
4	GRD. LAYER	7-8	4	SOLCANA > grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	O	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:		PIONEER		YOUNG	✓	MID-AGE		MATURE		OLD GROWTH

VEGETATION TYPE: Fresh-Moist Deciduous Forest CODE: FOD

COMPLEX: _____ CODE: _____

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
QUEMACR	A	O	R	N	O	A	
FAGGRAN	A	O	R	N	O	A	
SHRUBS:							
ROBPSEU	N	D	D	O	D	D	
RHUTYPH	N	O	R	N	O	N/O	
VIVINI	N	O	O	R	O	O	
CORRACE							
GROUND:							
SOLCANA	N	N	N	D	D	N/O	
grasses	N	N	N	O	A	N/O	
SYMLANC							

Signature: _____ (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑.

Signature: _____ (Project Manager)

ELC Polygon: # 7-6 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	21	light	—	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-1

START TIME: 12:30

END TIME: 13:00

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	
2	SUB-CANOPY	3	1	SALNIGR=FAGGRAN>ACESACC>PICGLAU
3	UNDERSTOREY	4-5	4	CALCANA>TYPANGU
4	GRD. LAYER	6-7	4	CALCANA>TYPANGU>SOLCANA

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	✓ YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Mineral Cultural Meadow – Old Field CODE: CUM1-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SALNIGR	—	O	N	N			
FAGGRAN	—	O	N	N			
ACESACC	—	R	N	N			
PICGLAU	—	R	N	N			
SHRUBS:							
CORRACE	—	N	R	N			
GROUND:							
CALCANA	—	N	D	D			
SYMLANC	—	N	N	O			
ASCSYRI	—	N	N	O			
SOLCANA	—	N	N	O			
TYPANGU	—	N	A	A			

Quality Control: This form is complete ☑ & legible ☑

Signature: (Field Personnel)

Signature: (Project Manager)

ELC Polygon: # 8-1 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	21	light	—	—	—

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-2

START TIME: 13:00

END TIME: 13:30

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☒ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☒ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	2	SALIX sp. > SALNIGR
2	SUB-CANOPY	3	2	SALIX sp. = SALNIGR > QUEMACR
3	UNDERSTOREY	4-5	4	TYPANGU > CALCANA > SOLCANA
4	GRD. LAYER	C-7	3	TYPANGU > CALCANA > ALIPLAN

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	O	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Cattail Organic Shallow Marsh CODE: MAS3-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

Frogs present in wetland (river not moving)

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SALNIGR	A	A	O	N	A	A	
SALIX sp.	D	A	O	N	A	A	
QUEMACR	N	R	O	N	O	R	
SHRUBS:							
GROUND:							
TYPANGU	N	N	D	D	A	A	
ALI PLAN	N	N	N	O	R	O	
PARQUIN	N	N	N	O	A	O	
SOL CANA	N	N	O	O	O	O	
CALCANA	N	N	A	A	D	A	

Quality Control: This form is complete ☐ & legible ☐.

Signature: _____ (Field Personnel)

Signature: _____ (Project Manager)

ELC Polygon: # 8-2 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	22	light	—	—	—

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-3

START TIME: 13:30

END TIME: 14:00

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	QUEALBA > SALNIGR > FAGGRAN
2	SUB-CANOPY	3	3	QUEALBA > SALNIGR > FAGGRAN
3	UNDERSTOREY	4-5	2	SOLCANA > Can. red grass
4	GRD. LAYER	6-7	4	SOLCANA > grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	O	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	✓ MATURE	OLD GROWTH

VEGETATION TYPE: Fresh-Moist Oak Deciduous Forest CODE: FOD (9?)

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SALNIGR	A	A	O	N	A	N/O	
FAGGRAN	O	O	N	N	O		
FRAAMER	N	R	N	N	R		
TILAMER	N	R	N	N	R		
QUEALBA	D	D	R	N	D		
SALIX sp.	O	O	R	N	O		
SHRUBS:							
CRASPCC	N	O	O	N	O	N/O	
GROUND:							
SOLCANA	N	N	D	D	D	N/O	
CALCANA	N	N	A	A	A		
grass sp.	N	N	A	A	A		

Quality Control: This form is complete ☐ & legible ☑

Signature: (Field Personnel)

Signature: (Project Manager)

ELC Polygon: #8-3 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	22	light	—	—	—

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-4

START TIME: 13:30

END TIME: 14:00

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	—
2	SUB-CANOPY	3	4	POPTREM >>QUEALBA>SALIX
3	UNDERSTOREY	4-5	4	grass sp.
4	GRD. LAYER	6-7	4	SOLCANA = grass sp.

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R <10	N 10 – 24	N 25 – 50	N >50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Deciduous Forest Hedgerow CODE: HoD / FOD

COMPLEX CODE:

Evidence of Disturbance / Notes:

Hedgerow within field

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:					N	A	
POPTREM	—	D			—	—	
QUEALBA	—	A			—	—	
SALIX sp.	—	D			—	—	
SHRUBS:							
N/O	—	—	—	—	—	—	
GROUND:							
grass sp.	—	N	O	A	—	—	
SOLCANA	—	N	N	A	—	—	

Quality Control: This form is complete ☐ & legible ☐

Signature: _____ (Field Personnel)

Signature: _____ (Project Manager)

ELC Polygon: # 8-4 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	22	light	—	—	

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-5

START TIME: 14:00

END TIME: 14:30

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☐ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	SALNIGR > ACESASA > QUEMACR
2	SUB-CANOPY	3	4	SUGNIGR > ACESASA = SALNIGR
3	UNDERSTOREY	4-5	3	SUGNIGR > ROBPSEU > RHUTYPH
4	GRD. LAYER	6-7	3	grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	O	<10	R	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	✓ MATURE	OLD GROWTH

VEGETATION TYPE: Deciduous Forest CODE: FOD

COMPLEX CODE:

Evidence of Disturbance / Notes:

Fresh-moist sugar maple - black walnut deciduous forest?

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
QUEMACR	O	O	N	N	O	N/O	
FAGGRAN	O	O	N	N	O	↓	
ACESASA	A	A	N	N	A		
SUGNIGR	N	A	A	N	A		
SALNIGR	N	O	O	N	A		
TILCORD	O	O	N	N	O		
SHRUBS:							
CORRACE	N	N	O	R	O	N/O	
RHUTYPH	N	N	O	R	O	↓	
ROBPSEU	N	N	O	R	O		
GROUND:							
grasses	N	N	O	O	D	O	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑.

Signature: (Project Manager)

ELC Polygon: # 8-5 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRVC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	22	light	—	—	—

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-6

START TIME: 14:30

END TIME: 15:00

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2-3	4	POPTREM
2	SUB-CANOPY	—	—	
3	UNDERSTOREY	—	—	
4	GRD. LAYER	6-7	4	grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	R	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
				☑	

VEGETATION TYPE: Hedgerow – Fresh-moist Poplar Deciduous Forest CODE: HoD / FOD 8-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

could be CUP 1-4 ?
(Hybrid-poplar Deciduous Plantation Type)

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:					n/a		
POPTREM	D	—	—	N	—	—	
SHRUBS:							
—							
GROUND:							
grasses	N	—	—	D	—	—	

Quality Control: This form is complete ☑ & legible ☑

Signature: (Field Personnel)

Signature: (Project Manager)

ELC Polygon: # 8-6 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	23	light	—	—	—

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-7

START TIME: 15:00

END TIME: 15:30

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	
2	SUB-CANOPY	3	4	THUOCCI > PINSTRO
3	UNDERSTOREY	—	—	
4	GRD. LAYER	—	—	

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Hedgerow – Coniferous Forest CODE: HOC / FOC

COMPLEX CODE:

Evidence of Disturbance / Notes:

- trees lined in rows.
- could also be CUP3 (coniferous plantation)

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
THUOCCI	—	D	—	—	—	D	
PINSTRO	—	A	—	—	—	A	
SHRUBS:	—						
GROUND:	—						

Quality Control: This form is complete ☐ & legible ☑

Signature: (Field Personnel)

Signature: (Project Manager)

ELC Polygon: #8-7 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRVC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	24	light	—	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-8

START TIME: 15:30

END TIME: 15:40

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	—
2	SUB-CANOPY	3	2	Deciduous Trees
3	UNDERSTOREY	4-5	4	Deciduous Shrubs
4	GRD. LAYER	C-7	4	Grasses > SOLCANA > DIPFULL

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	☐ <10	☐ 10 – 24	☑ 25 – 50	☐ >50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	☐ PIONEER	☐ YOUNG	☑ MID-AGE	☐ MATURE	☐ OLD GROWTH

VEGETATION TYPE: Hedgerow - Gray Dogwood Cultural Thicket CODE: HOD/CUT1-4

☐ COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	DISTANCE FROM RD. ≤5 m	DISTANCE FROM RD. >5 m	COLL.
TREES:							
Deciduous Trees (difficult to see)	—	O	A	R	N	A	
SHRUBS:							
Deciduous Shrubs (difficult to see)	—	N	D	O	O	D	
GROUND:							
SOLCANA	—	N	N	A	A	O	
Grasses	—	N	N	A	D	O	
DIPFULL	—	N	N	R	O	R	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 8-8 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	24	light	—	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-9

START TIME: 15:40

END TIME: 15:50

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2-3	1	FAGGRAN
2	SUB-CANOPY	—	—	—
3	UNDERSTOREY	4-5	2	CORRACE
4	GRD. LAYER	6-7	4	grasses > DIPFULL

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	R	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Hedgerow – Dry-Moist Old Field Meadow CODE: HOD/CUM1-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
FAGGRAN	O	—	N	N	N	O	
SHRUBS:							
CORRACE	N	—	O	N	R	O	
GROUND:							
grasses	N	—	N	D	A	D	
DIPFULL	N	—	N	A	D	A	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑.

