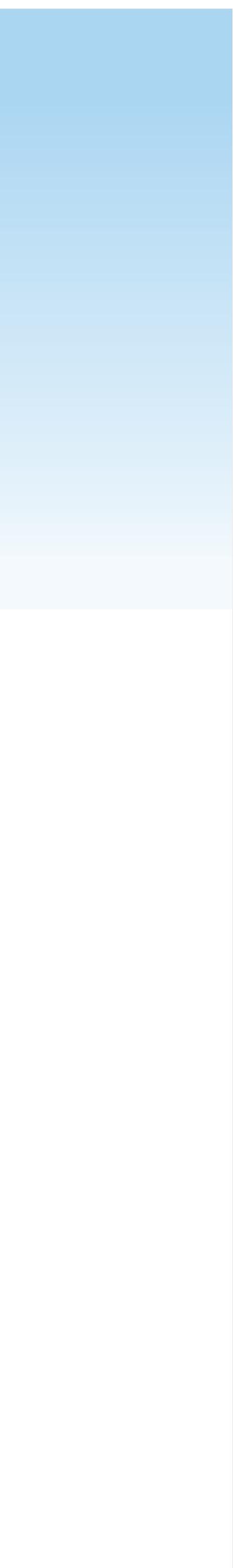
- Thank you for coming. We are here to answer your
- questions, and provide information on the proposed
- wind facility. Please view the display panels, speak with
 - members of the study team, and complete a

WELCOME To the St. Columban Wind Project Open House!

questionnaire with your comments.



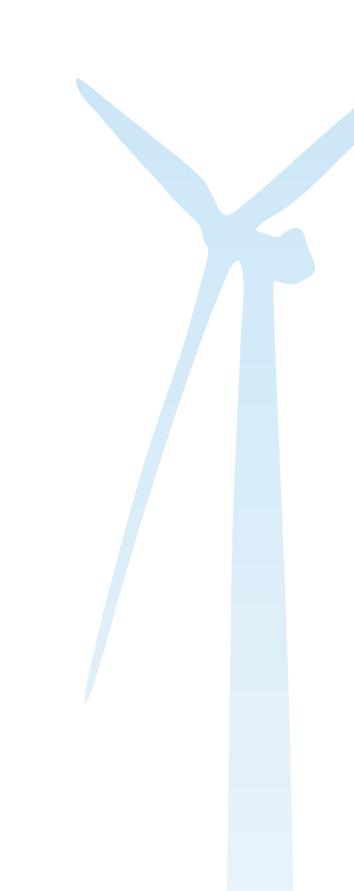


Objectives of This Public Open House

- Provide a status update on the proposed St. Columban Wind Project (the Project).
- Provide an overview of the Renewable Energy Approval (REA) process.
- Share results of the environmental studies which have been completed to date.
- Answer questions about the Project and outline next steps.
- Receive the community's input and feedback for consideration by the Project team as St. Columban Energy LP finalizes the reports for submission to the Ministry of the Environment (MOE).









St. Columban Energy LP

The Project

- Municipality of Huron Howick, and Municipa
- 15 Turbines, 33 MW (n
- A 34.5 kV approximation electrical interconnecti
- Infrastructure includes electrical collector line connection to the exist network, a transformer unserviced electrical c
- All Project component and within municipal rights-of-way

	Projec
East, Township of	 Zero
ality of Morris-Turnberry	ener
maximum capacity)	gree
ately 43 km underground tion line	 Help rene fired
s access roads, buried es, two points of	firedNew
sting Hydro One	• Secc
er station, and two small control buildings	and
ts are on private land	

ST. COLUMBAN ENERGY LP

Project Benefits

emissions – helps meet forecasted gy supply requirements while reducing enhouse gas levels

os meet Ontario's commitment to

ewable energy and phasing out of coalpower plants

v local investment

ondary source of income for farmers landowners

Site Selection - Why St. Columban?

- verified the site capacity
- wind energy loss between turbines
- small footprint for Project components
- Landowner Interest in hosting turbines
- provincial grid
- and natural features

Good Wind Regime – 6 years of wind monitoring have

Sufficient distance between the turbines to account for

• Compatible Land Uses – agricultural land requiring a

 Electrical Interconnection – the project has access to connect to transmission capacity on the Hydro One

• Environment – studies of local environmental features show that the Project will have no/low impact on wildlife



ST. COLUMBAN ENERGY LP

 Local economic benefit - jobs, municipal tax revenue, keeps famers farming as supplemental income on participating lands

Site Access – good existing road infrastructure

Flat Topography





Wind Project Study Area and Project Location



W:\active\60960649\drawing\GIS\MXD\ConsultationMaps\POH3_Maps\60960649_Fig2_WindProjectLocation_20120503.mxd Revised: 2011-11-30 By: pworsell

ST. COLUMBAN ENERGY LP

QUEBEC Ottawa Study Area

February 2012 160960649

Wind Turbine Details

15 Siemens SWT 2.3-101/SWT 2.3-113 wind turbine generators with a maximum installed nameplate capacity of 33 MW.

Manufacturer

Model

Name plate capacity (MW)

