

Meeting Agenda:

**Community Liaison Committee (CLC)
for the South Canoe Wind Farm
Development**

New Ross Family Resource Centre
Monday, March 26, 2012
6pm – 8pm

Chair: Melissa Haley **Minutes Recorder:** Mary-Frances Lynch

Please read: Final draft of our Guidelines for the Formation of a Community Liaison Committee and previous meeting's draft minutes

Please bring: Your enthusiasm and ideas.

Agenda Items

Topic	Presenter	Time
Meeting starts at 6pm		
Review and accept of Guidelines and Minutes	CLC	6:00 – 6:15
Wind Farm Construction Process	Sean Brennan (NSPI)	6:15 – 7:00
The Environmental Assessment Process	Strum Environmental	7:00 – 7:45
Round Table and Meeting Close Out	Melissa Haley	7:45 – 8:00

Drive home safely!

Misc. Information

Outside Presenters: Sean Brennan; Project Manager from NSPI
Strum Environmental

Resources: None at this time

Notes: Light refreshments to be provided.



Meeting Minutes:

**Community Liaison Committee (CLC)
South Canoe Wind Farm**

New Ross Family Resource Centre
Monday, March 26, 2012
6 - 8pm

Chair: Melissa Haley

Secretary: Mary-Frances Lynch

In attendance: Melissa Haley (NSPI), Scott Lafleur (NSPI), Mary-Frances Lynch (MBPP), Chris Peters (MBPP), Rick Cecchetto (Oxford), Ray Cambria (Community), Ryan Cameron (Community), Kerry Keddy (Community), Judith O’Leary (Community), Buzz Smith (Community), Ben Wiper (Community), Janis Kinnie (Community), Bruce Strum (Strum Environmental), Melanie Smith (Strum Environmental), Sean Brennan (NSPI)

Regrets: Stephen Zheng (Community), Debbie Innes (Community), Megan Davies (Community)

Minutes:

1) Revision and approval of CLC Guidelines and February 27, 2012 Meeting Minutes

- February 27, 2012 Meeting Minutes revision:
 - No revisions
 - Meeting Minutes approved
- CLC Guidelines revisions:
 - Ray Cambria, not associated with Friends of Nature, simply Card Lake Conservation Society
 - Appendix A addition accepted
 - P.2 typo for email address “info” not “infor”
 - Add in “2-5 minutes” speaking time
 - P.3 put numbers in brackets
 - Missing “qs” throughout doc – formatting issue
 - CLC Guidelines approved , with noted corrections

2) Wind Farm Construction Process presentation – Sean Brennan (NSPI)

Overview of Digby windfarm:

- Air photo and map of Digby site
- Construction process in Digby - May to December
- Overview of major contracts
- Road construction
- Geotechnical work

- Foundation construction
- Turbine equipment transportation and road upgrades in collaboration with Transportation Infrastructure & Renewal
- Turbine equipment specifics at Digby – blades (37.5m), steel towers (80m), GE 1.5 turbines
- Overview of erection process (e.g. use of cranes)
- Overview of Digby collector system

Questions and Comments for Sean Brennan:

Are roads publicly available at Digby?

No, but ATV trails still exist and now have cautionary signage.

Can the Digby windfarm be expanded?

Unlikely, expansion would necessitate a transmission upgrade. Expansion depends on business case.

Do you need development permits (e.g. EA) if you want to expand?

Yes, you would start from square one.

Were there complaints about the Digby project?

There were several questions from the public; however, more uncertainty existed in the beginning because of the level of general knowledge regarding turbine technology and wind energy that now we have the answers to. In Digby, there were questions and concerns initially but as time went on, they dissipated.

Are there videos or tours that can be viewed/done so we can educate others and ourselves on what a wind farm looks and feels like?

Yes, the project team will arrange a tour of a windfarm.

How deep are the foundations at Digby?

The Digby foundations do not use a pile, instead concrete was poured right onto the rockbed which was an advantage for this site.

How many foundation pours are done at once?

Foundations were poured one at a time at Digby.

Has scoping been done on road work for the South Canoe project site?

Preliminary studies have been done - Hwy 14 may need to be upgraded.

Where were turbine manufactured for the Digby windfarm?

Towers and blades were trucked in from Quebec. It is a very long process to order turbine equipment. For the South Canoe project, towers may come from Trenton and blades shipped into the Halifax shipyard.

Are turbine towers definitely coming from Trenton for the South Canoe project?

Not a definite, will need to cost it out.

Is it easy to source iron workers for a wind project?

Will likely be able to source iron workers from Nova Scotia but have not done a contractual scoping yet for the South Canoe project.

Were there winded-out days on the Digby site, as it is a very windy location?

Yes, had to pick lower wind periods for construction.

How much does a nacelle weigh?

142,000 pounds, equal to 32 trucks.

Are blades made of carbon fiber?

Blade technology is changing, but blades at Digby were made of fiber glass; however, carbon fiber is being used more and more.

What has been the wear and tear on the Digby site to date?

At Digby there has been more wind than anticipated and there has been an issue with one gearbox (1 of 20) which has had to be replaced, otherwise, people are happy.

Does the nacelle rotate?

Yes, each turbine is equipped with a yaw drive to allow the nacelle to rotate and find the best wind. A SCADA (Supervisory Control and Data Acquisition) system captures wind data and direction of turbine. Blades can pitch as well.

What is the lifecycle of a turbine?

Approximately 20 years, but we don't know exactly and are anticipating longer than 20 years.

Are there internal systems in the towers to track damage/wear down?

There are usually vibrations in blades if something is wrong and as a result, the turbine will shut down. Visual inspections are also conducted and some wind projects have turbines equipped with cameras on the blades to easily determine issues.

Have there been any catastrophic failures?

Not with the 1.5 GE turbines used at the Digby windfarm. For the South Canoe project, only Tier 1 turbine suppliers (highest performance) are being considered.

What about injuries to birds at the Digby site?

There is a two-year bird and bat monitoring program at Digby and no curtailments have occurred due to bird and/or bat events so far.

How many turbines are lit at Digby and how was this determined?

Not all turbines are equipped with lighting. Transport Canada studies land and aviation needs to determine how many turbines are lit. At Digby, six (6) of the twenty (20) turbines are lit.

3) Environmental Assessment Process presentation – Strum Environmental

Overview of EA process:

- Overview of proponent, project size, project site

- Overview of EA process components - baseline biophysical studies, analysis, public consultation, EA document preparation, EA registration, EA revision, public commenting, Ministerial decision within 50 days of EA registration
- Overview of particular EA components
 - Geology/hydrogeology studies – groundwater infiltration
 - Flora surveys – lichen surveys, botanical surveys, species-at-risk
 - Mitigation - development of Environmental Protection Plan
 - Wetland surveys – mapping existing wetlands and potential wetland formation sites
 - Mitigation - buffers around wetlands, development of Environmental Protection Plan
 - Fauna surveys – large mammal surveys
 - Bird surveys – fall migration surveys, reference site surveys, baseline surveys, waterfowl surveys, breeding bird surveys
 - Mitigation - implementation of post-construction monitoring, sensitive habitat avoidance
 - Sound studies – study showing dBA levels for turbines at particular distances
 - Mitigation – 1.2km setback from residences
 - Visual Assessment - photomontage showing turbine views created for particular locations
 - Mitigation - 1.2km setback from residences
- Next Steps:
 - Finalize EA studies and document
 - Register EA
 - RFP submission in May (subject to change)
 - RFP decision in July (subject to change)
 - Wind project operational by January 1, 2015

Questions and Comments for Melanie Smith:

Is there a publicly available map of South Canoe project roads?

Existing roads are shown on map, but layout has not been finalized nor has scoping for new road construction.

Do turbine sound levels reduce past 40dBA the further you go from turbine?

Yes.

What about the cumulative effects of sound for a farm (ie. 50 turbines)?

The sound model takes the whole farm into account, as well as things like topography, layout, and turbine model.

Is there always bird monitoring going on?

There will be a two-year post-construction bird monitoring program developed for the South Canoe project. Depending on the results, the program may be extended.

4) Round Table & Meeting Close Out

Final Questions and Comments:

- *How many other proponents are participating in the RFP?*
 - Not known for certain, likely around ten (10) proponents who are proposing projects of varying sizes.

- *What is the buffer distance around Card Lake and other parks/recreational areas?*
 - Project Team to report back.

- *Could South Canoe project size (MW) be scaled down?*
 - Unlikely, it makes the most economic sense to have 100 MW project at this location.

- The Project Team proposes a windfarm site visit for the April CLC meeting.
 - Weekends work best for all. Email to follow with site visit location and suitable dates/times.

Meeting start: 6:05pm

Meeting end: 8:08pm

Meeting Agenda:

**Community Liaison Committee (CLC)
for the South Canoe Wind Farm
Development**

151 King St. (use back entrance)
Chester Municipal Office
Monday, May 28, 2012
6pm – 8pm

Chair: Melissa Haley **Minutes Recorder:** Mary-Frances Lynch
Please read: EA registration document
Please bring: Your questions.

Agenda Items

Topic	Presenter	Time
Meeting starts at 6pm		
Review and acceptance of previous minutes	CLC	6:00 – 6:15
Overview of EA Document	Melissa Haley / Melanie Smith	6:15 – 6:45
Questions and Answers regarding the content of the EA Document	CLC	6:45 – 7:45
<ul style="list-style-type: none">• New Members• Quorum number requirements• Next meeting date (do we want to meet over the summer?)	Melissa Haley	7:45 – 8:00

Drive home safely!

Misc. Information

Outside Presenters: Strum Environmental

Resources: EA Document, found electronically at: <http://www.gov.ns.ca/nse/ea/south-canoe-wind-power-project.asp> OR hardcopies at Lakeside Variety (1808 Route 14, Upper Vaughan) or Municipality of the District of Chester (151 King Street)

Notes: Light refreshments to be provided.



Meeting Minutes:

**Community Liaison Committee (CLC)
South Canoe Wind Farm**

151 King St., Chester
Chester Municipal Office
Monday, May 28, 2012
6 - 8pm

Chair: Melissa Haley

Secretary: Mary-Frances Lynch

In attendance: Melissa Haley (NSPI), Scott Lafleur (NSPI), Mary-Frances Lynch (MBPP), Chris Peters (MBPP), Ray Cambria (Community), Ryan Cameron (Community), Judith O'Leary (Community), Buzz Smith (Community), Ben Wiper (Community), Megan Davies (Community), Kerry Keddy (Community), Janis Kinnie (Community), Debbie Innes (Community)

Guests: Eric Christianson (Community), Dave McCall (Community), Melanie Smith (Strum Environmental)

Regrets: Rick Cecchetto (Oxford), Syd Dumaresq (Community)

Minutes:

1) Revision of CLC Guidelines (quorum number) and approval of Meeting Minutes

- Quorum number changed to six (6) community members (originally seven (7)), CLC Guidelines will be changed accordingly.
- March 26, 2012 Meeting Minutes revision:
 - Please number the pages
 - Meeting Minutes approved
- May 5, 2012 Fieldtrip Meeting Minutes revision:
 - No revisions
 - Meeting Minutes approved

2) Overview of registered Environmental Assessment (EA)

- EA has been registered and can be found online (NSE EA website) and at Lakeside Variety in Vaughan and Chester Municipal Office
 - Suggestion from Megan Davies to put a copy at the New Ross Family Resource Centre
- Overview of project site optimization
 - Constraints/Considerations included in optimization:
 - Hydrology – wetlands, buffers around watercourses

- Public interest constraints – dwellings, roads
- Wind atlas data
- Existing clear cut areas were used as much as possible
- Bird data, flight paths
- Site optimization process:
 - Included three iterations of optimization
 - Final layout exemplifies a 75% reduction from the original project site size
 - Final project footprint is approximately 1300 ha
 - All turbines moved from eastern portion of the property, removed from around Card Lake area
 - Engaged closely with the Department of Natural Resources throughout the optimization process
 - All Valued Ecosystem Components were included in site optimization, sound, rare species, etc.

