

Appendix E
Information from 115-kV Transmission Line
Public Meeting



Northland Power

Welcomes You to the Public Meeting

Information Handout



Northland Power

Northland Power develops and operates clean and green power generation facilities, mainly in the provinces of Ontario and Quebec, with Saskatchewan being added to that list shortly. Our facilities produce about 870 MW of electricity. Northland Power has been in business since 1987 and has been publicly traded since 1997.

Sustainability is a core value at Northland Power. All of our development efforts and operational practices focus on providing long term benefits to our customers, investors, employees, communities and partners.

For Northland Power, sustainability has many dimensions:

Environmental: Northland Power was founded on the belief that clean and green energy sources are vital to the future of our planet. Our construction and operational practices are engineered to meet the highest environmental standards, even in jurisdictions where lower standards are legislated.

Community: Northland Power takes an active interest in its host communities to ensure they remain vibrant, healthy places to live.

Operational: Northland Power maintains and reinvests in their operating assets to achieve maximum efficiency and economic life.

Health and Safety: Ensuring that our staff has the knowledge, tools and time to work safely is Northland's first priority. Our culture of safety, respect and independence helps to ensure we attract and retain the people that we need to perform.

Financial: Northland Power consistently chooses long term success over short term gain. Northland Power only pursues projects that meet strict return thresholds and have creditworthy customers. As a result, we have paid stable monthly dividends since 1997.



Northland Power has retained Hatch Ltd. to undertake the Renewable Energy Approval (REA) process, subject to the provisions of the Environmental Protection Act Part V.0.1 and Ontario Regulation 359/09. Hatch is an Ontario-based consulting, engineering and management company with operations worldwide and a reputation for excellence acquired over 80 years of continuous service to its clients. Hatch will undertake the REA process from its Niagara Falls, Ontario office.



Solar Technology

A solar photovoltaic (PV) module (or panel, as they are often called) transforms the sun's energy into electrical energy. Silicon, a semi-conductor, is the material that transforms a ray of sunshine into electricity. The silicon is located within a grid (commonly made of metal) that conducts electricity. When the sunlight hits the silicon, electrons flow from the silicon into the grid, thereby producing electricity. The silicon and metallic grid are located beneath a layer of glass to provide weather protection. The glass has a special coating applied to maximize the capture of sunlight by the panel, thereby reducing glare.

Advantages of Solar Energy

Solar power has a multitude of advantages compared to most other power generation technologies.

- First and foremost, the fuel is free. As the cost of many fossil fuels is expected to increase in the future, having solar energy on the grid at a set price will give greater stability to future energy prices.
- Another key benefit is the absence of any green house gas emissions and other pollutants. This ensures that the local community will not have to live with poor air quality or noxious odours.
- Solar PV systems are comprised of safe, common materials that will not affect the lands on which they are located, allowing for easy remediation upon decommissioning.
- Most solar PV systems have no moving parts, unlike almost all other power generation technologies. Having no moving parts reduces the environmental impact, maintenance costs, and noise levels of this type of power generation.
- There is a natural supply/demand match that is inherent to solar power, as the sun rises and sets in parallel with society's general daily electricity demand pattern. This helps mitigate the need for the development of other technologies that traditionally meet peak electricity demand.



Ontario's Feed-in-Tariff (FIT) program was launched by the Ontario Power Authority on October 1, 2009 to encourage the development of renewable energy resources and to stimulate growth in green technology and renewable power industries.

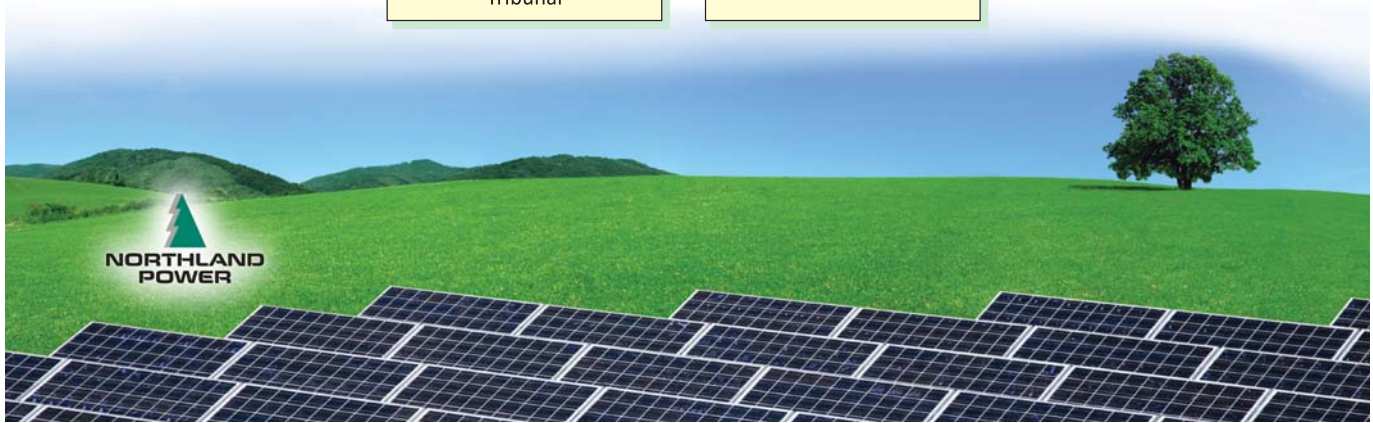
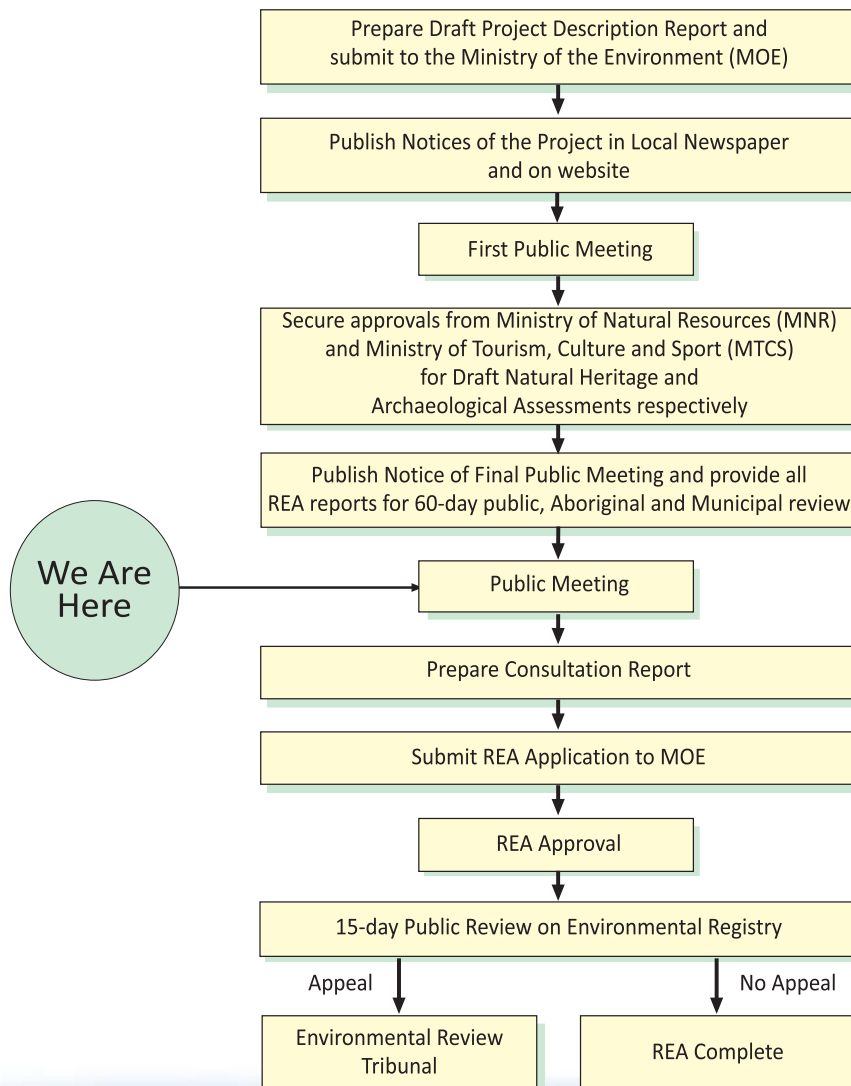
The Ontario Power Authority awarded 184 FIT contracts to renewable power developers in Ontario on April 8, 2010. Northland Power was awarded a total of 13 contracts for proposed solar ground-mount developments throughout the province. These projects are currently proceeding through the REA process.



Renewable Energy Approval Process

The proposed Project is subject to the (REA) process, subject to the provisions of Part V.0.1 of the Environmental Protection Act and Ontario Regulation 359/09. The REA process entails consideration of environmental aspects, including natural heritage features and water bodies, as well as heritage and archaeological resources. In addition, the REA process includes public, government agency and First Nation consultation.

The main components of the REA process are shown in the flow diagram.



Abitibi, Empire, Martin's Meadows Solar Projects

Project Location

Abitibi Solar Project and Martin's Meadows Solar Project are both located south of Concession 8 and 9 Glackmeyer. Empire Solar Project is located north of Concession 6 and 7 Glackmeyer. The proposed Projects, if approved, will be constructed on privately owned lands.

Project Description

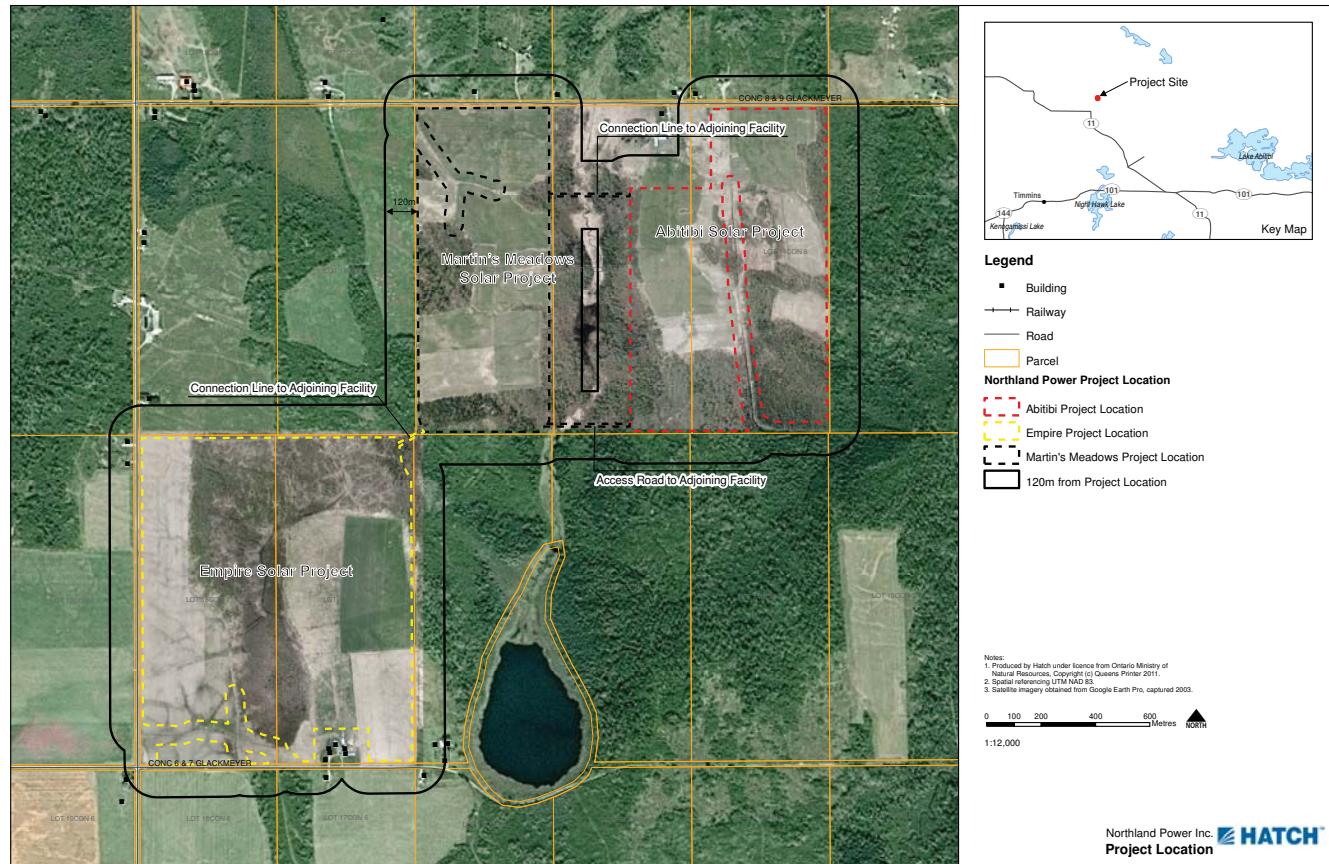
The proposed Abitibi, Empire, Martin's Meadows Solar Projects are considered to be Class 3 solar facilities, as defined under the Environmental Protection Act (Act) Part V.0.1 and Ontario Regulation 359/09. Class 3 solar facilities are defined as having a name plate capacity of 10 kilowatts (kW) or greater and the solar panels are mounted on the ground. Specifically, these proposed Projects have nameplate capacities of 10 MW (ac).

The proposed Projects will use crystalline technology photovoltaic (PV) panels installed on ground-mounted rack structures made of steel and aluminum. The project will consist of approximately 50,000 panels and will be designed to optimize energy production.

Project Schedule – Abitibi, Empire, Martin's Meadows Solar Projects

FIT Application – November 2009
Submission of Project Description to MOE – March 2011
FIT Contract Award – April 2010
First Public Meeting – July 2011
Final Public Meeting – August 2012
REA Application Submission – September 2012
REA Received – February 2013
Start of Construction – Early 2013
Commercial Operation Date – Fall 2013

For more information regarding these Projects please visit the Project website at: northlandpower.ca



Long Lake Solar Project

Project Location

The proposed Project is located on Lot 2 and 3 Concession 8, Calder, northeast of Cochrane. The proposed Project, if approved, will be constructed on privately owned lands.

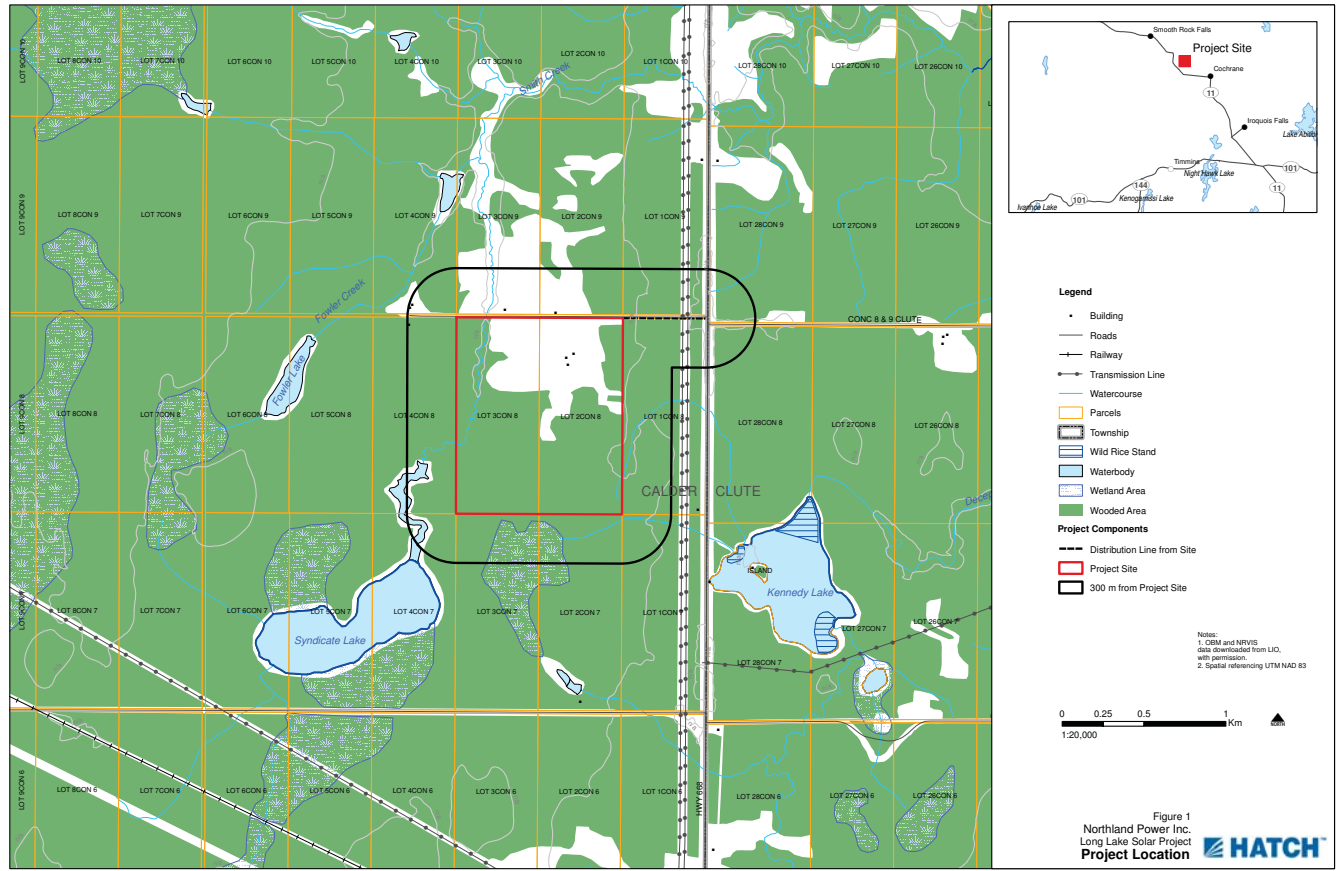
Project Description

The proposed Long Lake Solar Project is considered to be a Class 3 solar facility, as defined under the Environmental Protection Act (Act) Part V.0.1 and Ontario Regulation 359/09. Class 3 solar facilities are defined as having a name plate capacity of 10 kilowatts (kW) or greater and the solar panels are mounted on the ground. Specifically, these proposed Projects have nameplate capacities of 10 MW (ac).