Hub height above grade

Blade length

Full blade diameter

Blade sweep area

Speed range

Frequency spectrum

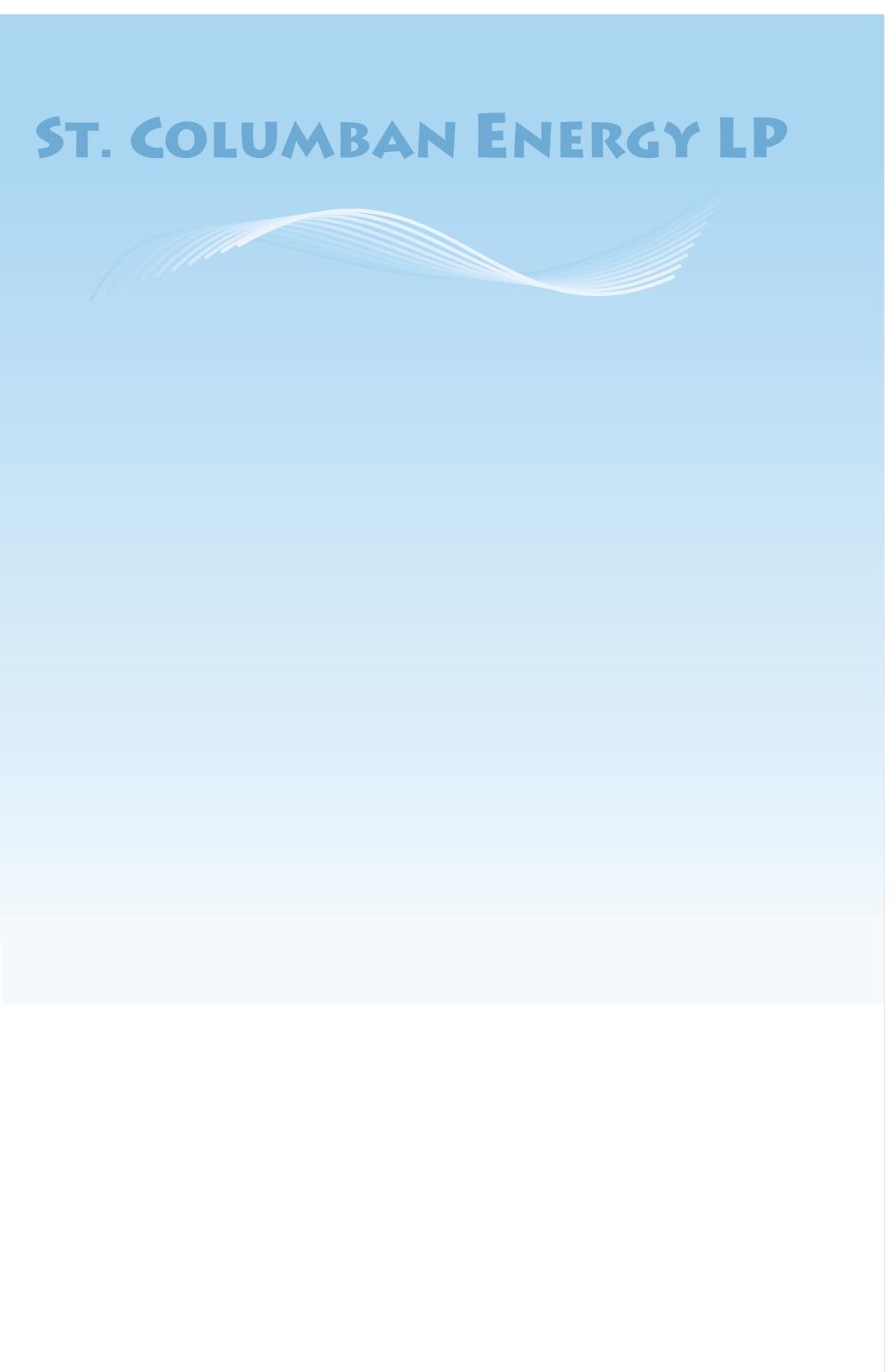
To be conservative, two turbine models were assessed as part of the Renewable Energy Approval (REA) process – the SWT 2.3-113 (113m blade span) and the SWT 2.3-101 (101m blade span).

This conservative approach will ensure the 'worst case scenario' was assessed.

	Siemens	Siemens
	SWT 2.3-113	SWT 2.3-101
/)	2.3 MW	2.3 MW
	99.5 m	99.5 m
	55 m	49 m
	113 m	101 m
	10,000 m	8,000 m
	6-13 rpm	6-16 rpm
	60 Hz	60 Hz

• For the noise assessment, the SWT 2.3-101 was assessed, due to its higher noise level.

• For potential impacts to the natural environment, and property line setback assessments, the SWT 2.3-113 was assessed, due to its longer blade length.



Renewable Energy **Approval (REA) Process**

- satisfy before building the Project.
- has been ongoing throughout the REA process.
- community and environment are protected.
- addressed prior to construction.

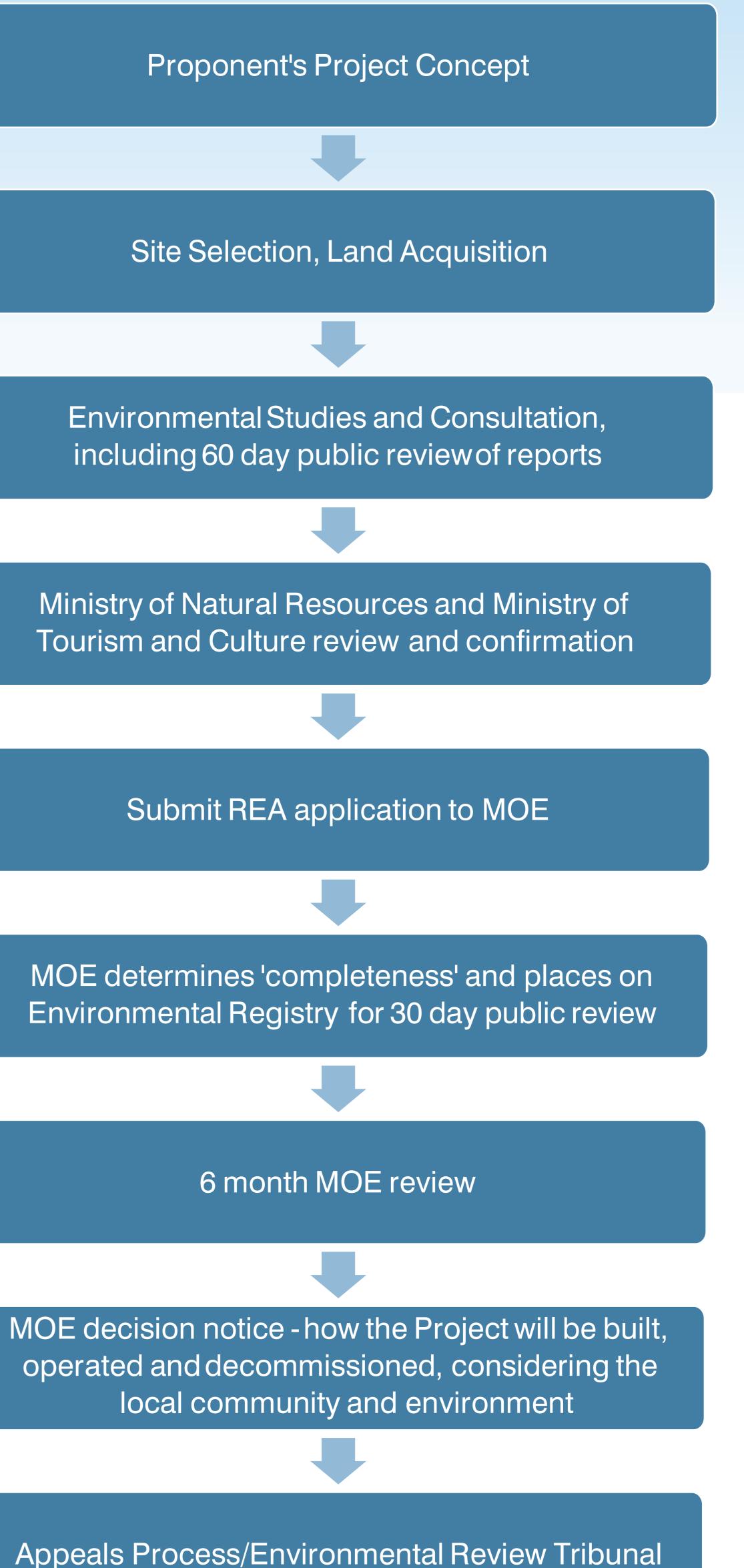
• The REA process is a stringent environmental approvals process that St. Columban Energy LP is required to

• The detailed studies, analysis, and work required to prepare the REA application have been completed.