Signature: (Project Manager)

ELC Polygon: # 8-9 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	25	light	—	—	—

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-10

START TIME: 15:50

END TIME: 16:00

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE

- ☐ LACUSTRINE
- ☐ RIVERINE
- ☐ BOTTOMLAND
- ☐ TERRACE
- ☐ VALLEY SLOPE
- ☑ TABLELAND
- ☐ ROLL. UPLAND
- ☐ CLIFF
- ☐ TALUS
- ☐ CREVICE / CAVE
- ☐ ALVAR
- ☐ ROCKLAND
- ☐ BEACH / BAR
- ☐ SAND DUNE
- ☐ BLUFF

HISTORY

- ☑ NATURAL
- ☐ CULTURAL

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	ACESASA > FAGGRAN
2	SUB-CANOPY	3-4	4	RHUTYPH > FAGGRAN > ACESASA
3	UNDERSTOREY	5-6	3	grasses > SOLCANA > VITVINI = PARQUIN
4	GRD. LAYER	7-8	3	grasses > SOLCANA > VITVINI = PARQUIN

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R <10	R 10 – 24	N 25 – 50	N >50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	✓ MATURE	OLD GROWTH

VEGETATION TYPE: Fresh-Moist Sugar Maple-Hardwood Deciduous CODE: FOD 6-5

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
ACESASA	D	A	O	R	A	N/O	
FAGGRAN	A	A	O	R	A	N/O	
SHRUBS:							
RHUTYPH	N	D	O	R	D	N/O	
GROUND:							
grasses	N	N	A	A	D	N/O	
VITVINI	N	N	O	O	O	↓	
SOLCANA	N	N	A	O	A		
PARQUIN	N	N	O	O	O		

Signature: (Field Personnel)

Quality Control: This form is complete ☒ & legible ☐.

Signature: (Project Manager)

ELC Polygon: #8-10 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; EY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	25	light	—	—	—

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 8-11

START TIME: 16:00

END TIME: 16:10

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE			HISTORY
☐ LACUSTRINE	☐ TALUS		☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE		
☐ BOTTOMLAND	☐ ALVAR		☐ CULTURAL
☐ TERRACE	☐ ROCKLAND		
☐ VALLEY SLOPE	☐ BEACH / BAR		
☑ TABLELAND	☐ SAND DUNE		
☐ ROLL. UPLAND	☐ BLUFF		
☐ CLIFF			

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	—
2	SUB-CANOPY	3	1	RHUTYPH > CORRACE
3	UNDERSTOREY	4-5	4	grasses > DIPFULL
4	GRD. LAYER	6-7	4	grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	☑ N	<10	☑ N	10 – 24	☑ N	25 – 50	☑ N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	☑ YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Meadow Marsh CODE: MAM

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
—							
SHRUBS:							
RHUTYPH	—	O	R	N			
CORRACE	—	O	R	N			
GROUND:							
grasses	—	N	D	D			
DIPFULL	—	N	O	N			

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑.

Signature: (Project Manager)

ELC Polygon: #8-1 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

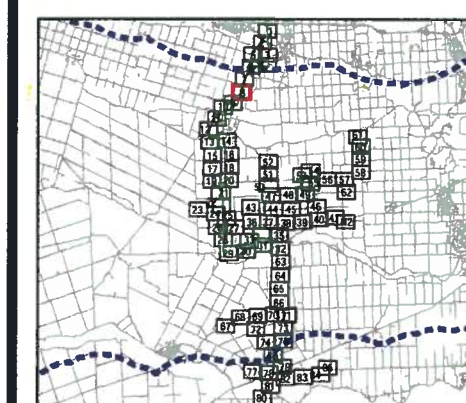
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
  - Standard Turbine (105 dBA)
  - Potential Turbine Locations
- Turbines in Unsigned Lands
  - Standard Turbine (105 dBA)
- 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary



Notes

1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

Stantec

June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
8

Title
Proposed Collector Route
Map 8

V:\01609\Active\160950269\planning\drawing\mxd\20120423_NHA_Fieldmaps\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bcowper

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	25	light	—	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 9-1

START TIME: 16:10

END TIME: 16:20

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☐ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	
2	SUB-CANOPY	3	1	Deciduous shrubs
3	UNDERSTOREY	4-5	4	TYPANGU >> grasses
4	GRD. LAYER	6-7	4	grasses > TYPANGU

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	R	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:		PIONEER		YOUNG	✓	MID-AGE		MATURE		OLD GROWTH

VEGETATION TYPE: Cattail organic shallow marsh CODE: MAS 3-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SALNIGR (nearly dead)	—	R	N	N	N	R	
SHRUBS:							
Deciduous shrubs	—	O	O	N			
GROUND:							
TYPANGU	—	N	D	A			
grasses	—	N	A	D			

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑.

Signature: (Project Manager)

ELC Polygon: #9-1 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

- Square concrete culvert under road.

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	25	light	—	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 9-2

START TIME: 16:20

END TIME: 16:30

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	—
2	SUB-CANOPY	—	—	—
3	UNDERSTOREY	—	—	—
4	GRD. LAYER	6-7	4	grasses > DIPFULL > ASCSYR1

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	✓ PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Cultural Meadow - Dry-Moist Old Field — CODE: CUM1-1

COMPLEX — CODE:

Evidence of Disturbance / Notes:

Horse track (?)

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
—	—						
SHRUBS:							
—	—						
GROUND:							
grasses	—	—	—	D			
DIPFULL	—	—	—	A			
ASCSYR1	—	—	—	A			

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☐

Signature: (Project Manager)

ELC Polygon: # 9-2 **Assessment Type:** ☒-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests:

Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	25	light	—	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 9-3

START TIME: 16:30

END TIME: 16:40

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☐ BOTTOMLAND	☐ ALVAR	☑ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	ACESACC
2	SUB-CANOPY	—	—	
3	UNDERSTOREY	—	—	
4	GRD. LAYER	—	—	

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	✓ MATURE	OLD GROWTH

VEGETATION TYPE: Hedgerow – Silver Maple Deciduous Forest CODE: HOD / FOD

COMPLEX CODE:

Evidence of Disturbance / Notes:

Silver maple group.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	DISTANCE FROM RD. ≤5 m	DISTANCE FROM RD. >5 m	COLL.
TREES:							
ACESACC	D	—	—	—			
SHRUBS:							
GROUND:							

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑

Signature: (Project Manager)

ELC Polygon: #9-3 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	25	light	—	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 9-4

START TIME: 4:40

END TIME: 4:45

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☐ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	—
2	SUB-CANOPY	3	3	CRATCOCC > CORRACE
3	UNDERSTOREY	4-5	4	CALCANA >> DIPFULL > SOLCANA
4	GRD. LAYER	6-7	4	grasses > SOLCANA > DIPFULL

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	☑ YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Gray Dogwood Cultural Thicket? CODE: CUT 1-4 ?

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SHRUBS:							
CRATCOCC	—	O	O	N			
CORRACE	—	O	O	N			
GROUND:							
CALCANA	—	N	D	O		N/O	
DIPFULL	—	N	A	O		↓	
SOLCANA	—	N	A	A		↓	
grasses	—	N	O	D		↓	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☐.

Signature: (Project Manager)

ELC Polygon: #9-4 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. Poly 9; Poly 9-5

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	25	light	—	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 9-5

START TIME: 4:45

END TIME: 4:50

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☒ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	DEAD TREE
2	SUB-CANOPY	3	3	RHUTYPH >>>>
3	UNDERSTOREY	4-5	3	DIPFULL >>
4	GRD. LAYER	6-7	4	grasses >> SOLCANA > DIPFULL

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R <10	R 10 – 24	N 25 – 50	N >50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	✓ YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Sumac Cultural Thicket — CODE: CUT 1-1

COMPLEX — CODE:

Evidence of Disturbance / Notes:

* Cultural / historical significance
- tower structure

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
DEAD TREE	R	–	–	–			
SHRUBS:							
RHUTYPH	N	D	N	N			
GROUND:							
grasses	N	N	N	D			
DIPFULL	N	N	D	O			
SOLCANA	N	N	N	A			

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐

Signature: (Project Manager)

ELC Polygon: # 9-5 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. Poly 9; Poly 9-6

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC ELC

Date: 26 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	25	light	—	—	—

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 9-6

START TIME: 16:50

END TIME: 17:00

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☒ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☒ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	3	FAGGRAN > SALIX sp.
2	SUB-CANOPY	3	3	SALIX sp. > FAGGRAN > CORRACE
3	UNDERSTOREY	4-5	4	GRASS sp. > DIPFULL
4	GRD. LAYER	6-7	4	GRASS sp. >> DIPFULL

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R <10	N 10 – 24	N 25 – 50	N >50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Fresh-Moist Deciduous Forest Hedgerow CODE: HOD/FOD (7?)