Questions and Comments

Are you putting more turbines in smaller area?

We are still looking at 33-50 turbines, within the smaller area.

What turbines will you eliminate if you choose the 33 turbine layout over the 50 turbine layout? Will they be eliminated in any particular order?

No, they will not be eliminated in any particular order.

Does the final site map show appropriate setbacks between turbines to account for wake losses?

Yes, wake losses are taken into account on the final site map. A 300m separation distance is included between turbines to account for wake losses (energy lost due to wind being stolen from neighbouring turbines).

How far is the closest turbine to a resident?

1.2km from the closest resident.

Picture taken from New Ross Rd. (Fig 6.2 in EA) should have been taken from back field on the Deal-Porter property to account for higher elevation and potential view of wind farm instead of from down below on the road (Megan Davies).

Difficult to see turbines in pictures in the EA.

Could a visit of the site be coordinated?

Yes.

Seasonal residents don't know about the project yet. They would likely be interested in knowing what the view will look like from the water during the summer.

How many turbines will be used for the project?

33 – 50 depending on the turbine technology that is chosen.

How much power will the project provide and to how many people?

The project will produce enough power for 28,000 homes.

How many people live in the area surrounding the project site?

Only a few hundred within 3km.

What is the timeline for the EA process?

Once registered, the Minister has 50 days to approve/set terms and conditions on the project. The Minister has until July 13 to make a decision on the South Canoe project.

When is RFP deadline?

Currently the deadline is set for no sooner than June 26. Thereafter, the Renewable Electricity Administrator has 30 days to make a decision and announce the winner of the RFP.

How many projects are competing in RFP?

At least 10.

How many projects will win the RFP?

That will depend on the project size - could be one big project or a combination of smaller ones. If the South Canoe project were to win, it would likely be one of the only projects chosen due to its large size.

What is pushing back the date for the RFP submission?

The development of the Power Purchase Agreement (PPA) and approval of that document has been an on-going process that has delayed the RFP deadline. The PPA has now been approved and the RFP deadline will not likely be pushed back much further.

Who is evaluating the RFP submissions?

The Renewable Electricity Administrator - the REA has offices in Toronto but is based out of Massachusetts. It is at arm's length of the government and NSPI.

Will a Development Agreement be needed with the Municipal District of Chester?

Yes.

What will be the price of this project's power in \$/kWh (as seen on my power bill)?

This is confidential information that will be included in the RFP bid. To win the RFP, the price will have to be competitive with other wind farms.

Recently heard that wind power produced at the Pubnico farm (commissioned in 2004) is now cost competitive with fossil fuels.

Is the South Canoe Wind Project affiliated with the Atlantic Energy Gateway?

No this project is not involved/funded from the Atlantic Energy Gateway.

Is a 33 turbine wind farm the largest project in the province?

Currently, yes. The Glen Dhu wind farm is presently the largest wind farm with 27 turbines.

The South Canoe Project would be the largest in the province if successful?
Yes.

The South Canoe site is in a low-wind area, correct? Is this why the project would use more turbines?

No, additional turbines would not help in a low wind site. You have to match the proper turbine to the wind regime. This site is better than a windier site in Cape Breton for example, due to its proximity to HRM which is the largest electricity load in the province. By being close to HRM, there are fewer electricity losses along the transmission line, making it an attractive project and site.

Where will the transmission line be located?

Off Hwy 14, connecting into the existing transmission line.

What about bats identified in the area? A professor is working on establishing the endangered status of bats in the area. Could this affect the project?

Not all bats in the area would be considered endangered. Studies were completed as part of the EA; however, like most locations within Nova Scotia, locations for hibernating are not known. We do know there is a potential location, approximately 25km away. NSPI is working with a professor to complete a study of bat movement within the province to better understand their habitats.

What about mainland moose sightings?

For the EA, a moose sighting was recorded 10km away from the project site. This was recorded within the ACCDC (Atlantic Canada Conservation Data Centre) data.

Megan Davies has heard of a moose sighting on Henley Rd.

This must be reported to DNR in order to be included in their data set. DNR will comment on our EA and may include a term/condition for moose as part of an approval.

Whose land will the power line cut across?

Primarily, the line will cut across Minas Basin Pulp and Power's land. There will be a potential need for easements on a couple properties to gain access to the right of way. That discussion will come later. Ryan Cameron (CLC member) is a property owner near the project site and may be interested in providing land for the transmission line.

Where will the substation be located?

Likely to be located in the middle of the site, near turbines #44, 47.

How many new roads will need to be built on-site?

Approximately 25km of new road will be built on-site. 12km of existing roads will be used; however, all roads will need to be upgraded for transporting equipment.

Is there a description of the site in the EA?

Yes, the site is described in a comprehensive manner, discussing habitat cover, wildlife, overview of hydrological features etc.

What is till? Is this dirt?

Yes, till is dirt that is left over from glaciation.

Can you use till to make roads? What does that mean for truckloads of material coming to the site?

Till will not be used to make roads. Bedrock could be used to make roads. It is unknown at this point how much material can be used from on-site and how much will need to be sourced from off-site to make roads. More will be known later once geotechnical work has been completed.

Has work commenced on the site?

No. No work will commence until after the RFP winner is announced later this summer and until an EA approval is received.

What about stray voltage? We do not want to see that in our community?

Stray voltage should not happen with proper grounding and is unlikely to occur on our site. If this is something that is reported to the proponents, it will be investigated and appropriate mitigation will be used.

Potential routing does not seem correct, how can the trailer transporting turbine equipment fit down Lower Water St., Bedford Hwy, and Route 213?

Permits will be required for moving oversized equipment. The proposed route was reviewed by the Department of Transportation, Infrastructure and Renewable and was approved.

Comments on EA should be provided to NSE by June 23, 2012.

3) Round Table & Meeting Close Out

- Can committee members make a motion? Yes
- Agenda items should be sent to whom? Mary-Frances
- Potential new CLC member (one or two new members):
 - Jannis Kinnie and Judy O'Leary each have someone in mind
 - Eric Christianson to be considered
- Next meeting date?
 - Potentially July 9th in Vaughan, details to follow
 - Due to summer schedules, Mary-Frances will ask for RSVPs for next meeting to make sure enough members can attend
- A new newsletter has been produced and CLC members are invited to distribute.
 - Megan Davies to put newsletter at the New Ross Family Resource Centre, Clover Farms in New Ross
 - Debbie Innes to put newsletter at CAP site near Lakeside Variety

Meeting start: 6:05pm

Meeting end: 7:54pm

Fieldtrip/Meeting Agenda:

**Community Liaison Committee (CLC)
for the South Canoe Wind Farm
Development**

Digby Wind Farm
Sunday, May 6, 2012
8:00am – 3:30pm

Chair: Melissa Haley **Minutes Recorder:** Mary-Frances Lynch

Please read: Draft Meeting Minutes from March 26, 2012

Please bring: Your enthusiasm and ideas.

Field Trip Schedule

Bus departure from Halifax	6:30 am
CLC members to be picked up by bus at the New Ross Family Resource Centre	8:00 am
Arrival at Digby Wind Farm	10:30 am
Wind Farm Tour	10:30 am – 12:00 pm
Complimentary Lunch	12:00 pm – 1:00 pm
Departure from Digby	1:00 pm
Arrival in New Ross	3:30 pm
Arrival in Halifax	5:00 pm

Directions for the few driving themselves:

The wind farm's civic address is:

**9911 HIGHWAY 217
DIGBY COUNTY
ROSSWAY, NS B0V 1A0**

Once you get to Digby (via Hwy 12 from New Ross to Hwy 101), take Hwy 217, and keep driving past Gulliver's Cove Road. The wind farm will be on your right. After less than 5 minutes after passing Gulliver's Cove Road, you'll notice a large entrance with rocks along the road and a gate. Please wait at the gate (locked or not) where the bus will pick you up. There, we will get instructions on where to park cars.

See this link for a map of the site:

<http://www.nspower.ca/en/home/environment/renewableenergy/wind/digby/map.aspx>

Meeting Agenda:

**Community Liaison Committee (CLC)
for the South Canoe Wind Farm
Development**

New Ross Family Resource Centre
Monday, August 20, 2012
6pm – 8pm

Chair: Stephanie Fuller **Minutes Recorder:** Mary-Frances Lynch

Please read: Draft Meeting Minutes from May 28th CLC Meeting
Environmental Assessment Approval Conditions

Please bring: Your enthusiasm and ideas.

Agenda Items

Topic	Presenter	Time
Introductions – CLC members and new Chair	Stephanie Fuller and CLC	6:00 – 6:10
RFP Results	Aaron Long	6:10 – 6:30
EA Approval and Conditions	Stephanie Fuller	6:30 – 7:00
Project Milestones	Sean Brennan	7:00 – 7:15
Frequency of CLC Meetings and CLC Membership	Stephanie Fuller	7:15 – 7:30
Round Table of Future Topics	CLC	7:30 – 7:45
Meeting Close Out	Stephanie Fuller	7:45 – 8:00

Misc. Information

Outside Presenters: Aaron Long, Minas Basin Pulp and Power; Sean Brennan, Nova Scotia Power

Resources: EA Approval Conditions can be found at: <http://www.gov.ns.ca/nse/ea/south-canoe-wind-power-project.asp>

Notes: Light refreshments to be provided.



PROJECT MEETING MINUTES			
Committee Chair:	Stephanie Fuller	Project Manager:	Sean Brennan
Project Name:	South Canoe Wind Project		
Purpose of Meeting:	Regular Community Liaison Committee Meeting		
Location:	New Ross Family Resource Centre	Date	August 20, 2012
Attendance	Representation		Present
CLC Members			
Ray Cambria	Card Lake Conservation Society		X
Ryan Cameron	Property Owner		X
Megan Davies	Local Resident		X
Sydney Dumaresq	Friends of Nature		X
Debbie Innes	Local Resident		X
Janis Kinnie	Cottage Owner		X
Buzz Smith	Local Resident		X
Ben Wiper	Chester Chamber of Commerce		X
Kerry Keddy	Local Resident		X
Judy O'Leary	Cottage Owner		X
Eric Christmas	Mi'kmaq Rights Initiative		X
Rick Cecchetto	Oxford Frozen Foods		
Stephanie Fuller	Nova Scotia Power		X
Chris Peters	Minas Basin Pulp and Power		
			X
Guests			
Janice Mitchell	Maritime Parklands Association		X
George Shay	Local Resident		X
Sean Brennan	Nova Scotia Power		X
Aaron Long	Minas Basin Pulp and Power		X
Introductions			
	CLC members' introductions New Chair, Stephanie Fuller from NSPI		
Review of May 28, 2012 Meeting Minutes			
	Minutes approved		
RFP Results			
	<p>A lot of work was involved in preparing proposal. Nineteen proposals were accepted by the REA and both South Canoe projects won totalling 102 MW. NSPI & Municipality of the District of Guysborough won other smaller project.</p> <p>CLC asks what factors made South Canoe win.</p> <ul style="list-style-type: none"> Price and location were major factors. The project received a 6% pricing advantage based on its location in a generation deficit part of the grid. 		