Public, Municipal, Agency and Aboriginal consultation

• The reports specify how the Project will be designed, built, operated, and decommissioned, so that the local

Additional approval and permitting requirements from the municipalities, as well as agencies such as the MNR and the Maitland Valley Conservation Authority, will be







Technical Studies

Environmental studies have been completed to fully understand the local environment and have been considered in the development of the Project layout.

The technical studies include in-depth analysis of:

- Significant Wildlife Habitat
- Bird breeding, wintering, and migration areas
- Waterbodies and aquatic resources
- **Protected Properties**
- Environment (MOE).

Wildlife and wildlife habitat, including Species at Risk and

Woodlands, vegetation, and other significant natural features (e.g. wetlands and Areas of Natural and Scientific Interest)

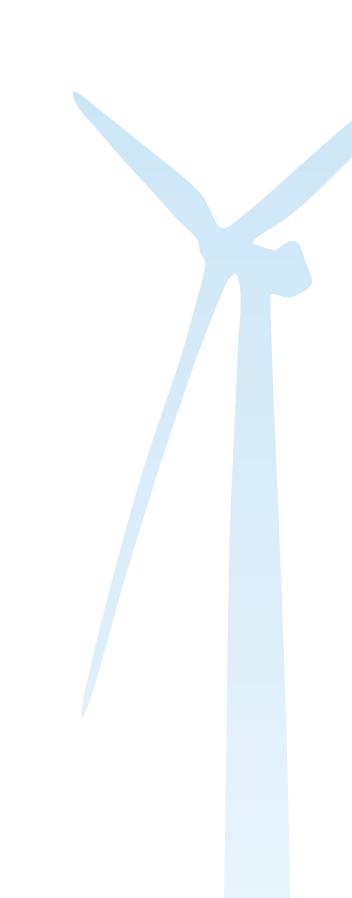
Archaeological Features, Built Heritage Features and

These technical studies have been reviewed by the Ministry of Natural Resources (MNR) and the Ministry of Tourism, Culture and Sport (MTCS), and deemed complete.

All technical reports for the Project were made available for public review on March 7, 2012, and will be included as part of the REA application submitted to the Ministry of the







Health and Wind Power

Public health and safety will be considered during all stages of the Project. Many studies have been conducted world-wide to examine the relationship between wind turbines and possible human

- health effects.
- and solar power to help us move away from coal"

*e.g., Chatham-Kent Public Health Unit, 2008; Minnesota Department of Health, 2009; Australian Government, National Health and Medical Research Council, 2010; Australian Government, 2011; Massachusetts Department of Environmental Protection (Mass DEP) and Massachusetts Department of Public Health (MDPH), 2012.

Ontario College of Family Physicians, Registered Nurses Association of Ontario, Canadian Association of Physicians for the Environment, Physicians for Global Survival, the Asthma Society of Canada, and the Lung Association

In "The Potential Health Impact of Wind Turbines" (May 2010), Ontario's Chief Medical Officer of Health examined the scientific literature related to wind turbines and public health, considering potential effects, such as dizziness, headaches, and sleep disturbance. The report concluded that:

"...the scientific evidence available to date does not demonstrate a direct causal link between wind turbine noise and adverse health effects. The sound level from wind turbines at common residential setbacks is not sufficient to cause hearing impairment or other direct health effects, although some people may find it annoying."

The report also concluded that low frequency sound and infrasound from current generation upwind model turbines are well below the pressure sound levels at which known health effects occur. Further, the report states that there is no scientific evidence to date that vibration from low frequency wind turbine noise causes adverse health effects.

Overall, health and medical agencies agree that sound from wind turbines is not loud enough to cause hearing impairment and is not causally related to adverse effects*.

Scientists and medical experts around the world continue to publish research in this area. Through our health consultants, St. Columban Energy LP is committed to keeping informed on this issue.