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
FAGGRAN	A	A	N	N	N	A	
SALIX sp.	O	A	N	N	O	A	
SHRUBS:							
CORRACE	N	O	O	N	N	O	
GROUND:							
GRASS sp.	N	N	O	D	D	D	
DIPFULL	N	N	O	O	O	O	

Signature: _____ (Field Personnel)

Quality Control: This form is complete ☒ & legible ☐.

Signature: _____ (Project Manager)

ELC Polygon: # 9-6 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. Poly 9; Poly 9-7

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 27 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	20	5 kph	part	none	none

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 9-7

START TIME: 8:30

END TIME: 9:00

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☐ BOTTOMLAND	☐ ALVAR	☑ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL, UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	—	—	
2	SUB-CANOPY	3	4	MALCORO >>> MALSYLV
3	UNDERSTOREY	—	—	—
4	GRD. LAYER	6-7	4	grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Apple Deciduous Plantation Hedgerow CODE: HOD/CUP1

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
MALCORO	D	N	N	N	—	D	
MALSYLV	R	N	N	N	—	R	
SHRUBS:							
GROUND:							
grasses	—	—	—	D	D	D	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑.

Signature: (Project Manager)

ELC Polygon: #9-7 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. Poly 9; Poly 9-8

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 27 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	20	light	part	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 9-8

START TIME: 9:00

END TIME: 9:10

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	ACER SACC
2	SUB-CANOPY	—	—	
3	UNDERSTOREY	—	—	
4	GRD. LAYER	7	4	grasses

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Silver Maple Deciduous Plantation Hdgrow — CODE: HDD/CUP1-5

COMPLEX — CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
ACER SACC	D	—	—	—	—	D	
SHRUBS:							
GROUND:							
grasses	—	—	—	D	—	D	

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐

Signature: (Project Manager)

ELC Polygon: #9-8 **Assessment Type:** ☒-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☒-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Coll. Poly 9; Poly 9-9.

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 27 June 2012 Field Personnel: A. Ducharme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	20	light	part	—	—

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 9-9

START TIME: 9:10

END TIME: 9:30

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	1	ACESASA
2	SUB-CANOPY	3	3	CRATCOCC / PRUNVIRG > ACESASA
3	UNDERSTOREY	4-5	4	CORRACE >> TYPANGU > CRATCOCC
4	GRD. LAYER	6-7	2	grasses > TYPANGU > SOLCANA

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	O	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	✓ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Gray Dogwood Cultural Thicket Hedgerow CODE: HDD/CUT1-4?

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
ACESASA	R	R	N	N	R	—	
CRATCOCC	—	A	O	N	A	—	
PRUNVIRG	—	O	N	N	O	—	
FAGGRAN	—	R	R	N	R	—	
JUNVIRG	—	R	N	N	R	—	
SHRUBS:							
CORRACE	—	O	D	N	D	—	SL *
GROUND:							
TYPANGU	—	—	A	A	A	—	
ASCSYRI	—	—	O	R	O	—	
SOLCANA	—	—	O	O	O	—	
GRASS sp.	—	—	O	A	A	—	

Signature: (Field Personnel)

Quality Control: This form is complete ☑ & legible ☑.

Signature: (Project Manager)

ELC Polygon: #9-9 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

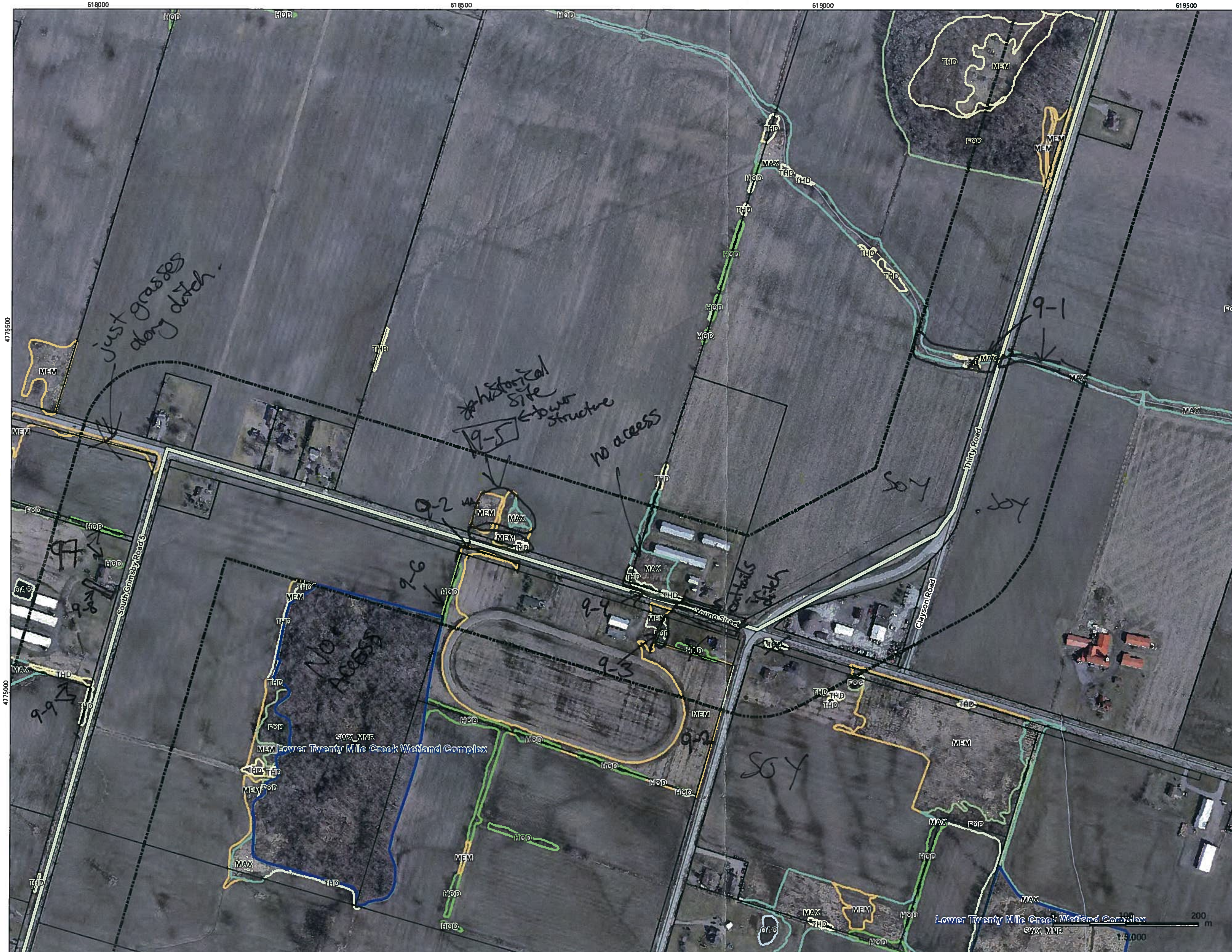
Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer
- Turbines in Signed Lands
  - Standard Turbine (105 dBA)
  - Potential Turbine Locations
- Turbines in Unsigned Lands
  - Standard Turbine (105 dBA)
- 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

Stantec

June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
9

Title
Proposed Collector Route
Map 9

V:\01609\Active\160950269\planning\drawing\mxd\20120423_NHA_Fieldmaps\160950269_Release_17_ELC_Collector_Map_Book_20120613.mxd
Revised: 2012-06-14 By: bcowper

9-AD

Stantec Consulting Ltd.
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Guelph, ON
Canada N1G 4P5
Tel: (519) 836-6050
Fax: (519) 836-2493

Coll. Tile 10; Poly 10-1

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Stantec

Project Number: 160950269 Project Name: NRWC ELC

Date: 27 June 2012 Field Personnel: A. Duchamme

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	20	light	part	—	—

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 10-1

START TIME: 9:30

END TIME: 10:00

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	3	QUEALBA
2	SUB-CANOPY	3	3	QUEALBA > CORRACE
3	UNDERSTOREY	4-5	1	GRASS sp.
4	GRD. LAYER	6-7	4	GRASS sp.

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	R	<10	N	10 – 24	N	25 – 50	N	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	✓ MATURE	OLD GROWTH

VEGETATION TYPE: Dry-Fresh White Oak Deciduous Forest Hedgerow CODE: HOD1

COMPLEX CODE:

Evidence of Disturbance / Notes:

Mature trees ~ 30cm DBH

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	LAYER 2	LAYER 3	LAYER 4	DISTANCE FROM RD. ≤5 m	DISTANCE FROM RD. >5 m	COLL.
TREES:							
QUEALBA	D	D	O	N	—	D	
SHRUBS:							
CORRACE	N	O	O	N	—	O	
GROUND:							
GRASS sp.	—	—	O	D	—	D	

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: #10-1 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

617000 617500 618000 618500

4775500 4775000 4774500

Lower Twenty Mile Creek Wetland Complex
SWX_MNE

Young Street

South Grimsby Road 9

field sheets in file 9

9-1

10-1

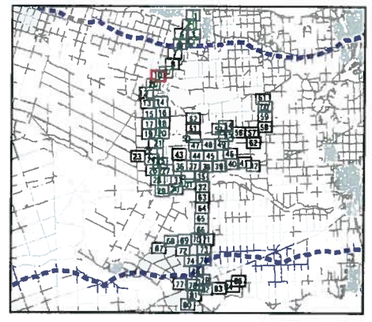
0 100 200 m
1:5,000

Legend

- Proposed T Line Route
- Proposed Collector 120m Buffer

Turbines in Signed Lands
- Standard Turbine (105 dBA)
- Potential Turbine Locations

Turbines in Unsigned Lands
- Standard Turbine (105 dBA)
- 51 m Turbine Setback
- Proposed Collector Cable
- Alternate Collector Cable Route
- Preliminary Study Area
- Signed Property
- Signed Property - Outside Study Area
- Potential Signed Property
- Potential Signed Property - Outside Study Area
- ELC Boundary
- Provincially Significant Wetland
- Other/Locally Significant Wetland
- Property Boundary



Notes

1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2012.