	<p>CLC asks if the project will be the biggest in the province.</p> <ul style="list-style-type: none"> ○ Yes <p>CLC asks what is meant by “price”, is this in kWh?</p> <ul style="list-style-type: none"> ○ Yes, the price was in kWh and was adjusted based on location (proximity to transmission lines) and project development status. <p>CLC asks how winning projects equal 355GWh/yr?</p> <ul style="list-style-type: none"> ○ The 355 GWh refers to the projects in the award group - the project from Canso (13.8 MW) and the two South Canoe Wind Projects (102 MW). When measuring wind energy output, you must take into account the capacity factor of the project – this is determined from the total energy generating capacity versus actual energy produced over a given time (ie. over a year). <p>CLC asks why the South Canoe project was split into 78MW and 24MW projects.</p> <ul style="list-style-type: none"> ○ The REA placed a cap on project size since they wanted to diversify and reduce risk on any one large project. <p>CLC asks about the electricity price for the South Canoe project.</p> <ul style="list-style-type: none"> ○ As released in the media, mid 70¢/kWh. <p>CLC asks about cost of generating electricity from coal.</p> <ul style="list-style-type: none"> ○ Project team does not want to be quoted at the moment, but believes that it is close to the price of wind. Will find an answer and provide to CLC. ACTION: NSPI <p>CLC comments that the project would be a great opportunity for tourism due to its proximity to Halifax.</p> <p>CLC asks what percentage of Nova Scotia’s power the project represents.</p> <ul style="list-style-type: none"> ○ Approx. 2% (300 GWh/12,000 GWh) <p>CLC asks that a fact sheet of the project be produced to circulate to locals. ACTION: MBPP & NSPI</p>
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EA Approval and Conditions	
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	<p>The EA is an important part of the project development process.</p> <p>Review of EA conditions - highlights</p> <p>2.0 Flora and Fauna:</p> <p>2.1 Final turbine and substation locations must be approved by Department of Natural Resources (DNR) and Nova Scotia Environment (NSE) before clearing and construction.</p> <p>2.3 Before construction, provide DNR with digital files for location of “red”, “yellow” and “undetermined” species identified in project area. A “red” classification means “at risk” or “maybe at risk”, “yellow” means “sensitive”, and “undetermined” means that not enough information exists on a particular species.</p>
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2.4 & 2.5 Required to monitor Mainland Moose (although not many in area) and Canada Lynx as well as birds and bats.

2.6 Required to conduct mortality monitoring for birds.

2.7 & 2.8 Site prep should occur between Sep 1 and Mar 30 to minimize impacts on breeding birds. If between Apr 1 and Aug 31, must implement a monitoring and mitigation plan.

3.0 Noise and Visual Impacts:

3.1 Provide NSE with sound modeling and shadow flicker for final turbine locations.

3.2 Monitor noise to ensure levels do not exceed 40 dBA.

CLC asks where 40 dBA will be measured from.

- Will be measured at sound receptors. Will work with NSE to determine appropriate locations.

3.3 Monitor shadow flicker and mitigate unacceptable environmental effects.

3.4 Develop a turbine lighting plan in consultation with CWS and Transport Canada.

Environmental Management System:

8.1 & 8.2 An Environmental Protection Plan will be approved before construction.

CLC asks about emergencies on-site and how incidences of fire will be handled.

- Project Team does not currently have the answer and will need to get back to the CLC on this point. The project will go through emergency scenarios, for example, hurricanes, fires, nearest hospitals and fire departments. This will be determined before construction begins. **ACTION: NSPI**

CLC expresses that local fire departments will benefit from support and training.

Project team comments that NSE was happy that the CLC was already formed for the project.

CLC asks about EA Condition 4.3 outlining a 30m measurement from tip of blade to wetland. Would like confirmation as to how that is measured.

- From the centre of the turbine, you measure the diameter of the rotor around the turbine and add 30m from there. This will give a diameter buffer. Another discussion point is the definition of a wetland. A crew is on-site at the moment

	<p>measuring the location of wetlands and setbacks between wetlands and turbines.</p> <p>A Health Canada Wind Turbine Study is currently underway. The study results will be released in 2014. The public can now comment on the study's methodology.</p> <p>CLC asks that the slide containing Health Canada Study contact information be sent to the CLC. ACTION: MBPP</p>
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Project Milestones	
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	<p>Milestones are subject to change.</p> <p>EA conditions stipulate schedule.</p> <p>Clearing work will start soon and will be dependent on EA conditions.</p> <p>Geotechnical work to determine type of bedrock on-site will be done this fall.</p> <p>Will engage a design firm for turbine pad, substation, and transmission lines design – will be awarding a contract in the coming months.</p> <p>Construction to begin as early as spring 2013 and continue until 2014. Working on schedule now.</p> <p>CLC asks if a local procurement policy is in place for the project.</p> <ul style="list-style-type: none"> ○ A process has not been defined yet. Right now an org chart is being developed to determine procurement steps. <p>CLC asks if there is a provincial policy on procurement.</p> <ul style="list-style-type: none"> ○ No, however, NSPI has tighter restrictions since its procurement needs to be approved by UARB. NSPI would have toughest procurement policy of the companies in the consortium. <p>Ben Wiper, representing the Chester Chamber of Commerce, asks that local procurement be evaluated.</p> <p>CLC asks if DSTN will provide services for the project.</p> <ul style="list-style-type: none"> ○ Not finalized at the moment. <p>CLC comments that from a Chamber of Commerce perspective, it would make sense to hire local skilled people. Local expertise exists in road construction, concrete work (plant nearby), and clearing. There are also unions in the area, for example, the Carpenters Union.</p> <p>CLC asks where transmission line will be going – Chester or Windsor direction?</p> <ul style="list-style-type: none"> ○ Working on that now and will share information with the public as soon as it is finalized. <p>CLC asks what factors determine final site layout.</p>
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	<ul style="list-style-type: none"> Department of National Defence comments, wetland locations, wildlife information, wind resource assessment, etc.
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Frequency of CLC Meetings and CLC Membership

	<p>EA conditions stipulate that the project must have a CLC and that it must operate until NSE sees fit. Further EA conditions ask for representation from the Mi'kmaq and the Municipal District of Chester.</p> <p>CLC asks for clarification on Municipal District of Chester representative – staff or elected official? ACTION: MBPP</p> <p>CLC asks when Development Agreement will be sought with Municipal District of Chester.</p> <ul style="list-style-type: none"> This fall. <p>Frequency of meetings suggested for every 2 months, but may need to meet more frequently as issues arise.</p> <ul style="list-style-type: none"> Vote for meetings every 2 months = unanimous support <p>CLC asks about forming subcommittees, for example PR, tourism, etc. Since the public can attend meetings, share ideas with CLC members, as well as hold meetings in smaller groups outside of the CLC, subcommittees are deemed unnecessary.</p> <p>Debbie Innes has access to webinar software if particular groups/people cannot attend future meetings in-person.</p> <p>CLC asks that a field visit be coordinated for the project site.</p> <ul style="list-style-type: none"> Will need to determine clearing schedule first and then will confirm a site visit date. ACTION: NSPI <p>CLC asks if the CLC is the only PR group for the project.</p> <ul style="list-style-type: none"> There are other venues through which the project team will continue to share information - open houses, a project website, and newsletters. <p>CLC asks about the benefit of having a CLC once a Development Agreement is in place. From a business perspective, it makes sense to cut costs.</p> <ul style="list-style-type: none"> The project team thinks that it is better to prevent issues with the public by hearing their concerns and feedback upfront. The project is also required to operate a CLC as stated by NSE. From experience on the Digby Wind Project, it is better to hear about the project from a 'neighbour' rather than a project team member. The project needs local input to better understand the community and address local concerns. The CLC is key to the success of the project.
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Round Table of Future Topics

	Ben Wiper, Janis Kinnie - Fact sheet to be produced, CLC to provide input on topics.
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Kerry Keddy - Presentation of project to local community groups.

Kerry Keddy - Request that the South Canoe Wind Project join the Chester Chamber of Commerce. Agreed by project team. **ACTION: MBPP**

Ryan Cameron – Discussion of ideas for community project sponsored by project team, for example, signage, interpretive centre, enhancement of existing community centre, youth education, funding for the community, fundraiser for children’s health centre, etc.

Sean Brennan (Project Manager) – Project team volunteer activity in community in the coming months.

Sean Brennan (Project Manager) – New project logo and input from community on what the logo should look like, what image best represents the local community.

CLC membership and potential for increasing the CLC’s size if it means getting more representation for people living in the community/immediate area.

- If anyone would like to bow out of the committee, could do so now - Ray Cambria stepping down, Ben Wiper may step down, Janice Mitchell and George Shay are interested in joining the CLC.
- Idea that people can attend the CLC meetings, but not required to be an actual member of the CLC.

Judy O’Leary – What will wind farm look like from Lake Lewis, suggestion that a photomontage be made for the Lake. **ACTION: NSPI**

Megan Davis – What will be the viewplane from the ridge behind Megan’s home, will it be lit at night?

- Working with Transport Canada on lighting plan. Will be dependent on final layout.

CLC asks if turbines could be made a different colour other than white.

- Most manufacturers make white turbines, except for Enercon’s turbines that have a tapered green at the base, but white seems to be most neutral.

Janice Mitchell – Concerned about proximity of turbines to Lake Lewis. She has heard of a pressure issue at the Digby Wind Project experienced by a woman. She was located at 1.2km from the turbines and felt pressure in her house.

Megan Davies – Suggested 3km setback from physicians.

Kerry Keddy – Questions who governs setbacks. Would like FAQ on health issues. **ACTION: NSPI & MBPP**

Comment from CLC member regarding confidence that local companies - Minas Basin, NSPI and Oxford - will do what is best for local residents’ health.

Buzz Smith – Experience with propeller aircrafts and setbacks from the aircrafts. Although there are pressure differentials, at no time will pressure issues extend past 1km. Wind tends

	<p>to dampen pressure differentials.</p> <p>Megan Davies – Concerned about living 24/7 near turbines and health issues associated with this, as well as the value of her home.</p> <p>Sean Brennan – South Canoe’s setback is the largest of any wind farm in Nova Scotia.</p> <p>CLC suggests that sound be measured at Megan Davies’ home. Confirmed by Project Manager. ACTION: NSPI</p> <p>Megan Davies would like a copy of sound study from Digby Wind Farm. ACTION: NSPI</p> <p>Syd Dumaresq – Suggested that the relationship with Card Lake be a topic for next meeting.</p>
Meeting close out	
	<p>Start: 6:10pm End: 7:45pm Next meeting in 2 months.</p>
Minutes compiled by:	Mary-Frances Lynch
Please review Minutes for errors and omissions, and advise complier accordingly. NOTE: Closed items will be recorded for one additional meeting, and then removed.	

