



# Proposed St. Vital Transmission Complex

## Round 2 Preferred Route for the St. Vital to Letellier Line

### What is it?

Manitoba Hydro is proposing construction of two 230-kilovolt (kV) transmission lines to improve system reliability and accommodate the growth in demand for electricity in southern Manitoba. Both lines will originate at the St. Vital Station, located in southeastern Winnipeg. One line will run west to the La Verendrye Station, located near Oak Bluff. The other will run south to the Letellier Station, located near Letellier.

The new transmission line between the St. Vital and La Verendrye stations will be situated on an existing Manitoba Hydro right-of-way, located south of Winnipeg, (see page 3) known as the Southern Loop.

The transmission line between the St. Vital and Letellier stations will be routed through southeastern Manitoba, near Steinbach in order to accommodate a potential future 230-kV station. Manitoba Hydro is seeking public input to finalize a route for this line that will be submitted for regulatory approval.

### How do we choose a route for the St. Vital to Letellier line?

Our approach to developing a preferred route for the St. Vital to Letellier transmission line includes early stakeholder input and takes into account engineering considerations as well as the built and natural environment.

In the first round of public engagement, we shared information, including alternative routes, with landowners, First Nations, the Manitoba Métis Federation, municipalities and other stakeholders as well as the public. We received feedback on the alternative routes through stakeholder workshops, public open houses, meetings and email and telephone communications. This included completed comment sheets, workbooks, mapped issues and concerns and route preferences. Route selection information was compiled from these sources, along with general comments from key person interviews, and used in development of the preferred route.

In addition, discipline specialists evaluated cost, schedule, reliability and environmental considerations in determining the preferred route.



## Project Timelines

### Round 1 - August

- Introduce the project
- Present alternative routes
- Answer questions
- Identify and document concerns
- Use input to guide preferred route selection process

### Round 2 - October / November

- Present findings of Round 1
- Present the preferred route
- Answer questions
- Identify and document outstanding concerns
- Provide opportunity to discuss potential effects and possible mitigation measures to minimize effects

We are here.

### Next steps

- Submission of the Environmental Assessment Report
- Regulatory authorities review report
- Receipt of licence
- Construction
- In-service for St. Vital to Letellier line: Fall 2016
- Final project completion: 2017

## The preferred route for the St. Vital to Letellier line

The preferred route was determined by considering information supplied by specialists and feedback received throughout Round 1. Many alternative segments were presented by stakeholders, landowners and the general public. In total, four segments not initially presented during Round 1 are now considered part of the preferred route for the project. These have become part of the preferred route to address local concerns regarding aerial application, land use, current and future development, proximity to livestock operations and other concerns.

We are seeking comments and feedback on the preferred route in order to refine it further. Upon completion of Round 2, we will file a final preferred route with Manitoba Conservation and Water Stewardship.

## What's next?

Information gathered during round two of the public engagement process will assist in the identification of a final preferred route that balances technical, biophysical, and socioeconomic considerations.

We will continue to:

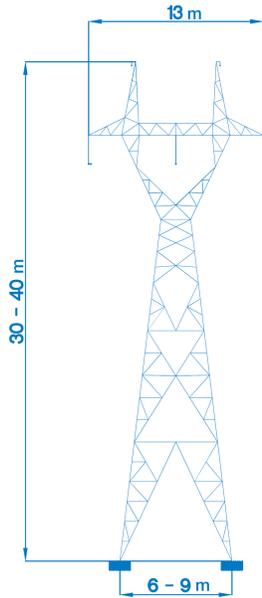
- inform the public regarding the project, timelines and route selection process.
- utilize a variety of mechanisms to receive and share information with interested individuals.
- gather feedback on the local environment to help finalize the route as well as the environmental assessment.
- discuss mitigation measures to minimize potential impacts.
- provide the public with the opportunity to have their questions answered and concerns addressed by Manitoba Hydro representatives.

## Tower Design

For the St. Vital to La Verendrye transmission line, we will utilize a self-supporting steel lattice tower. These towers will be located on a 137 metre (m), (450 ft.) right-of-way and will vary in height from 30 to 40 m (98 to 131 ft.). They will be similar to existing transmission lines in the Sage Creek area of Winnipeg.