Stantec

June, 2012
160950269

Client/Project
Niagara Region Wind Corporation
Amphibian Field Maps

Figure No.
10

Title
Proposed Collector Route
Map 10

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Revised: 2012-06-14 By: bcowper

V:\01609\Active\160950269\planning\drawing\mxd\20121015_Collector_Tline_Update\160950269_Figure_X_New_Survey_Areas_Mapbook.mxd
Revised: 2012-10-17 By: bcowper

October, 2012
160950269

Legend

- Project Study Area
- Interconnector Study Area
- Signed Property
- Potential Signed Property
- 120m Zone of Investigation
- Additional Survey Area
- ELC Boundary
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Potential Transformer Station Location
- Junction Box
- Preferred Transmission Line Route
- Potential Alternative Transmission Line Routes
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Potential Construction Laydown Area
- Transformer Substation

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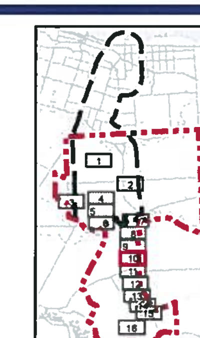
Notes

1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.



Client/Project
Niagara Region Wind Corporation
Natural Heritage Assessment Report

Figure No.
X.10

Title
Potential Additional Survey Areas Figure X.10

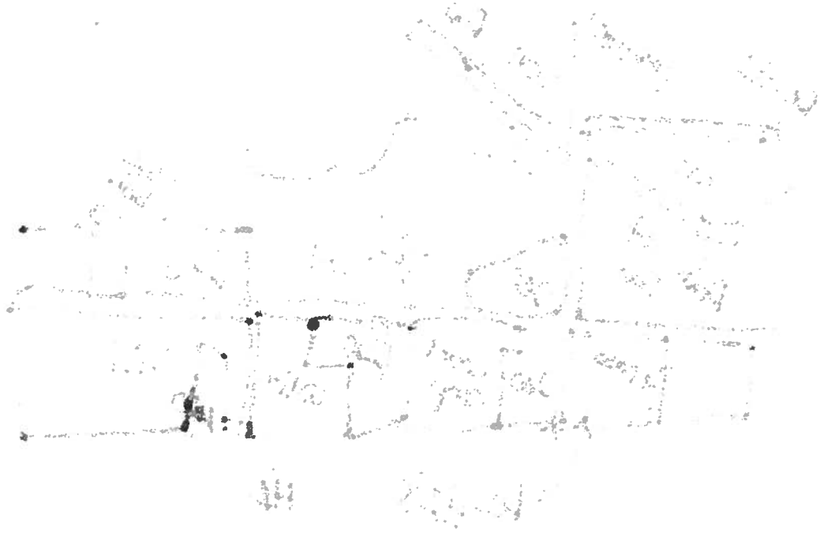


Figure 10
NRWC ELC
October 18, 2012
C. Ross
60950269

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	SITE: NRWC		POLYGON: 11-A
	SURVEYOR(S): C. Ross	DATE: October 18, 2012	UTME:
	START:	END:	UTMZ: UTMN:

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL	☐ ORGANIC	☐ LACUSTRINE	☑ NATURAL	☐ PLANKTON	☐ LAKE
		☐ RIVERINE		☐ SUBMERGED	☐ POND
☐ WETLAND	☑ MINERAL SOIL	☐ BOTTOMLAND	☐ CULTURAL	☐ FLOATING-LVD.	☐ RIVER
		☐ TERRACE		☐ GRAMINOID	☐ STREAM
☐ AQUATIC	☐ PARENT MIN.	☐ VALLEY SLOPE		☐ FORB	☐ MARSH
		☑ TABLELAND		☐ LICHEN	☐ SWAMP
	☐ ACIDIC BEDRK.	☐ ROLL. UPLAND		☐ BRYOPHYTE	☐ FEN
		☐ CLIFF		☑ DECIDUOUS	☐ BOG
	☐ BASIC BEDRK.	☐ TALUS		☐ CONIFEROUS	☐ BARREN
SITE		☐ CREVICE / CAVE	**COVER**	☐ MIXED	☐ MEADOW
☐ OPEN WATER	☐ CARB. BEDRK.	☐ ALVAR	☐ OPEN		☐ PRAIRIE
☐ SHALLOW WATER		☐ ROCKLAND	☐ SHRUB		☐ THICKET
☑ SURFICIAL DEP.		☐ BEACH / BAR	☑ TREED		☐ SAVANNAH
☐ BEDROCK		☐ SAND DUNE			☐ WOODLAND
		☐ BLUFF			☑ FOREST
					☐ PLANTATION

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	Sugar maple > freeman's maple = red maple
2	SUB-CANOPY			
3	UNDERSTOREY	3-4	3	spice bush > blue beech > poisonivy
4	GRD. LAYER	5-7	2	wood nettle > garlic mustard

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60%

STAND COMPOSITION:							BA:
SIZE CLASS ANALYSIS:	O	<10	A	10 – 24	D	25 – 50	R >50
STANDING SNAGS:	R	<10	O	10 – 24	M	25 – 50	V >50
DEADFALL/LOGS:	A	<10	O	10 – 24	O	25 – 50	W >50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT

COMM. AGE:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
				✓	

SOIL ANALYSIS: could not go any deep @ 50cm — Mottles @ 15cm in V.P.

TEXTURE: Sand	DEPTH TO MOTTLES/GLEY	g= 35cm	G= n/a
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITY CLASSIFICATION:

COMMUNITY CLASS:		CODE:
COMMUNITY SERIES:		CODE:
ECOSITE:		CODE:
VEGETATION TYPE: Sugar maple-hardwood deciduous forest		CODE: FOD6-5
☑ INCLUSION	Freeman maple mix swamp	CODE: SWD3
☐ COMPLEX		CODE:

Evidence of Disturbance / Notes:

evidence of past logging (large stumps)
ground layer mostly died back

ELC COMMUNITY DESCRIPTION & CLASSIFICATION	SITE:
	POLYGON:
	DATE:
	SURVEYOR(S):

LAYERS: 1=CANOPY>10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COLL.
greenash	O				
white elm	O				
freemans maple	O				
yellow birch	R				
sugar maple	S-A				
red oak	O				
white oak	R				
white birch	R				
blackcherry	O				
red maple	O				
tartarian honeysuckle			R		
highbush cranberry			R		
Downy arrowwood			R		
Alt-leaved dogwood			R		
wild red raspberry			O		
spicebush			A		
blue beech			O-A		
Poisonivy		O	A		

SPECIES CODE	LAYER 1	2	3	4	COLL.
wood nettle				O	
Fern sp				R-O	
Sensitive fern				R-O	
bane berry				R	
garlic mustard				O	
Sedge sp				R-O	
horsetail sp				R	

Page ___ of ___

Signature: _____ (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: _____ (Project Manager)

Stantec Consulting Ltd.
1 – 70 Southgate Drive
Guelph, ON
Canada N1G 4P5
Tel: (519) 836-6050
Fax: (519) 836-2493

Stantec

Woodland & Wildlife Habitat Assessment Form

Project Number: 60950269 Project Name: NRWC

Date: October 19, 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	13	4	80%	rainwater log survey - HEAVY!	none

ELC Polygon: # LL-A Assessment Type: ☐-Visual; no access / ☑-Walk through feature

Extent of Physical Investigation of Feature: ☑-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☑-N / ☐-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☑-Y* / ☐-N / ☐-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?
622475 4754992	channel	40m	no water (Fall)	35	n/a	yes- logs

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

RCKI

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Guelph ON
Canada N1G 4P5
Tel. (519) 836-6050
Fax: (519) 836-2493

Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 6095069 Project Name: NRNC

Date: October 18, 2012 Field Personnel: C. Payette

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	13	4	80%	n/a	rain

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 11B

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	white spruce > blue spruce = norway spruce
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	3	grass sp

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N <10	R 10 – 24	N 25 – 50	N >50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Spruce cultural plantation CODE: CUP3-12

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
white spruce	A						
blue spruce	A						
norway spruce	A						
SHRUBS:							
GROUND:							
grass sp				A			

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 11B **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