PROJECT MEETING MINUTES			
Committee Chair:	John Woods	Project Manager:	Sean Brennan
Project Name:	South Canoe Wind Project		
Purpose of Meeting:	Regular Community Liaison Committee Meeting		
Location:	Vaughan Fire Hall	Date	October 22, 2012
Attendance	Representation	Present	Regrets
CLC Members			
Ryan Cameron	Property Owner	X	
Megan Davies	Local Resident	X	
Sydney Dumaresq	Friends of Nature	X	
Debbie Innes	Local Resident	X	
Janis Kinnie	Cottage Owner	X	
Janice Mitchell	Maritime Parklands/Lake Lewis		X
Buzz Smith	Local Resident	X	
Ben Wiper	Chester Chamber of Commerce		X
Kerry Keddy	Local Resident	X	
Judy O'Leary	Cottage Owner	X	
Eric Christmas	Mi'kmaq Rights Initiative		X
Rick Cecchetto	Oxford Frozen Foods		X
Stephanie Fuller	Nova Scotia Power	X	
Chris Peters	Minas Basin Pulp and Power	X	
John Woods	Minas Basin Pulp and Power	X	
Guests			
Dan Flinn	Stonebroke Rd., Long Lake	X	
Richard Krane	Clearwater Lot Association	X	
Emery Peters	Stonebroke Rd., Long Lake	X	
Russ Parkyn	Red Shirt Rd. area	X	
Sean Brennan	Project Manager, South Canoe Wind Project	X	
1. Adoption of Meeting Agenda			
	Approved		
2. Review of Aug 20, 2012 Meeting Minutes and Action Items			
	<p>Review of Aug 20, 2012 Meeting Minutes</p> <ul style="list-style-type: none"> • Edit on p.6, Kerry Keddy requested that the project join the Chamber of Commerce and project team approved this request. • Approved meeting minutes <p>Review of action items</p> <ol style="list-style-type: none"> 1) Cost of coal power compared to wind power – information gathered by NSPI, Mary-Frances to forward to CLC. 2) FAQ sheet – prepared by Mary-Frances 3) Emergency site plan – will be developed in 2013 4) Slide about Health Canada – sent to CLC on August 22, 2012 5) Municipal representative – can be councillor or staff, suggestion that Tina Connors fill the position 6) Site visit – at least 4 members interested. Suggested that visit include a view from location at higher elevation. Interest in seeing site from start to finish. 7) Photomontage for Lake Lewis – Project team will take photo from Lake Lewis and will render photomontage once layout is finalized. Photo will likely be ready early next year. 		

	<p>8) Setback and health – There are no municipal setbacks in the Municipal District of Chester, except for one in the village itself. Health information will be added to the South Canoe Wind Project website.</p> <p>9) Sound study – Megan received copy of study</p>
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3. Project Update – Environmental Assessment, Development Agreement

	<p>Environmental Assessment Follow-Up Studies Update</p> <ul style="list-style-type: none"> • Completed wetland/water crossing studies and Mi'kmaw Ecological Knowledge Study. • Developing monitoring plan for mainland moose, bird and bat monitoring, sedimentation control, complaint resolution plan, and Environmental Protection Plan. <ul style="list-style-type: none"> ○ Local resident knows of moose in the area. Megan Davies to coordinate contact. • LiDAR was flown for the site. LiDAR is high resolution data, good for road planning. CLC asked if LiDAR data will be available to public. ACTION: MBPP • Department of Natural Resources no longer requires lynx monitoring. • Once layout is finalized, visual, sound, and shadow flicker, and lighting plan will be updated. <p>Development Agreement Process</p> <ul style="list-style-type: none"> • Project required to enter into Development Agreement with Municipality of Chester • Process steps: <ul style="list-style-type: none"> ○ Submit letter to Council requesting Development Agreement – sent to Council October 15, 2012 ○ Request will be forwarded to Planning Dept. ○ Planning Dept. prepares a report evaluating the project's compliance with Municipal Planning Strategy ○ Planning Dept. sends report and recommendations to Planning Advisory Committee (PAC) ○ PAC presents recommendations to Council ○ If Council wishes to go ahead with Development Agreement application, it will hold a public info session and public hearing. Residents can voice concerns and comment on the project in public hearing. • CLC asked why Area Planning Advisory Committee is not involved in process. ACTION: MBPP • CLC asked for examples of other projects that require a Development Agreement. ACTION: MBPP
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4. Engagement with local schools

	<ul style="list-style-type: none"> • As a result of discussion at Aug 20 meeting, project team has engaged local schools. • Project team has reached out to New Ross Consolidated School and Chester Area Middle School to come into school and speak to students about renewable energy. • Will hold a drawing competition with students asking them to draw what comes to mind when they think of renewable energy. Selected images will be screen printed onto turbines. A NSCAD student will come with project team to lead art session with students. Students will also be asked to name the turbines. • Once the project is built, students will be brought on fieldtrips to the site. Students will grow up with wind farm and it is a great opportunity to have them engaged in the project. • Have received interest from grade 5/6 teacher at NRCS and from teacher at CAMS and will hold session with students before Christmas. Only targeted middle school-aged students to date.
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	<ul style="list-style-type: none"> • CLC suggested other schools could be target – Gold River-Western Shore Elementary, Forest Heights High School. If turbine components are transported through Windsor, perhaps Windsor Forks Elementary School could be engaged. • CLC suggested that high schools be targeted since the project will provide jobs and local high school students may be interested in knowing about such opportunities. The project team could contact guidance councillor at Forest Heights High School regarding career fairs. CLC suggested that Canada Summer Jobs and NSERDT could provide funding for summer students. Sean Brennan informed CLC that the project team has presented to the NSCC in Middleton regarding jobs. ACTION: NSPI & MBPP • Concern expressed about distorted message to students. Project team confirmed that conversations with teachers include how presented material can directly tie into the curriculum. Balanced approach should be used by project team when speaking with students.
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5. Brainstorming Session

	<ul style="list-style-type: none"> • Review of newsletter <ul style="list-style-type: none"> ○ List common concerns and misconceptions ○ Fact and Myth sheet for CLC members ○ Encourage observers to attend CLC meetings ○ Make website address more visible on newsletter ○ Do not use reverse text, as done in sidebar ○ Put map on newsletter ○ Tips on how to share project info more easily: <ul style="list-style-type: none"> ▪ Have a bulletin board or billboard, easily accessible and visible to public. CLC member has property to host billboard. ▪ Concern that cottagers have not received project information. Project team should access permanent/mailling addresses from municipal records. Could also use Property Online database. ▪ Using permanent addresses would capture land owners who do not know about the project. ▪ Email is an effective way of reaching cottagers. Clearwater Lot Owners Association will provide membership email addresses. ▪ Letson Lake also has a lot association. Project team to be provided contact info. ▪ Use facebook ▪ CLC should take copies of newsletter and distribute to friends. ▪ CLC should receive newsletter as soon as it is prepared instead of waiting to receive at CLC meeting • Project logo <ul style="list-style-type: none"> ○ Use local artists - follow up with Chester Art Centre to determine interest. ACTION: MBPP ○ Logo should say “who” and “what” ○ Blend three company logos together ○ CLC suggested that they do not need to be involved in logo design from onset but should review once a draft is prepared. • Presentations to local community groups <ul style="list-style-type: none"> ○ Chester Heritage Society ○ Downtown Merchants Society ○ New Ross Legion ○ New Ross and Vaughan Firehalls, Women’s Auxiliary ○ Village commissions ○ Council ○ Chamber of Commerce
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	<ul style="list-style-type: none"> ○ Open-house sessions ○ Chester Garden Club ○ VOCTADA ○ Meet with several groups at once <ul style="list-style-type: none"> ● Community project <ul style="list-style-type: none"> ○ New Ross pre-school ○ New Ross Family Resource Centre – contact name given. ○ Interpretive Centre – to educate people, put it on Hwy 14 ○ Signage ○ Youth education ○ Children’s health centre ○ Hants community hospital ○ Food banks ○ Community access program ● Volunteer activity <ul style="list-style-type: none"> ○ Next year’s New Ross Fair ○ Christmas Festival in New Ross, Dec 7 weekend, dinner, craft fair, parade ○ Build a wooden windmill at New Ross Farm ○ Gingerbread festival in Chester ○ Chester Race Week ● Engagement with Card Lake <ul style="list-style-type: none"> ○ Have rep from Card Lake speak to group about this at later date.
6. CLC Membership	
	<ul style="list-style-type: none"> ● CLC formed after open houses ● Member resigned and Janice Mitchell, representing Maritime Parklands, joined ● EA conditions ask for representation from the Mi’kmaq and the Municipal District of Chester. ● Mi’kmaq representation filled ● Invite Tina Connors, newly elected councillor for New Ross to attend next meeting.
7. Suggestions for Future Topics	
	<ul style="list-style-type: none"> ● Sound levels - what will project sound like? ● Explanation of Digby sound study ● Other wind farms residents to come and speak to CLC ● Shadow flicker - what does it look like and what are the impacts of shadow flicker? ● Turbine selection
8. Comments from Observers	
	<ul style="list-style-type: none"> ● Suggestion to not use road across from Red Shirt Road as the site’s access road since it is located on a blind/dangerous corner ● Increase setback , suggested 3km setback ● Remove nearest turbines to residents ● Are project boundaries set? <ul style="list-style-type: none"> ○ Layout is being finalized over the coming months, based on turbine selection and results of EA studies. ● Concerns about property values ● Do not want to see turbines ● Lack of communication with seasonal residents ● Impacts on deer and rabbits. Are there studies being done on wildlife impacts near Lake Lewis? <ul style="list-style-type: none"> ○ EA studies are complete. Working with DNR on mitigating wildlife impacts. ● Condition of New Russell Rd and traffic on road.



	<ul style="list-style-type: none"> • What kind of pesticides are used on the site? ACTION: MBPP • Impacts on rural internet • When will answers be provided on height, location and number of turbines? <ul style="list-style-type: none"> ○ Sean Brennan informed that project was approved in August and that turbine supply negotiations are currently underway. Turbine supply will be signed in 2012. Sean will explain the turbine selection process at an upcoming CLC meeting.
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9. Meeting close out

	Start: 6:10 End: 8:15 Suggested for late November, early December.
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Minutes compiled by:	Mary-Frances Lynch
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<p>Please review Minutes for errors and omissions, and advise complier accordingly.</p> <p>NOTE: Closed items will be recorded for one additional meeting, and then removed.</p>
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PROJECT MEETING MINUTES			
Committee Chair:	John Woods	Project Manager:	Sean Brennan
Project Name:	South Canoe Wind Project		
Purpose of Meeting:	Regular Community Liaison Committee Meeting		
Location:	Chester Council Chambers	Date	November 26, 2012
Attendance	Representation	Present	Regrets
CLC Members			
Ryan Cameron	Property Owner		X
Megan Davies	Local Resident		X
Sydney Dumaresq	Friends of Nature		X
Debbie Innes	Local Resident	X	
Janis Kinnie	Cottage Owner	X	
Buzz Smith	Local Resident	X	
Ben Wiper	Chester Chamber of Commerce	X	
Kerry Keddy	Local Resident	X	
Judy O'Leary	Cottage Owner		X
Eric Christmas	Mi'kmaq Rights Initiative		X
Rick Cecchetto	Oxford Frozen Foods		X
Janice Mitchell	Cottage Owner		X
Stephanie Fuller	Nova Scotia Power	X	
Chris Peters	Minas Basin Pulp and Power		X
John Woods	Minas Basin Pulp and Power	X	
Guests			
Melanie Smith	Strum Environmental	X	
Richard Krane	Clearwater Hills Lot Owners Association	X	
Emery Peters	Clearwater Hills Lot Owners Association	X	
Dan Flinn	Clearwater Hills Lot Owners Association	X	
Mike Lunn	South Shore Ready Mix	X	
John Parnell	South Shore Ready Mix	X	
1. Adoption of Meeting Agenda			
	Addition to agenda - Update on October 27, 2012 meeting with Maritime Parklands		
	Agenda adopted		
2. Review of Oct 22, 2012 Meeting Minutes and Action Items			
	Minutes approved		
	Outstanding action items		
	<ol style="list-style-type: none"> 1) LiDAR data sharing: Data files are too large to transfer, not practical to share. 2) APAC in Development Agreement process – Tara Maguire informed that there is no APAC for the New Ross area. There is only one APAC in the Municipality of the District of Chester. 3) Other examples of Development Agreements in the Municipality: Projects that require Environmental Assessment or any development over 12 units on a lot or 12 units in a building. Examples include an auto salvage yard, a sales office in Mill Cove, Light Manufacturing and a laboratory in Marriott's Cove, Tooling and Machinery Manufacturing in Mill Cove, and the Atlantica/Oak Island Inn townhouse development. 4) Presentation to Forest Heights High School's Skilled Trades Centre: Mary-Frances Lynch has 		