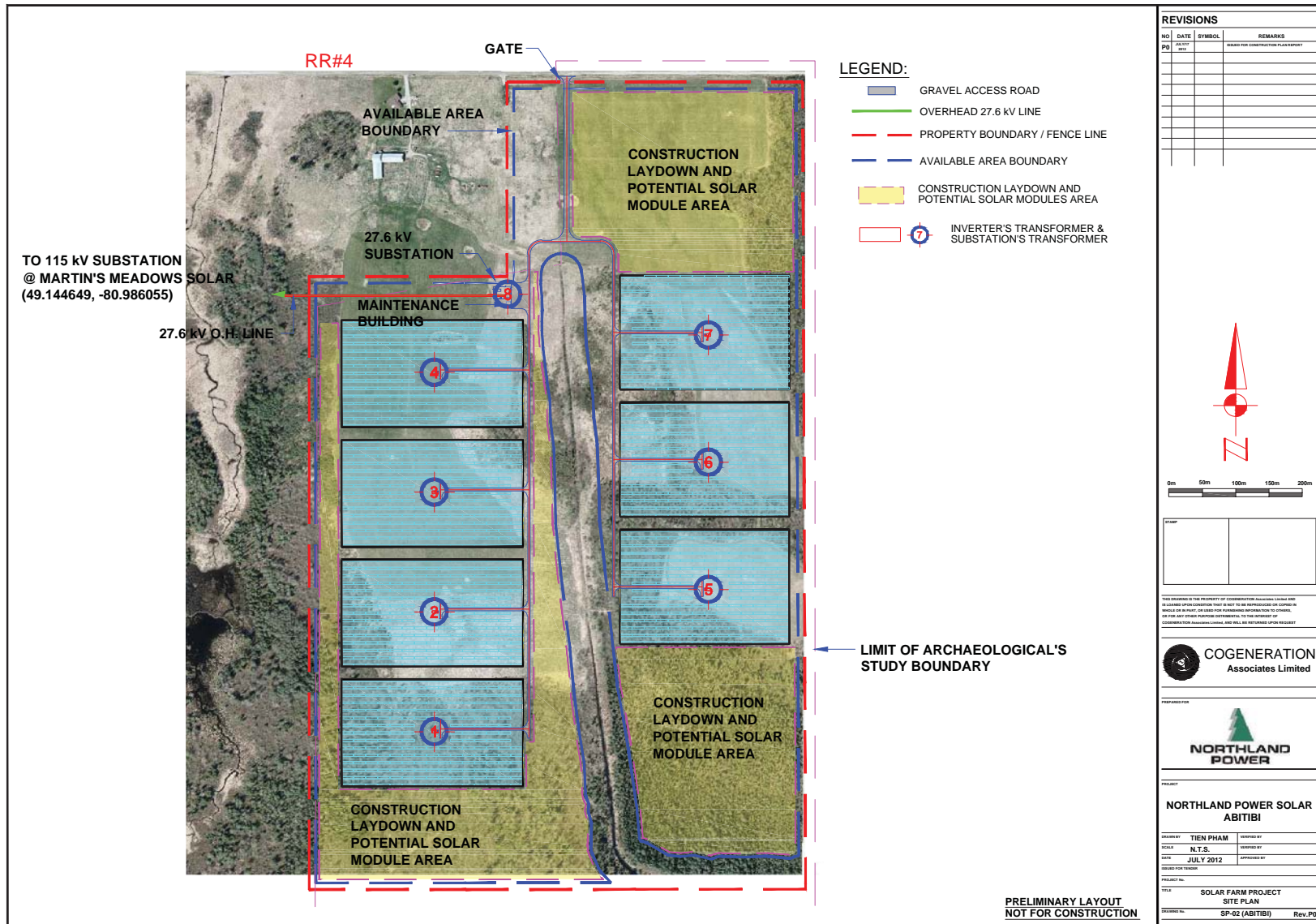
Project Schedule – Long Lake Solar Project

FIT Application – November 2009
Submission of Project Description to MOE – April 2012
FIT Contract Award – April 2010
First Public Meeting – July 2011
Final Public Meeting – August 2012
REA Application Submission – September 2012
REA Received – March 2013
Start of Construction – Spring 2013
Commercial Operation Date – October 2013

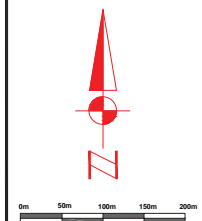
For more information regarding this Project please visit the Project website at northlandpower.ca/longlake



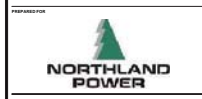
Abitibi Solar Project - Site Layout



REVISIONS			
NO.	DATE	SYMBOL	REMARKS
PO			BASED FOR CONSTRUCTION PERMITTING



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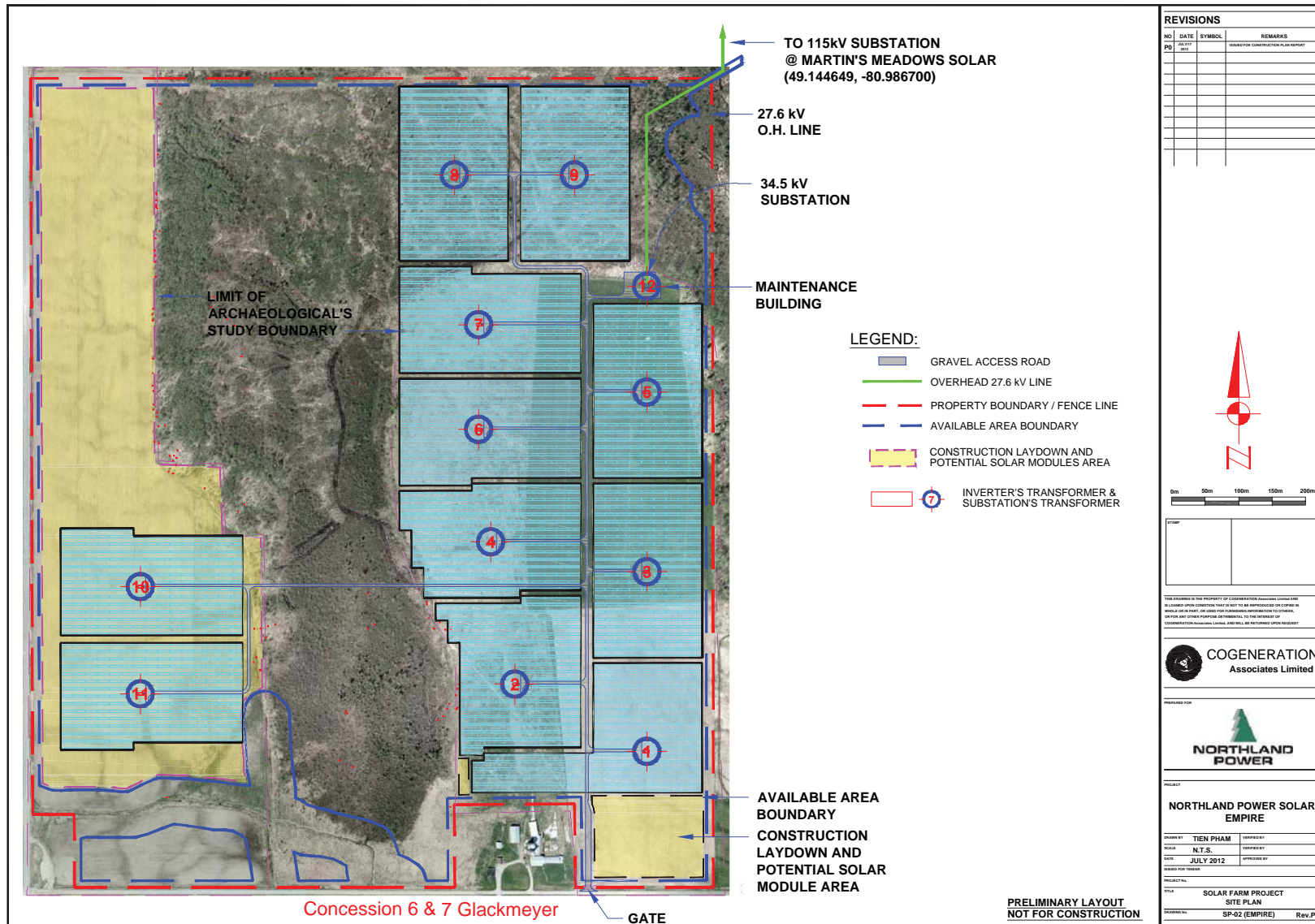


NORTHLAND POWER SOLAR ABITIBI

PROJECT NO. _____
 DRAWN BY: TIEN PHAM CHECKED BY: _____
 SCALE: N.T.S. APPROVED BY: _____
 DATE: JULY 2012 APPROVED BY: _____
 DESIGNED FOR: _____
 PROJECT NO.: _____
 TITLE: SOLAR FARM PROJECT SITE PLAN
 DRAWING NO.: SP-02 (ABITIBI) Rev. PD

PRELIMINARY LAYOUT
 NOT FOR CONSTRUCTION

Empire Solar Project - Site Layout



REVISIONS			
NO.	DATE	SYMBOL	REMARKS
01	2012		ISSUED FOR CONSTRUCTION PERMIT

0m 50m 100m 150m 200m

COGENERATION Associates Limited

PREPARED FOR

NORTHLAND POWER

PROJECT

NORTHLAND POWER SOLAR EMPIRE

DRAWN BY TIEN PHAM

CHECKED BY N.T.S.

DATE JULY 2012

APPROVED BY

PROJECT NO.

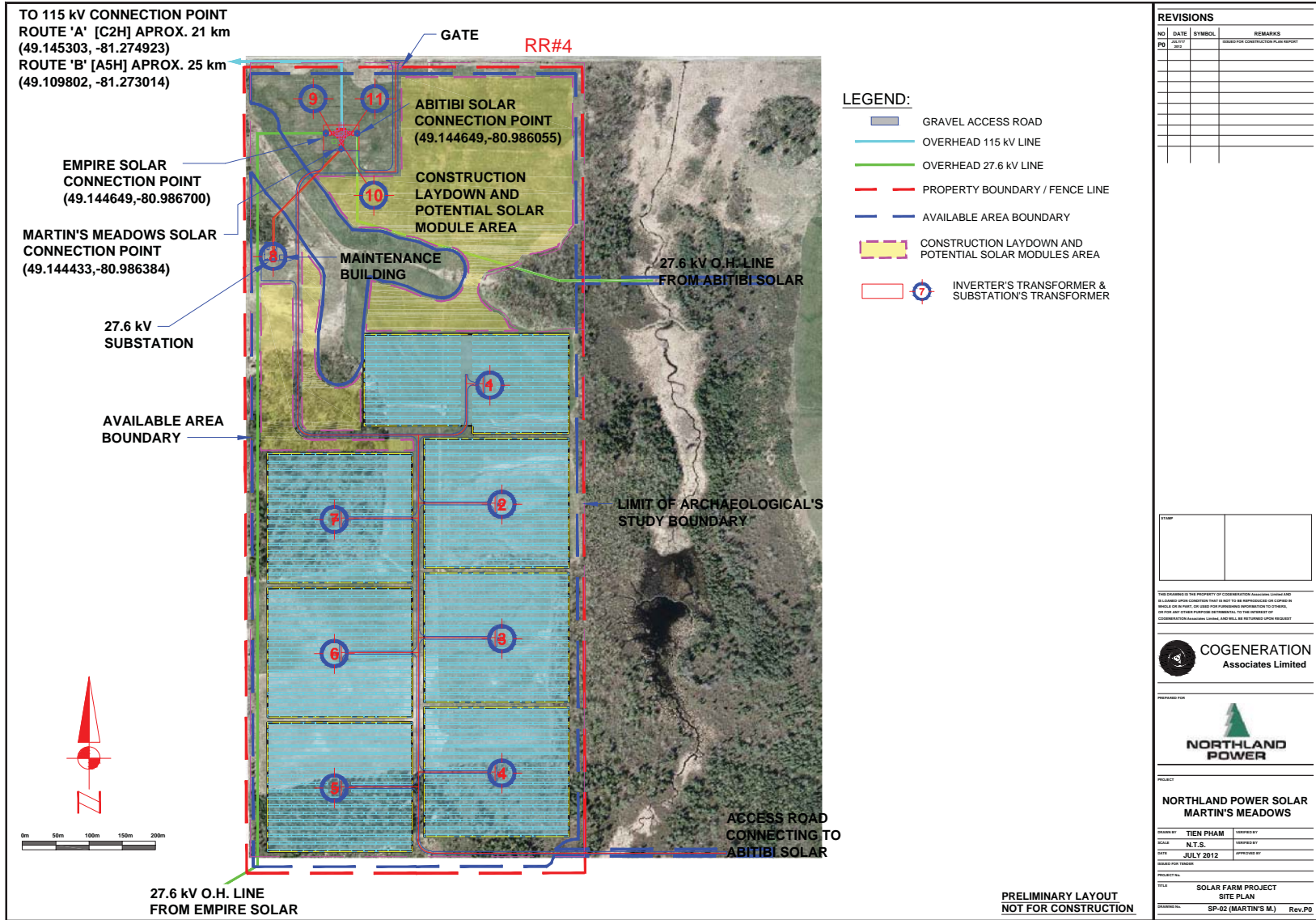
TITLE SOLAR FARM PROJECT SITE PLAN

DATE

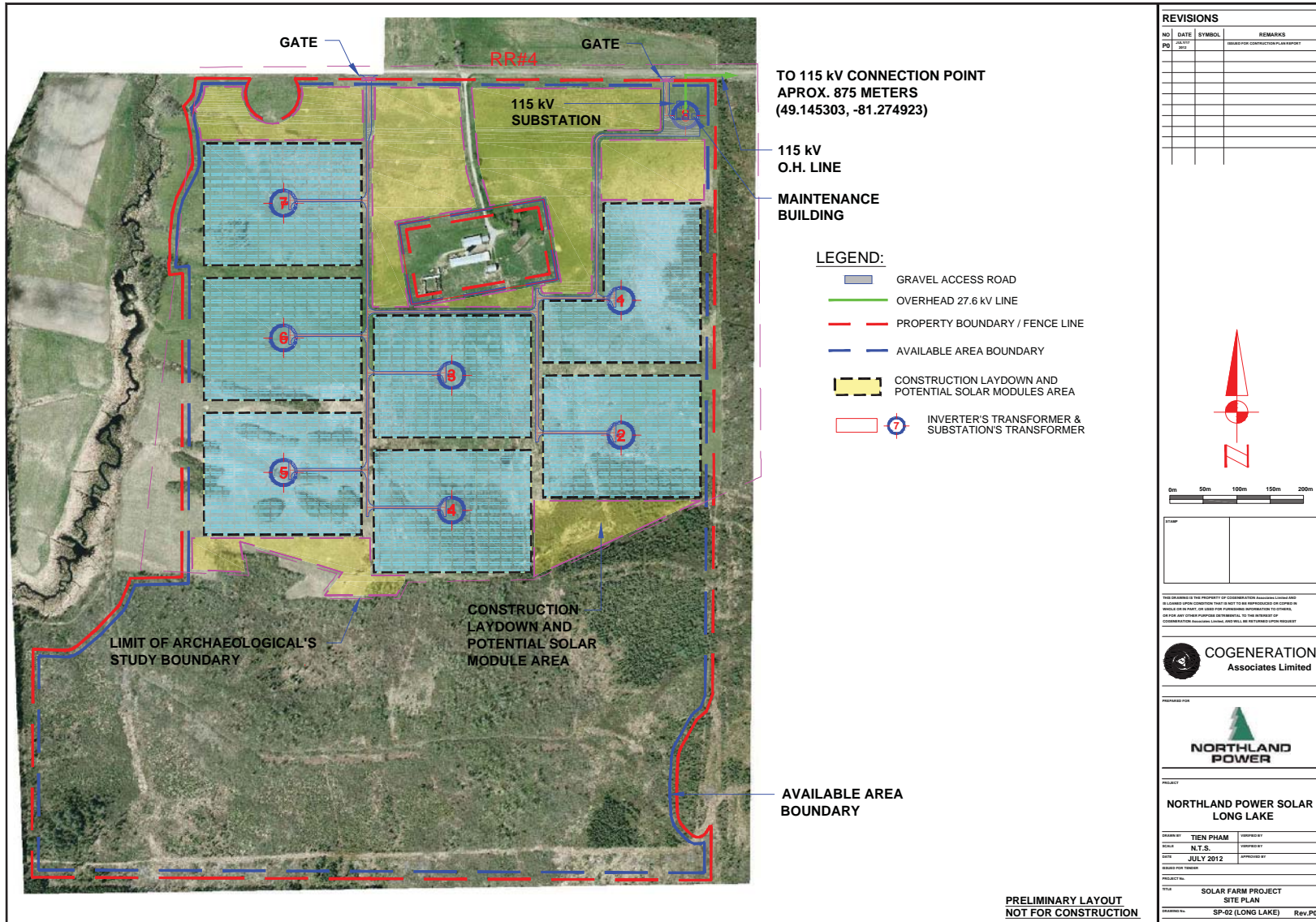
REVISION

SP-02 (EMPIRE) Rev.P0

Martin's Meadow Solar Project - Site Layout



Long Lake Solar Project - Site Layout



Construction

Construction of the proposed Project is anticipated to start following the appropriate approvals, in 2013. The construction take approximately 6-9 months and will consist of:

- *Site Preparation*
- *Construction and Installation of the Facility*
- *Testing and Commissioning*
- *Site Restoration*

Each day construction will normally begin at 7:00 am and end at 5:00 pm. If a longer construction day becomes required, the Project will follow local requirements and minimize impacts to the local community.

Site preparation refers to activities such as:

- Surveying/staking, site clearing and grubbing (where required)
- Construction of access roads and drainage systems
- Installation of fencing, and construction of a laydown area

It is anticipated that these activities will require several months to complete

Construction and installation of the facility includes:

- Pouring of the concrete foundations for electrical equipment
- Installation of electrical equipment such as inverters and transformers, interconnection cable trenching
- Installation of PV panel supports and the racking systems
- Placement of PV panels

Testing and commissioning will be performed prior to start-up and connection to the power grid. Solar modules, inverters, collection system, and substation will be checked for system continuity, reliability, and performance standards.

Site restoration following construction the main objective will be to (i) establish ground cover and drainage within the solar panel footprint and (ii) re-instate temporarily disturbed areas to stable conditions. All construction material, equipment, temporary facilities, and waste will be removed from the site. Revegetation will include planting of native plants and hydro-seeding where required.



Operation

Following construction, the operations phase is expected to commence in Fall of 2013. Operations will consist of routine maintenance inspections and general up keep of the Project (e.g., panel cleaning and mowing). Otherwise, no on-site staff will be required.

Visual inspections of the transformers and erosion and sedimentation control measures are to occur monthly. Panel cleaning may or may not be required, depending on weather conditions, and if required, any water used will be brought to the site. No chemicals will be used for cleaning.

Vegetation, including underneath the panels, will be selected to minimize maintenance activities (e.g., mowing) and to provide ground cover to both protect and enhance the soil and to provide wildlife habitat. Presently, a mix of low growing, weed-resistant turf type fescues is proposed. Herbicides will not be used to control vegetation growth during operations.

Site security will consist of fencing and limited lighting near the entrance of the facility. Fencing will consist of a 2 meter high wire fence, with barb wire along the top of the fence.

For more information, please refer to the Project's *Design and Operation Report*



Decommissioning

It is anticipated that the Project will have a useful life of at least 20 years, the length of the existing FIT contract, which can be extended with proper maintenance, component replacement and repowering. Decommissioning will occur at the end of the useful life and consist of:

- *Equipment dismantling and removal*
- *Site restoration*

Equipment dismantling and removal will include the PV modules, electrical equipment, access roads and foundations as well as any other facility equipment. Equipment and material may be salvaged for resale, scrap value or disposal, depending on market conditions.

Site restoration will consist of the following, subject to environmental requirements and the wishes of the landowner:

- Any damage to existing tile drainage system, if applicable, will be repaired/restored
- Any excavation and/or trench will be backfilled and graded to existing contours
- Should the subsoil be negatively affected and compromise the future productive use of the land, the following will be implemented: first the topsoil will be removed and stockpiled; then the subsoil may be ripped and tilled prior to grading it; topsoil will then be replaced and revegetated
- Should the soil be negatively affected and compromise the future productive use of the land, nutrients may be added or fertilizers deployed
- Topsoil and compost will be blended where required, spread and replaced to original depth
- Hydroseeding with approved seed mixture and mulching during the appropriate seasonal conditions

For more information, please refer to the Project's *Decommissioning Plan Report*