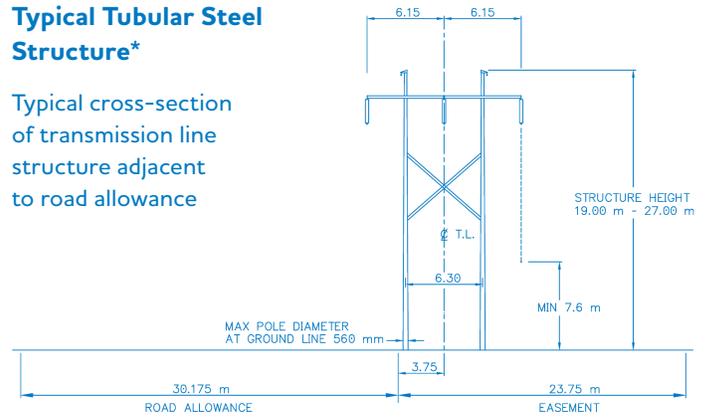
For the St. Vital to Letellier transmission line, we will utilize a tubular steel H-frame structure. These towers will be located on a 23.75 m (78 ft.) right-of-way when following a road or mile line, or 40 m (131 ft.) when placed in a field. These towers will vary in height up to 27 m (89 ft.), depending on terrain and road and river crossings.

### Self Supporting Suspension Lattice Steel Structure\*

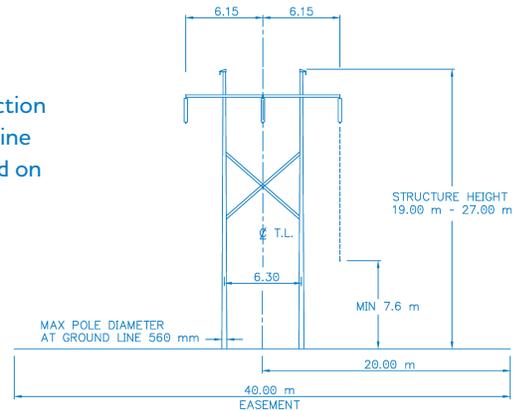


### Typical Tubular Steel Structure\*

Typical cross-section of transmission line structure adjacent to road allowance



Typical cross-section of transmission line structure located on 1/4 section line



\* Tower height and design are estimations and are dependent on terrain and final placement of the transmission line.