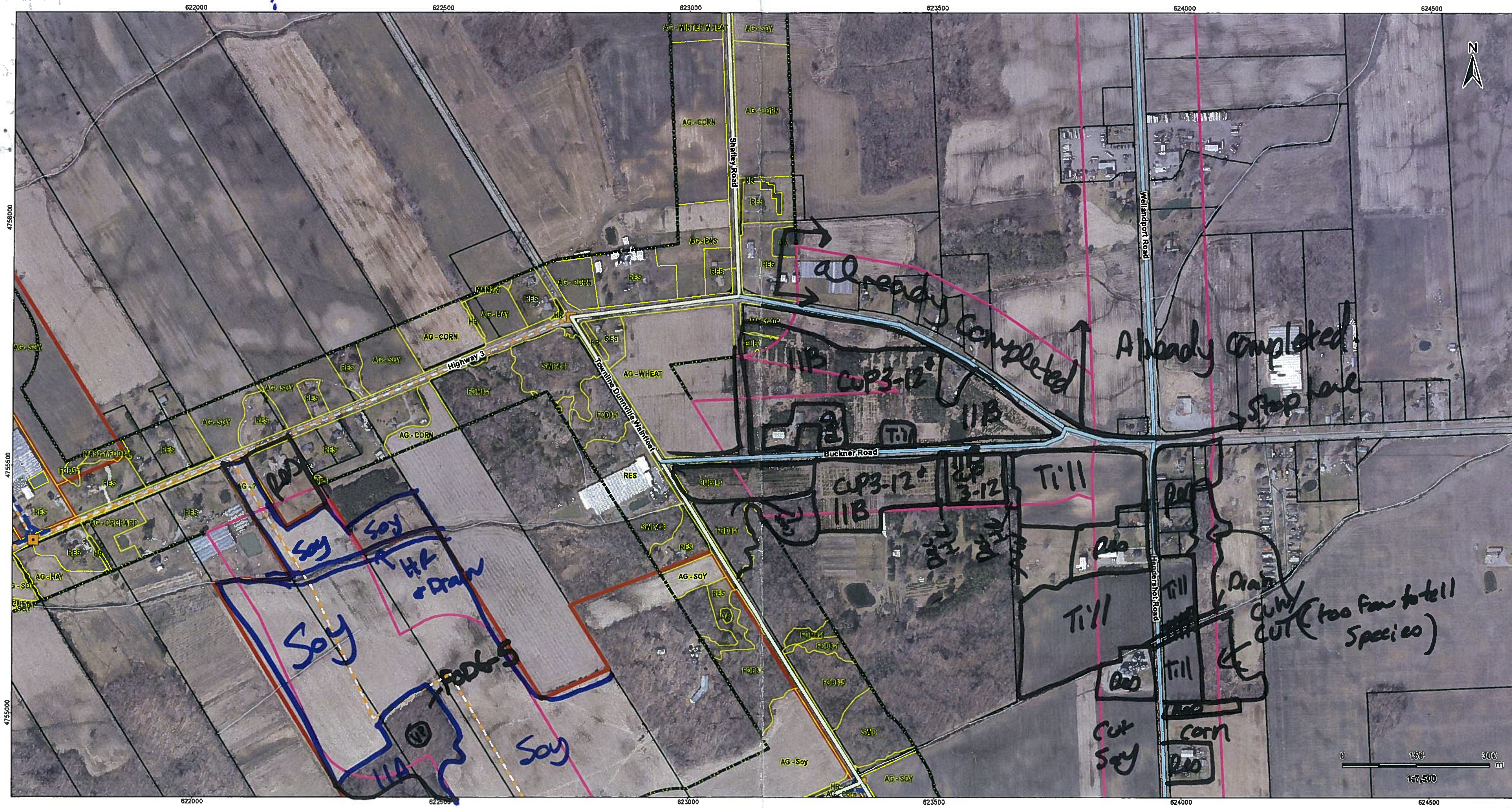
STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



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Revised: 2012-10-17 By: bcowper

October, 2012
160950269

Legend

- Project Study Area
- Interconnector Study Area
- Signed Property
- Potential Signed Property
- 120m Zone of Investigation
- Additional Survey Area
- ELC Boundary
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Potential Transformer Station Location
- Junction Box
- Preferred Transmission Line Route
- Potential Alternative Transmission Line Routes
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Potential Construction Laydown Area
- Transformer Substation

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Notes

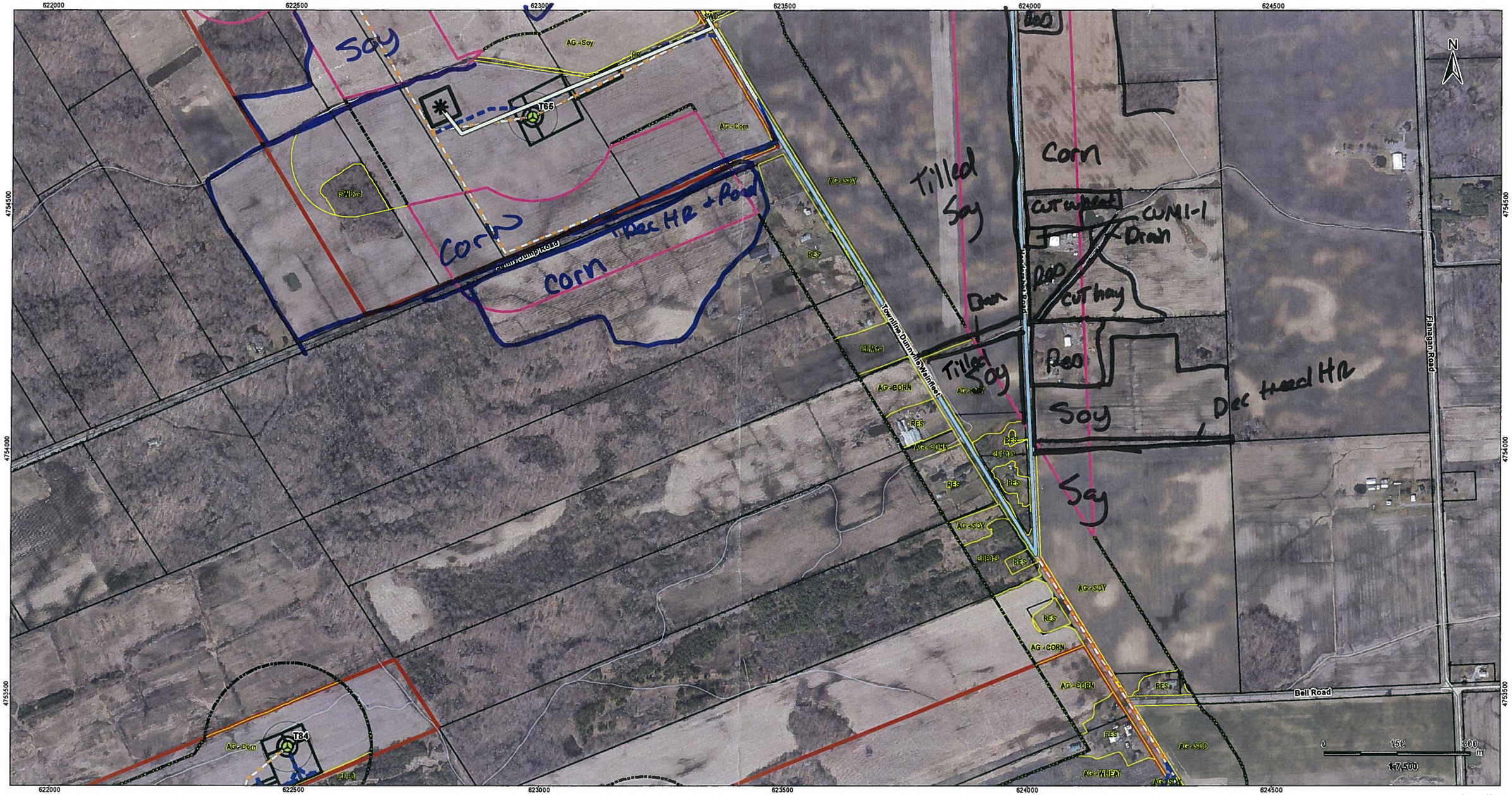
1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.

Client/Project
Niagara Region Wind Corporation
Natural Heritage Assessment Report

Figure No.
X.11

Title
Potential Additional Survey Areas
Figure X.11

Figure 11
NRWC ELC
Oct 18, 2012
C. Ross
6G950269



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Revised: 2012-10-17 By: bcowper

October, 2012
160950269

Stantec

Legend

- Project Study Area
- Interconnector Study Area
- Signed Property
- Potential Signed Property
- 120m Zone of Investigation
- Additional Survey Area
- ELC Boundary
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Potential Transformer Station Location
- Junction Box
- Preferred Transmission Line Route
- Potential Alternative Transmission Line Routes
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Potential Construction Laydown Area
- Transformer Substation

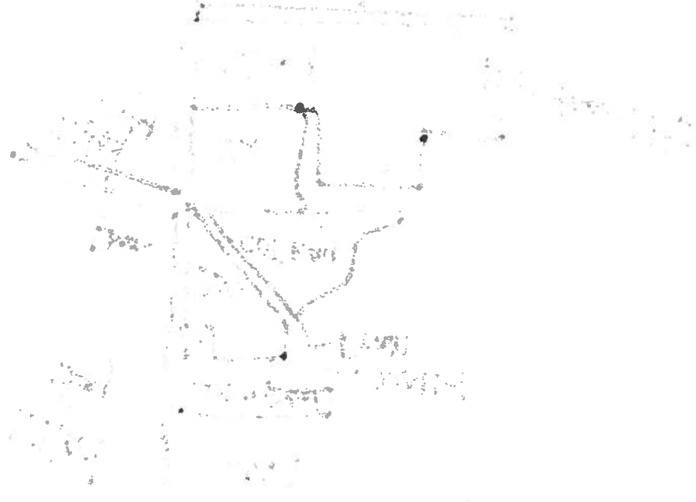
Notes

1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.