Noise - Abitibi Solar Project

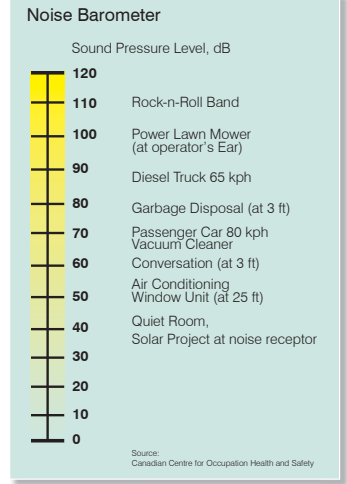
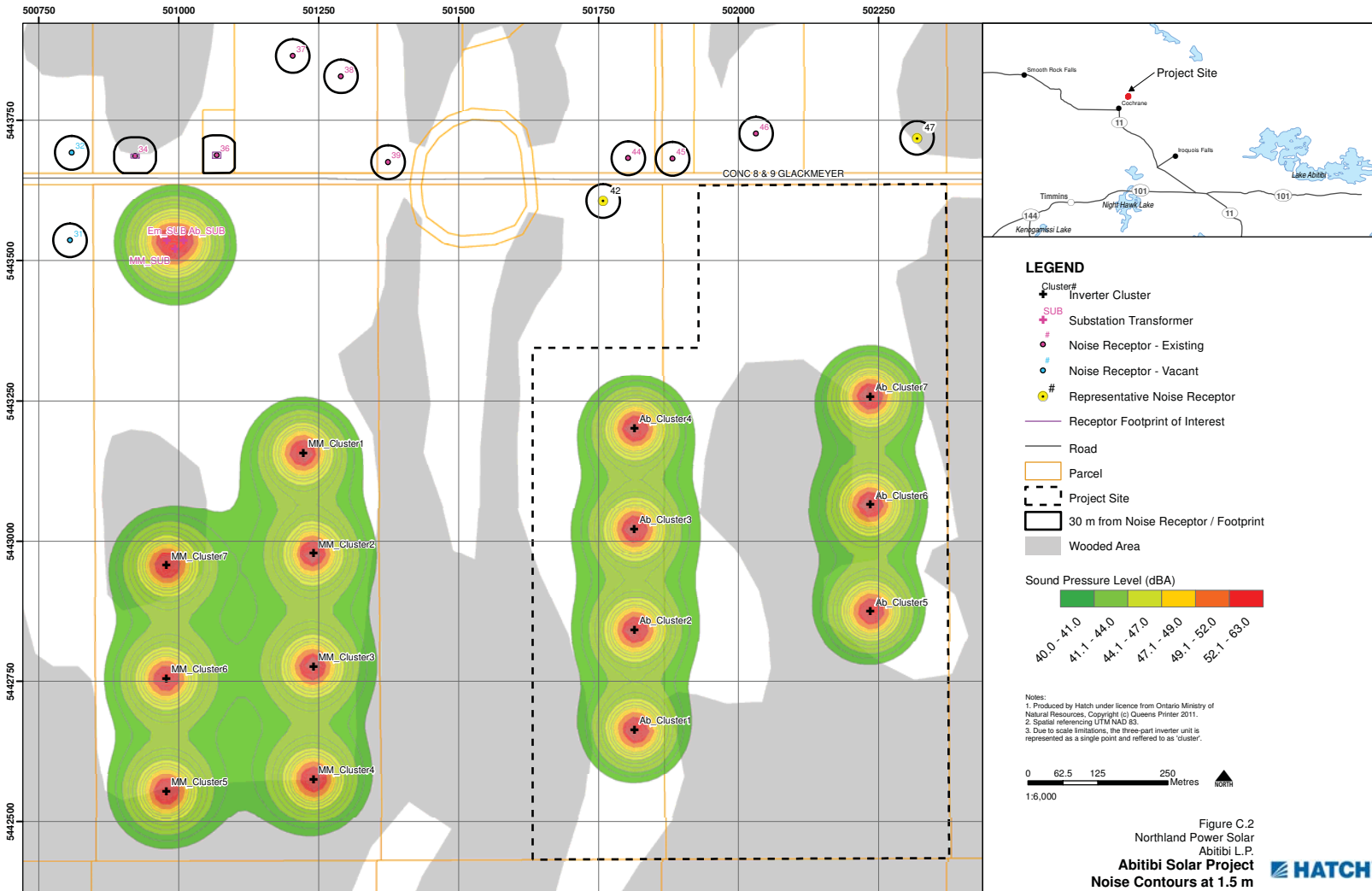
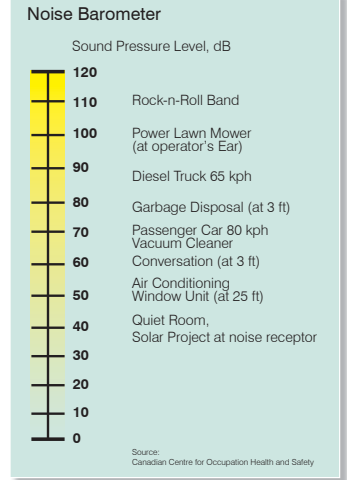
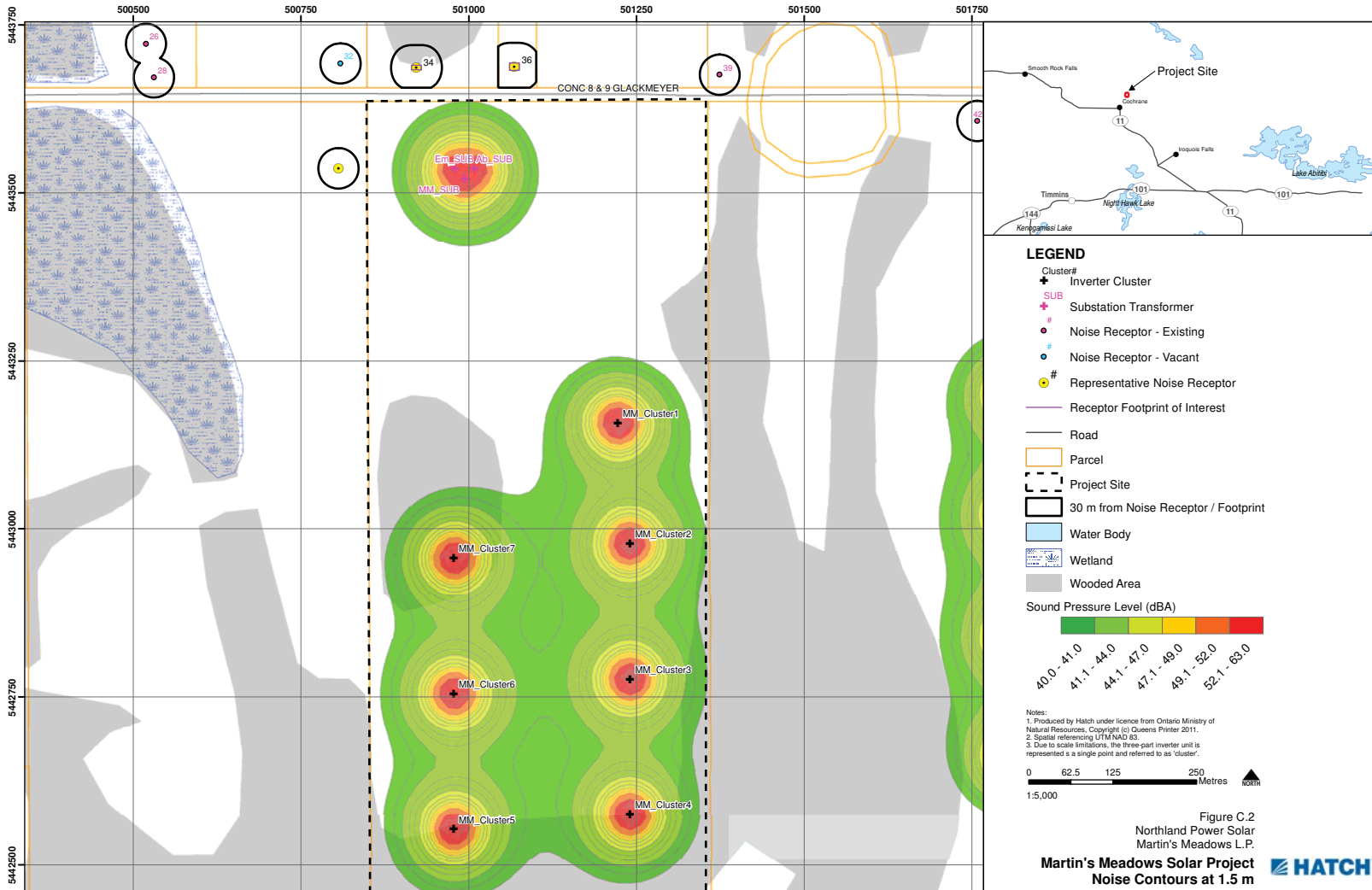


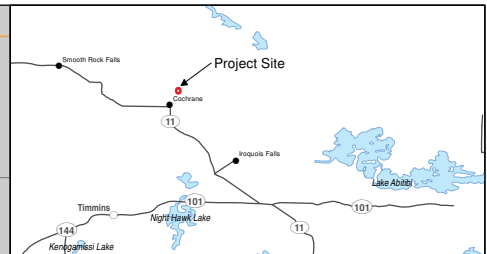
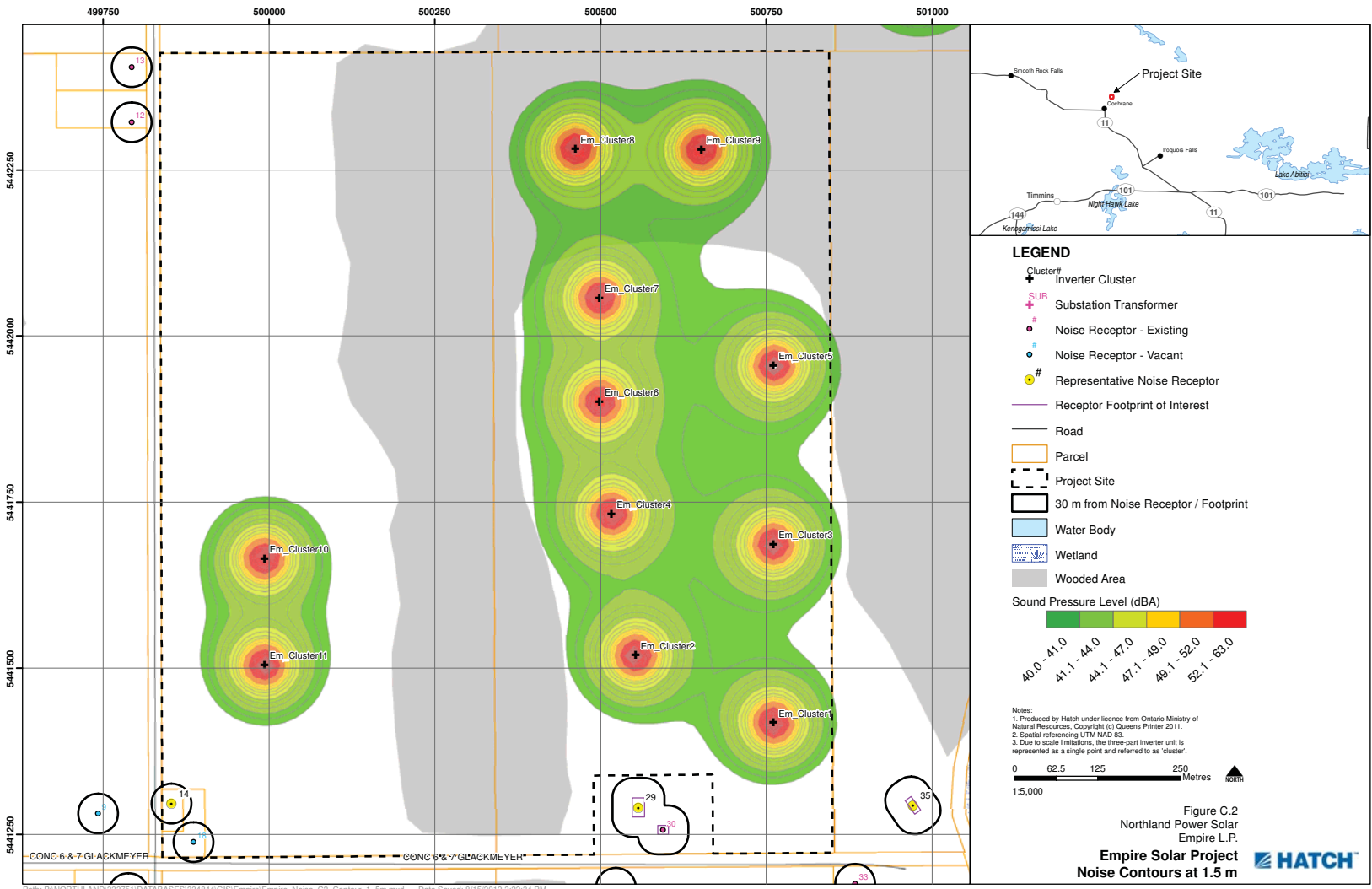
Figure C.2
Northland Power Solar
Abitibi L.P.
Abitibi Solar Project
Noise Contours at 1.5 m

Noise - Martin's Meadows Solar Project



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Noise - Empire Solar Project



LEGEND

- Cluster# Inverter Cluster
- SUB Substation Transformer
- Noise Receptor - Existing
- Noise Receptor - Vacant
- # Representative Noise Receptor
- Receptor Footprint of Interest
- Road
- Parcel
- Project Site
- 30 m from Noise Receptor / Footprint
- Water Body
- Wetland
- Wooded Area

Sound Pressure Level (dBA)

40.0 - 41.0
41.1 - 44.0
44.1 - 47.0
47.1 - 49.0
49.1 - 52.0
52.1 - 63.0

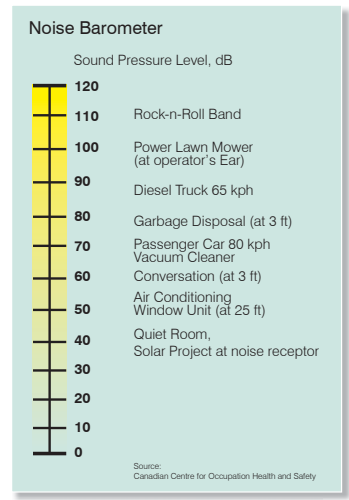
Notes:

- Produced by Hatch under licence from Ontario Ministry of Natural Resources, Copyright (c) Queens Printer 2011.
- Spatial referencing UTM NAD 83.
- Due to scale limitations, the three-part inverter unit is represented as a single point and referred to as 'cluster'.

0 62.5 125 250 Metres north

1:5,000

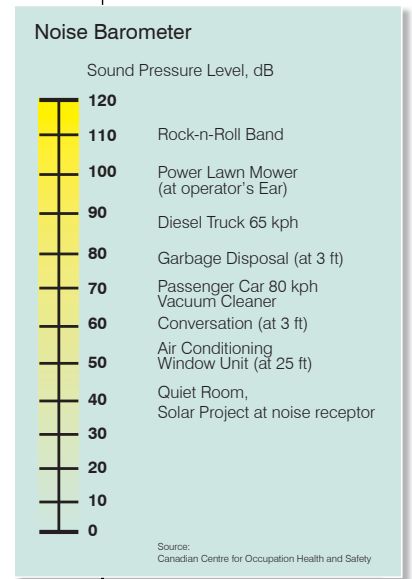
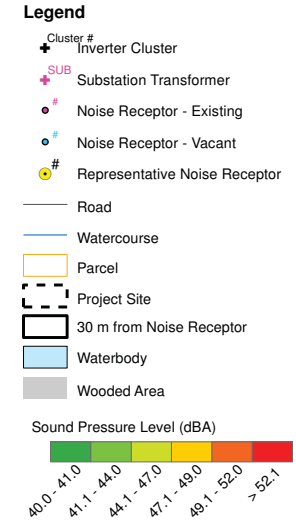
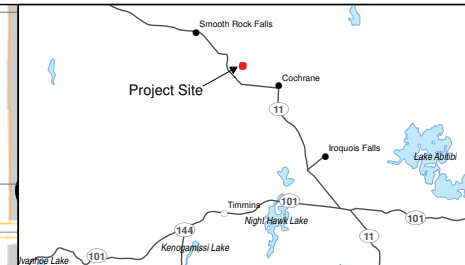
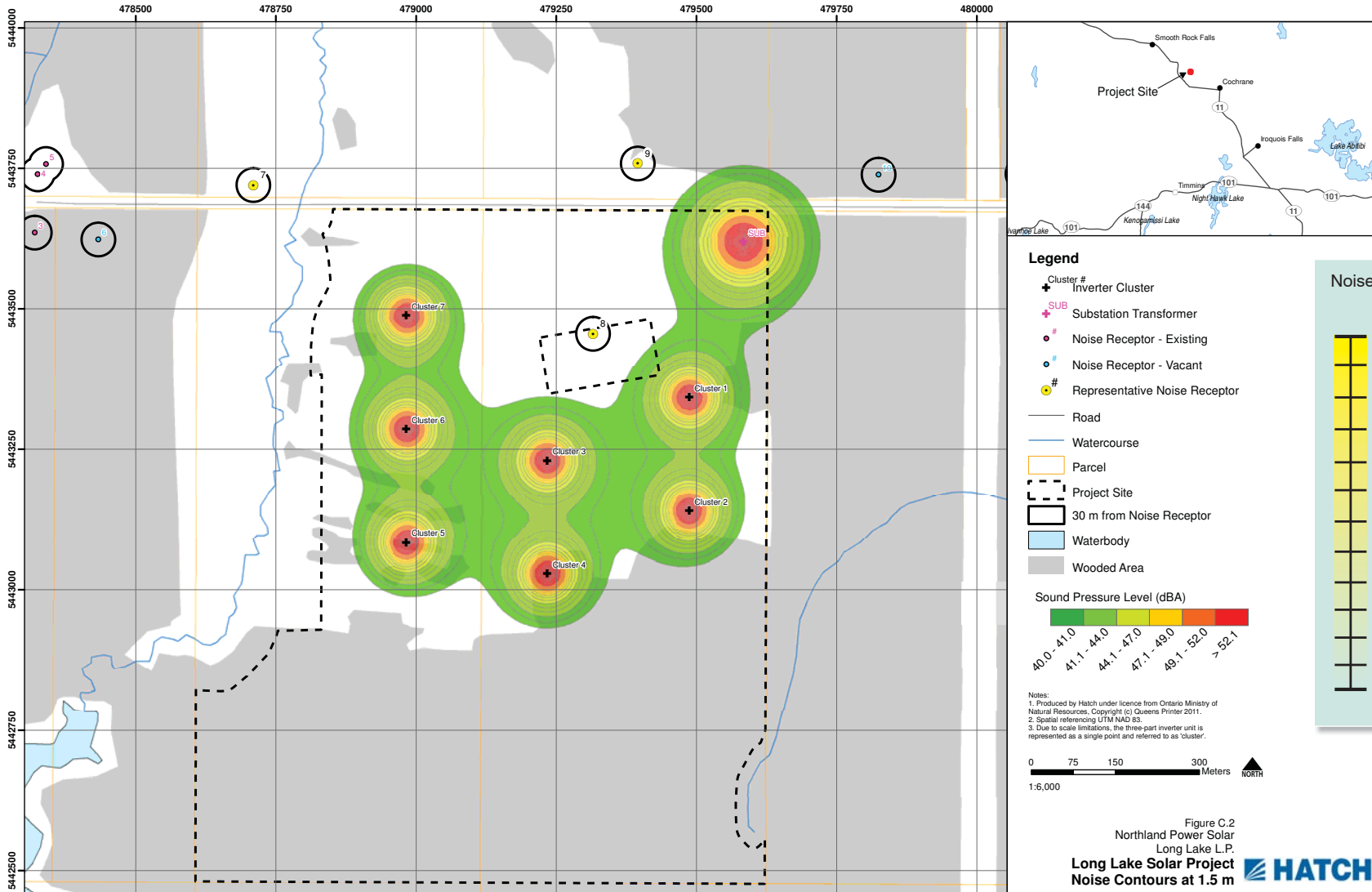
Figure C.2
Northland Power Solar
Empire L.P.
**Empire Solar Project
Noise Contours at 1.5 m**



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Noise - Long Lake Solar Project



Notes:

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- Spatial referencing UTM NAD 83.
- Due to scale limitations, the three-part inverter unit is represented as a single point and referred to as 'cluster'.

0 75 150 300 Meters North
1:6,000

Figure C.2
Northland Power Solar
Long Lake L.P.
Long Lake Solar Project
Noise Contours at 1.5 m



Abitibi, Empire, Martin's Meadows Solar Projects

Natural Heritage Assessment for Solar Panel Locations

Abitibi Solar Project

- Project location is composed of mainly agricultural fields with occurrences of provincially significant wetlands communities on and within 120 m.
- Significant wildlife habitat for waterfowl nesting habitat and wetlands providing amphibian breeding habitat are located on and within 120 m.
- Significant animal movement corridor is associated with Monroe Creek and its riparian habitat.

Empire Solar Project

- Project location is composed of mainly agricultural fields with occurrences of significant wetlands and woodlands located on and within 120 m.
- Provincially significant wetland complex has been identified on and within 120 m of the Project location, which extends for several hundred metres from the Project location.

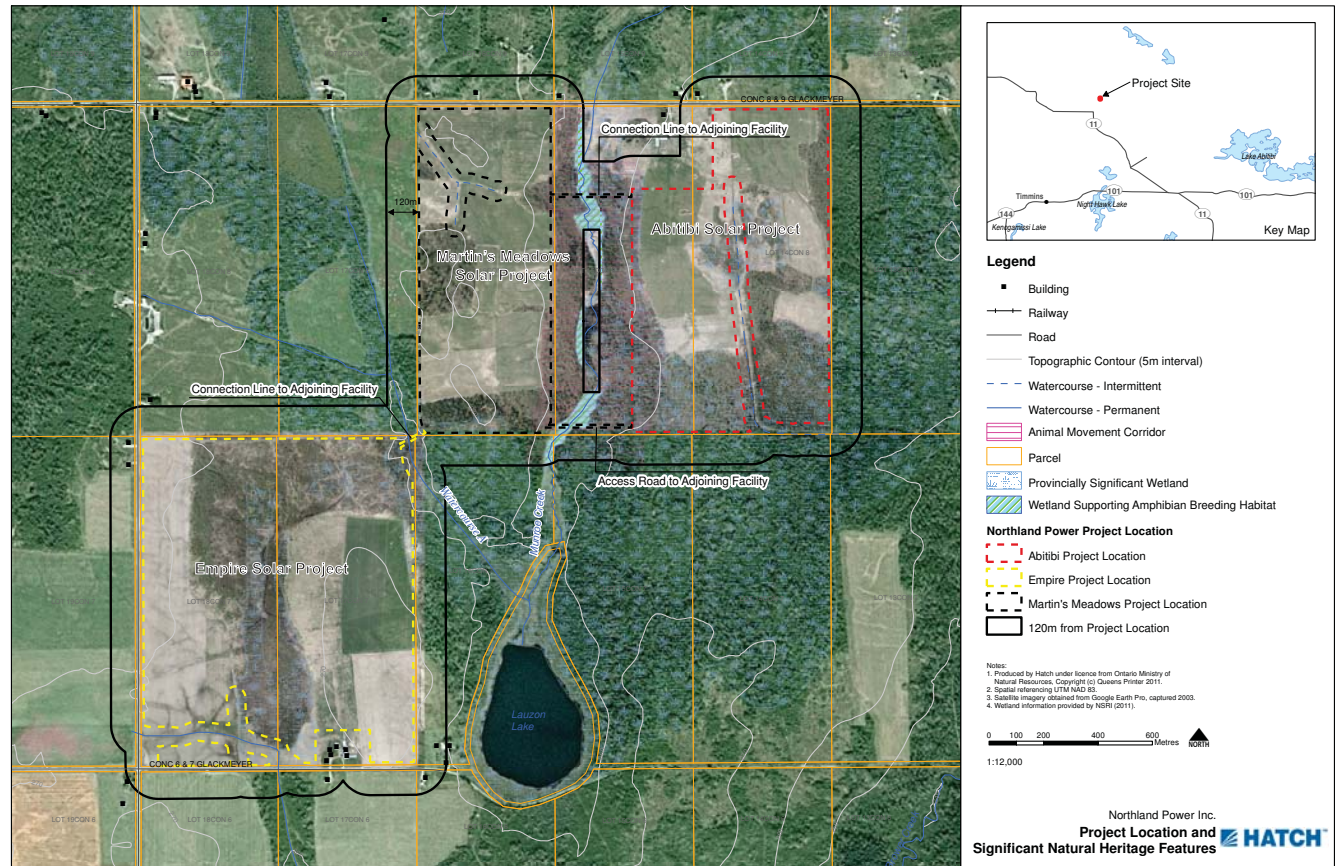
Martin's Meadow's Solar Project

- Project location is composed of mainly agricultural fields with occurrences of provincially significant wetlands and woodlands located on and within 120 m.
- Significant wildlife habitat providing amphibian breeding habitat are located around Monroe Creek.
- Animal movement corridor associated with the creek and riparian habitat.