	<p>contacted the high school to coordinate a presentation.</p> <p>5) Contact Chester Arts Centre to design project logo: The Centre has been contacted and a designer was suggested. Mary-Frances Lynch will coordinate with the designer.</p> <p>6) Pesticide use on the site: Bruce MacDonald confirmed that no pesticides are used on Minas land.</p>
<p>3. Effect of Minas Basin Pulp and Power mill closure</p>	
	<ul style="list-style-type: none"> • On November 1, the mill announced the shutdown of the paper machine • 135 employees laid off, some employees will be migrated to affiliated companies • Minas Energy and the real estate divisions will continue to function by reporting to the parent company - Scotia Investments Limited in Bedford
<p>4. Field Trip Recap (Nov 9, 2012)</p>	
	<p>For more detail, see power point slides from Debbie Innes.</p> <p>Summary:</p> <ul style="list-style-type: none"> • History of site • Site visit stop locations – look off point on Hwy 14, Minas land to see meteorological mast (entering off New Russell Rd.), Wagner land (entering off New Russell Rd.) • Pictures from visit <p>Suggested that field trips to the site occur again at different phases of the project.</p>
<p>5. Update on bulletin board and billboard</p>	
	<ul style="list-style-type: none"> • Kerry Keddy and Ray Cambria submitted design of project bulletin board. • Approximate cost of \$2,500 depending on roof material • One side the info board would display project information and other side could be used for community notices. • In the future, the bulletin board could be handed over to the community. • Proposed location in Upper Vaughan at Lakeside Variety. Store owner has already agreed to put bulletin board there. Will need to find a suitable location in New Ross. • Proposed idea to have project information displayed at Martock as there will be a good view point from that location. • Bulletin board idea will be discussed with Project Team. ACTION: MBPP <p>Ryan absent. Discussion on billboard to come at another time.</p>
<p>6. Update on project team's volunteer activity in the community</p>	
	<p>Project Team will be volunteering at the New Ross Christmas Festival on December 8 and 9.</p> <p>Suggestion that Project Team participate in Chester Gingerbread Festival from December 1-16.</p>
<p>7. Project engagement with Card Lake</p>	
	<p>A meeting has been planned between Project Team members and the Card Lake Conservation Society to be held on December 17. CLC member Syd Dumaresq and Card Lake Conservation Society member Brad Armstrong requested the meeting. Kerry Keddy wants to know if others can attend</p>

meeting **ACTION: MBPP**

8. Update on Development Agreement

- Process began on October 15
- Project Team met with Tara Maguire and have been providing her info for her report
- Development Agreement must show compliance with the Municipal Planning Strategy (MPS) and Land Use Bylaw (LUB)
- Tara Maguire is preparing report now and following this, report will be given to the Planning Advisory Committee and Council
- Process unfolding over December, January, February and Planning Department will set dates for meetings

The CLC asked about what information goes into the Development Agreement (DA) and if the Planning Department will re-open the provincially approved Environmental Assessment (EA). The project team answered that information on road traffic, required services onsite, water use, setback, etc. are all part of the DA. The DA will be judged against the MPS and LUB and will not require re-opening/re-doing EA studies.

9. Meeting with Maritime Parklands on October 27

Summary:

- Approximately 30 people attended, mostly from Lake Lewis/Red Shirt area
- Major issues included – project communications, health impacts, property values, on-site blasting, setback, sound levels, tower lighting, lack of information on Development Agreement
- Working with Janice Mitchell on follow-up meeting

A comment was made by a CLC member stating that government has set renewable energy targets and that the Project Team’s intent to bid into the Province’s Request for Proposals was made public last winter. Further, the Environmental Assessment required a public engagement process.

The CLC requested that the Project Team compile a list of all public meetings and engagement activities so as to be up-to-date on all community consultation. **ACTION: MBPP**

Project team confirmed that the latest newsletter was mailed out to local residents a few weeks ago. The mailout radius was increased to all those living or owning property within 5km of the project (nearly 780 people).

10. Presentation from Strum Environmental on photomontages, shadow flicker, sound study and monitoring

For more detail, see PowerPoint slides from Melanie Smith, Project Manager for Environmental Assessment team at Strum Environmental

Visual Assessment

- Six previous photo locations used in EA, two additional photo locations (Lake Lewis, Long Lake)
- Photo locations were chosen based on where people live and use area
- Photomontages take into account topographic features, turbines locations, turbine dimensions,

and GPS coordinates from where the photograph was taken.

Questions:

- What are the elevations levels on the site? **ACTION: MBPP**
- When will the photos be rendered into photomontages? Likely at next CLC meeting in December.
- How many turbines are seen in each photo? Photograph locations are typically chosen to show a view of more turbines. The number of visible turbines depends on the vantage point.

Sound Modeling

- Nova Scotia uses the Ontario guideline of 40dBA
- Modeling done to predict sound levels at residences when project is operational
- Model has particular inputs – receptor locations, topography, turbine locations, turbine size and height, sound power data
- The sound modeling for the South Canoe project was conservative as it modeled 150 MW (50 turbines x 3MW) when in fact the project is 102MW
- Modeling results show all receptors within 40dBA sound level, with about 50% under 35 dBA

Questions and Comments:

- Does the model assume all turbines running at once or just one? It assumes all 50 turbines
- Are wind speeds and direction taken into account? Yes, meteorological data are incorporated.
- A CLC member brought a handheld sound monitoring and measured 51dBA while people in the room were talking, 40dBA in a quiet room, 48 dBA in his backyard earlier that day.
- It was re-iterated that when the CLC visited the Digby Wind Project and stood underneath turbines, there was no problem having a conversation as sound levels were low.

Sound Monitoring

- Sound monitoring now being done (pre-construction) at five locations to gather baseline data.
- Sound data is gathered over a week, weather data and site specific details are recorded too.

Questions and Comments:

- What is the consequence of exceeding 40dBA? You may need to take another look at the layout and work with Nova Scotia Environment on mitigation plan. Model is conservative so it is not anticipated that the wind project will surpass modeling.
- CLC member referred to CanWEA & AWEA on turbine sound and health impacts and found that there were no adverse health effects. There is a now a Health Canada study looking into this. There are also articles by the Chief Medical Officer of Ontario and in acoustics journals.

Shadow Flicker

- Shadow flicker occurs under very specific conditions – sun always shining, perpendicular rotor plan, turbine constantly operating
- Modelling done for receptors within 2km of the South Canoe project
- Model included 50 turbine locations, assuming large turbine, topographic features, but did not include vegetation data (adding to the conservativeness of the model)
- Model revealed no concern for shadow flicker due to large project setback (1.2km)

Questions and Comments:



	<ul style="list-style-type: none"> • Does turbine colour affect shadow flicker? No. • Can Melanie Smith's PowerPoint slides be posted online? Yes. ACTION: MBPP
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11. Suggested topics for next CLC	
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	<ul style="list-style-type: none"> • Next meeting will focus on review of updated turbine layout. Meeting will be held on Dec 10 at the New Ross Fire Hall from 6-8pm. • CLC requested that a large topographic map be brought to the meeting showing contour lines/elevation on the site. ACTION: MBPP • Request to send out meeting invitation to cottage groups. ACTION: MBPP • Request that a representative from Oxford attend the next CLC meeting. ACTION: MBPP
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12. Meeting close out	
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	<p>No comments from the CLC</p> <p>Questions and Comments from Observers:</p> <ul style="list-style-type: none"> • When is the public hearing for the Development Agreement? Likely February. The Municipality sets the dates. • Please send the link to the photomontages in the EA to the Clearwater Lot Association. ACTION: MBPP • One observer took issue with CLC members opinions that though he did not previously comment on the EA, that this does not prohibit him now from attending CLC meeting and asking questions. • Expected Project Manager to attend tonight's meeting to discuss wind turbines.
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Minutes compiled by:	Mary-Frances Lynch
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**Please review Minutes for errors and omissions, and advise complier accordingly.
NOTE: Closed items will be recorded for one additional meeting, and then removed.**

South Canoe Wind Project

Melanie Smith
CLC Meeting
November 2012



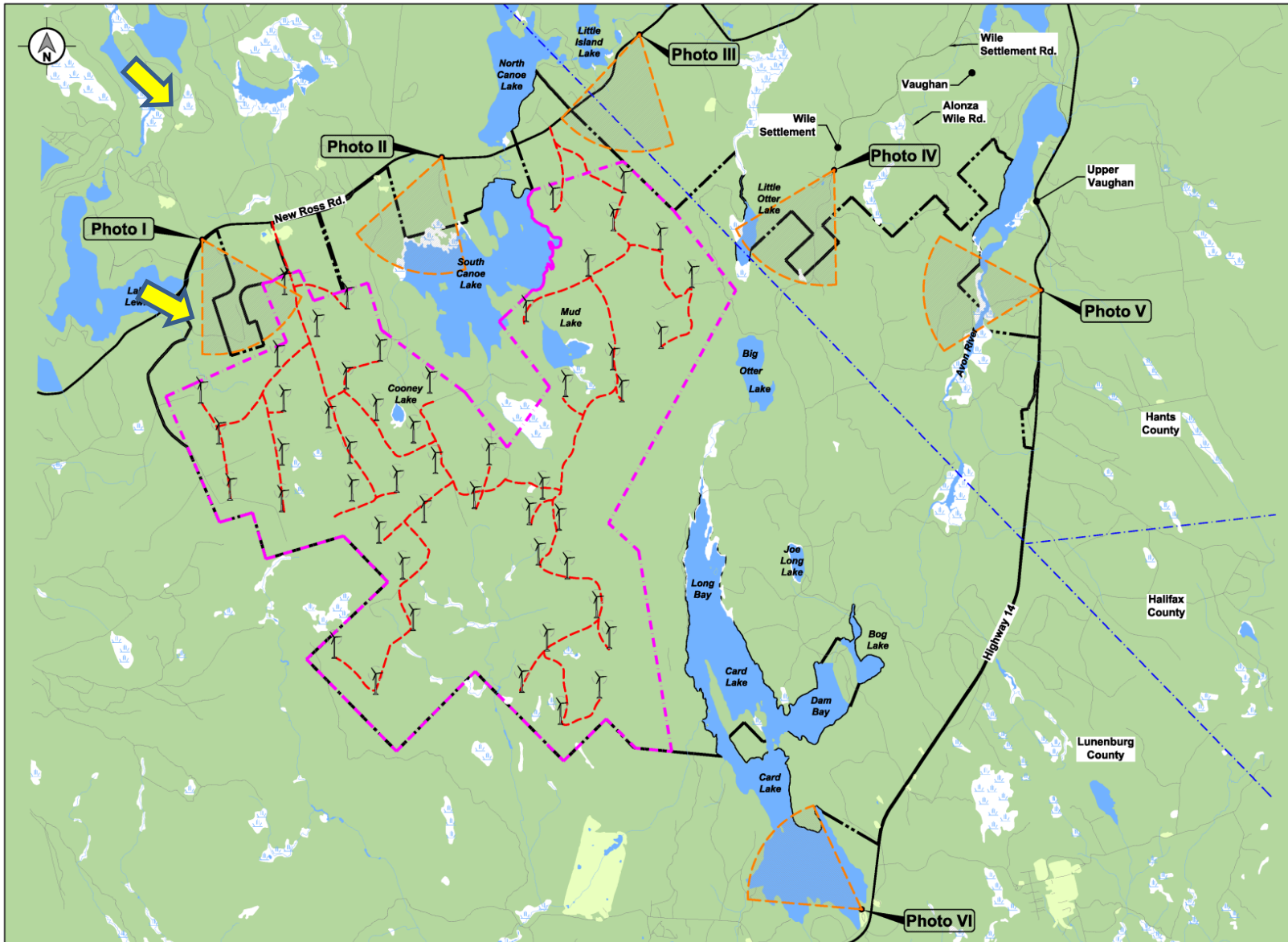
Strum
ENVIRONMENTAL

Taking Charge™

Outline

- Visual Assessment
- Sound Modeling
- Sound Monitoring
- Shadow Flicker Modeling
- Questions?