Client/Project
Niagara Region Wind Corporation
Natural Heritage Assessment Report

Figure No.
X.12

Title
Potential Additional Survey Areas Figure X.12



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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 60950269 Project Name: NRWC

Date: oct 18 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	15	4	80%	none	none

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 13A

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	3	Freeman maple > Scots pine
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	golden rod sp = Reed canary grass

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 – 24	25 – 50	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Cultural woodland CODE: CUW1

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
Scots pine	C						
Freeman's maple	O-A						
SHRUBS:							
GROUND:							
Reed canary grass				A			
golden rod sp				A			

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 3A **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Fax: (519) 836-2493

Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 60950269 Project Name: NAWC

Date: October 18, 2017 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C)	WIND	CLOUD:	PPT:	PPT (in last 24 hrs)
	15	3-4	80%	None	None

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: BB

START TIME:

END TIME:

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
CANOPY	2	4	Sugar maple > trembling aspen, cottonwood = Freeman's maple
SUB-CANOPY			
UNDERSTOREY	4	2	riverbank grape > Speckled alder
GRD. LAYER	5-7	3	Zig Zag goldenrod

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS: n/o	<10	10 – 24	25 – 50	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	☑ MATURE	OLD GROWTH

VEGETATION TYPE: Sugar maple Deciduous CODE: FOD6

COMPLEX CODE:

Evidence of Disturbance / Notes:

BLJA
RTHA
AMPE

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
Freeman's maple	O						
eastern cottonwood	O						
red maple	R-O						
Sugar maple	D						
white elm	O						
oak sp			R				✓
trembling aspen	R-O						
Pin oak	R						
white oak			R				
SHRUBS:							
riverbank grape			C				
Red osier dogwood			R				
Buckthorn			R				
Speckled alder			R-O				
GROUND:							
Zig Zag goldenrod				C			

nothing else identifiable from road.

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: #13B **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Guelph, ON
Canada N1G 4P5
Tel: (519) 836-6050
Fax: (519) 836-2493

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 60950269 Project Name: NRWC

Date: October 18, 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C)	WIND	CLOUD:	PPT:	PPT (in last 24 hrs).
	15	3-4	90%	None	None

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 13C

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	grass sp > goldenrod sp > N.E Aster.

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 – 24	25 – 50	>50
ABUNDANCE CODES:	N=NONE R=RARE	O=OCCASIONAL	A=ABUNDANT	N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: old field cultural meadow/fallow CODE: CUM1-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

Fallow turning to cultural meadow

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SHRUBS:							
GROUND:							
N.E. aster	A						
goldenrod sp	A						
phil. fleabane	O						
queen anne's lace	O						
mallow	R-O						
mullein	R-O						
common dandelion	R						
grass sp.	A						
clover sp	O						

Signature: Clayton Ross (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: _____ (Project Manager)

ELC Polygon: # 13C **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests:

Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Tel: (519) 836-6050
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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: NRWC

Date: October 18, 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	15	4	90%	none	none

POLYGON DESCRIPTION

ELC – COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 13D

START TIME: 12:05

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☑ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
CANOPY	2-3	4	eastern cottonwood > green ash > crack willow
SUB-CANOPY			
UNDERSTOREY	4	4	gray dogwood > riverbank grape > red-osier dogwood
GRD. LAYER	~~4~~	n/o	

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 – 24	25 – 50	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH
			✓		

VEGETATION TYPE: F-M Poplar deciduous Forest CODE: FOD8-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

BCCH
TUVU
YRWA

very young forest w heavy understory

Crack willow growing in woodlot, quite unusual.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
green ash	O						
eastern cottonwood	A						
Crack willow	R-O						
Basswood			R				
Sugar maple	R						
SHRUBS:							
gray dogwood			A				
riverbank grape			O-A				
red-osier dogwood			O				
elderberry sp.			R-O				
Blue beech			O				
GROUND:							

Signature: Clayton Ross (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: _____ (Project Manager)

ELC Polygon: #130 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 60450269 Project Name: NRWC

Date: October 18, 2012 Field Personnel: C. Paquette

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	15	4	80%	none	none

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 13E

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
CANOPY	2	4	Sugar maple > American beech > Red maple
SUB-CANOPY			
UNDERSTOREY	3-4	3	Spicebush > Riverbank grape > blue beech
GRD. LAYER		—	N/O

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	N/O	<10	10 – 24	25 – 50	>50
ABUNDANCE CODES:		N=NONE	R=RARE	O=OCCASIONAL	A=ABUNDANT	N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE ✓	OLD GROWTH

VEGETATION TYPE: D-F Sugar maple. Beech Dec. Forest Type — CODE: FOD5-2

COMPLEX — CODE:

Evidence of Disturbance / Notes: almost no ground cover or understory in some areas.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
Sugar maple	D						
American beech	A						
Red maple	O-A						
white ash	R-O						
hemlock	O-A						
Basswood	O						
White birch	R-O						
SHRUBS:							
Riverbank grape		C-A					
Spicebush		O-A					
Blue beech			O				
Sweet fern			R-O				
GROUND:							

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: #BE **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

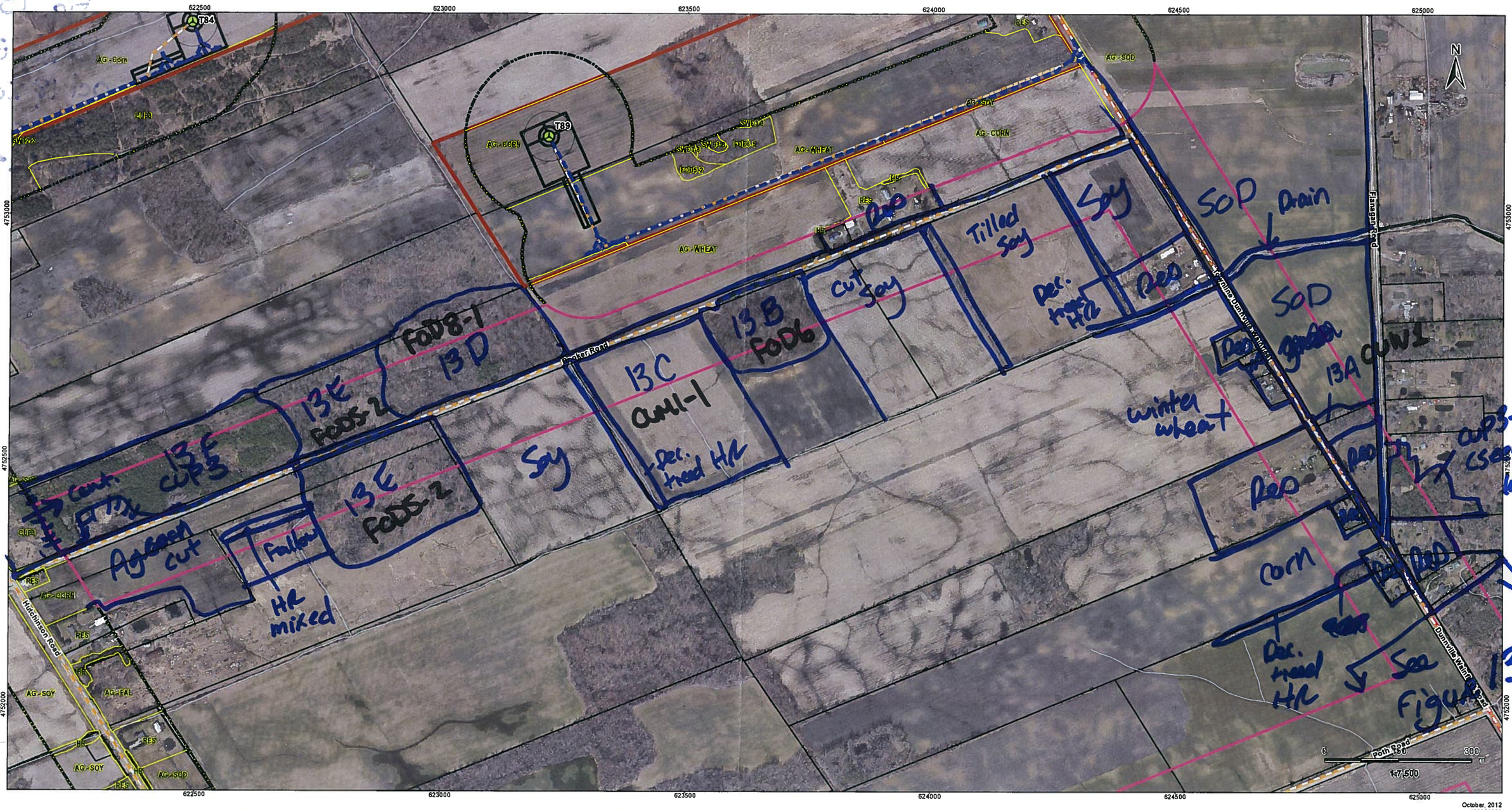
STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



V:\101609\Active\160950269\planning\drawing\mxd\20121015_Collector_Tline_Update\160950269_Figure_X_New_Survey_Areas_Mapbook.mxd
Revised: 2012-10-17 By: bcowpert

October, 2012
160950269

Legend

- Project Study Area
- Interconnector Study Area
- Signed Property
- Potential Signed Property
- 120m Zone of Investigation
- Additional Survey Area
- ELC Boundary
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Potential Transformer Station Location
- Junction Box
- Preferred Transmission Line Route
- Potential Alternative Transmission Line Routes
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Potential Construction Laydown Area
- Transformer Substation