Mitigation Measures for Natural Heritage Features

- Avoidance of encroachment, and provision of setbacks, from many of the significant features.
- Demarcation of work areas to prevent encroachment beyond designated sites.
- Construction outside of bird breeding season, where possible.
- Visual search following completion of fence for trapped animals.
- Visual monitoring of work areas, equipment and access roads prior to start of each work day to search for wildlife species.

There will be no change to the existing environment outside of the Project location.



Abitibi, Empire, Martin's Meadows Solar Projects

Water Body Assessment for Solar Panel Locations

Abitibi Solar Project

- Munroe Creek is a permanent water body located within 120 m west of the Project that flows through wetland communities (i.e., narrow leaved emergent marsh, tall shrub swamp) and woodlands dominated by trembling aspen, black spruce and balsam fir.
- Watercourse A is both an intermittent (for the initial 100 m) and permanent stream that originates in an agricultural field on the north-central portion of the Project.

Empire Solar Project

- An unnamed water body originates in the open field approximately 30 m west of the Project and flows in an easterly direction.
- A tributary of Monroe Creek originates to the north of the Project location in an agricultural field and drains through a wooded area in the northeast corner of the property, before draining into Lauzon Lake, approximately 350 m east of the Project.

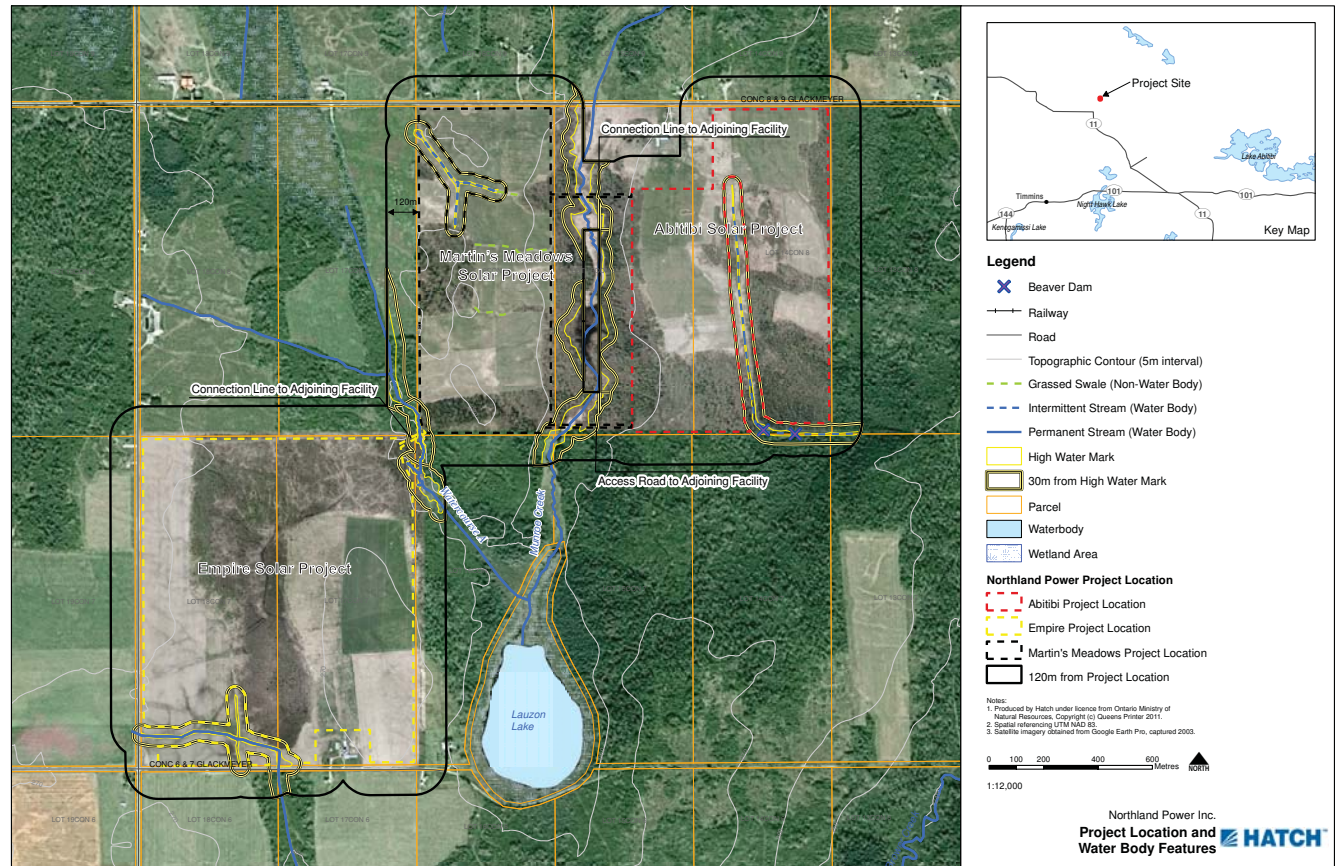
Martin's Meadow's Solar Project

- Munroe Creek is a permanent stream located in a relatively wide, low lying valley, with abundant wetland vegetation, surrounding by wooded areas adjacent to the agricultural fields east of the Project.
- An intermittent tributary of Munroe Creek passes within 30 m of the southwest corner of the Project.

Mitigation Measures for Natural Heritage Features

- Sediment and erosion controls (e.g., silt fencing, site stabilization and construction phasing).
- Stormwater management plans (e.g., site re-vegetation, enhanced vegetated swales).
- Spill prevention and response measures (e.g., handling protocols, secured storage areas, clean up materials on hand).
- Dust control measures (e.g., watering of access roads, tarping of stock piles).

There will be no change to the existing environment outside of the Project location.



Long Lake Solar Project

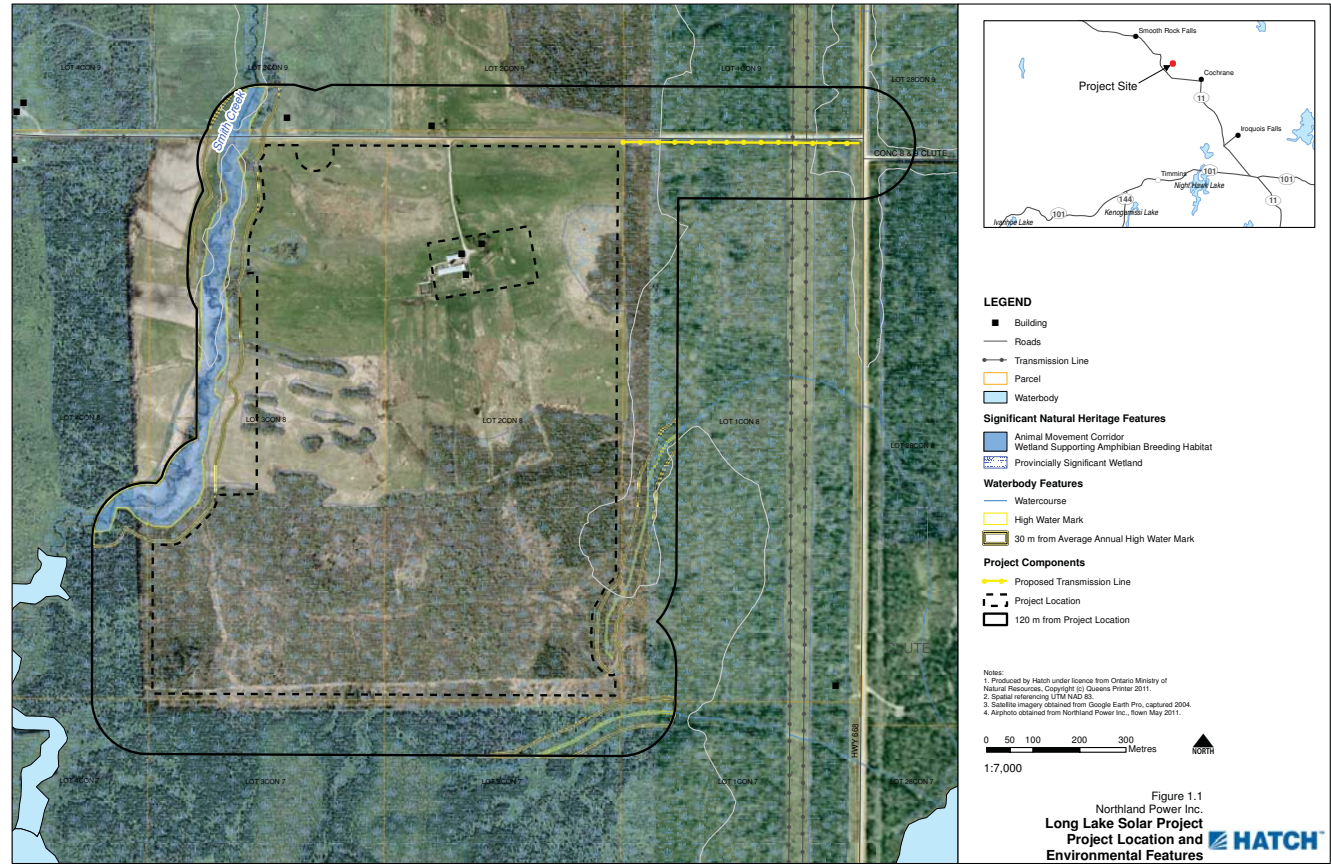
Natural Heritage and Water Body Assessment

Natural Environment:

- The Project location is made up of agricultural fields, with occurrences of non-significant woodlands and wetlands.
- Significant wildlife habitat includes wetlands supporting amphibian breeding habitat and animal movement corridors.
- There are 3 water bodies present on and within 120 m of the Project, including Smith Creek.

Mitigation Measures for Natural Heritage Features

- 30 m setbacks from all water bodies and from the amphibian breeding habitat.
- Demarcation of work areas to prevent encroachment beyond designated site.
- Use of best management practices for sediment and erosion control.



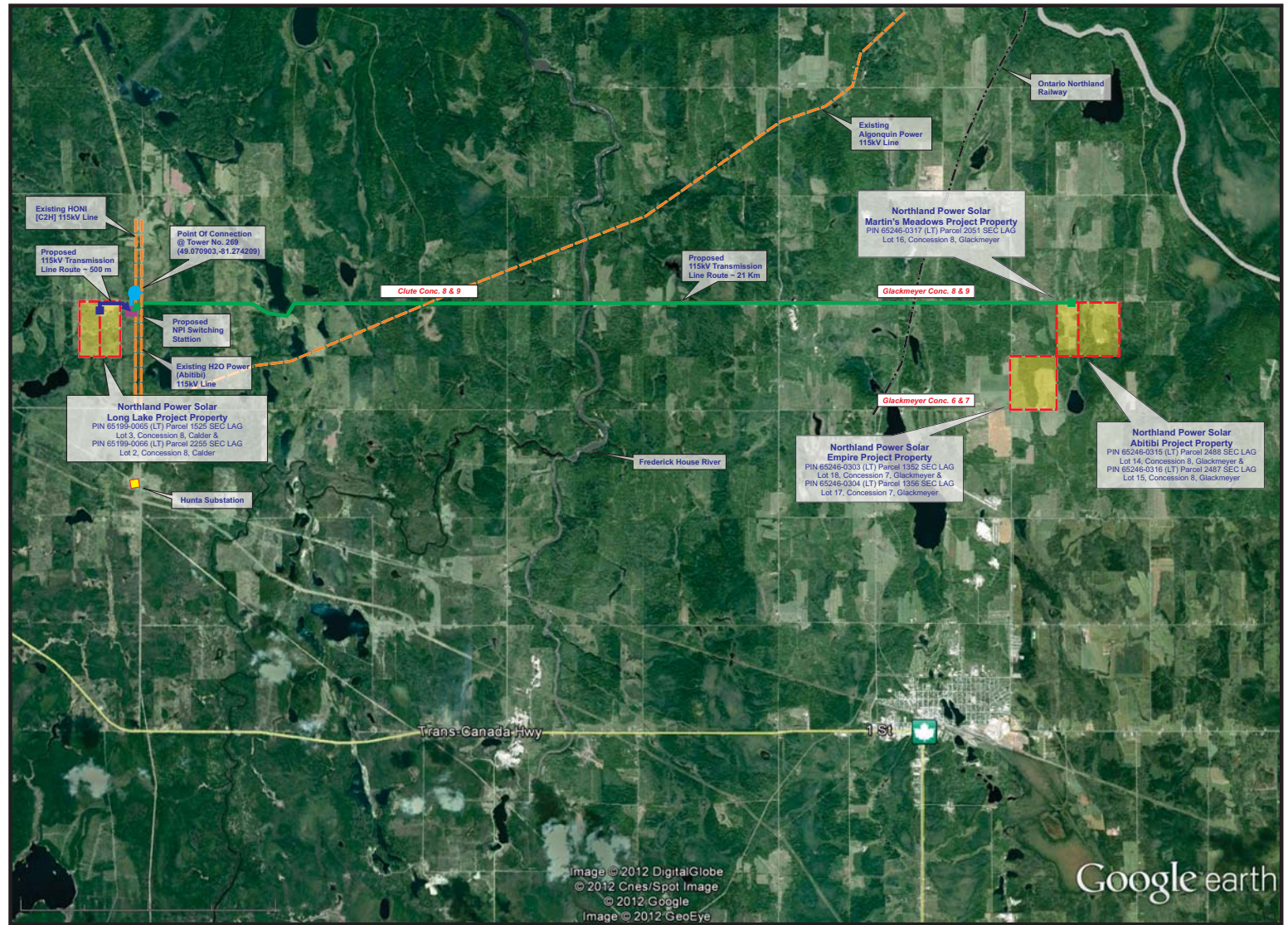
115kV Transmission Line

In order to connect the Abitibi, Empire and Martin's Meadows Solar proposed Projects to the existing Hydro One transmission system circuit (C2H), Northland will construct an approximately 22 km 115 kV single-circuit transmission line. The line will run from the three step up transformers located on the Martin's Meadows Project location to the connection point located near the intersection of Highway 688 and Clute Concession 8 & 9 that is located north of Hunta. In addition, there will be an approximately 800 metre section of 115 kV line to connect the Long Lake Solar Project to tie in this project.

Additional information on the transmission line is provided below:

- There will be a small switch station (approximately 75m x 75 m) on either privately owned or Crown (MNR) land at the connection point
- The line will be above ground, except where it crosses the existing Hydro One and H2O transmission lines, where it will be buried underground
- The 115 kV transmission line will be supported through either single or double poles.
- The transmission will be largely contained within municipal road rights-of-way, but some private property will be crossed. Northland may approach some private landowners for small easements for guy wires.
- The transmission line will also cross the Ontario Northland Railway (ONR), an existing Algonquin Power transmission line, and several watercourses including the Frederick House River.

Northland is also permitting the transmission line through parallel process with the Ontario Energy Board (such as "Leave to Construct") and Ministry of Natural Resources (such as land use permits, easements, and work permits under the Public Lands Act; a Forest Resource License will be required for removal of trees from Crown Land, if needed).



Environmental Features

Waterbodies

A total of 38 water bodies are crossed by the transmission line, including 14 permanent waterbodies and 24 intermittent waterbodies.

Mitigation Measures

Mitigation measures outlined in the Ontario Operational Statement for Overhead Line Construction, will be used, mitigation measures include:

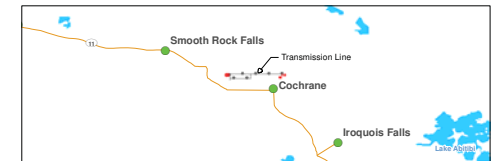
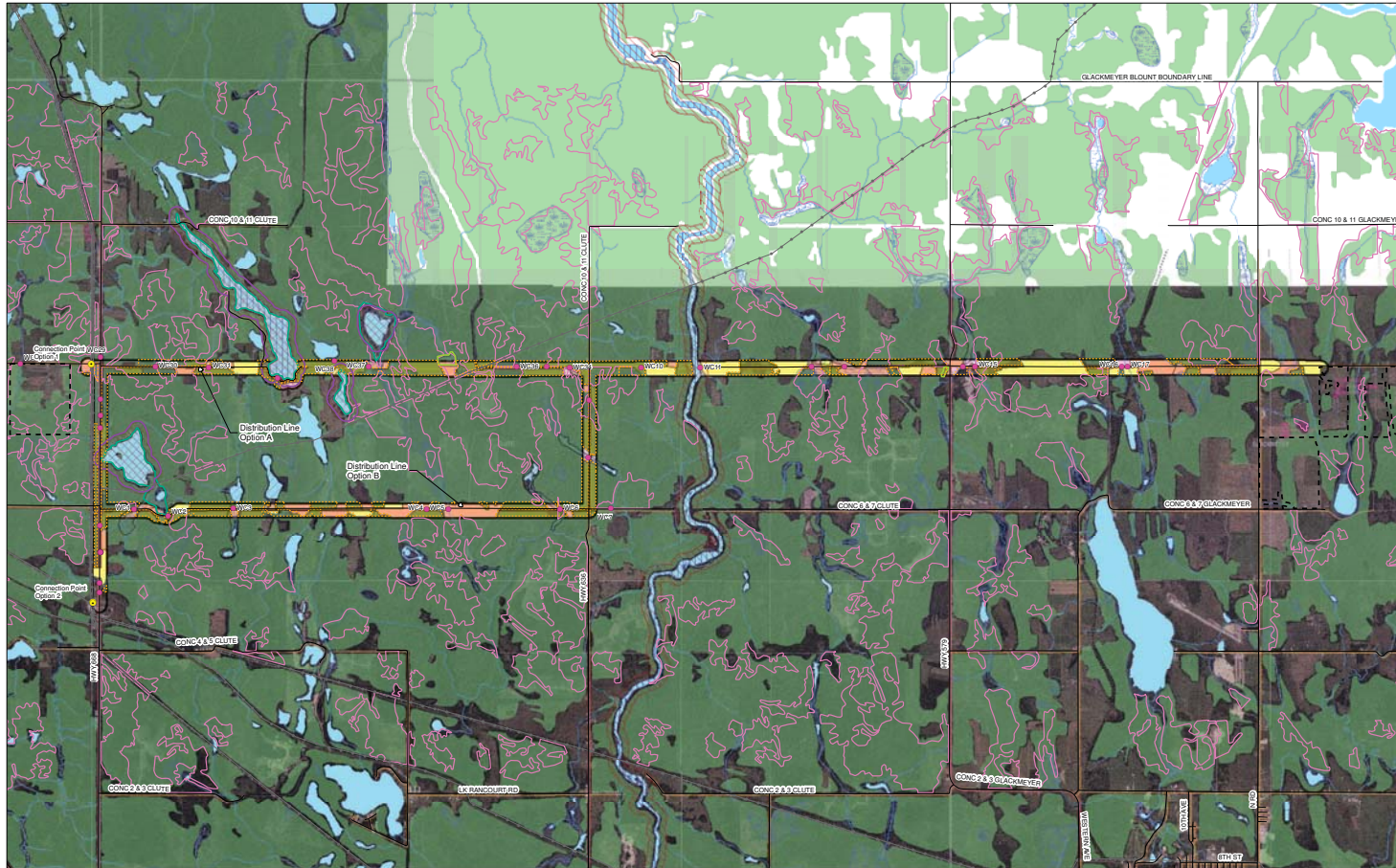
- timing machinery fording to avoid sensitive reproductive periods, including those of cold water species such as Brook Trout, which may be present in the small watercourses along the proposed transmission line route
- operating heavy equipment from outside the watercourse and minimizing disturbance to the watercourse banks
- avoid working during wet or rainy conditions
- stabilizing waste materials (e.g., stripped topsoil, grubbed material) above the high water mark

Natural Heritage

The proposed transmission line contains a variety of wildlife habitats as well as occurrences of significant wetlands, animal movement corridors are associated with several waterbodies.