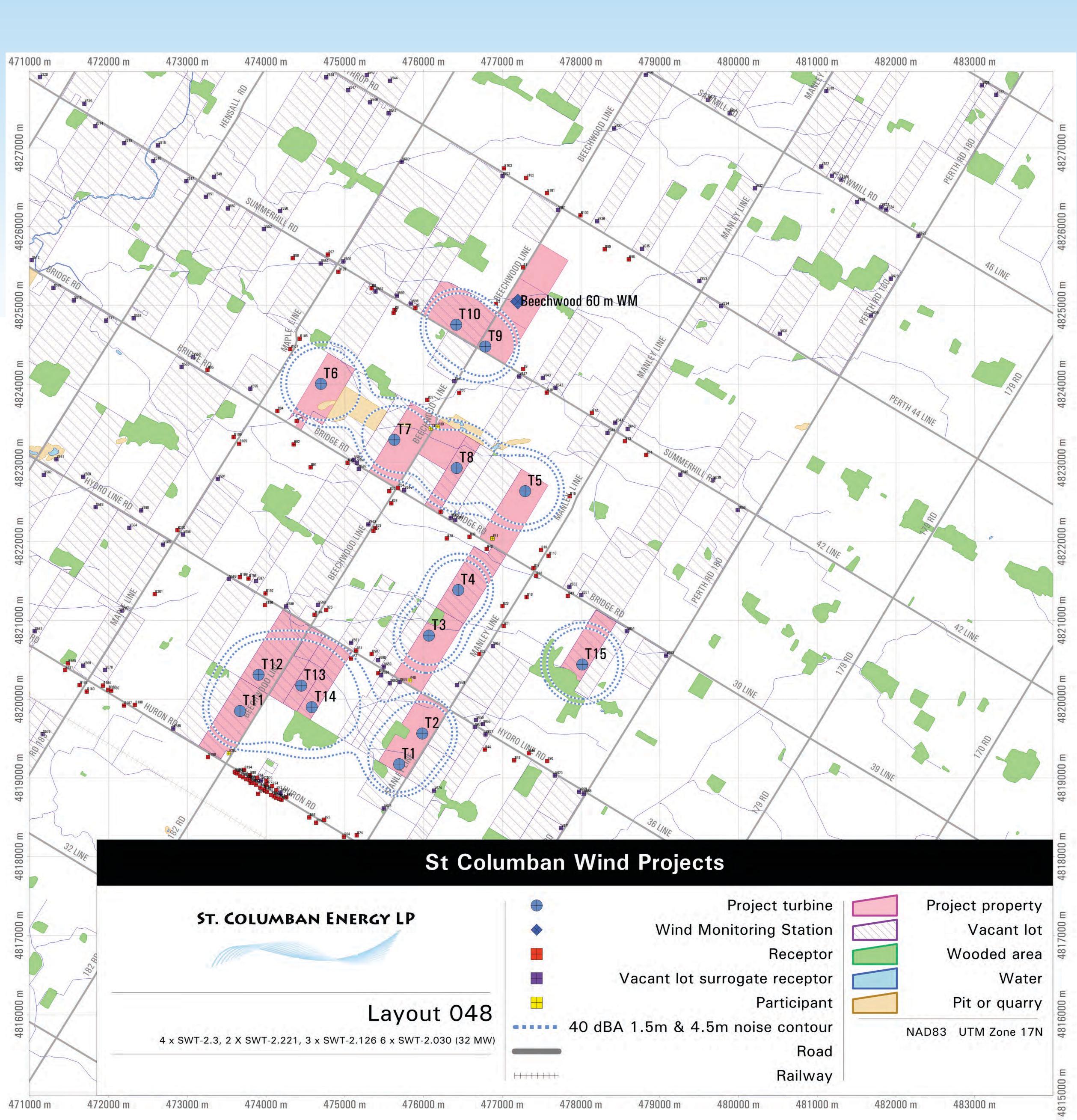
ST. COLUMBAN ENERGY LP

In Ontario "Ontario doctors, nurses, and other health professionals support energy conservation combined with wind

Noise Assessment

- Two turbine models are being considered, the SWT 2.3-113 (113m blade span) and the SWT 2.3-101 (101m blade span). For the noise assessment, the SWT 2.3-101 was assessed, due to its higher noise level. This conservative approach ensured the 'worst case scenario' was assessed.
- The Noise Assessment concluded that sound to be produced by the Project will be within the limits established by the MOE at all non-participating noise receptors (residences and schools).





Natural Heritage Assessment

The NHA assessed vegetation, woodl habitat.

- The MNR has reviewed the reports a results were appropriate.
- Public input resulted in a 2011 surve
- No seasonal concentration areas for
- No animal movement corridors, bat maternity roosts were identified.
- Although the Project is within an area found, we do not anticipate negative habitats. We are currently working v

The following were found within 120 r **Project:**

- Provincially and locally significant we assessed as provincially significant
- One Life Science Area of Natural and
- One deer yard
- Two potential woodland amphibian breeding ponds

Potential construction effects include:

- Changes to wetland hydrology by increasing or decreasing runoff
- Disturbance from dust and increased traffic
- Accidental spills, sedimentation, and erosion

ands, wetlands, wildlife, and	Miti
and determined the methods and	elim has inte
ey for Tundra Swans.	road pote
r birds were identified. hibernacula (overwintering) or	Pote sigr
e where species at risk may be impacts on these species or their with the MNR to confirm this finding.	MN mor thre faci tem
etlands (ALL conservatively to ensure their protection). d Scientific Interest (ANSI)	The pos

ST. COLUMBAN ENERGY LP

gation measures will be put in place to reduce or ninate potential effects to natural features. The Project been sited to avoid natural features, and the rconnection line will be entirely within the municipal d allowance, significantly reducing or even eliminating ential effects on adjacent natural features.

ential impacts on all features were not determined to be nificant and can be mitigated through standard ctices and timing windows.

IR has prescriptive guidelines for post-construction nitoring of bird and bat mortality, including esholds. Mandatory mitigation is required for ilities that exceed thresholds which may include porary turbine shutdown.

Environmental Effects Monitoring Plan will include st-construction monitoring for birds and bats.



Water Body Assessment

Water Features

- Seven watercourses are present within 120 m of the Wind Project Location (construction area); (T7), Woods Drain (T3) and Carpenter Drain (T1)
- Water crossings with culverts are required at Krouskopf Drain (T4), Ryan Drain (T6), Canada and T15 will require resizing of existing culverts
- Twenty-three watercourses are within 120 m of the construction area for the underground electrical interconnection line – all will be crossed by directional drilling under the watercourses
- Mitigation will include direction drilling, controls, and using Operational Statements from the Department of Fisheries and Oceans

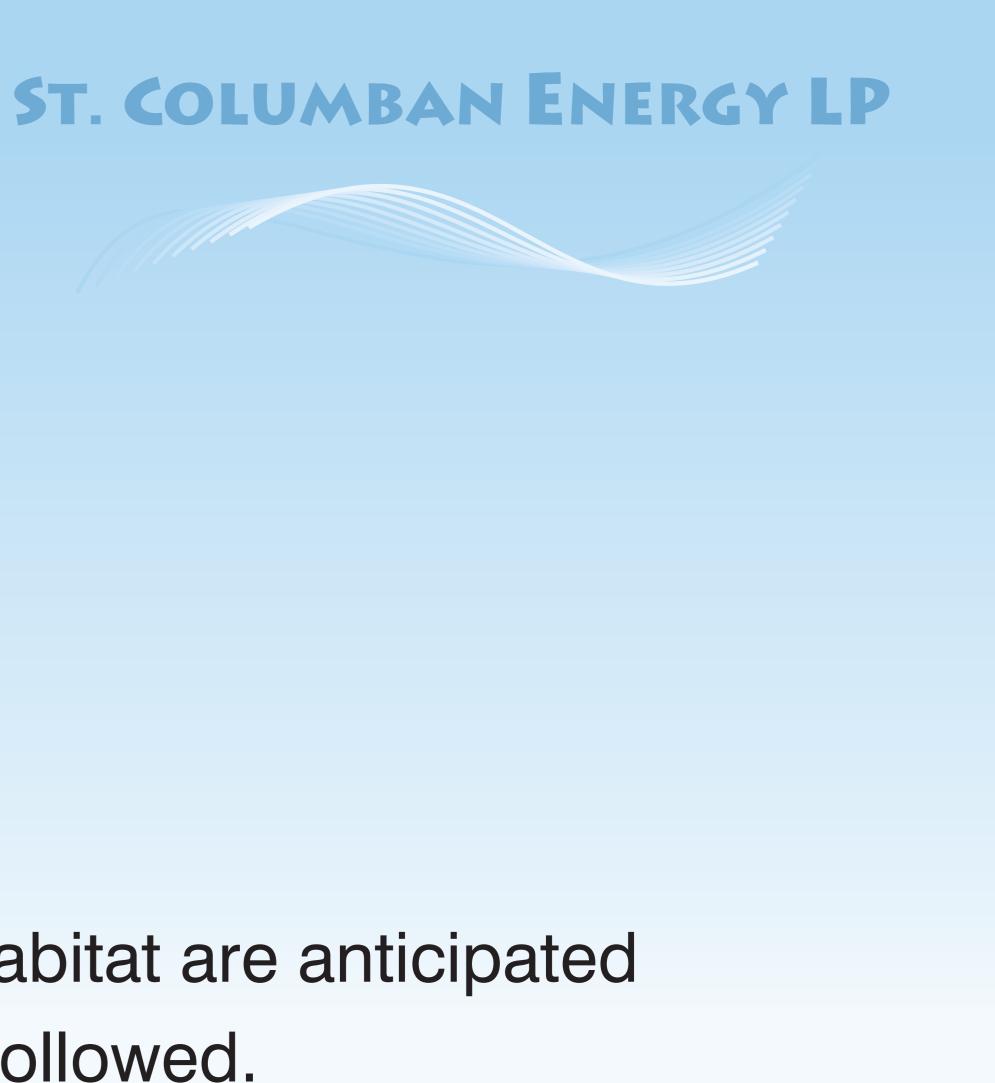
three are within the construction area – Ryan Drain

Company Drain (T14), and Woods Drain (T15); T14

Project infrastructure, including access roads and buried electrical cable, could impact watercourses

construction of appropriate sediment and erosion





No impacts to fish or fish habitat are anticipated if mitigation measures are followed.