Visual Assessment



Notes:

- Reference: Site Plan supplied by client. Digital topographic Mapping by Nova Scotia Geomatics Centre.
- Projection: NAD83(CRS), UTM Zone 20 North.

Legend:

- Proposed Turbine Location
- Viewpoint Location
- Direction of View
- Project Area
- Property Boundary
- County Boundary
- Proposed Road
- Existing Paved Road
- Existing Trail / Access Road
- Mapped Stream
- Mapped Indefinite Stream
- Mapped Water Bodies
- Mapped Wet Area
- Cleared Area

Visual Assessment Locations

OXFORD

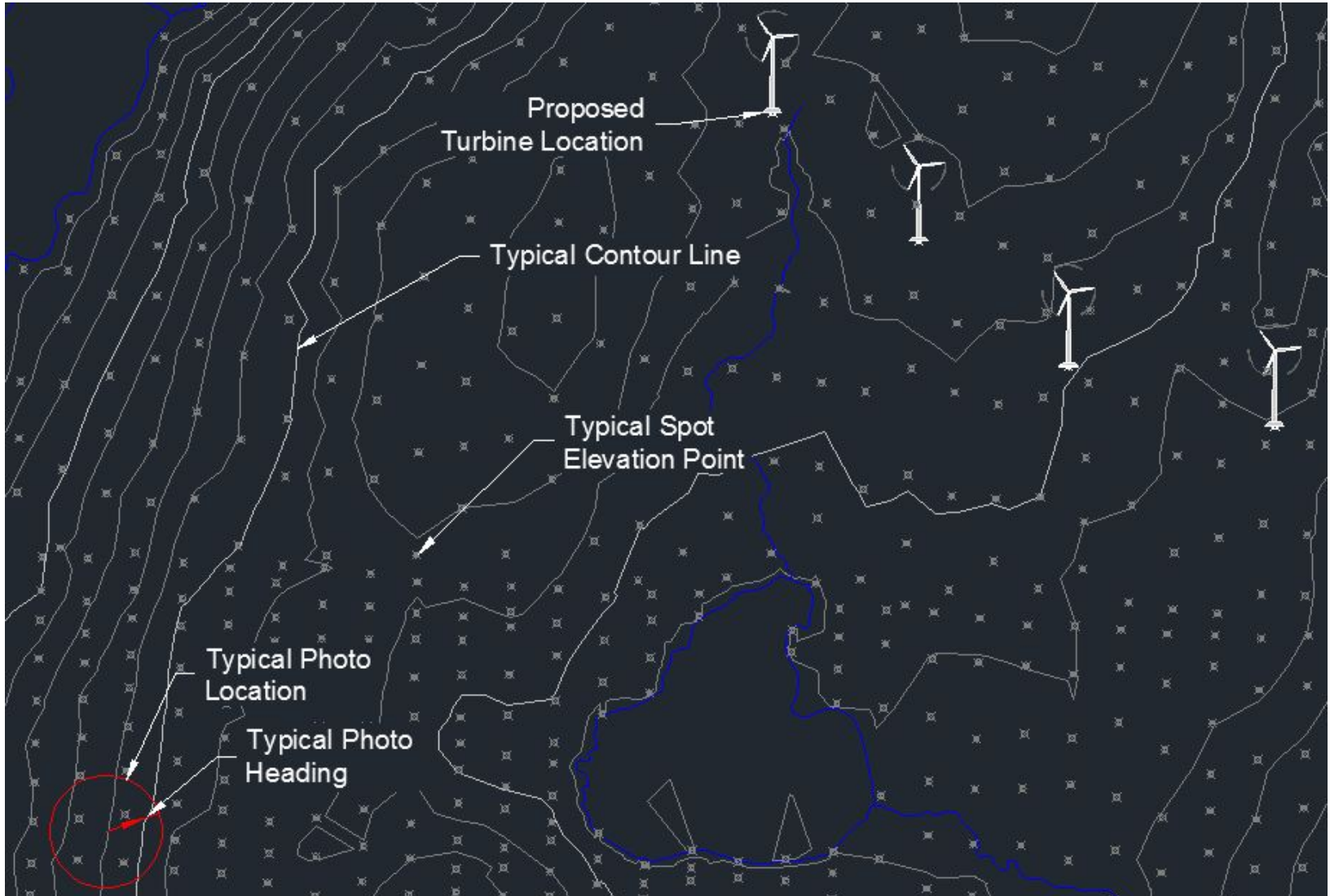
MINAS BASIN

Nova Scotia **POWER**
An Emera Company

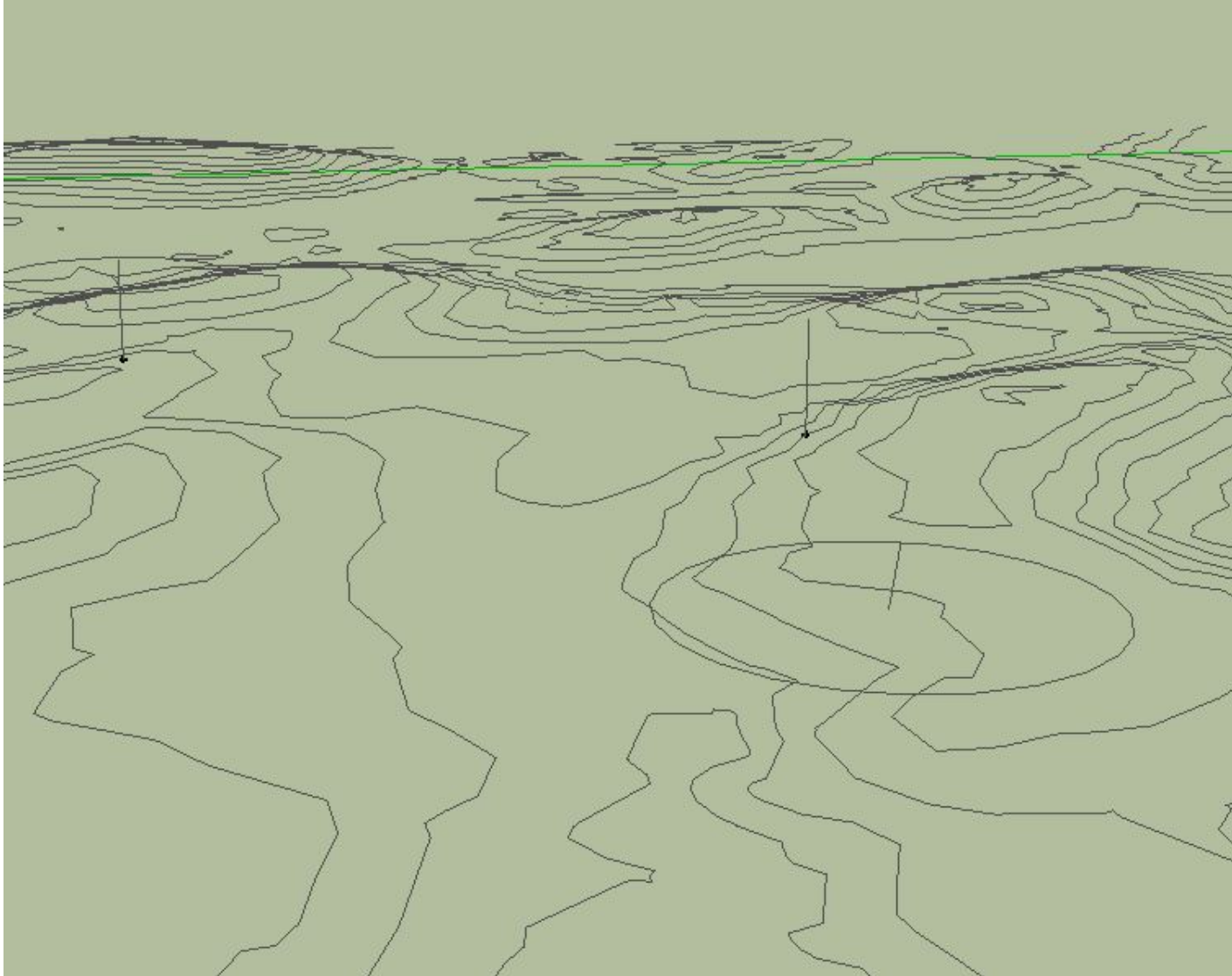
Strum
ENVIRONMENTAL

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DRAWN BY: H. Serhan	
CHECKED BY: A. Walter	