Mitigation Measures

- Construction to be timed to occur outside of the breeding wildlife period (May through July), with preference for construction to occur within the winter months to minimize potential impact to vegetation communities within the right of way.
- Trees will be felled into previously cleared areas, and cleared and grubbed material will be piled away from remnant vegetation prior to removal.
- When waterbodies are crossed measures outlined in the "Ontario Operational Statement for Overhead Line Construction" (e.g., transmission poles or other structures to not be placed below the normal high water mark, heavy equipment to be operated from outside the watercourse to minimize disturbance to the watercourse banks) is to be used.

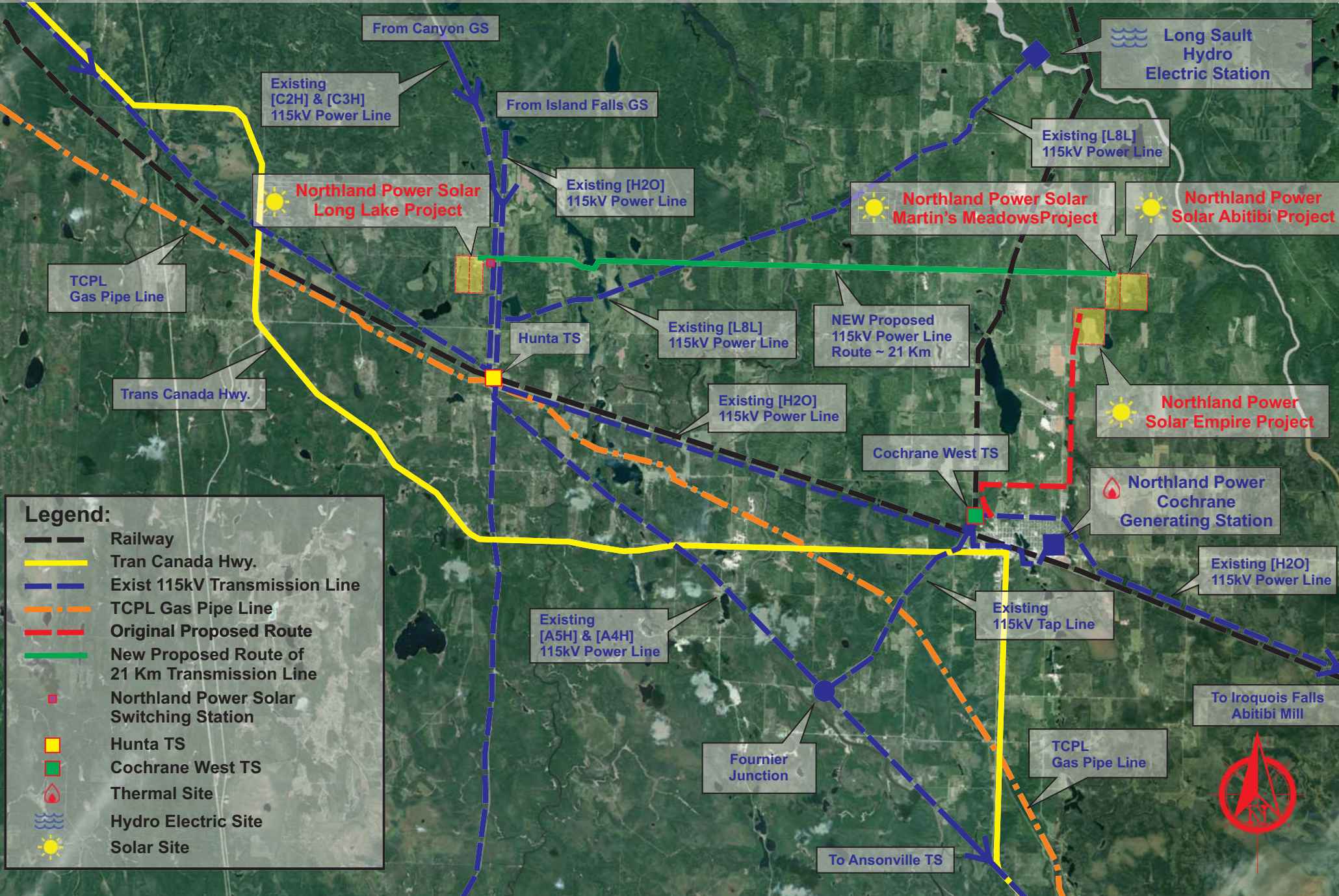


Legend


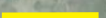

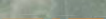








- Road
 - Utility Line
 - Area Sensitive Grassland Habitat / Short-eared Owl Habitat
 - Area Sensitive Shrubland Habitat / *Carex Wiegandii* Habitat
 - Area Sensitive Woodland / Canada Warbler / Olive-sided Flycatcher / *Vaccinium ovalifolium* Habitat
 - Bald Eagle Habitat
 - *Carex haydenii* Habitat
 - *Carex loliacea* Habitat
 - Common Nighthawk Habitat
 - Old Growth or Mature Forest / Northern Long-eared Bat and Specialized Raptor Nesting Habitat
 - Mink, Otter, Marten, and Fisher Denning Site
 - Moose Aquatic Feeding Area
 - Moose Late Winter Habitat / Winter Deer Yard
 - *Scirpus heterochaetus* Habitat
 - Seeps and Springs / *Carex tetanica* Habitat
 - Red-necked Grebe Habitat
 - Waterfowl Stopover and Staging Area
 - Waterfowl Nesting Habitat
 - Wetland Area
 - Wetlands Supporting Amphibian Breeding Ponds
- Waterbody Features**
- Watercrossing (Hatch)
 - Watercourse (LIO Mapping)
 - Waterbody
- Project Infrastructure**
- Connection Point
 - Northland Power Project Location
 - 120 m from Distribution Line
- Notes:
1. Produced by Hatch under licence from Ontario Ministry of Natural Resources, Copyright (c) Queens Printer 2011.
 2. Spatial referencing UTM NAD 83.
 3. Satellite imagery from Ministry of Natural Resources.



NORTHLAND POWER SOLAR PROJECTS TRANSMISSION LINE



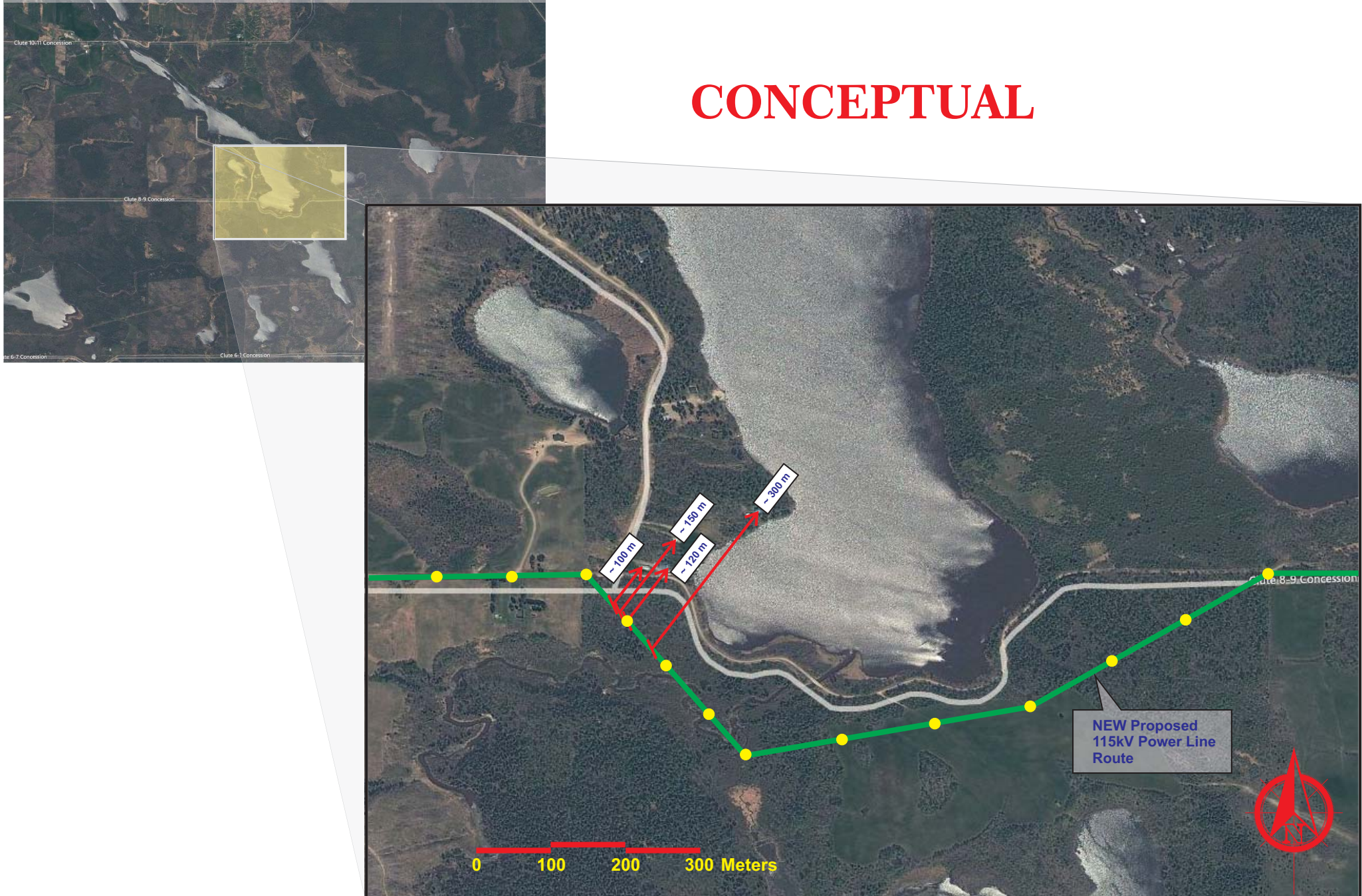
Legend:

-  Railway
-  Tran Canada Hwy.
-  Exist 115kV Transmission Line
-  TCPL Gas Pipe Line
-  Original Proposed Route
-  New Proposed Route of 21 Km Transmission Line
-  Northland Power Solar Switching Station
-  Huntta TS
-  Cochrane West TS
-  Thermal Site
-  Hydro Electric Site
-  Solar Site

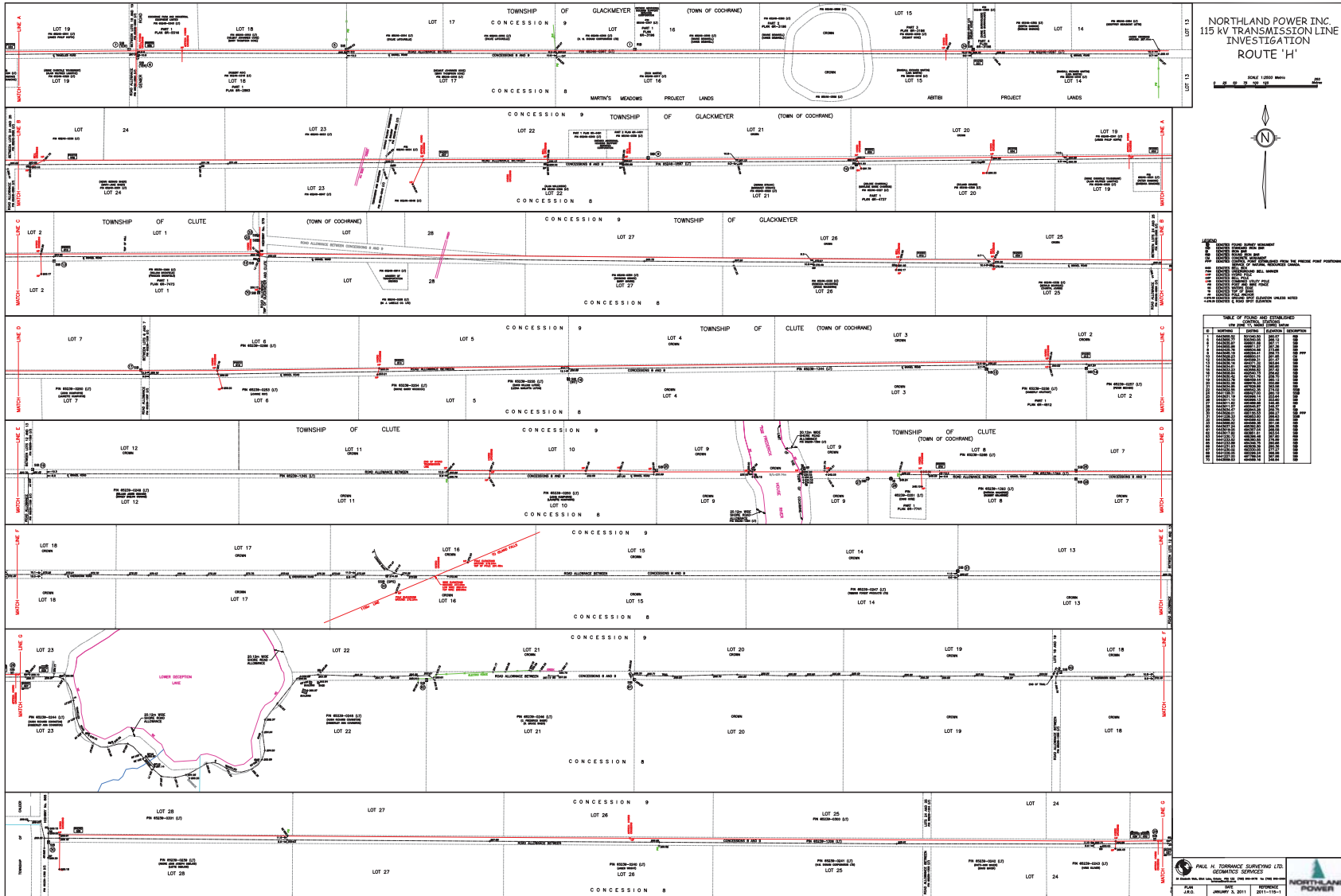


CONCEPTUAL TRANSMISSION LINE ROUTE

CONCEPTUAL



Transmission Line – Legal Survey



Welcome to the Public Meeting for the
115-kV Transmission Line to Interconnect the
Long Lake Solar, Empire, Abitibi, and Martin's Meadows
Projects



Thursday October 4, 2012

Public Information Centre #3 (PIC#3)



Agenda

Cochrane 5:00 – 7:00 and Hunta 7:30 – 9:30

1) Presentation (approx. 30 minutes)

- Introduction – Northland and Panel
- Purpose of the Meeting
- Permitting Process and Schedule
- Transmission Line
- Next Steps

2) Question and Answer Period (approx. 30 minutes)

3) Open House – Display Boards (approx. 60 minutes)

Northland Power Inc.

Northland Power develops and operates clean and green power generation facilities, mainly in the provinces of Ontario and Quebec. Our facilities produce about 1,000 MW of electricity. Northland Power has been in business since 1987 and has been publicly traded since 1997.

Sustainability is a core value of Northland Power Inc. Sustainability has many dimensions including:

- Environmental
- Community
- Health and Safety
- Financial
- Operational

Presenters

- Northland Power
 - Rob Miller, M.Sc., P.Eng., Manager Solar Development
 - Luke Kupczyk, M.Eng, P.Eng., Project Engineer, Engineering Department
- Hatch
 - Sean Male, M.Sc., Terrestrial Ecologist, Environmental Assessment & Management
- Intrinsic Environmental Sciences Inc.
 - Dr. Chris Ollson, PhD., Environmental Health Scientist

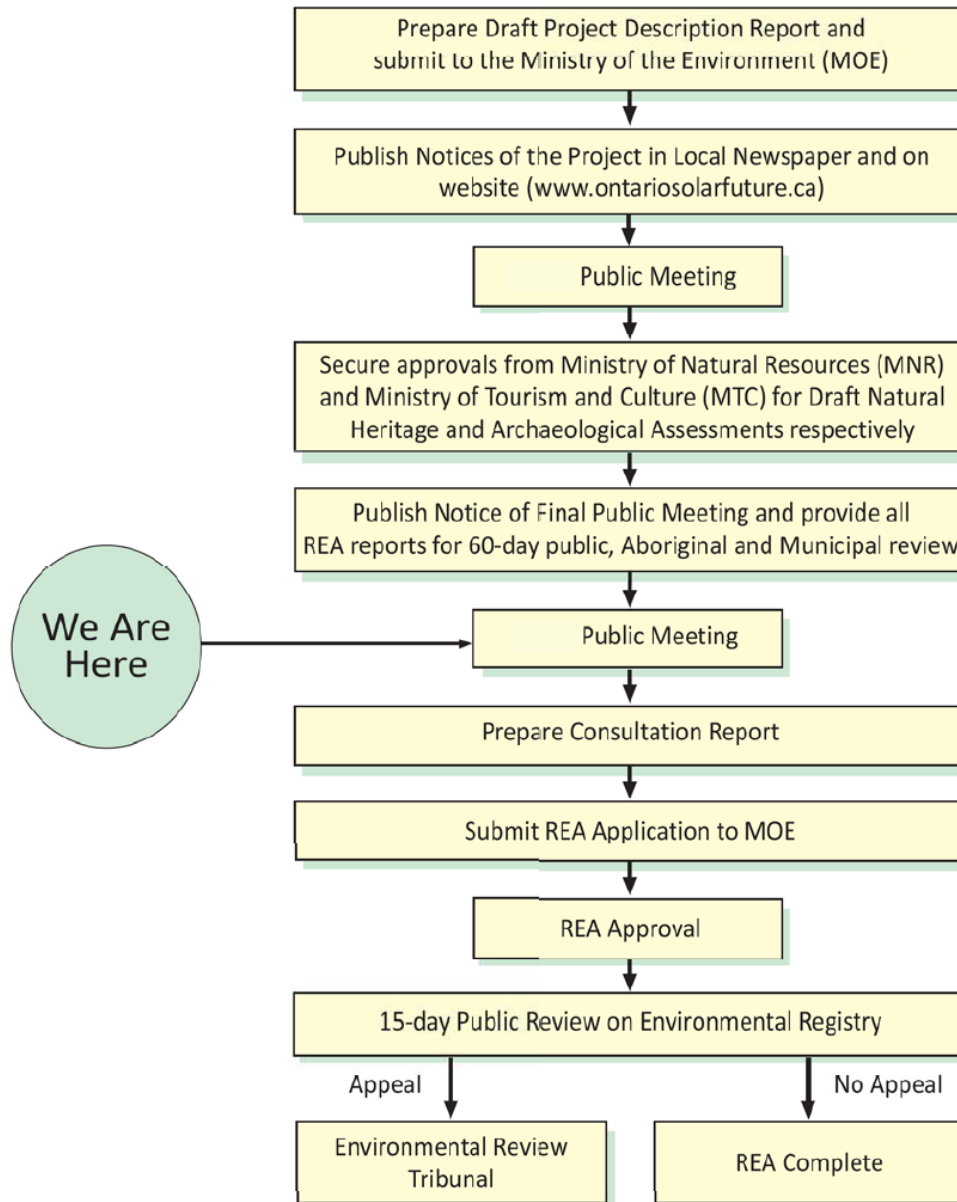
Purpose of this Public Meeting

- To communicate project details and to solicit stakeholder input, with a focus on the transmission line
- You Can:
 - Ask Questions
 - Obtain information
 - Gain a greater understanding of the Project and the REA process
 - Express any comments or concern
- Comments or Concerns can be provided:
 - In a comment form
 - Through discussions with the representatives in attendance
 - Or contact the Environmental Coordinator, Sean Male, after the meeting

Benefits of Solar Energy

- Advantages of solar energy include:
 - Fuel is free
 - No pollutants or green house gases
 - Components are safe and non-toxic
 - Low environmental impact - most benign form of power generation
 - Low maintenance costs, no moving parts
 - Power production matches supply and demand patterns
 - Ontario has a summer peaking utility due to air conditioning loads

Renewable Energy Approval (REA) Process



Anticipated Project Schedule

- Submission of Renewable Energy Approval (REA) Documents to MOE – October 2012
- Renewable Energy Approval Received – April 2013
- Construction Begins – Spring 2013
- Construction Complete – Fall 2013, but could stretch to 2014