Natural Heritage Assessment & Water Body Assessment



W:\active\60960649\drawing\GIS\MXD\ConsultationMaps\POH3_Maps\60960649_Fig7_NaturalFeaturesWindProjectLocation_20120503.mxd Revised: 2011-03-11 By: pworsell

ST. COLUMBAN ENERGY LP

	Study Area
	Turbine Location
	Point of Common Coupling
	Operations and Maintenance Buil
	Unserviced Electrical Control Buil
	Construction Area
	Proposed Underground Electrical Line Route
	Underground Collector
	Access Road
	Property Boundary
	Highway
	Road
<u> </u>	Railway
	Regionally Significant Earth Scien
	Aggregate Site
	Watercourse
	REA Waterbody (as defined in O.
	Waterbody
	Wooded Area
	Significant Natural Features

December 2011 160960649

Built Heritage, Protected Properties and Archaeological Assessments

Stage 2 Archaeological Assessment (field studies) Legend Study Area Project Components Construction Area Point of Connection Operations and Maintenance Building Unserviced Electrical Control Building Access Road ----- Underground Collector Proposed Underground Electrical Interconnection Aggregate Site Watercourse Heritage Resources Abandoned Petroleum Well School Soccor Field Before construction, a qualified engineer would Optioned Property Setback measure ambient (pre-construction) vibration Road Setback (65m) Property Line Setback (99.5) levels at the property line of a significant built Notes Coordinate System: UTM NAD 83 - Zone 17 (N). heritage resource along the proposed 2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011. interconnection line. Orthographic Imagery: © First Base Solutions -Imagery Date: 2010 & 2006. be taken again, and the peak vibration levels compared to pre-construction conditions. The engineer would then determine the need for any further vibration testing at other protected and/or heritage properties located close to the construction site. Results and recommendations would be documented and kept on-site.

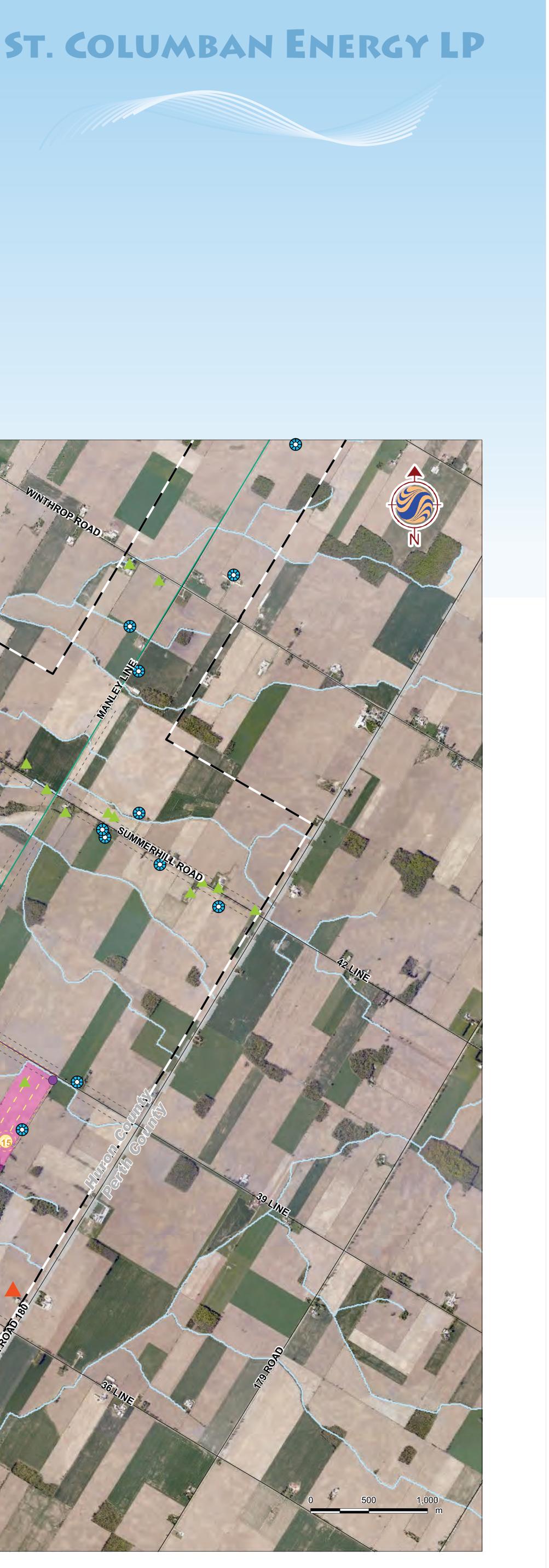
conducted for all Project components No archaeological features found. 47 significant built heritage resources and two significant cultural heritage landscapes were identified within the Study Area and assessed for Project-related effects. Potential negative effects were identified for 17 properties and 2 cultural heritage landscapes. Mitigation includes: • At the start of construction, measurements would Also, five 19th and 20th century windmills were identified in the Study Area, and the team

recommends these not be removed during construction and operation of the Project.

ng\GIS\MXD\ConsultationMaps\POH3_Maps\60960649_Fig4_SocioEc_Windproject_20120503.mx Revised: 2011-03-11 By: dharvey