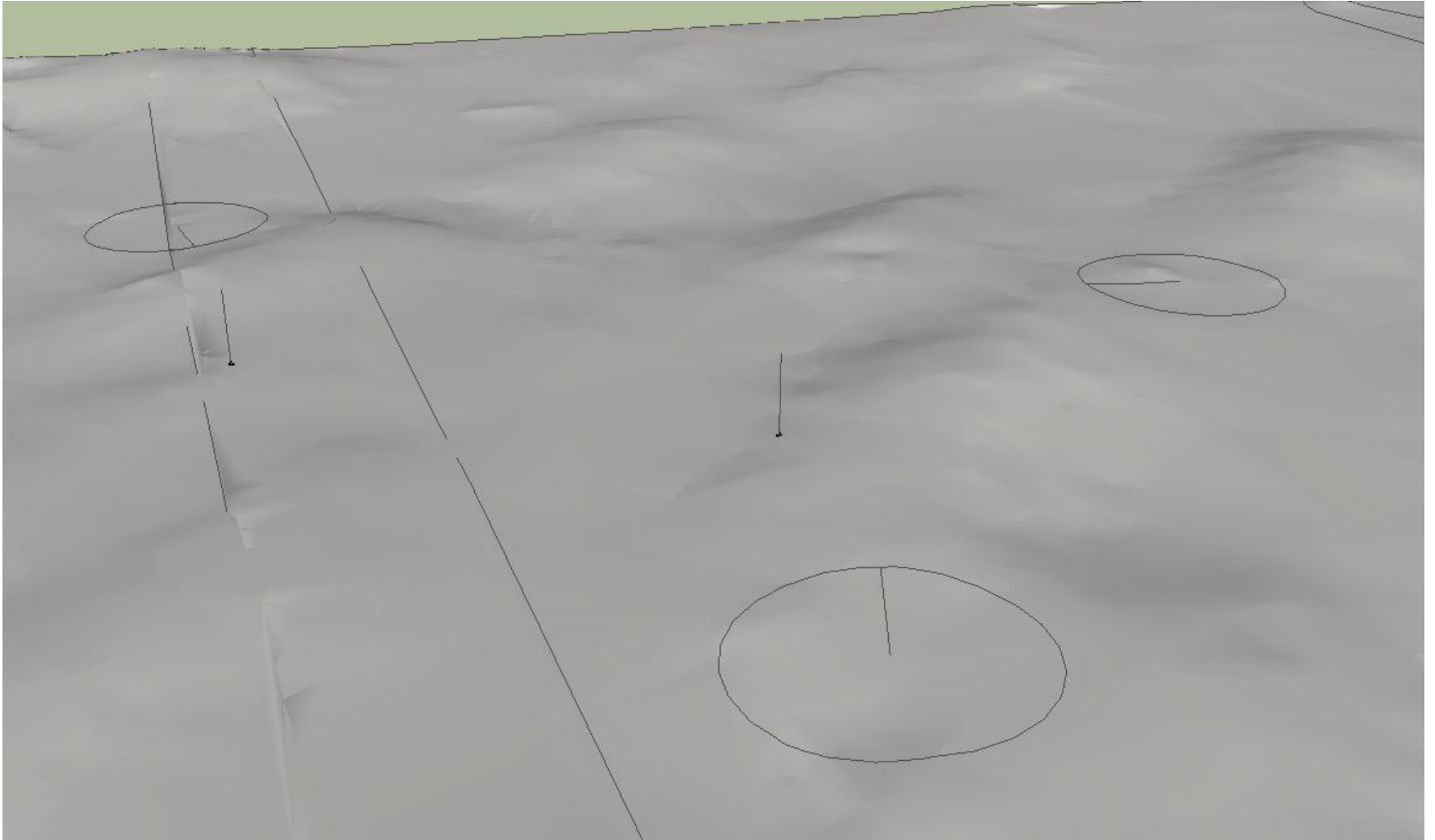
Visual Assessment



Visual Assessment



Visual Assessment



Visual Assessment



Visual Assessment



Visual Assessment

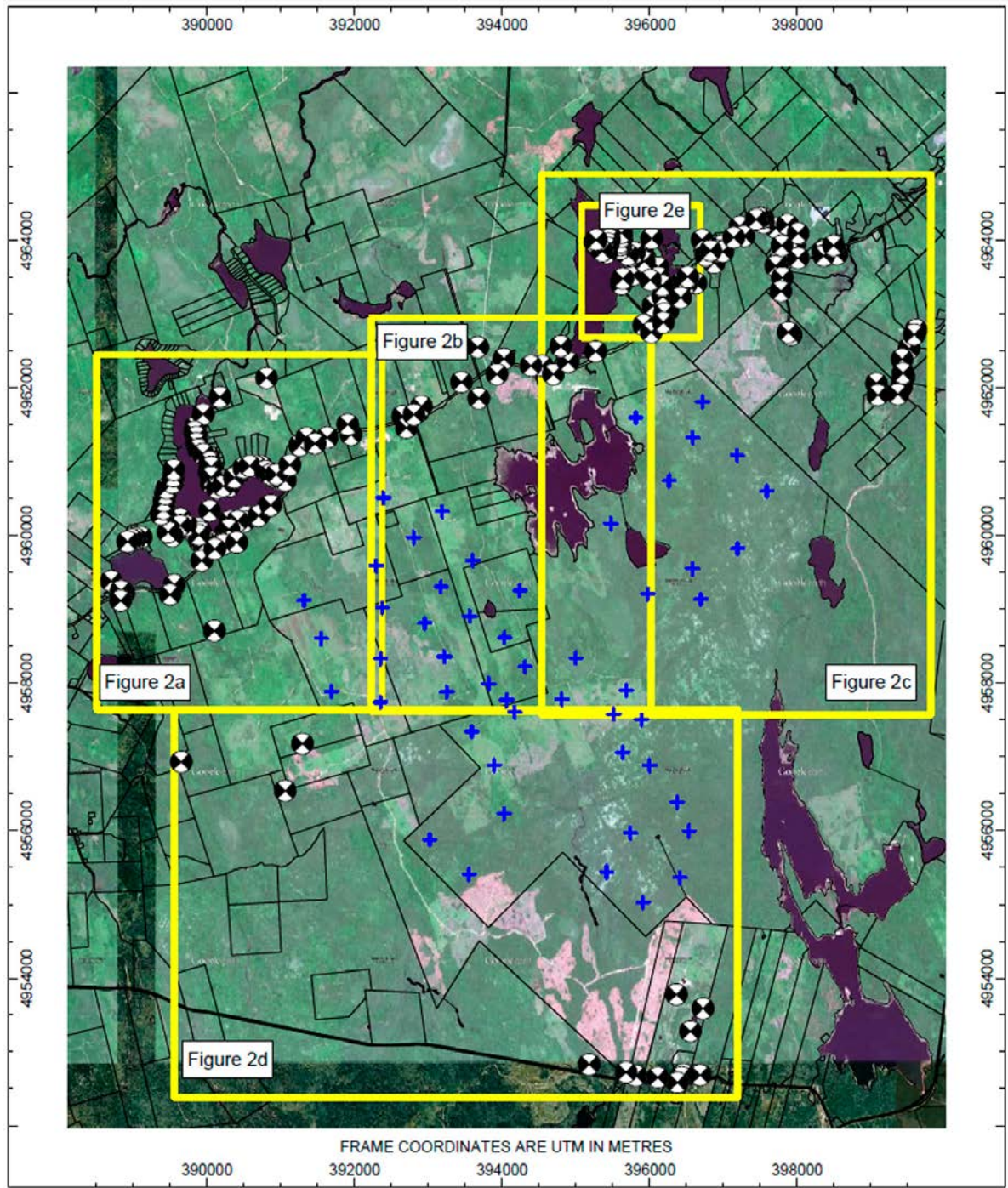


Visual Assessment



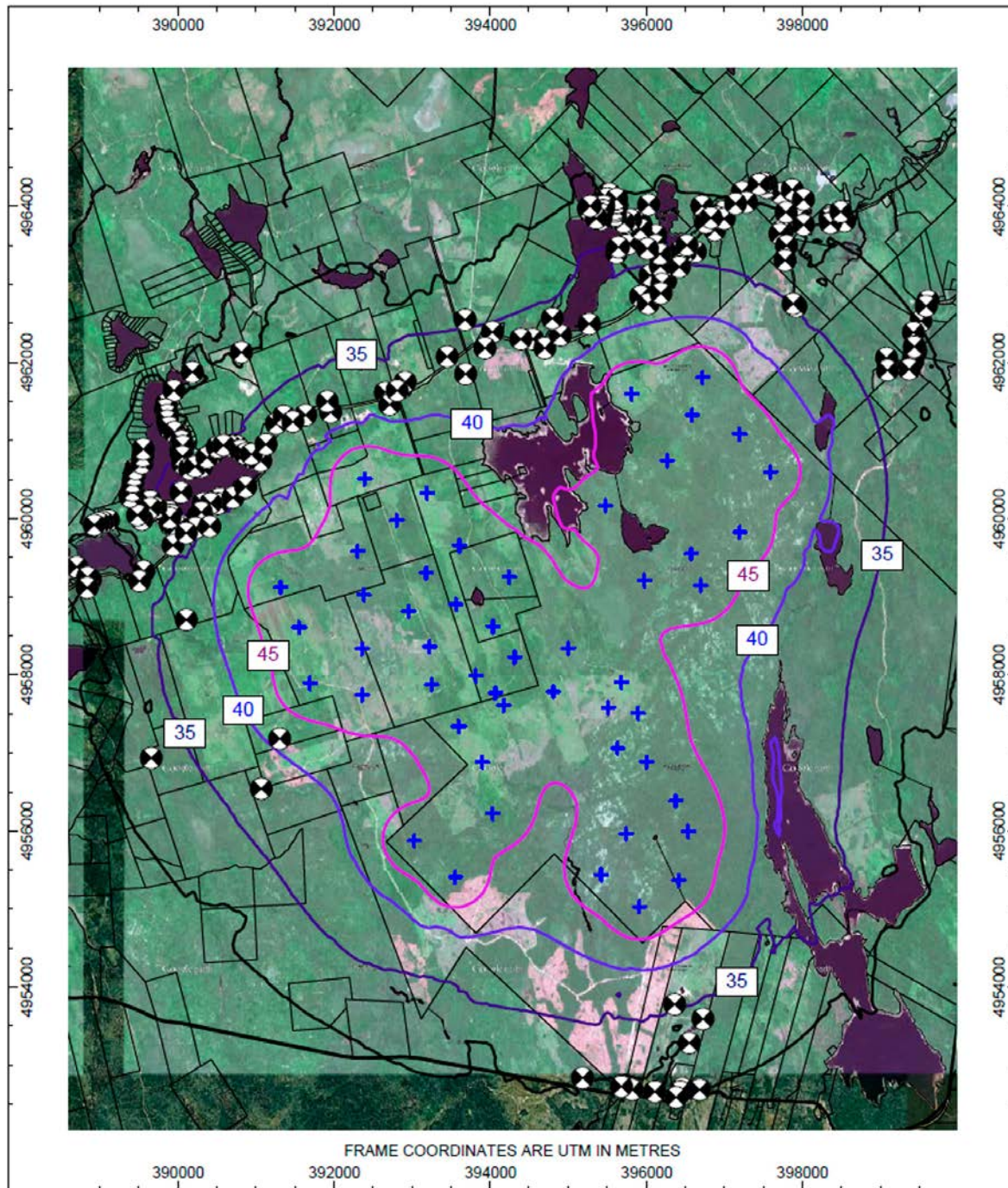
Sound Modeling

- Purpose: to predict sound levels at receptor locations during wind turbine operation.
- Guideline: Ontario Ministry of the Environment – 40 dbA



Sound Modeling

- Model Inputs:
 - Receptor locations
 - Topography
 - Turbine locations (50)
 - Turbine size (3 MW)
 - Turbine height
 - Sound power data (from manufacturer – max levels used)
 - Octave bank spectral sound power data
 - Transformer location and sound level