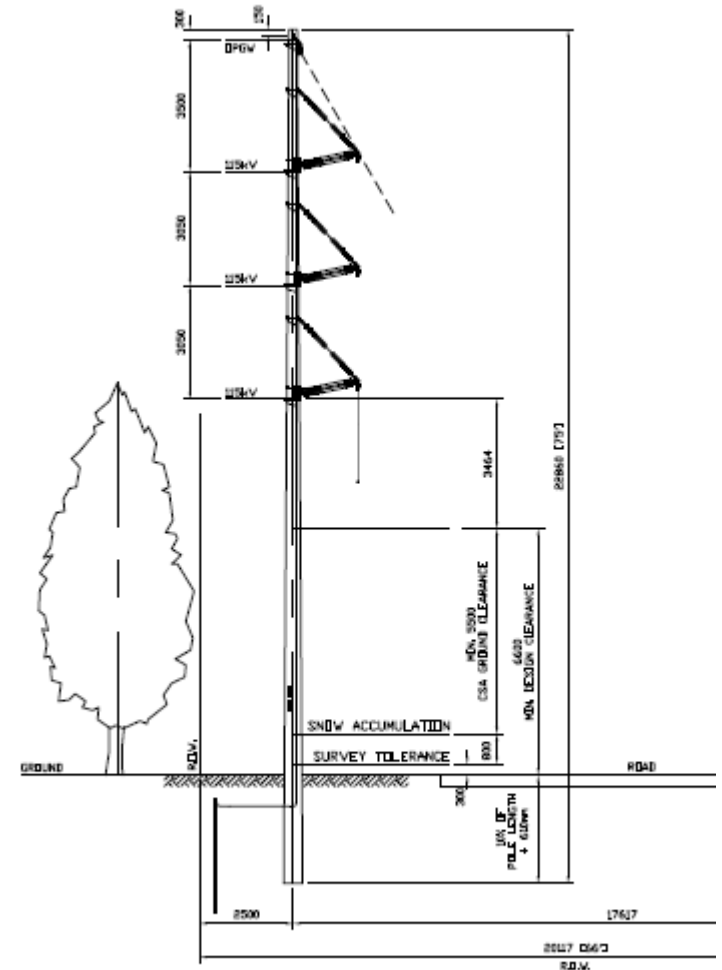
Northland



115 kV Transmission Line

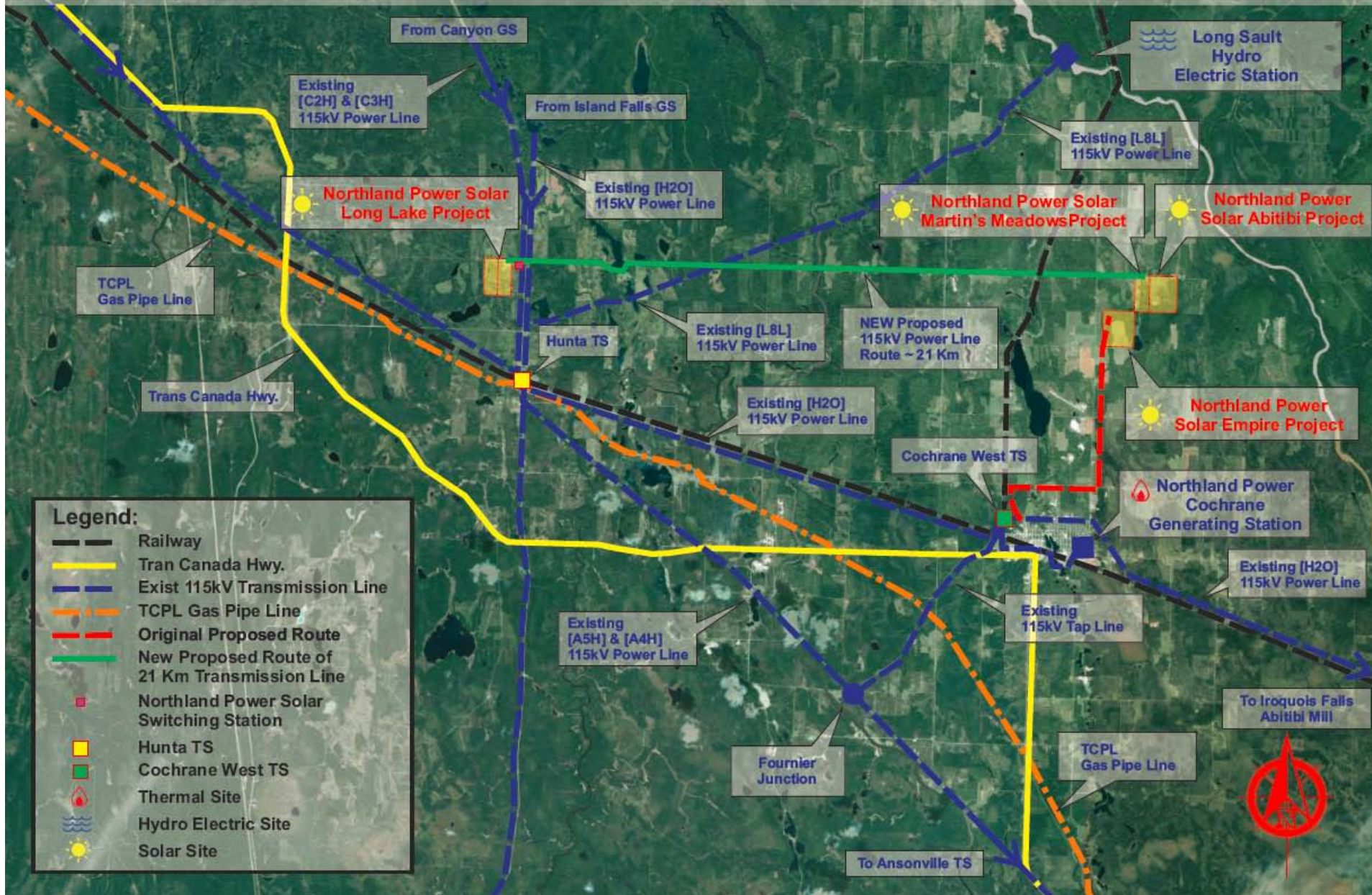
115 kV Transmission Line

- A 20 km long transmission line will be constructed
- Located within municipal road right-of-way along Concession 8&9
- Several crossings will be required (i.e. Frederick House River, Ontario Northland Railway, existing transmission lines)
- In the unorganized townships, line will be on Crown Land
- Permitting of the transmission line is also going through an Ontario Energy Board “Leave to Construct” and other Ministry of Natural Resources permitting (such as work permits).



115kV TRANSMISSION LINE
TANGENT STRUCTURES
CONCEPTUAL RIGHT OF WAY DESIGN

NORTHLAND POWER SOLAR PROJECTS TRANSMISSION LINE



CONCEPTUAL TRANSMISSION LINE ROUTE

CONCEPTUAL



Why This Route Was Selected

- Learned / told by Hydro One we could not connect to the tap line servicing Cochrane.
 - It is not big enough, i.e. conductor is too small.
 - Need to connect to main circuit, for example C2H
 - Spur line capacity of 59 MVA. This is not enough to carry the output of the 30 MW solar plus Cochrane NP plant
- Northland, Hydro One and IESO want to minimize connections to the grid.
 - This is easier to monitor and control and it is less expensive

Why This Route Was Selected (cont'd)

- The proposed route is the most direct
- Least number of landowners, predominantly the Town and MNR.
- Utilities are typically or best located in municipal road ROW's, and not cross country – less environmental impacts, better for O&M, compatible with intended use of land
- Optimizes use of existing linear severances (i.e. roads)
- Takes advantage of areas that have already been cut and disturbed
- Relatively flat gentle topography

Private Algonquin and H2O Lines

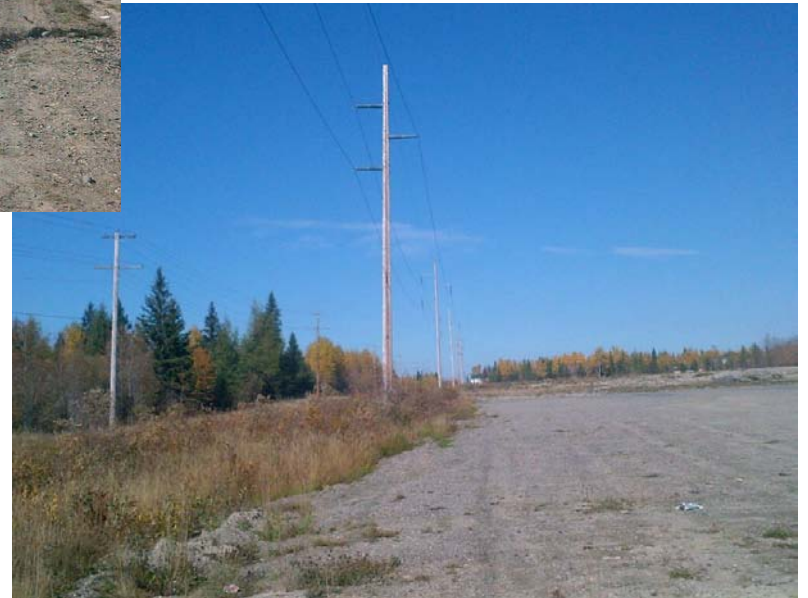
- Approached Algonquin, and cannot connect to their line because it is already limited in terms of capacity and there are other technical and commercial reasons why we cannot.
 - It does not make sense environmentally, or from a cost perspective, to parallel the Algonquin line
- Same reason we cannot connect to H2O's line running through Cochrane

Existing 115 kV Line in Cochrane



This is what Northland is proposing.

Northland will not use large metal lattice towers.



H2O Line Along 8th Street Next to School



H2O Line Along 8th Street

Looking West



Looking East

H2O Line Next to Minto Health Centre



Health Canada on EMF from Power Lines

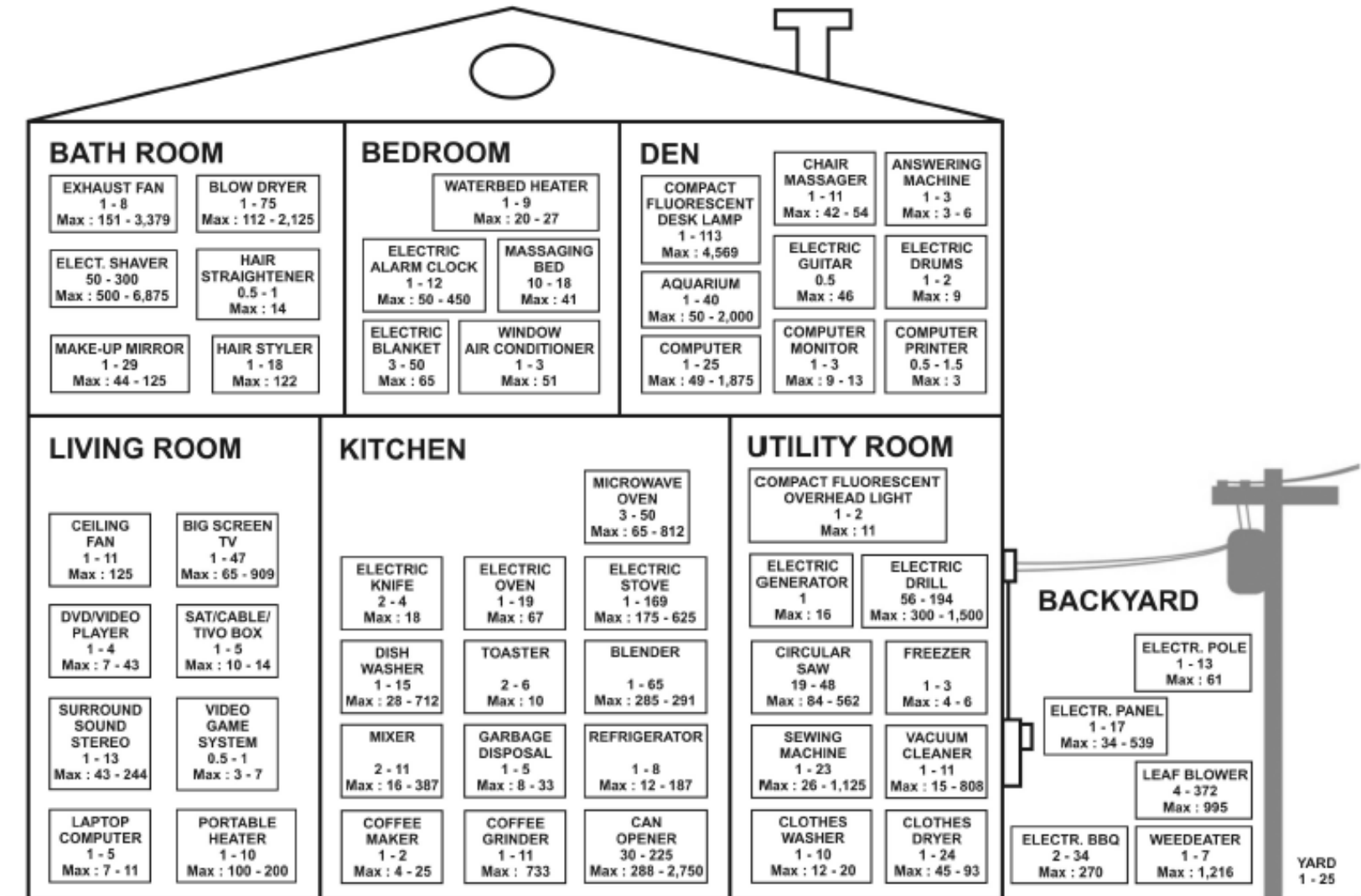
“There is no conclusive evidence of any harm caused by exposures at levels found in Canadian homes and schools, including those located just outside the boundaries of power line corridors.”

“Health Canada does not consider guidelines for the Canadian public necessary because the scientific evidence is not strong enough to conclude that exposures cause health problems for the public.”

IEEE - EMF In The Environment

MAGNETIC FIELD ENVIRONMENT

Units: milliGauss (mG)



Typical EMF Levels for Power Transmission Lines*

115 kV



Approx. Edge
of Right-of-Way

15 m
(50 ft)

30 m
(100 ft)

61 m
(200 ft)

91 m
(300 ft)

Electric Field (kV/m)	1.0	0.5	0.07	0.01	0.003
Mean Magnetic Field (mG)	29.7	6.5	1.7	0.4	0.2

230 kV



Approx. Edge
of Right-of-Way

15 m
(50 ft)

30 m
(100 ft)

61 m
(200 ft)

91 m
(300 ft)

Electric Field (kV/m)	2.0	1.5	0.3	0.05	0.01
Mean Magnetic Field (mG)	57.5	19.5	7.1	1.8	0.8

500 kV



Approx. Edge
of Right-of-Way

20 m
(65 ft)

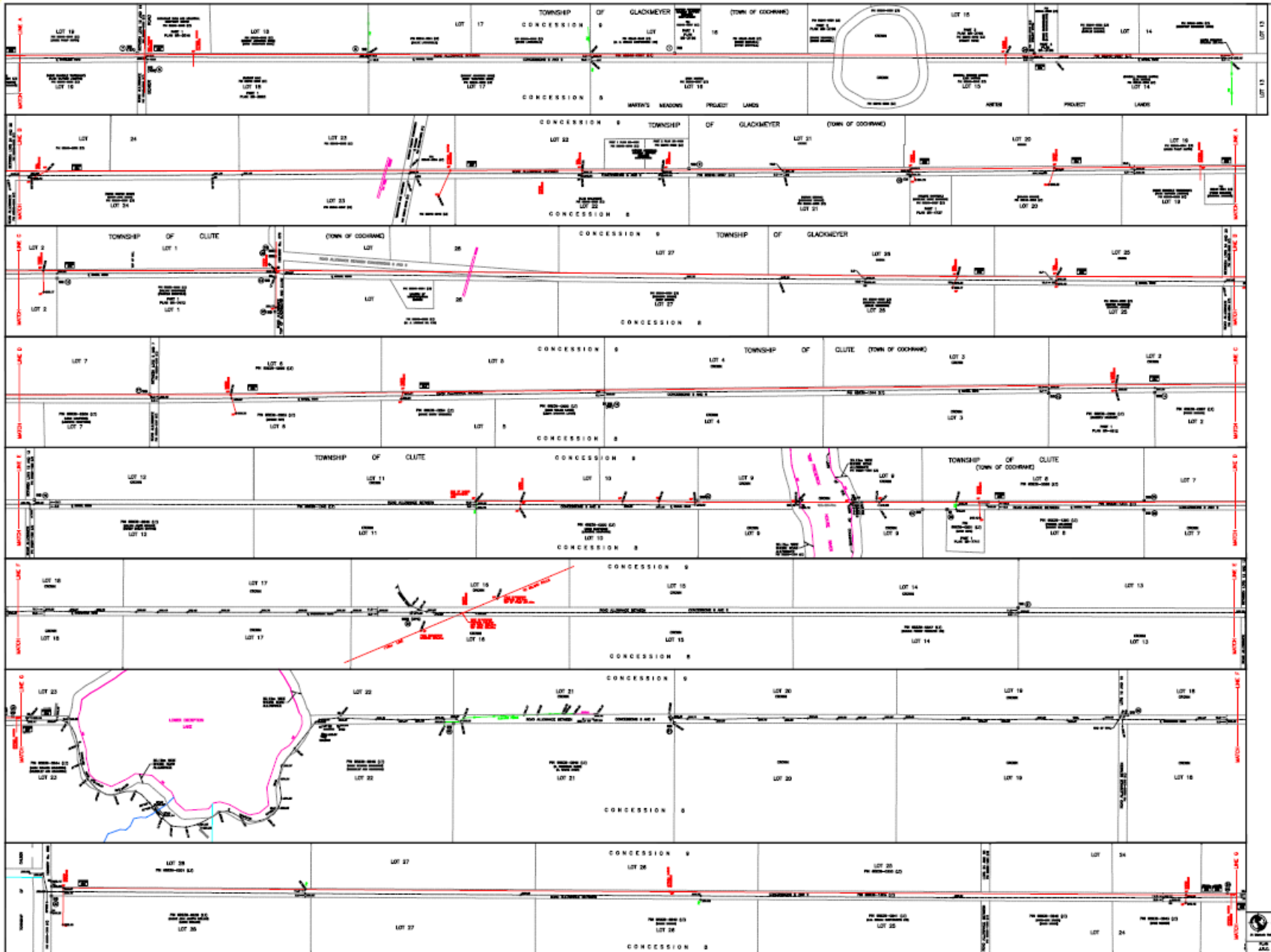
30 m
(100 ft)

61 m
(200 ft)

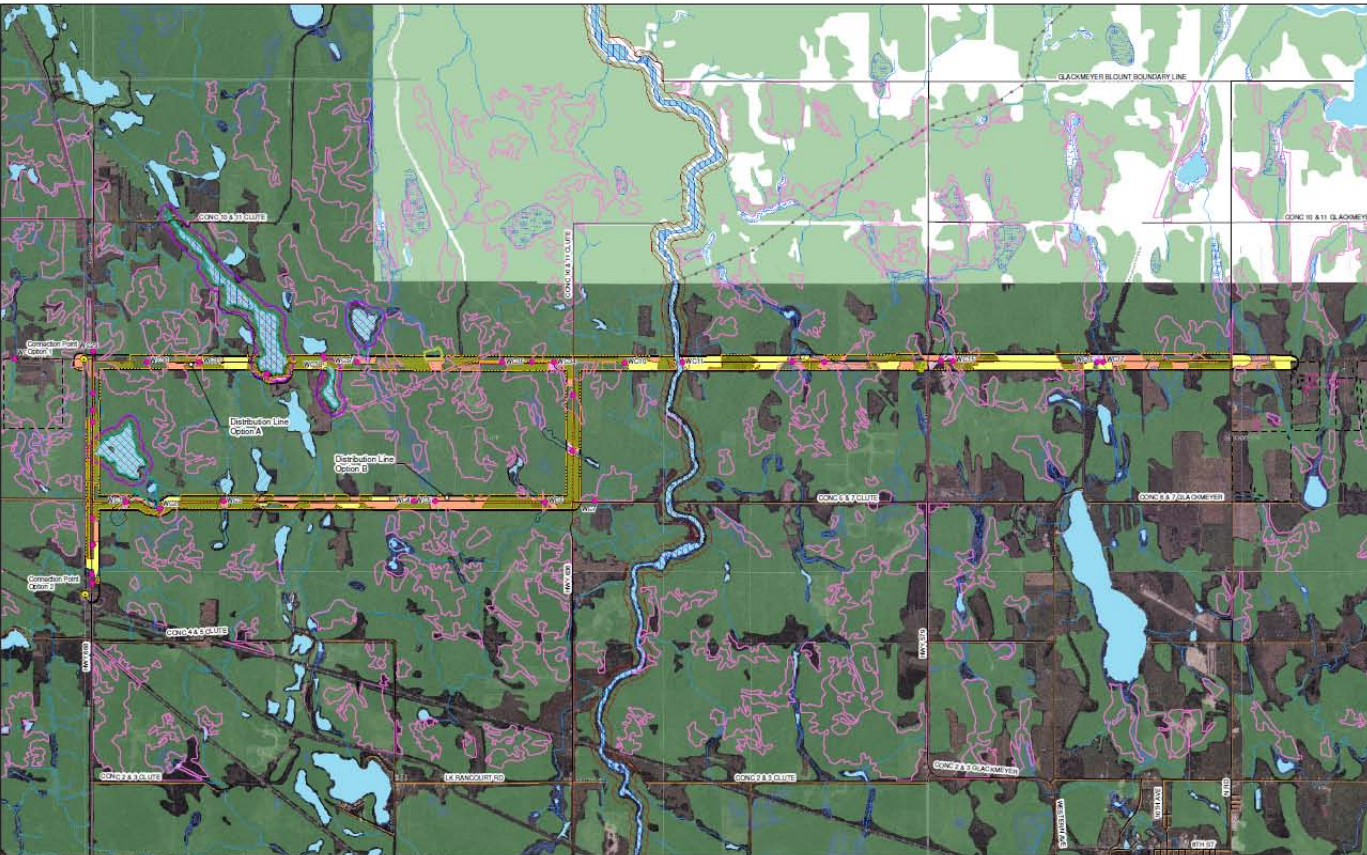
91 m
(300 ft)