Notes

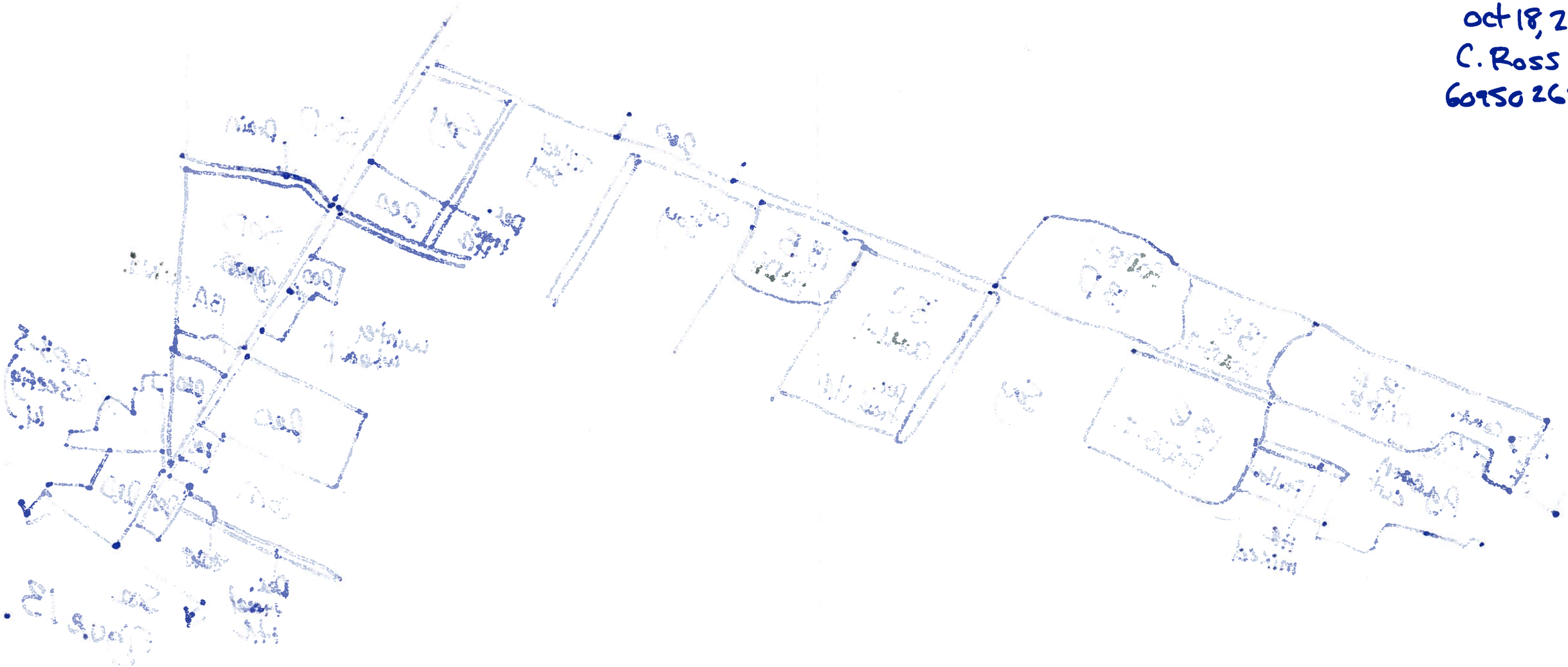
1. Coordinate System: NAD 1983 UTM Zone 17N).
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.

Client/Project
Niagara Region Wind Corporation
Natural Heritage Assessment Report

Figure No.
X.13

Title
Potential Additional Survey Areas Figure X.13

Fig. 13
NRWC ELC
oct 18, 2012
C. Ross
60950269



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Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 60950269 Project Name: NRWC

Date: oct 18, 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	15	3-4	60%	have	have

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 14A

START TIME: 10:45

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2-3	2	eastern cottonwood >> Freeman maple
2	SUB-CANOPY			
3	UNDERSTOREY	4	3	staghorn sumac > eastern cottonwood > trembling aspen
4	GRD. LAYER	5-7	4	Canada goldenrod > goldenrod sp. > Reed canary grass

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 – 24	25 – 50	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: cultural woodland CODE: CUM1-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
eastern cottonwood	O						
white ash			A-O				
trembling aspen			O				
Freeman's maple	R						
SHRUBS:							
red-osier dogwood			R				
riverbank grape			R				
staghorn sumac			O				
GROUND:							
Canada goldenrod	A-D						
Reed canary grass	O						
N.E. aster sp.	R-O						
Bull thistle	O						
goldenrod sp.	A						

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 14A **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 609560269 Project Name: Niagara RNC

Date: October 15, 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C):	WIND	CLOUD:	PPT:	PPT (in last 24 hrs):
	15	3-4	60%	none	none

POLYGON DESCRIPTION

ELC COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 14-B

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
CANOPY	3	4	white pine >> white ash
SUB-CANOPY			
UNDERSTOREY			
GRD. LAYER			

T CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

VR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 – 24	25 – 50	>50
BUNDANCE CODES:	N=NONE R=RARE	O=OCCASIONAL	A=ABUNDANT	N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	☑ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: white pine plantation CODE: CUP3-2

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
white pine	D						
white ash	R						
SHRUBS:							
GROUND:							

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 14B **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; EY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 60950269 Project Name: NRWC

Date: oct 18, 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	15	3-4	75%	none	none

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 14C

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☐ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☑ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	4	eastern cottonwood = greenash
2	SUB-CANOPY			n/o
3	UNDERSTOREY			n/o
4	GRD. LAYER			n/o

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 – 24	25 – 50	>50
ABUNDANCE CODES:	N=NONE	R=RARE	O=OCCASIONAL	A=ABUNDANT	N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Deciduous Forest CODE: FOD

COMPLEX CODE:

Evidence of Disturbance / Notes:

very difficult to see due to patches of CUP throughout Roadside edge of woodlot. Cannot determine abundance or Dominance.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
eastern cottonwood	O						
greenash	O						
SHRUBS:							
GROUND:							

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 14C **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; EY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 60950269 Project Name: NRWC

Date: October 18, 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	15	4	75%	haze	none

POLYGON DESCRIPTION

ELC – COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 14-D

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☑ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
CANOPY	2	1	eastern cottonwood
SUB-CANOPY			
UNDERSTOREY	3/4	2	eastern cottonwood > willow sp. > R.-d. osier.
GRD. LAYER			Reed canary grass = Canada goldenrod

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 – 24	25 – 50	>50
ABUNDANCE CODES:	N=NONE R=RARE	O=OCCASIONAL	A=ABUNDANT	N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: old field cultural meadow / Reed canary meadowmarsh CODE: CUM1-1 / MAM2-2

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
trembling aspen			R				
eastern cottonwood	R-O		O				
SHRUBS:							
Red-osier dogwood			R				
willow sp.			R-O				
GROUND:							
Reed canary grass				A			
goldenrod sp.				A			
Canada goldenrod				A			
N.E. aster				O			
common milkweed				R-O			
B.F. trefoil				O			
queen anne's lace							
Cattail							

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 140 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features: Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]
Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features: Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests: Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

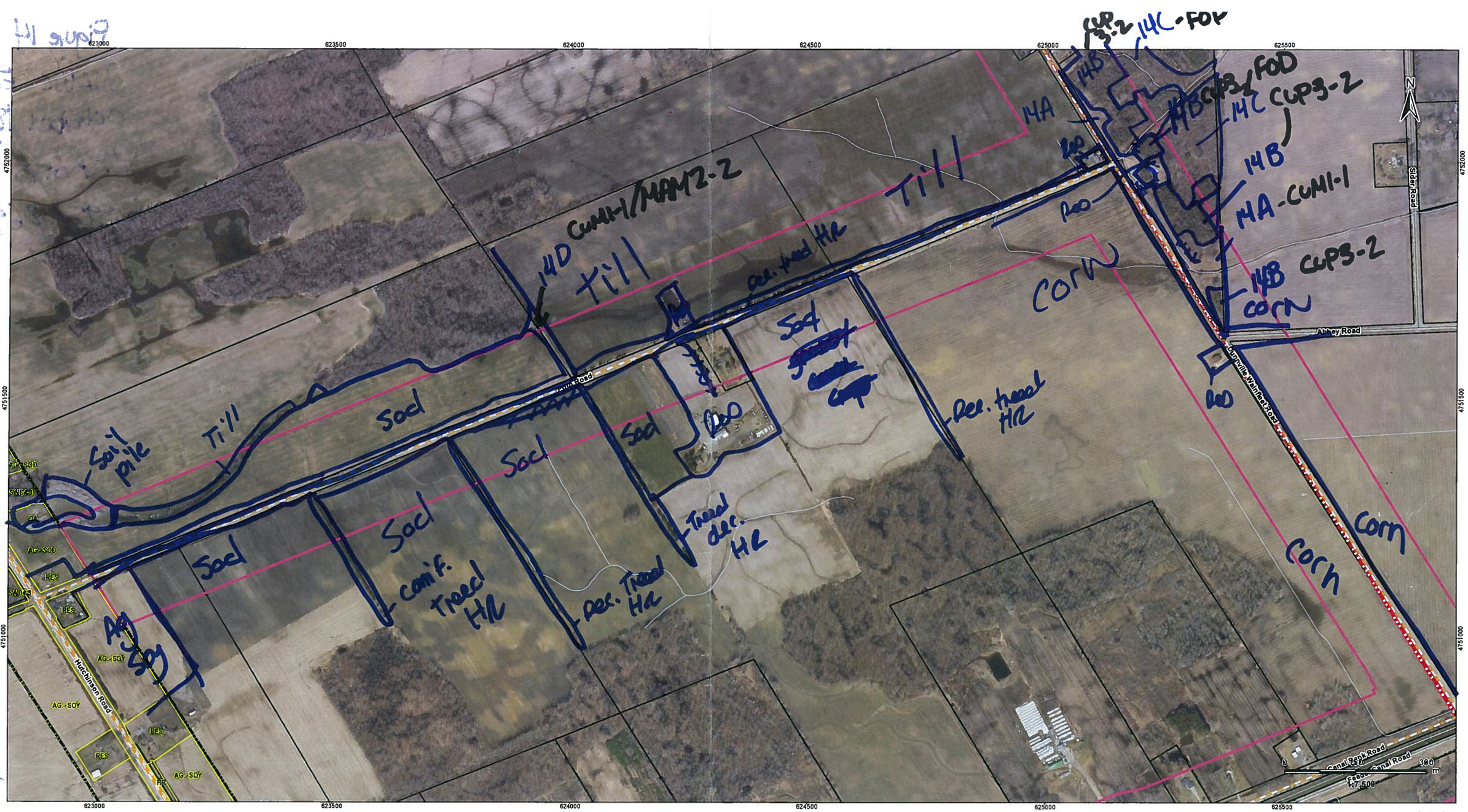
STICK NEST(S) IDENTIFIED					
UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools: Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization