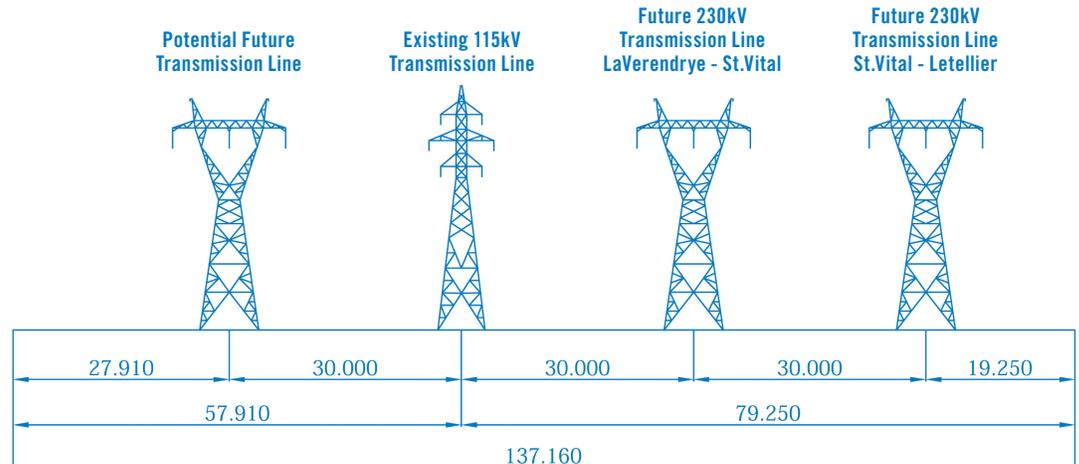
## Southern Loop

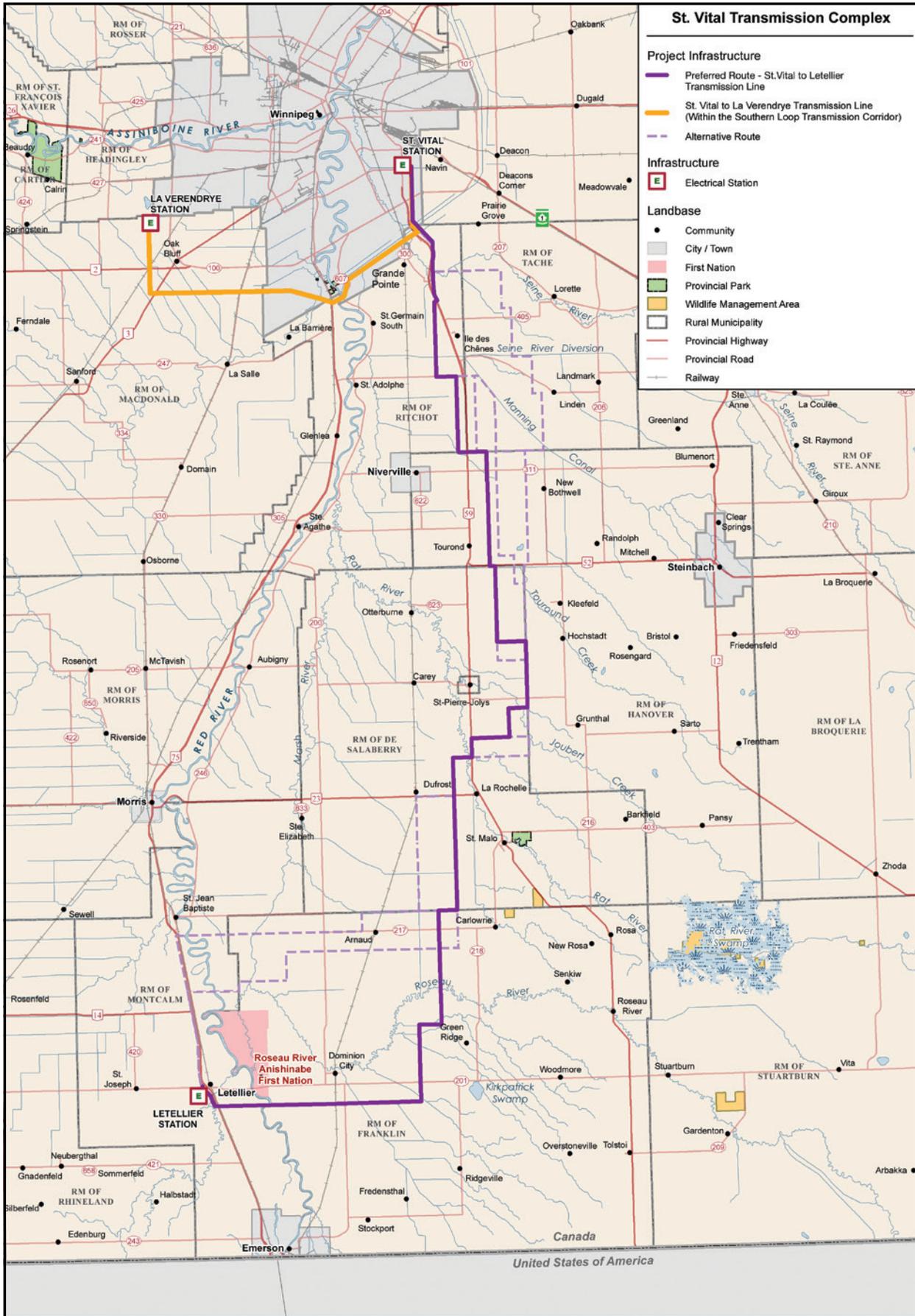
The Southern Loop is a dedicated transmission corridor that will accommodate the multiple transmission lines necessary to provide system reliability and to meet future energy demands. This corridor will reduce the number of independent rights-of-way on the landscape.

Situated between the Dorsey Converter Station (located near Rosser) and Riel Station (located east of Winnipeg), this transmission corridor follows the western and southern boundaries of the City of Winnipeg. It connects to the LaVerendrye Station, which is near Oak Bluff.

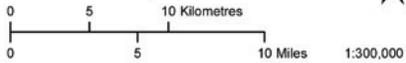
### Sage Creek Transmission Corridor Cross section looking north

This cross section is based on matching existing tower locations and right-of-way width. The numbers (in metres) below the transmission lines indicate the complete right-of-way width for the transmission line in that area.





Coordinate System: UTM Zone 14N NAD83  
 Data Source: MB Hydro, ProvMB, NRCAN  
 Date Created: October 16, 2013



**Preferred Route**

## What we heard – Round 1

Comment/Concern	How was the feedback incorporated?
Potential impacts to aerial application.	<p>Structure height in agricultural areas will be minimized to the extent possible to mimic heights of distribution lines.</p> <p>Air strip locations were identified, incorporated into early planning and avoided as much as possible in final route selection.</p>
Impacts to agricultural operations.	<p>We will avoid half-mile (quarter section) alignments where possible. Guyed-wire structures are not being considered for this project. A tubular steel H-frame design, which has a smaller footprint than self supporting or guyed structures, will be utilized.</p>
Potential affect on livestock, particularly dairy cattle, e.g., tingle voltage.	<p>Tingle voltage tends to occur with faulted distribution lines as opposed to transmission lines. Livestock operators are encouraged to contact Manitoba Hydro if they notice tingle voltage occurring so that the source can be identified.</p>
Loss of high-quality farm land.	<p>We will route the line adjacent to road allowances to minimize the land area used for the transmission line and the related impact on farming activities.</p>
Will I be compensated if the transmission line is on my land?	<p>Manitoba Hydro provides a one-time compensation payment for transmission line easements (75 per cent of market value), as well as one-time structure payment related to loss of annual production. We also compensate landowners for any damages which may occur through the construction and operation of the line.</p>
Proximity to farmsteads and shelterbelts.	<p>During routing, we avoid residences and shelterbelts as to the extent possible.</p>
Many areas are flood prone.	<p>The potential for flooding was taken into account but does not hinder operation of the transmission line.</p>
Locate transmission lines within existing Hydro transmission line corridors.	<p>This is being done where feasible; a portion of the line passing through Sage Creek is in an existing Manitoba Hydro corridor as is the Southern Loop.</p>
Locate transmission line infrastructure adjacent to linear infrastructure such as provincial and municipal highways and roads and drains in order to reduce land requirements.	<p>Existing corridors and linear features were identified as routing opportunities in the route selection process and are being taken advantage of where possible. We will consult with Manitoba Infrastructure and Transportation (MIT) on future planning before developing alignments near PTH 75, PTH 59 and PTH 52.</p>
Minimize transmission line crossings of major highways and rail lines, as well as stream crossings. Concern that stream crossings impact riparian habitat.	<p>Such crossings, which require higher and more costly towers, were minimized.</p>