Electric Field (kV/m)	7.0	3.0	1.0	0.3	0.1
Mean Magnetic Field (mG)	86.7	29.4	12.6	3.2	1.4

115 kV Transmission Line – Legal Survey



115kV Transmission Line – Environmental Features



Legend

- Road
 - Utility Line
 - Area Sensitive Grassland Habitat / Short-eared Owl Habitat
 - Area Sensitive Shrubland Habitat / *Carex Wiegandii* Habitat
 - Area Sensitive Woodland / Canada Warbler / Olive-sided Flycatcher / *Vaccinium ovalifolium* Habitat
 - Bald Eagle Habitat
 - Carex haydenii* Habitat
 - Carex liliacea* Habitat
 - Common Nighthawk Habitat
 - Old Growth or Mature Forest / Northern Long-eared Bat and Specialized Mink, Otter, Marten, and Fisher Denning Site Raptor Nesting Habitat
 - Moose Aquatic Feeding Area
 - Moose Late Winter Habitat / Winter Deer Yard
 - Scirpus heterochaetus* Habitat
 - Seeps and Springs / *Carex tetanica* Habitat
 - Red-necked Grebe Habitat
 - Waterfowl Stopover and Staging Area
 - Waterfowl Nesting Habitat
 - Wetland Area
 - Wetlands Supporting Amphibian Breeding Ponds
- Waterbody Features**
- Watercrossing (Hatch)
 - Watercourse (LIO Mapping)
 - Waterbody
- Project Infrastructure**
- Connection Point
 - Northland Power Project Location
 - 120 m from Distribution Line

Notes:
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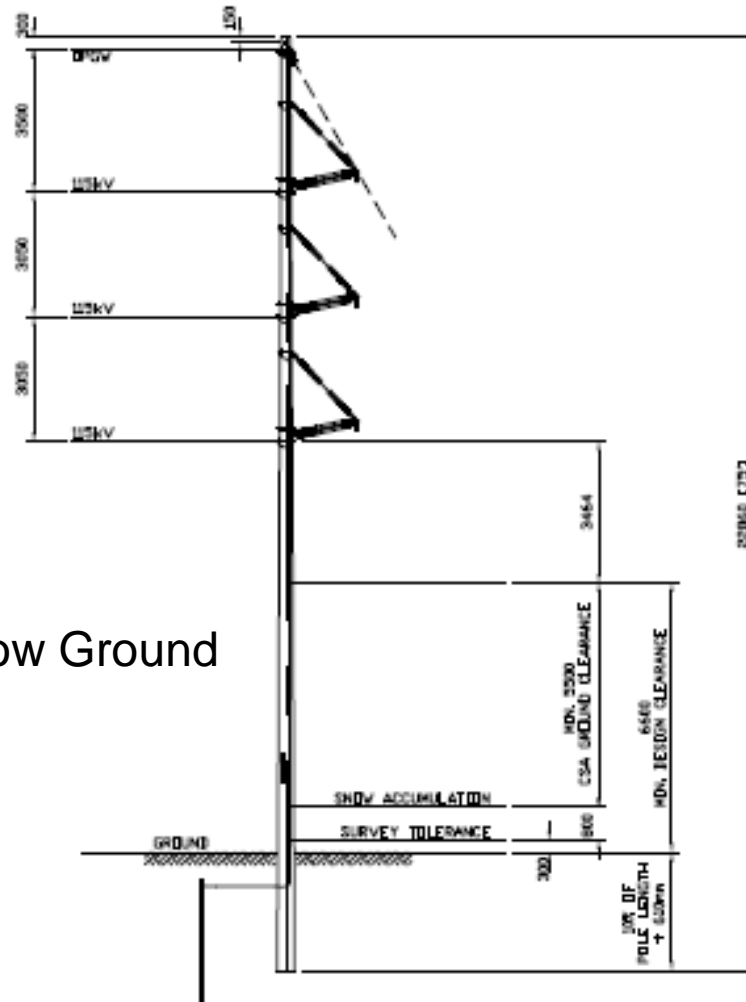
Northland Power Inc.
 Distribution Line Project Location
 Generalized Candidate
 Significant Natural Heritage / Waterbody Features **HATCH**

115kV Transmission Line – Typical Pole

Typical 75' Pole

9' Embedment or Below Ground

66' Aboveground



10CT 115kV TRANSMISSION LINE
TANGENT (0 - 2°) FRAMING

Northland



Next Steps

Next Steps

- A consultation report will be prepared documenting results of this Public meeting
- An application for a Renewable Energy Approval will be submitted to the Ministry of Environment
- A Notice of Environmental Registry Posting will be published
- A Decision Notice will be issued from the Ministry of Environment

**For more
information, please
visit
northlandpower.ca**

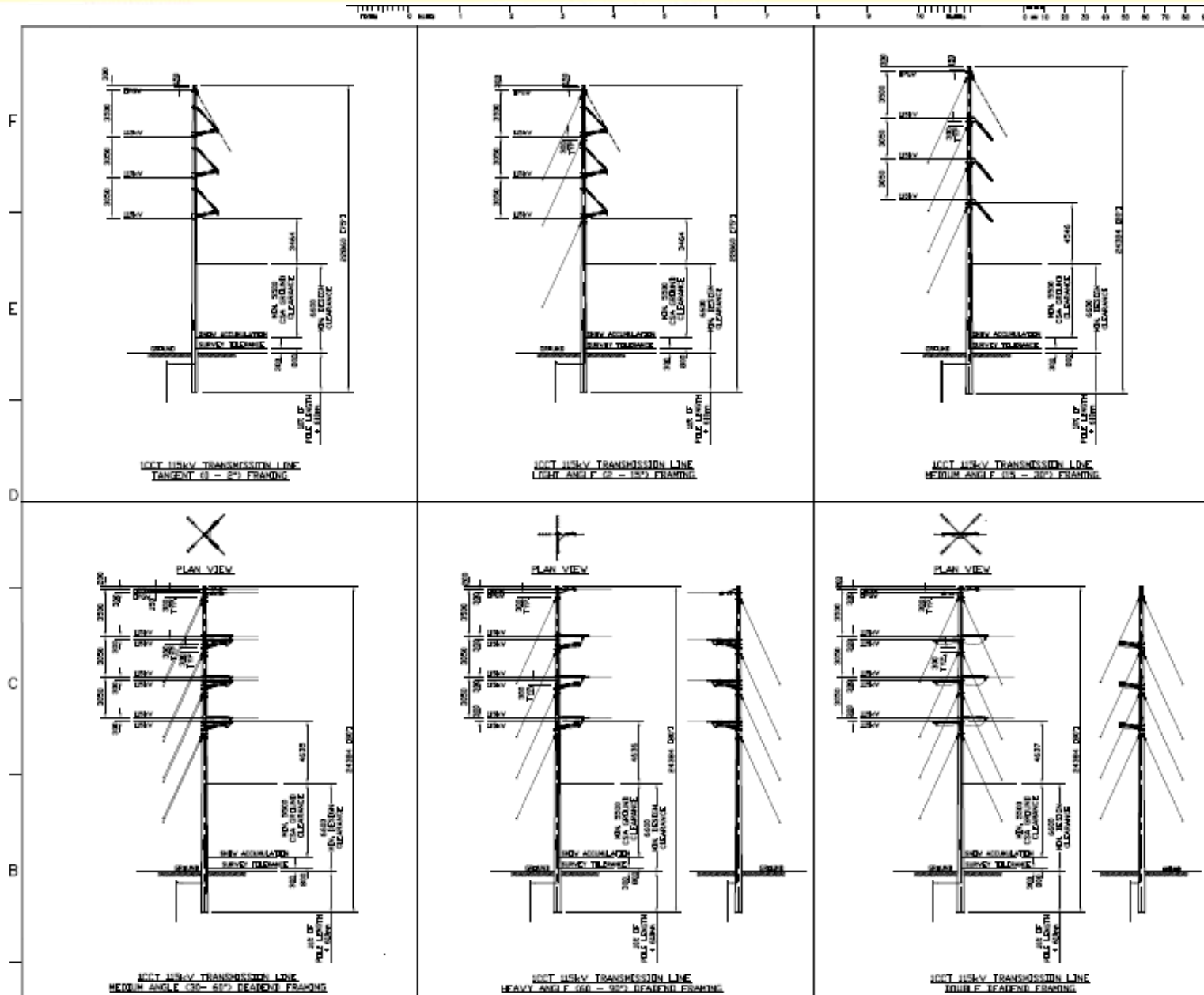
Questions?

Thank You

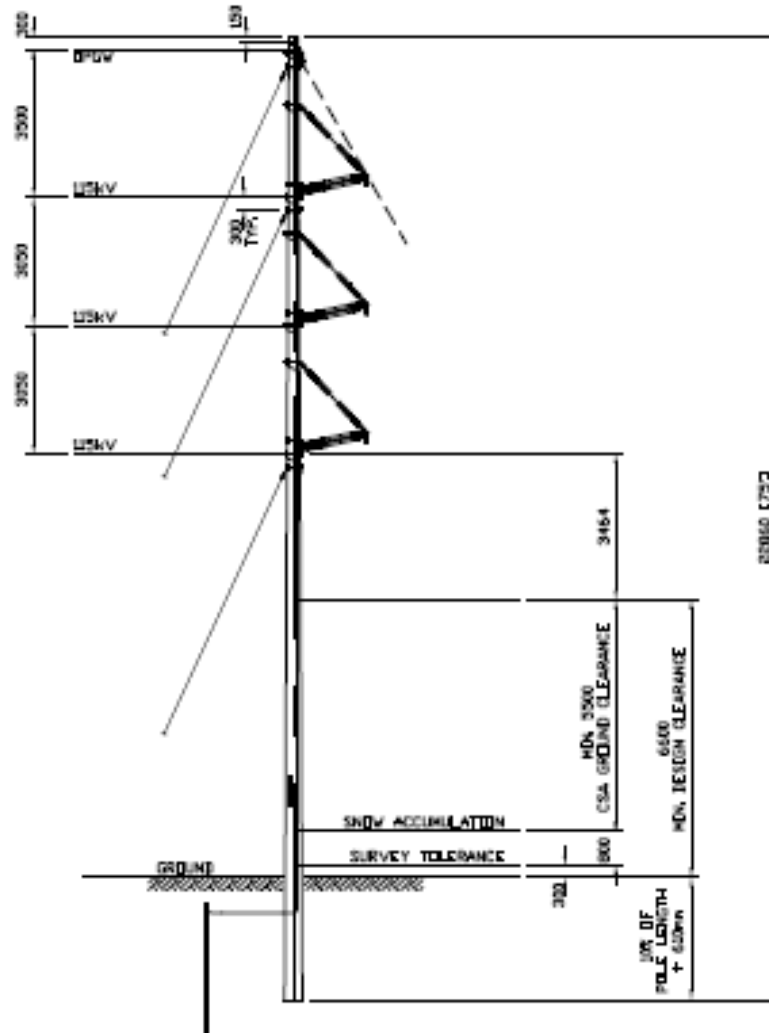
www.northlandpower.ca



115kV Transmission Line – Structure Summary

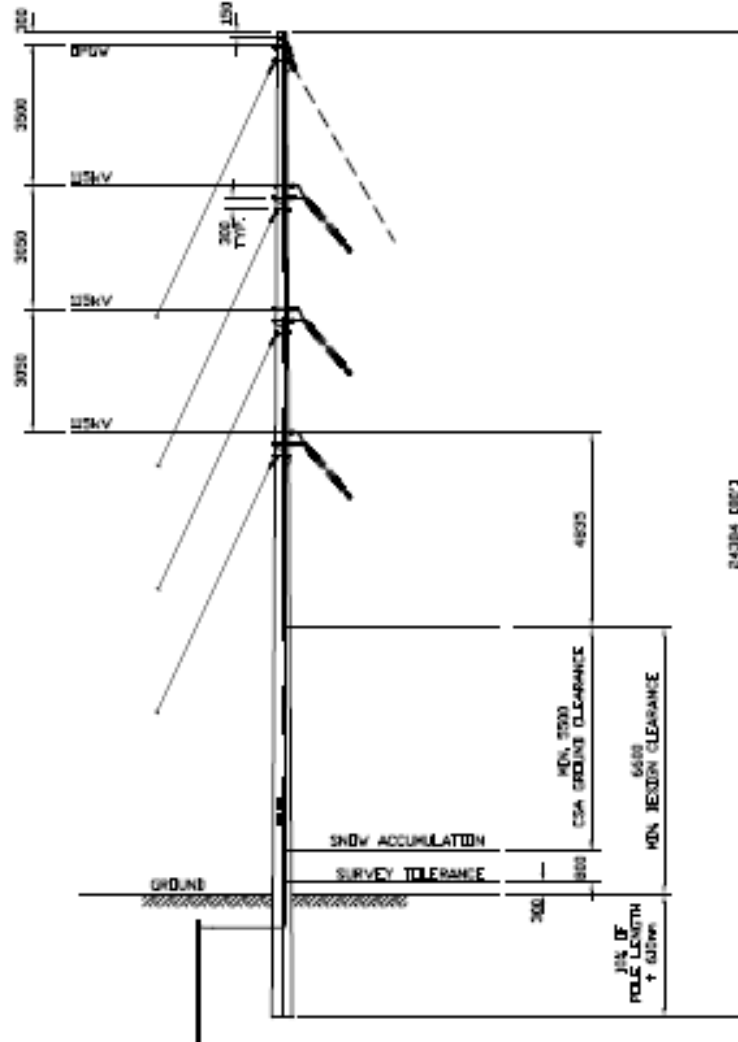


115kV Transmission Line – Design Option



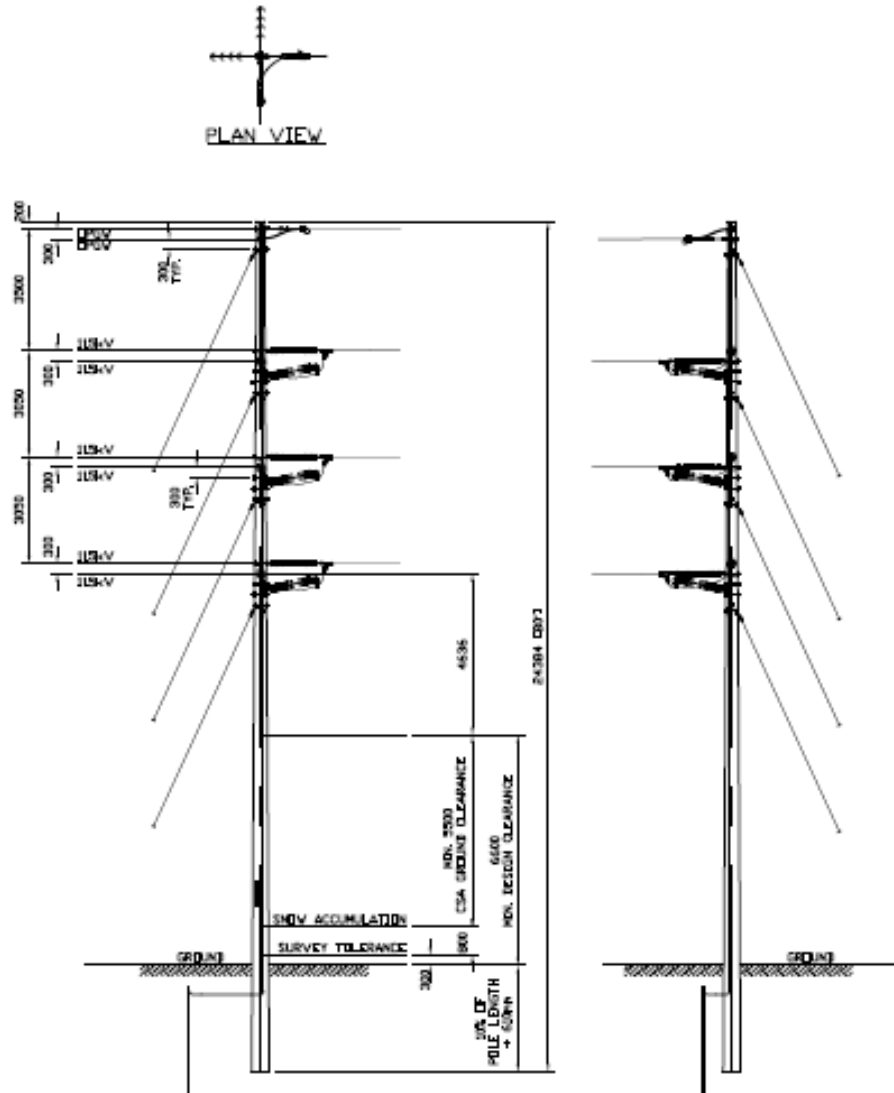
10CT 115kV TRANSMISSION LINE
LIGHT ANGLE (P - 15°) FRAMING