FRAME COORDINATES ARE UTM IN METRES

Sound Modeling

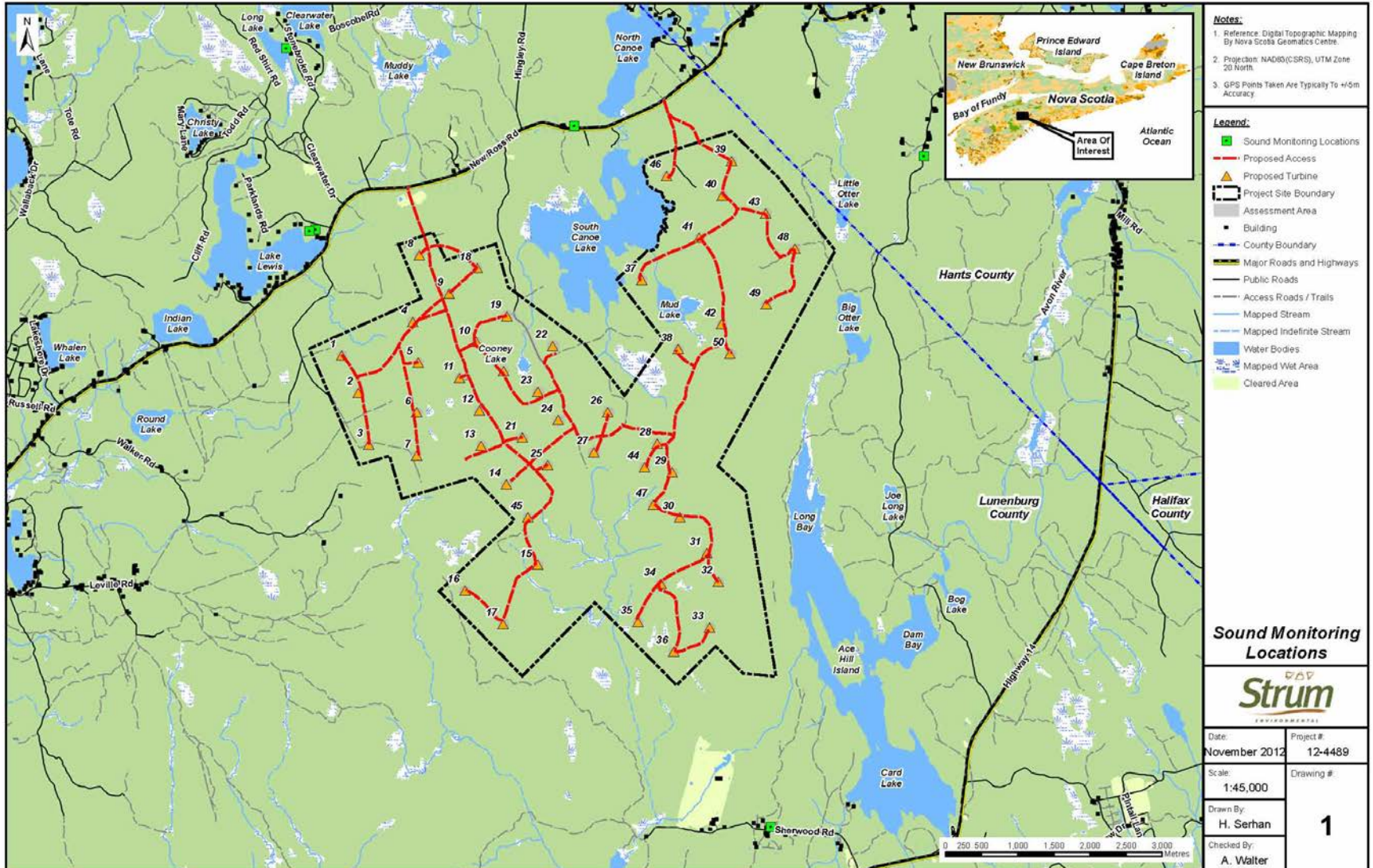
Source	Distance from Source		Sound Pressure Levels in dBA
	feet	meters	
Freight train	100	30	70
Vacuum Cleaner	10	3	70
Freeway	100	30	70
Wind in trees	40	12	55
Light traffic	100	30	70
Average home			50
Soft whisper	5	2	30

Sound Monitoring

- Purpose: to document ambient (i.e. pre-construction) sound levels at receptor locations.



Sound Monitoring



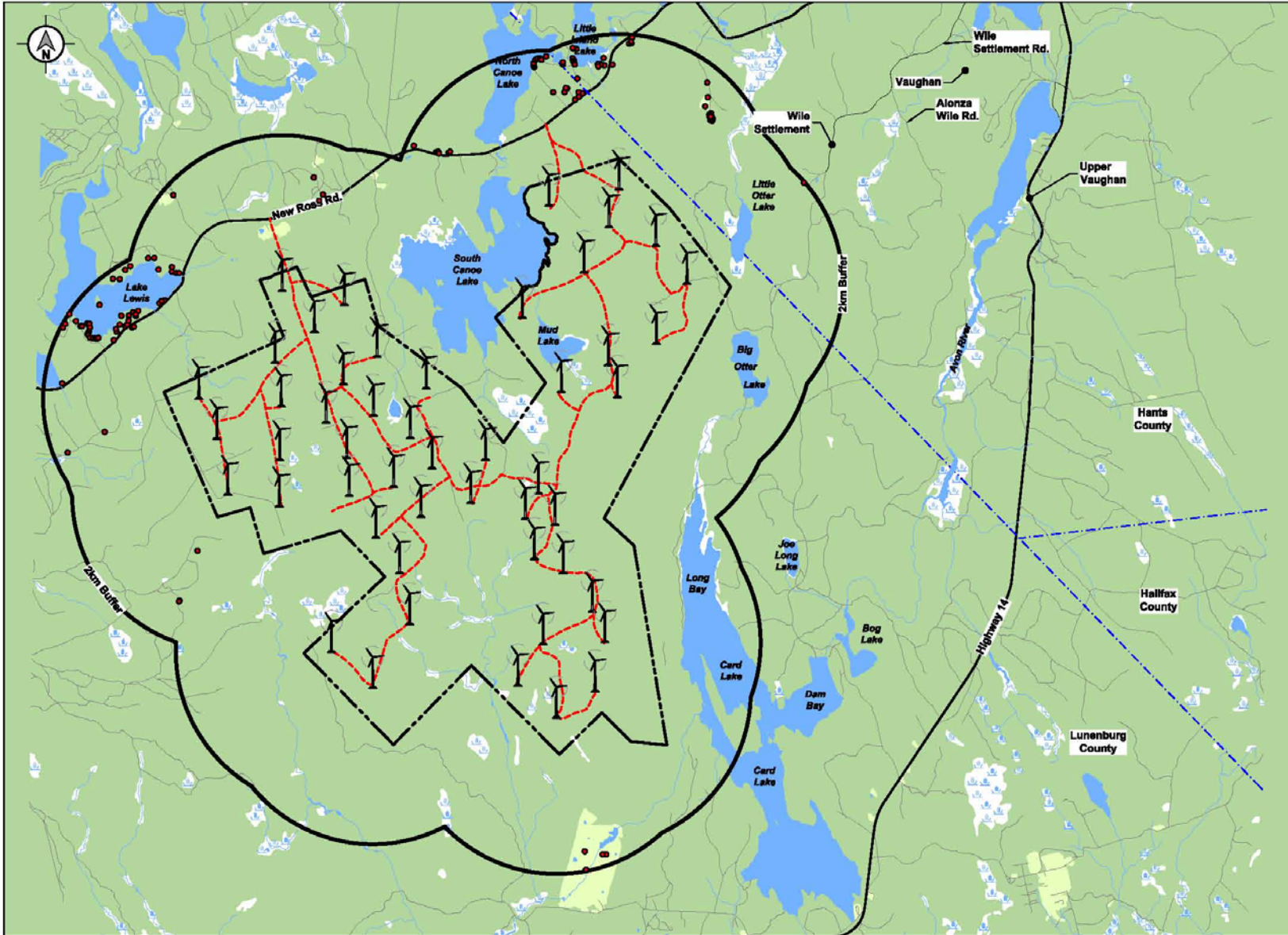
Sound Monitoring

- A-weighted filter correlates well with our perception of most sounds.
- Sound is logged every minute.
- Results will be reported as Leq at each monitoring location.
- Can report hourly Leq, as well as daytime, evening, and nighttime Leq values.

Shadow Flicker

- Shadow flicker occurs when rotating wind turbine blades cast shadows upon stationary objects.
- Only appears during very specific conditions.

Shadow Flicker



Notes:

1. Reference: Site Plan supplied by client. Digital Topographic Mapping by Nova Scotia Geomatics Centre.
2. Projection: NAD83(CRS), UTM Zone 20 North.

Legend:

- Proposed Turbine Location
- Receptor Locations
- Project Area
- County Boundary
- Proposed Road
- Existing Paved Road
- Existing Trail / Access Road
- Mapped Stream
- Mapped Indefinite Stream
- Mapped Water Bodies
- Mapped Wet Area
- Clear Area

Shadow Flicker Results

DATE:	PROJECT #:
May 2012	12-4361
SCALE:	DRAWING #:
1:45,000	1
DRAWN BY:	
H. Serhan	
CHECKED BY:	
L. Hynes	

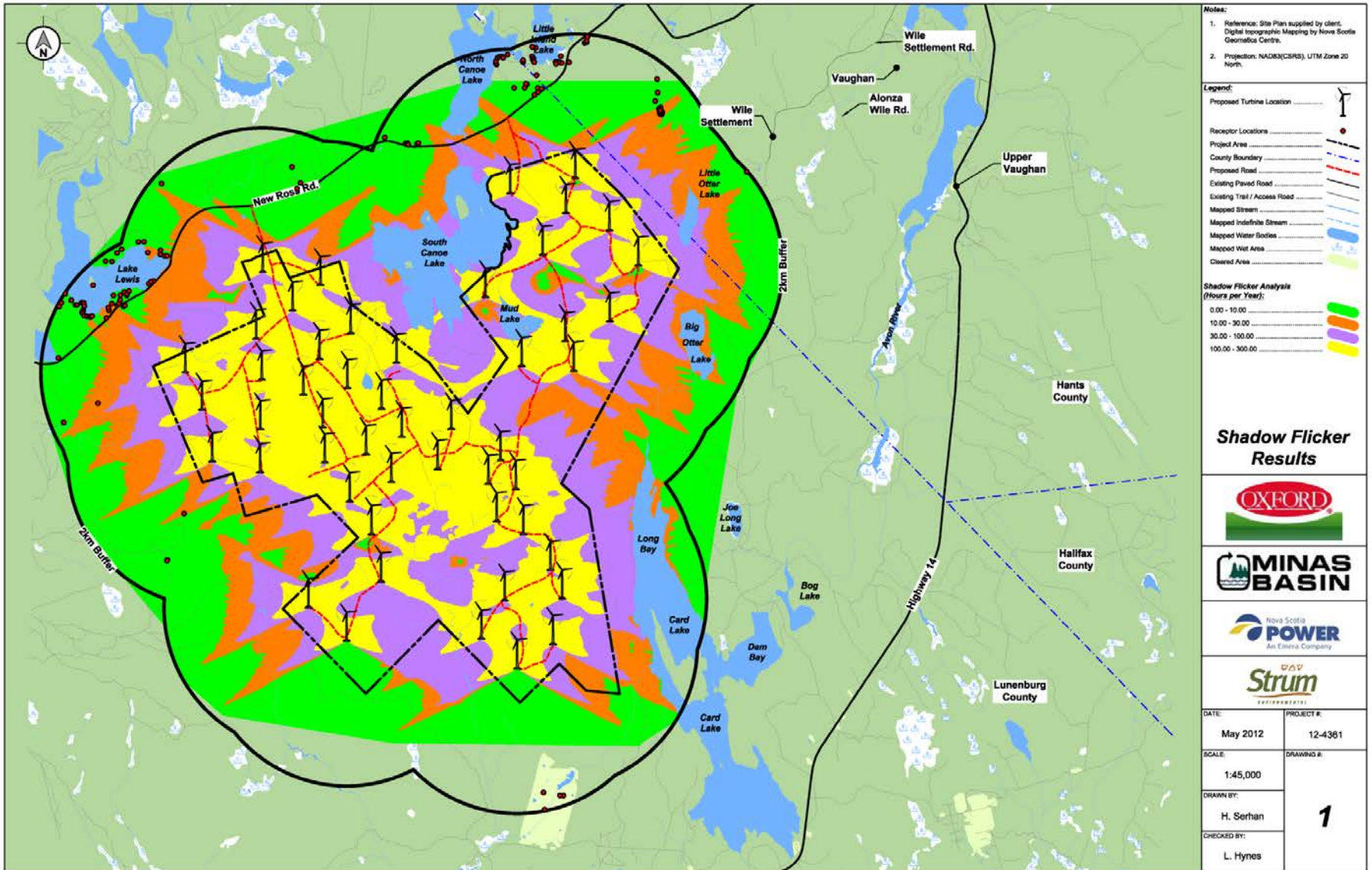
Shadow Flicker

- Model Inputs:
 - Receptor locations
 - Topography
 - Turbine locations (50)
 - Turbine size (3 MW)
 - Turbine height, blade diameter, blade width

Shadow Flicker

- Model Assumptions:
 - the sun is shining over the entire day, from sunrise to sunset
 - the rotor plane is always perpendicular to the line from the turbine to the sun
 - the turbine is in constant operation mode

Shadow Flicker



Thank You

Questions?