Comment/Concern	How was the feedback incorporated?
Avoid landfills, lagoons and cemeteries.	Locations of landfills, lagoons and cemeteries were noted. Structure placement will avoid these areas.
Transmission tower aesthetics.	Towers that will be placed adjacent to existing towers will have similar spacing and heights.
Potential impact on wildlife, including birds, vegetation, riparian area, endangered species and wetlands	The environmental assessment process will identify potential environmental sensitivities and will prescribe appropriate mitigation measures.
Concern that construction will disrupt fur-bearing animals and affect trapping.	The environmental assessment process will identify potential sensitivities related to fur-bearing animals and will prescribe appropriate mitigation measures such as modifications to construction scheduling.
Avoid heritage sites.	The environmental assessment process will identify heritage resources, including archaeological sites, which will be avoided.
Perceived health effects due to electric and magnetic fields (EMF).	Information will continue to be provided in the public engagement process and these concerns will be addressed in the environmental assessment process. Health Canada, the World Health Organization, and other international health entities have noted that no scientific evidence suggests that exposure to EMF will cause any negative health effects on humans, vegetation and wild or domestic animals.
Transmission line rights-of-way become areas for growth of noxious weeds and potential bio-security issues.	We will take necessary precautions as part of construction of the project to minimize the risk of invasive plants and diseases spreading. Manitoba Hydro is currently developing a bio-security policy.
Noise, dust and disruption of traffic, particularly related to emergency services, during construction.	Construction operations will minimize noise and dust. Construction traffic routes and detours will be identified and made available to local police, fire and emergency services.
City, municipal and business and industry stakeholders, in particular, noted beneficial effects of a more secure power supply on their operations and growth. Agricultural stakeholders also noted that they are impacted by electrical power system reliability.	The beneficial effect on power system reliability and capacity is a fundamental reason for this project.

## What happens after a final preferred route is selected?

Following the determination of a preferred route and the filing of the environmental assessment report to Manitoba Conservation and Water Stewardship, we are planning to meet with affected landowners. These meetings will be held exclusively for affected landowners and will outline the following:

- Manitoba Conservation and Water Stewardship's public review process for the environmental assessment report submitted by Manitoba Hydro.
- Manitoba Hydro's compensation policy.
- What to expect during the land surveying process.
- What to expect throughout construction of the project.

We encourage all affected landowners to attend this meeting to learn:

- How the project will unfold after Manitoba Hydro files the environmental assessment report.
- How to participate in the regulatory review process.
- What to expect once a project is licensed.

### The environmental assessment process

The development of both transmission lines requires a Class 2 licence under *The Environment Act* (Manitoba). The environmental assessment report for the project includes:

- documentation of public engagement activities.
- characterization of the environment.
- identification of potential effects on people and the environment.
- determination of ways to avoid or reduce potential adverse effects.

## How can you participate?

There are a number of ways you can participate in a review of this project and provide your input:

- **Attend an open house**

You are invited to attend one of four open houses to gather project information and share your local knowledge. Your input will help us determine a final preferred route for the project. Manitoba Hydro and consultant staff will be available to provide project information and answer your questions. Refreshments will be provided.

**Dominion City**

November 4  
4 to 8 p.m.  
Dominion City  
Community Hall  
31 Mc Kercher St.

**Winnipeg**

November 7  
4 to 8 p.m.  
Winakwa Community  
Centre  
980 Winakwa Road

**Ile des Chenes**

November 6  
4 to 8 p.m.  
Trans Canada Centre  
1 Rivard St.

**St. Pierre Jolys**

November 5  
4 to 8 p.m.  
Cabane a Sucre  
432 Joubert St.

- **Submit a comment sheet, available at the open houses or on our website at [www.hydro.mb.ca/stvital](http://www.hydro.mb.ca/stvital).**

- **Contact us directly:**

**Trevor Joyal**

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