St. Columban

olic School

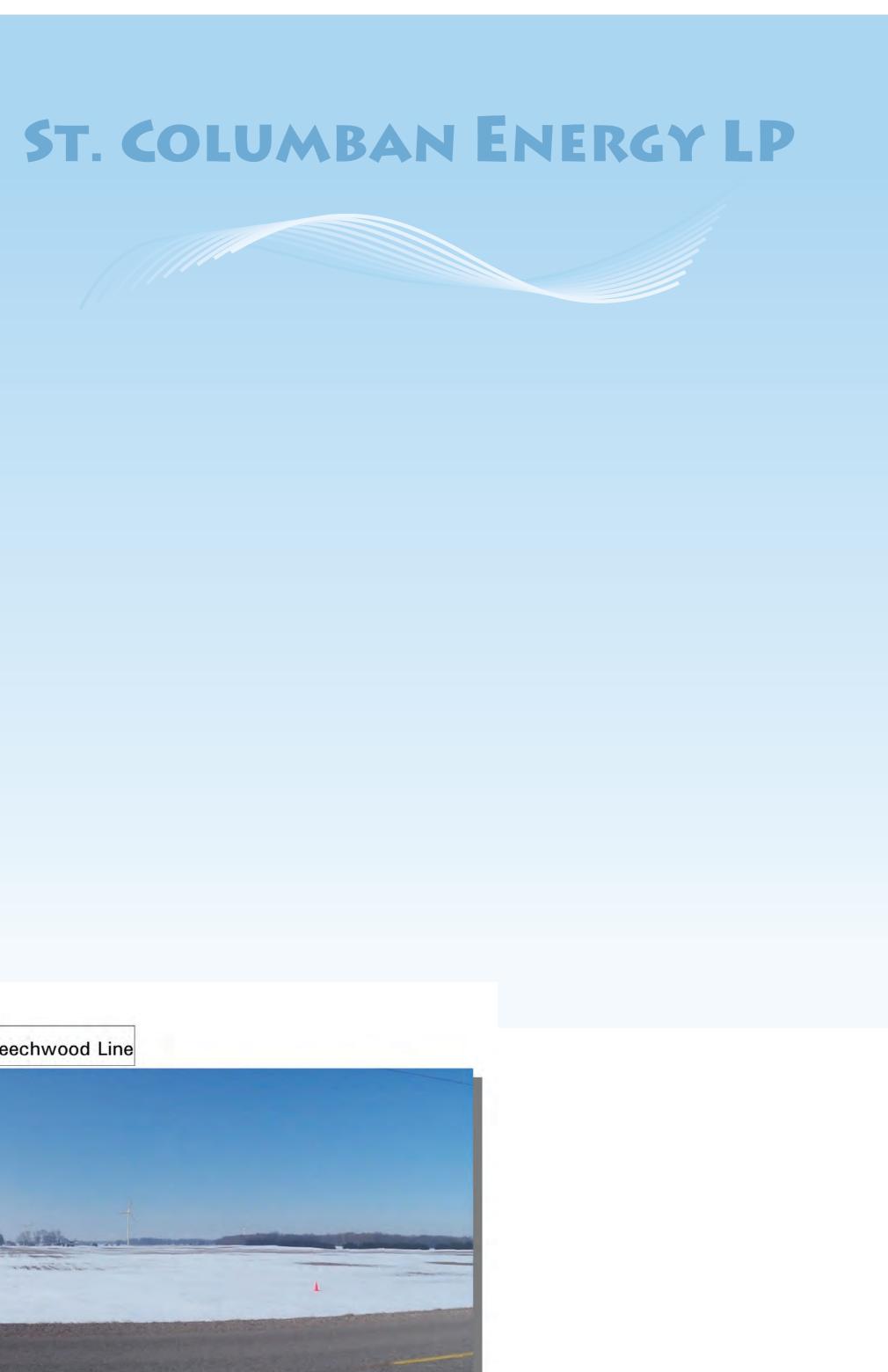




Visual Impact Assessment



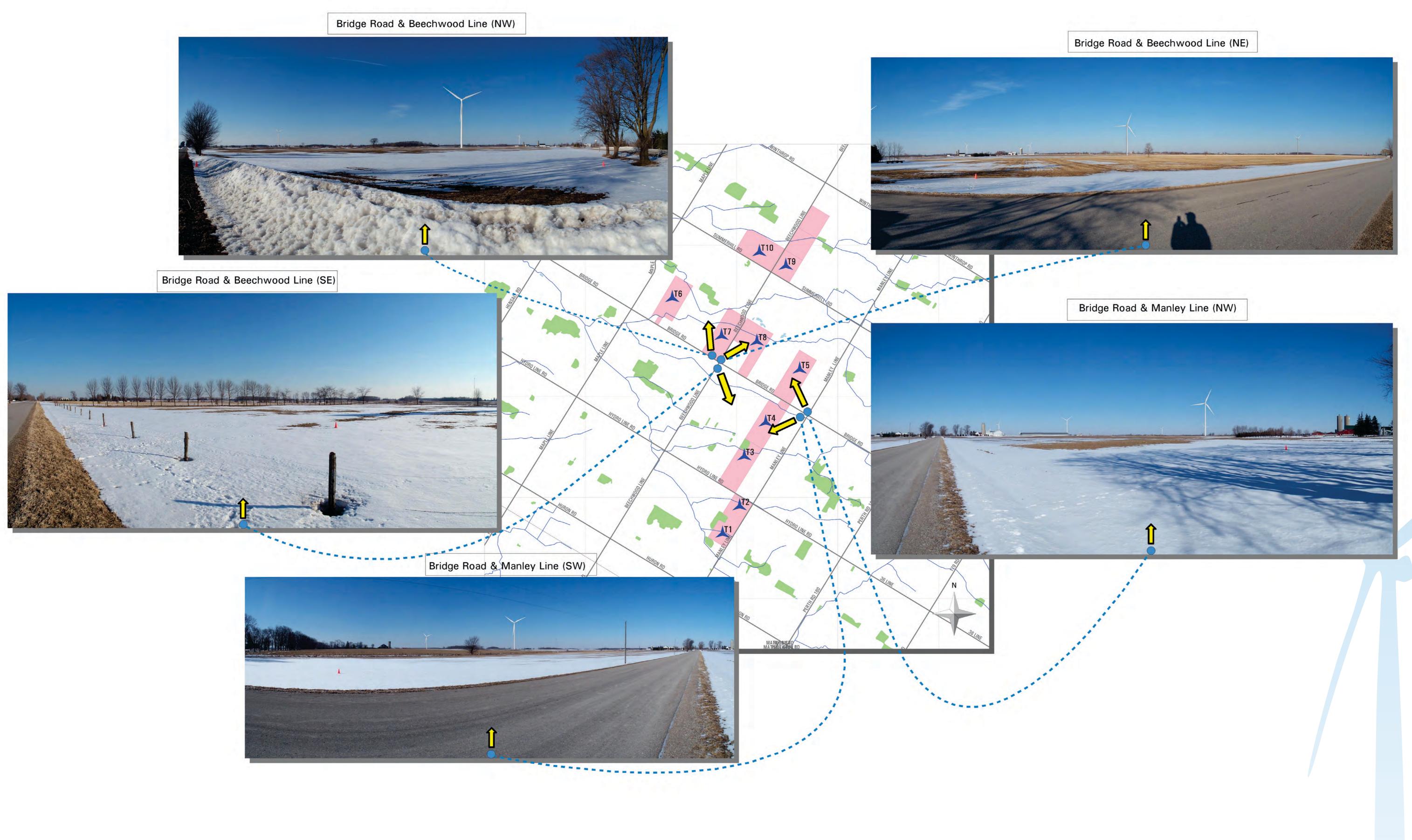


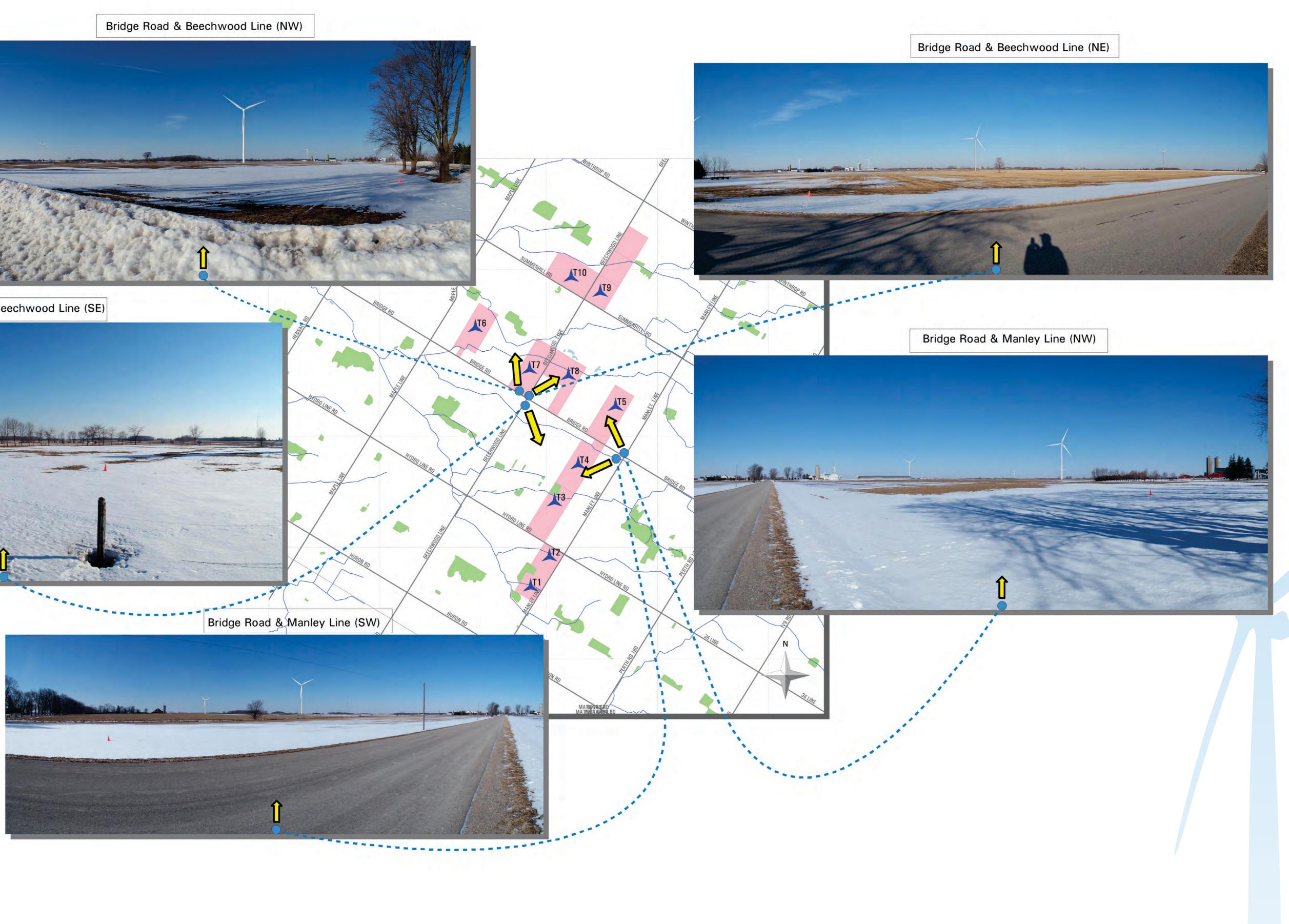


Visual Impact Assessment

Visual assessments were conducted during the ESR phase in 2009. While some newly proposed turbines have not been assessed, the majority have been, and the figures below give an indication of the visual impact of turbines within the Study Area.









Renewable Energy Approval Reports

The following reports have been prepared in draft and will be submitted as part of the REA application:

- Project Description Repo
- Construction Plan Report
- Design and Operations F
 - Property Line Setback
 - Noise Assessment
- Decommissioning Plan R