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Revised: 2012-10-17 By: bcowper

October, 2012
160950269

Legend

- Project Study Area
- Interconnector Study Area
- Signed Property
- Potential Signed Property
- 120m Zone of Investigation
- Additional Survey Area
- ELC Boundary
- Proposed Turbine Location
- Turbine Blade Length
- Tap-in Location
- Potential Transformer Station Location
- Junction Box
- Preferred Transmission Line Route
- Potential Alternative Transmission Line Routes
- Temporary Laydown Area
- Collector Lines – Underground or Overhead
- Fibre Optic Line
- Potential Access Road
- Potential Construction Laydown Area
- Transformer Substation

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N.
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
3. Orthoimagery source: First Base Solutions, Date Spring 2010.

Client/Project
Niagara Region Wind Corporation
Natural Heritage Assessment Report

Figure No.
X.14

Title
Potential Additional Survey Areas Figure X.14

Figure 14
NRWC ELC
October 18, 2012
C. Ross
6095026g

Stantec Consulting Ltd.
1 – 70 Southgate Drive
Guelph, ON
Canada N1G 4P5
Tel: (519) 836-6050
Fax: (519) 836-2493

Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 160950269 Project Name: Niagara region wind

Date: october 18, 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	15	3-4	10%	none	none

ELC – COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 15-A

START TIME: 10:00

END TIME:

POLYGON DESCRIPTION

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☑ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	
☑ BOTTOMLAND	☐ ALVAR	☐ CULTURAL
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☐ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	3	4	Sugar maple
2	SUB-CANOPY			n/o
3	UNDERSTOREY			n/o
4	GRD. LAYER			n/o

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS: n/o	<10	10 – 24	25 – 50	>50

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT N/O=Not observed

STAND MATURITY:	PIONEER	YOUNG	☑ MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: Sugar maple deciduous Forest CODE: FOD6

COMPLEX CODE:

Evidence of Disturbance / Notes:

Leaf-off, species difficult to determine from roadside.

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
Sugar maple	D						
eastern cottonwood	O						
SHRUBS:							
GROUND:							

Signature: Cynthia Ross (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 5A **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED			
UTM	**Feature Description**	**Photo No.**	**Spp. Observed Using Feature**

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

POTENTIAL BAT ROOSTING FEATURE(S) IDENTIFIED							
UTM	**Tree ID**	**Tree Spp.**	**DBH**	**Photo No.**	**Decay Class (1-5)**	**No. of Cavities**	**Height and Type of Cavities**

Stick Nests:

Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED					
UTM	**Tree ID**	**Tree Spp.**	**Nest Size**	**Photo No.**	**Spp. Observed Using Feature**

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED						
UTM	**Feature No. & Type**	**Feature Size** (Diameter)	**Water Depth**	**Photo No.**	**Sub/Emergent Veg. Spp. Present?**	**Shrubs/ Logs at Edge Present?**

SPECIES & HABITAT OBSERVATIONS (list species and type of observation & indicate on map)

CA=carcass; DP=distinctive parts; FE=feeding evidence; FY=eggs/nest; HO=house/den; OB=observed; SC=scat; SI=other sign; TK=track; VO=vocalization

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Fax: (519) 836-2493

Stantec

Roadside ELC, Woodland & Wildlife Habitat Assessment Form

Project Number: 60950269 Project Name: NRWC

Date: October 18, 2012 Field Personnel: C. Ross

Weather Conditions:	TEMP (°C):	WIND:	CLOUD:	PPT:	PPT (in last 24 hrs):
	15	3-4	15%	none	none

POLYGON DESCRIPTION

ELC — COMMUNITY DESCRIPTION & CLASSIFICATION

POLYGON: 15B

START TIME:

END TIME:

TOPOGRAPHIC FEATURE		HISTORY
☐ LACUSTRINE	☐ TALUS	☐ NATURAL
☐ RIVERINE	☐ CREVICE / CAVE	☑ CULTURAL
☐ BOTTOMLAND	☐ ALVAR	
☐ TERRACE	☐ ROCKLAND	
☐ VALLEY SLOPE	☐ BEACH / BAR	
☑ TABLELAND	☐ SAND DUNE	
☐ ROLL. UPLAND	☐ BLUFF	
☐ CLIFF		

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (>>MUCH GREATER THAN; >GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY			
2	SUB-CANOPY			
3	UNDERSTOREY			
4	GRD. LAYER	5-7	4	goldenrod >> ragweed > queen anne's lace

HT CODES: 1=>25m 2=10<HT≤25m 3=2<HT≤10m 4=1<HT≤2m 5=0.5<HT≤1m 6=0.2<HT≤0.5m 7=HT<0.2m

CVR CODES: 0=NONE 1=0%<CVR≤10% 2=10<CVR≤25% 3=25<CVR≤60% 4=CVR>60% N/O=not observed

STANDING SNAGS:	<10	10 – 24	25 – 50	>50
ABUNDANCE CODES:	N=NONE	R=RARE	O=OCCASIONAL	A=ABUNDANT	N/O=Not observed

STAND MATURITY:	PIONEER	☑ YOUNG	MID-AGE	MATURE	OLD GROWTH

VEGETATION TYPE: cultural meadow CODE: CUM1-1

COMPLEX CODE:

Evidence of Disturbance / Notes:

LAYERS: 1=CANOPY >10m 2=SUB-CANOPY 3=UNDERSTOREY 4=GROUND (GRD.) LAYER

ABUNDANCE CODES: N=NONE R=RARE O=OCCASIONAL A=ABUNDANT D=DOMINANT N/O=Not observed

SPECIES CODE	LAYER 1	2	3	4	DISTANCE FROM RD. ≤5 m	>5 m	COLL.
TREES:							
SHRUBS:							
GROUND:							
goldenrod				D			
ragweed				O			
curly-leaf dock				O			
queen anne's lace				O			
soy				R			

Signature: (Field Personnel)

Quality Control: This form is complete ☐ & legible ☐.

Signature: (Project Manager)

ELC Polygon: # 158 **Assessment Type:** ☑-Visual; no access / ☐-Walk through feature

Extent of Physical Investigation of Feature: ☐-Entire / ☐-Partial, walk through polygon *(indicate on map)*

Reptile / Bat Hibernacula Features:

Contains potential reptile hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. features that would provide a route underground, including buried concrete or rock (e.g. foundations, bridge abutments or culverts with cracks/entry points, exposed rock crevices or inactive animal burrows)]

Contains potential bat hibernacula features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. karst topography, abandoned mines or caves]

POTENTIAL HIBERNACULA FEATURE(S) IDENTIFIED

UTM	Feature Description	Photo No.	Spp. Observed Using Feature

Bat Roosting Features:

Contains potential bat roosting features?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*
[i.e. tall trees with open surroundings, DBH >25cm, side-facing cavities ~10m high in tree]

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UTM	Tree ID	Tree Spp.	DBH	Photo No.	Decay Class (1-5)	No. of Cavities	Height and Type of Cavities

Stick Nests:

Contains large stick nests?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

STICK NEST(S) IDENTIFIED

UTM	Tree ID	Tree Spp.	Nest Size	Photo No.	Spp. Observed Using Feature

Seeps/Springs/Vernal Pools:

Contains seeps/springs/vernal pools?
☐-Y* / ☐-N / ☑-Unknown, no access *(*if yes, describe in table below)*

SEEP / SPRING / VERNAL POOL FEATURE(S) IDENTIFIED

UTM	Feature No. & Type	Feature Size (Diameter)	Water Depth	Photo No.	Sub/Emergent Veg. Spp. Present?	Shrubs/ Logs at Edge Present?

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