- Wind Turbine Specificatio



ort	٠	Natur
t		Impa
Report, includes:	٠	Water
Assessment	•	Herita
	٠	Prote
Report	٠	Stage
ons Report	٠	Cons
		subm

All reports, with the exception of the Consultation Report, have been made available in draft for public review and comment as of March 7, 2012, for at least 60 days prior to the Final Public Open House. Notification of the release of the draft reports was provided in local newspapers, by mail, and on the Project website.

ST. COLUMBAN ENERGY LP

ral Heritage Assessment / Environmental ct Study

r Assessment / Water Body Report

age Impact Assessment

ected Properties Assessment

e I and II Archaeology Assessments

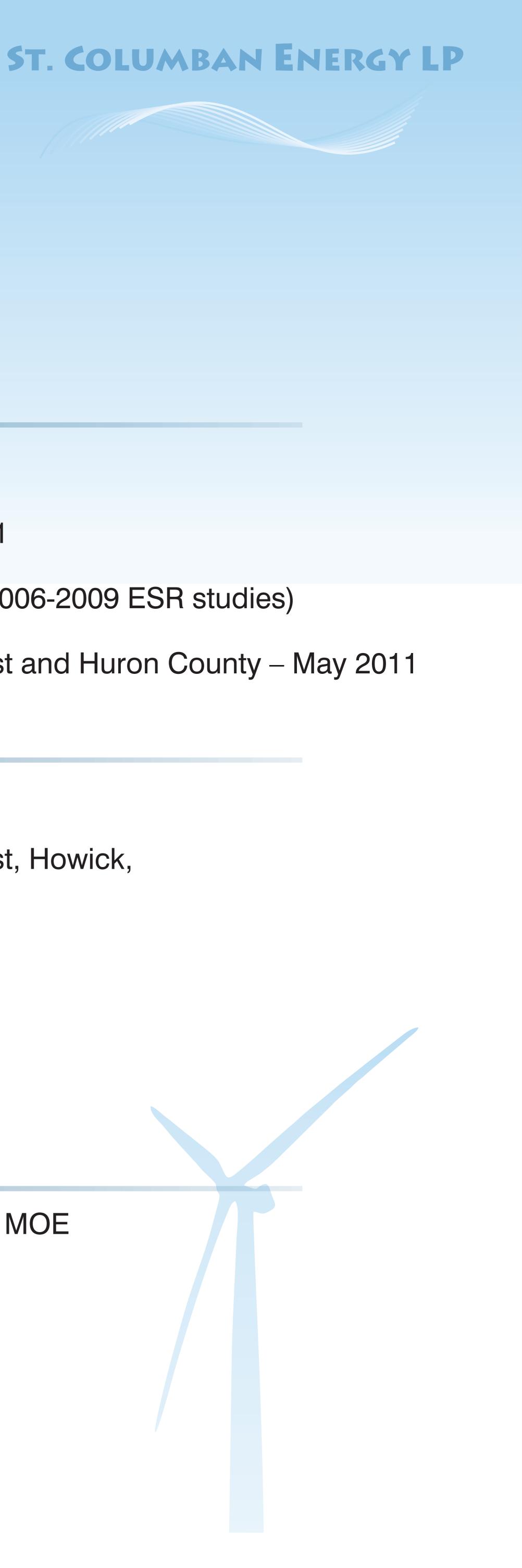
sultation Report (will be prepared for the final submission to the MOE).



Project Schedule Overview



- Initiate Public REA Process Winter 2011
- Draft Project Description Report and Site Plan made available March 2011
- Draft REA Reports and Municipal Consultation Form provided to Huron East and Huron County May 2011
- Public Open House #1 May 2011
- Public Open House #2 January 2012
- Draft REA Reports and Municipal Consultation Form provided to Huron East, Howick, Morris-Turnberry and Huron County – January 2012
- Draft REA Reports to Public February 2012
- 60 day Public Review and Comment Period
- Final Public Open House May 2012
- REA Submission June 2012
- 30 day Environmental Registry public review period date determined by MOE
- REA Decision late 2012
- Start of Construction July 2013
- Commercial Operation Date (COD) early 2014
- Repowering/Decommissioning Approximately 20.5 years after COD



Undertake REA Technical Studies – throughout 2011 (supplemented with 2006-2009 ESR studies)

We Want Your Feedback!

Please share your questions and comments with us by filling out a questionnaire. You can also contact the Project team by:

Email: Shawna.Peddle@stantec.com

Project Email: stcolumbanwind@vereseninc.com

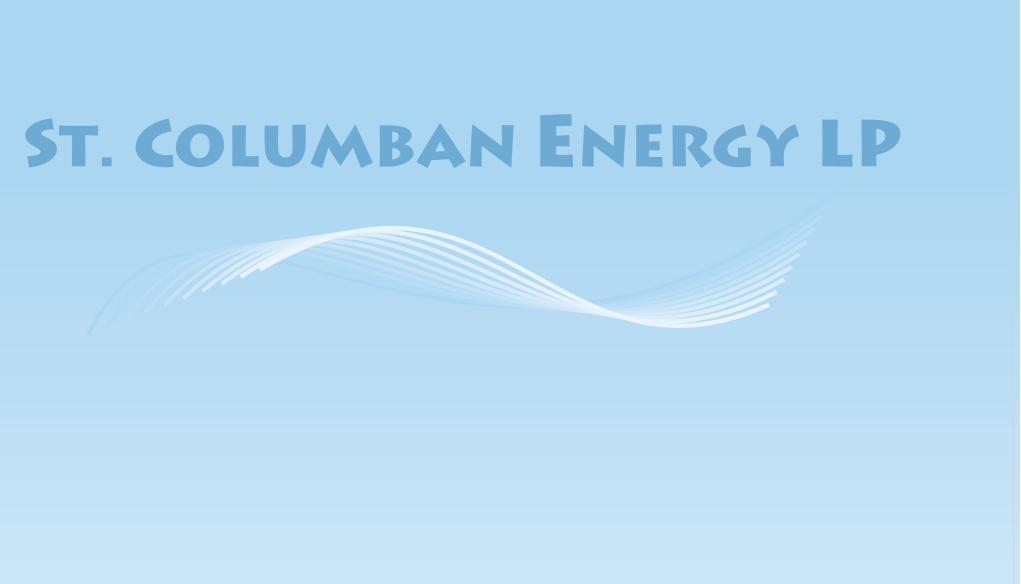
Phone: 519-836-6050

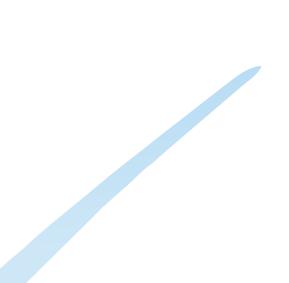
Mail: José Menendez VP Business Development, East St. Columban Energy LP 222-3rd Avenue SW, Suite 900 Calgary, AB T2P 0B4

You may also visit us on the project website at: http://www.vereseninc.com/our-business/power/wind.html

Copies of the display boards from this Public Open House and Draft Project reports are available on the website.

Shawna Peddle Senior Project Manager Stantec Consulting Limited 70 Southgate Drive, Suite 1 Guelph, ON N1G 4P5





Construction

- Construction is planned to begin in July 2013.
- Main areas that would be directly impacted by construction activities include:
 - Turbine Locations: Each turbine will have an approximately 16 m diameter, poured-in-place reinforced concrete foundation, buried to a depth of approximately 2.5 m.
 - Crane Pads: Installed in the construction area adjacent to each turbine location, measuring 30 m x 20 m.
 - Access Roads: Approximately 8 km of new access roads will be required (approximately 6 m wide in straight sections, but potentially wider where turning of large construction vehicles is required). Entrances will be approximately 26 m wide.
 - Underground Collector Lines: Approximately 11.6 km of 34.5 kV underground collection lines will connect 8 wind turbines for St. Columban 1. Approximately 9.5 km of 27.6 kV underground collection lines will connect 7 wind turbines for St. Columban 2.
 - Electrical Interconnection Line: Approximately 43 km of buried 34.5 kV electrical interconnection line to the Township of Howick is proposed to be installed just off the grass gravel interface at the edge of municipal roads at a depth of at least 1.0 m.
 - Electrical Control Buildings and Transformer Station: Two small unserviced electrical control buildings near the entrance to turbine access roads T8 and T15 will measure approximately 6 m x 12 m. The transformer station will occupy an area approximately 20 m x 30 m in size on private lands, south-east of the intersection of Gough Road and Belmore Road in the Township of Howick.

ST. COLUMBAN ENERGY LP









Operations and Decommissioning

- Operations include daily monitoring of the wind turbines and maintenance activities.
- St. Columban Energy LP will carry out various on-going activities, including daily operation and maintenance, associated with the Project.
- The maintenance staff would be able to monitor the performance of all turbines on-line in real time using the Supervisory Control and Data Acquisition (SCADA) system.
- St. Columban Energy LP will finalize a detailed Emergency Response Plan for each Project phase and coordinate with the applicable municipal agencies.

Decommissioning

- Project components are expected to be in service for the 20 year term of the power supply agreement between St. Columban Energy LP and the Ontario Power Authority. Following the term of the agreement, a decision would be made regarding whether to extend the life of the Project components or to decommission.
- Decommissioning would entail the removal of Project components and restoration of the land to an acceptable condition for its intended use.
- During all decommissioning and restoration activities, general environmental protection and mitigation measures would be implemented.
- Many activities during decommissioning would be comparable to the construction phase.