115kV Transmission Line – Design Option



1CCT 115kV TRANSMISSION LINE
MEDIUM ANGLE (15 - 30°) FRAMING

115kV Transmission Line – Design Option

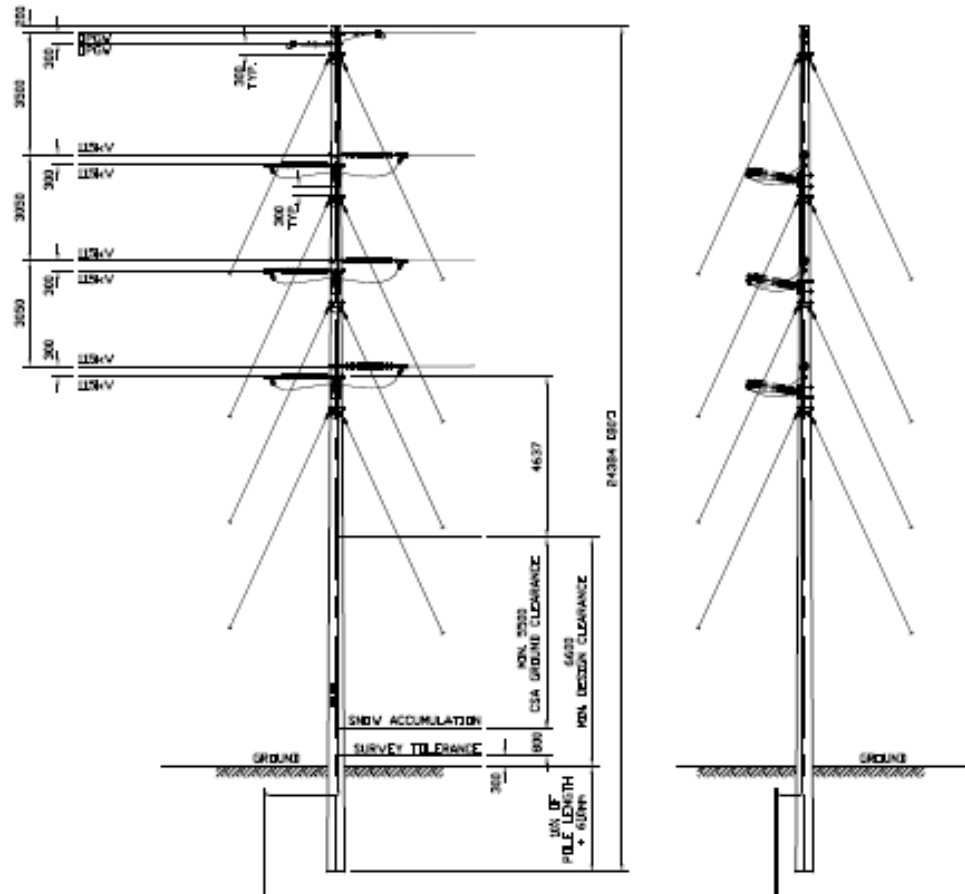


ICCT 115kV TRANSMISSION LINE
HEAVY ANGLE (60 - 90°) DEADEND FRAMING

115kV Transmission Line – Design Option



PLAN VIEW

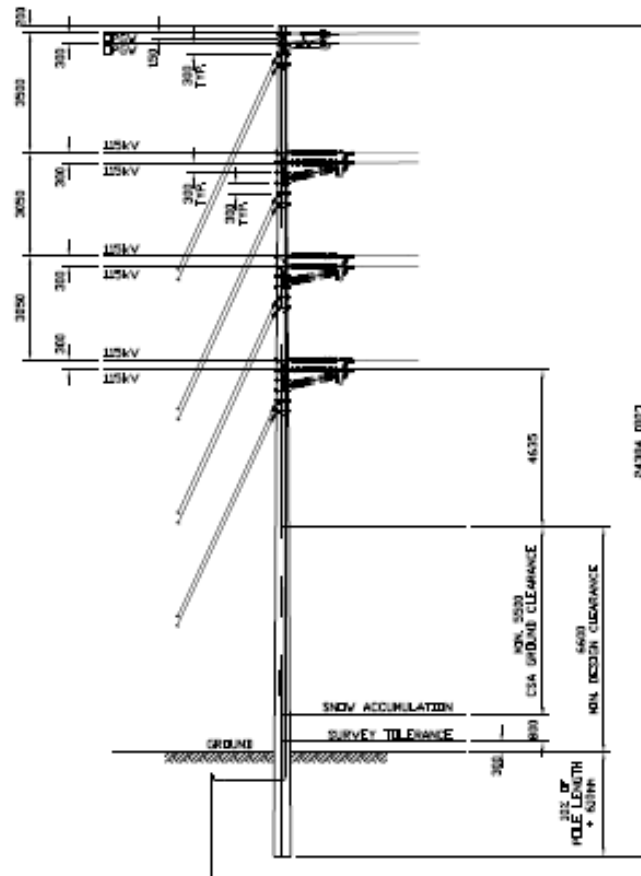


LCCT 115kV TRANSMISSION LINE
DOUBLE DEADEND FRAMING

115kV Transmission Line – Design Option



PLAN VIEW



ICCT 115kV TRANSMISSION LINE
MEDIUM ANGLE (30 - 60°) DEADEND FRAMING

Appendix F

Correspondence with the Public

Appendix G

Correspondence with the Agencies

Appendix G1

Ministry of the Environment

November 10, 2010

Ms. Doris Dumais
Director, Approvals Program
Ministry of the Environment
Environmental Assessment and Approvals Branch
12A Floor, 2 St. Clair Avenue West
Toronto, Ontario
M4V 1L5

Dear Ms. Dumais:

Subject: Draft Project Description Reports - Northland Power Inc.

On behalf of Northland Power Inc., please find attached Draft Project Description Reports for four proposed solar projects. Each Draft Project Description Report has been prepared in accordance with Sections 13 and 14(1)(a) of Ontario Regulation 359/09 and the Ministry of the Environment's draft Guidance for Preparing the Project Description Report.

As per Section 14(1)(b) of Ontario Regulation 359/09, at this time we request that you provide the list of Aboriginal communities that we will consult with on each project.

If you have any questions, please do not hesitate to contact the undersigned at 905-374-0701 (Ext. 5280) or smale@hatch.ca.

Sincerely,



Sean Male, M.Sc
REA Coordinator

SKM:mg

cc: Mike Lord, Northland Power
Tom Hockins, Northland Power

June 1, 2011

Denis Durocher, Timmins District Manager, Ministry of Environment
5520 Hwy 101 East, PO Bag 3080
Ontario Government Complex, South Porcupine P0N 1H0

Subject: Notice of a Proposal and Notice of Public Meeting - Northland Power - Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project

Northland Power is proposing to construct three solar projects in the Town of Cochrane, just southeast of the community of Genier. The proposed projects are named the Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project (the "Projects") and will each have an installed nominal capacity of 10 MW. These Projects require a Renewable Energy Approval (REA) issued in accordance with the provisions of the Ontario *Environmental Protection Act* Part V.0.1 and Ontario Regulation 359/09 as amended by Ontario Regulation 521/10. Northland Power has retained Hatch to assist in fulfilling the requirements of the REA process.

Northland Power is undertaking a public consultation program in support of the Projects and we would like to invite you to the upcoming Public Meeting. Please find attached a "Notice of a Proposal to Engage in a Renewable Energy Project and Notice of Public Meeting", which details the time and date of the planned meeting. This Notice will also be published in *Cochrane Times Post* on Thursday June 2, 2011 and Thursday June 9, 2011. The Public Meeting will provide the public with an opportunity to learn more about the Project proposals and about Northland Power.

In accordance with Section 16 (3) of Ontario Reg. 359/09, a draft "Project Description Report" and associated information pertaining to these Projects and about Northland Power can be found online at: northlandpower.ca/abitibi, www.northlandpower.ca/empire and www.northlandpower.ca/martinsmeadows. As well, hardcopies are available at the Town of Cochrane municipal office. We would appreciate any comments, queries or information you may have that are relevant to the proposed Projects.

Please direct any correspondence(s) to:

Sean Male, M.Sc., REA Coordinator
Hatch Ltd.
4342 Queen St., Suite 500
Niagara Falls, ON, L2E 7J7
Phone: 905-374-0701, Ext 5280
Fax: 905-374-1157
Email: smale@hatch.ca

Yours truly,



Sean Male, M.Sc.
REA Coordinator

SM:srg

Attachment: Notice of a Proposal/Notice of Public Meeting: Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project

cc: Mike Lord, Northland Power
Tom Hockin, Northland Power

June 1, 2011

Doris Dumais, Director,
Ministry of the Environment,
Environmental Assessment and Approvals Branch
2 St. Clair Ave., W, 12A Floor
Toronto, On M4V 1L5

Subject: Notice of a Proposal and Notice of Public Meeting - Northland Power - Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project

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Tom Hockin, Northland Power



Suite 500, 4342 Queen Street
Niagara Falls, Ontario, Canada L2E 7J7
Tel. 905 374 5200 ♦ Fax: 905 374 1157 ♦ www.hatch.ca

June 27, 2011

Denis Durocher, Timmins District Manager, Ministry of Environment
5520 Hwy 101 East, PO Bag 3080
Ontario Government Complex, South Porcupine P0N 1H0

Subject: Notice of Change of Date for Public Meeting - Northland Power - Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project

Northland Power is proposing to construct three solar projects in the Town of Cochrane, just southeast of the community of Genier. The proposed projects are named the Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project (the "Projects") and will each have an installed nominal capacity of 10 MW. These Projects require a Renewable Energy Approval (REA) issued in accordance with the provisions of the Ontario *Environmental Protection Act* Part V.0.1 and Ontario Regulation 359/09 as amended by Ontario Regulation 521/10. Northland Power has retained Hatch to assist in fulfilling the requirements of the REA process.

As previously notified in a letter dated, June 1, 2011, Northland Power is undertaking a public consultation program in support of the Projects. Due to a change in Project location, the previously notified date of Tuesday July 5, 2011 for the Public Meeting is changed to Wednesday July 27, 2011. We apologize for any inconvenience. Please find attached a "Notice of Public Meeting", which details the time and date of the planned meeting. This Notice will also be published in *Cochrane Times Post* on Thursday June 23, 2011 and Thursday June 30, 2011. The Public Meeting will provide the public with an opportunity to learn more about the Project proposals and about Northland Power.

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Yours truly,



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SM:srg

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Tom Hockin, Northland Power

June 27, 2011

Doris Dumais, Director, Ministry of the Environment, Environmental Assessment and Approvals Branch
2 St. Clair Ave., W, 12A Floor
Toronto, On M4V 1L5

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REA Coordinator

SM:srg

Attachment: Notice of a Proposal/Notice of Public Meeting: Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project

cc: Mike Lord, Northland Power
Tom Hockin, Northland Power

May 24, 2012

Doris Dumais, Director, Ministry of the Environment,
Environmental Assessment and Approvals Branch
2 St. Clair Ave., W, 12A Floor
Toronto, ON M4V 1L5

**Subject: Notice of Public Meeting and Renewable Energy Approvals Documents -
Abitibi Solar Project, Empire Solar Project and Martin's Meadow's Solar Project**

Northland Power is proposing to construct three solar projects in the Town of Cochrane, just southeast of the community of Genier. The proposed projects are named the Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project (the "Projects") and will each have an installed nominal capacity of 10 MW. These Projects require a Renewable Energy Approval (REA) issued in accordance with the provisions of the Ontario *Environmental Protection Act* Part V.0.1 and Ontario Regulation 359/09. Northland Power has retained Hatch to assist in fulfilling the requirements of the REA process.

Northland Power is undertaking a public consultation program in support of the Projects and has planned a public meeting on Tuesday, August 21, 2012, as outlined in the enclosed Notice of Public Meeting. This Notice will also be published in *Cochrane Times Post* on Thursday, May 24, 2012 and Thursday, July 26, 2012. The Public Meeting will provide the public with an opportunity to learn more about the Project proposals and about Northland Power. Please note a change has occurred in the proposed transmission line route and the attached map outlines both the previous proposed transmission line route, as shown at the last public meeting, and the revised proposed transmission line route.

In accordance with Section 16 (3) of Ontario Reg. 359/09, draft supporting documents, including the Project Description Report, Executive Summary, Design and Operations Report, Construction Plan Report, Decommissioning Plan Report, Noise Assessment Report, Stage 1 and 2 Archaeological Assessment Report, Natural Heritage Assessment Reports and Water Body Assessment Reports, are to follow and will be made available by Thursday, June 21, 2012 at (i) the Town of Cochrane Municipal Office and at (ii) the Hunta Mennonite Church (please contact Robert Landis at 705-272-6306 for a viewing) or (iii) on-line at northlandpower.ca/abitibi, www.northlandpower.ca/empire and www.northlandpower.ca/martinsmeadows. We would appreciate any comments, queries or information you may have that are relevant to the proposed Projects.



May 24, 2012

Please direct any correspondence(s) to:

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4342 Queen St., Suite 500
Niagara Falls, ON, L2E 7J7
Phone: 905-374-0701, Ext 5280
Fax: 905-374-1157
Email: smale@hatch.ca

Sincerely,



Sean K. Male, M.Sc.
REA Coordinator

SKM:mg

Attachment(s)/Enclosure

Notice of Public Meeting – Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project
Comparison Map of Transmission Line Route

cc: Tom Hockin, Northland Power
Carol-Ann Fletcher, Northland Power

May 24, 2012

Denis Durocher, Timmins District Manager
Ministry of Environment
5520 Hwy 101 East, PO Box 3080
Ontario Government Complex
South Porcupine P0N 1H0

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Northland Power is proposing to construct three solar projects in the Town of Cochrane, just southeast of the community of Genier. The proposed projects are named the Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project (the "Projects") and will each have an installed nominal capacity of 10 MW. These Projects require a Renewable Energy Approval (REA) issued in accordance with the provisions of the Ontario *Environmental Protection Act* Part V.0.1 and Ontario Regulation 359/09. Northland Power has retained Hatch to assist in fulfilling the requirements of the REA process.

Northland Power is undertaking a public consultation program in support of the Projects and has planned a public meeting on Tuesday, August 21, 2012, as outlined in the enclosed Notice of Public Meeting. This Notice will also be published in *Cochrane Times Post* on Thursday, May 24, 2012 and Thursday, July 26, 2012. The Public Meeting will provide the public with an opportunity to learn more about the Project proposals and about Northland Power. Please note a change has occurred in the proposed transmission line route and the attached map outlines both the previous proposed transmission line route, as shown at the last public meeting, and the revised proposed transmission line route.

In accordance with Section 16 (3) of Ontario Reg. 359/09, draft supporting documents, including the Project Description Report, Executive Summary, Design and Operations Report, Construction Plan Report, Decommissioning Plan Report, Noise Assessment Report, Stage 1 and 2 Archaeological Assessment Report, Natural Heritage Assessment Reports and Water Body Assessment Reports, are to follow and will be made available by Thursday, June 21, 2012 at (i) the Town of Cochrane Municipal Office and at (ii) the Hunta Mennonite Church (please contact Robert Landis at 705-272-6306 for a viewing) or (iii) on-line at northlandpower.ca/abitibi, www.northlandpower.ca/empire and www.northlandpower.ca/martinsmeadows. We would appreciate any comments, queries or information you may have that are relevant to the proposed Projects.



May 24, 2012

Please direct any correspondence(s) to:

Sean Male, M.Sc., REA Coordinator
Hatch Ltd.
4342 Queen St., Suite 500
Niagara Falls, ON, L2E 7J7
Phone: 905-374-0701, Ext 5280
Fax: 905-374-1157
Email: smale@hatch.ca

Sincerely,



Sean K. Male, M.Sc.
REA Coordinator

SKM:mg

Attachment(s)/Enclosure

Notice of Public Meeting – Abitibi Solar Project, Empire Solar Project and Martin's Meadows Solar Project
Comparison Map of Transmission Line Route

cc: Tom Hockin, Northland Power
Carol-Ann Fletcher, Northland Power

September 18, 2012

Denis Durocher, Timmins District Manager
Ministry of Environment
5520 Hwy 101 East, PO Box 3080
Ontario Government Complex, South Porcupine P0N 1H0

Dear Mr. Durocher:

Subject: Notice of Public Meeting - Abitibi, Empire, Martin's Meadows and Long Lake Solar Projects

Northland Power is proposing to construct four solar projects in northeastern Ontario; three in the Town of Cochrane, just southeast of the community of Genier, and a fourth near the community of Hunta. The proposed projects are named the Abitibi Solar Project, the Empire Solar Project, the Martin's Meadows Solar Project and the Long Lake Solar Project (the "Projects") and will each have an installed nominal capacity of 10 MW. A 115 kV transmission line will connect these Projects to the provincial electricity distribution network. These Projects require a Renewable Energy Approval (REA) issued in accordance with the provisions of the Ontario *Environmental Protection Act*.

Northland Power is continuing a public consultation program in support of the Projects and has planned a public meeting on Thursday October 4, 2012, as outlined in the enclosed Notice of Public Meeting. This Notice will also be published in *Cochrane Times Post* on Thursday September 20, 2012, and Thursday September 27, 2012. The Public Meeting is being held to provide further information on the proposed 115 kV transmission line associated with the Projects.

As you may be aware, copies of the draft supporting documents were made available on June 21, 2012, at:

- the Town of Cochrane municipal office
- the Hunta Mennonite Church (please contact Robert Landis at 705-272-6306 for a viewing)
- online at the Project websites:
 - ◆ northlandpower.ca/abitibi
 - ◆ northlandpower.ca/empire
 - ◆ northlandpower.ca/martinsmeadows
 - ◆ northlandpower.ca/longlake



Safety • Quality • Sustainability • Innovation

H334844-0000-90-218-0160, Rev. 0

We would appreciate any comments, queries or information you may have that are relevant to the proposed Projects.

Please direct any correspondence(s) to:

Sean Male, M.Sc., REA Coordinator
Hatch Ltd.
4342 Queen St., Suite 500
Niagara Falls, ON, L2E 7J7
Phone: 905-374-0701, Ext 5280
Fax: 905-374-1157
Email: smale@hatch.ca

Sincerely,



Sean K. Male
SKM:mg

Attachment(s)/Enclosure
Notice of Public Meeting – Abitibi, Empire, Martin's Meadows and Long Lake

September 18, 2012

Doris Dumais, Director
Ministry of the Environment
Environmental Assessment and Approvals Branch
2 St. Clair Ave., W, 12A Floor
Toronto, ON M4V 1L5

Dear Ms. Dumais:

Subject: Notice of Public Meeting - Abitibi, Empire, Martin's Meadows and Long Lake Solar Projects

Northland Power is proposing to construct four solar projects in northeastern Ontario; three in the Town of Cochrane, just southeast of the community of Genier, and a fourth near the community of Hunta. The proposed projects are named the Abitibi Solar Project, the Empire Solar Project, the Martin's Meadows Solar Project and the Long Lake Solar Project (the "Projects") and will each have an installed nominal capacity of 10 MW. A 115 kV transmission line will connect these Projects to the provincial electricity distribution network. These Projects require a Renewable Energy Approval (REA) issued in accordance with the provisions of the Ontario *Environmental Protection Act*.

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 - ♦ northlandpower.ca/longlake



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H334844-0000-90-218-0160, Rev. 0

We would appreciate any comments, queries or information you may have that are relevant to the proposed Projects.

Please direct any correspondence(s) to:

Sean Male, M.Sc., REA Coordinator
Hatch Ltd.
4342 Queen St., Suite 500
Niagara Falls, ON, L2E 7J7
Phone: 905-374-0701, Ext 5280
Fax: 905-374-1157
Email: smale@hatch.ca

Sincerely,



Sean K. Male
SKM:mg

Attachment(s)/Enclosure
Notice of Public Meeting – Abitibi, Empire, Martin's Meadows and Long Lake



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Appendix G2

Ministry of Natural Resources

From: Male, Sean
Sent: Sunday, March 18, 2012 9:51 PM
To: 'Telford, Jennifer (MNR)'
Cc: 'Tom Hockin'; Carol-Ann Fletcher; 334844
Subject: Natural Heritage Reports for Abitibi, Martin's Meadows and Empire Solar Projects

Hi Jennifer,

I have uploaded the Natural Heritage Reports for Northland Power's Abitibi, Martin's Meadows and Empire Solar Projects onto our ftp site for your review.

Login information is provided below:

<ftp.hatch.ca>

login: 334844

password: Crew87PoW!

I will give you a call tomorrow to touch base around these. At that time, if you could give me an update on Long Lake that would be great.

Thanks,

Sean

Sean K. Male, M.Sc.

Terrestrial Ecologist/Environmental Assessment & Management



Tel: +1 905 374 0701 ext. 5280

Fax: +1 905 374 1157

4342 Queen Street, Suite 500, Niagara Falls, Ontario, Canada, L2E 7J7

From: Telford, Jennifer (MNR) [jennifer.telford@ontario.ca]
Sent: Friday, May 04, 2012 1:22 PM
To: Male, Sean
Cc: Clement, Denis (MNR)
Subject: MNR comments on Northland NHA's
Attachments: NHA Northland Comments.doc

Hi Sean,

I've attached a word document with comments for Abitibi, Empire and Martin's Meadows. I was going to fill out the NHA Review Checklist as we did with Long Lake but that was going to be very time consuming. The elements in the checklist were mostly met so here are the comments I have for the three sites. There aren't many so hopefully it will not take long to update the documents.

Have a good weekend,

Jennifer Telford

District Planner

Ministry of Natural Resources, Cochrane District

Phone (705) 272-7130

Fax (705)272-7183

jennifer.telford@ontario.ca

Ministry of Natural Resources
Cochrane District

2-4 Highway 11 South
P.O. Box 730
Cochrane ON P0L 1C0

Telephone: 705-272-7137
Facsimile: 705-272-7183
Toll Free: 1-800-667-1940

Ministère des Richesses naturelles
District de Cochrane

2-4 route 11 sud
C.P. 730
Cochrane ON P0L 1C0

Téléphone : 705-272-7137
Télécopieur : 705-272-7183
Sans frais : 1-800-667-1940



May 25, 2012

Mike Lord
General Manager, Solar Development
Northland Power Inc.
30 St. Clair Avenue West
17th Floor
Toronto, Ontario, Canada
M4V 3A1

Dear Mr. Lord:

RE: NHA Confirmation for Abitibi Solar Project

In accordance with the Ministry of the Environment's (MOE's) Renewable Energy Approvals (REA) Regulation (O.Reg.359/09), the Ministry of Natural Resources (MNR) has reviewed the natural heritage assessment and environmental impact study for Abitibi Solar Project in Cochrane submitted by Northland Power Solar Abitibi L.P. on March 19, 2012.

In accordance with Section 28(2) and 38(2)(b) of the REA regulation, MNR provides the following confirmations following review of the natural heritage assessment:

1. The MNR confirms that the determination of the existence of natural features and the boundaries of natural features was made using applicable evaluation criteria or procedures established or accepted by MNR.
2. The MNR confirms that the site investigation and records review were conducted using applicable evaluation criteria or procedures established or accepted by MNR, if no natural features were identified.
3. The MNR confirms that the evaluation of the significance or provincial significance of the natural features was conducted using applicable evaluation criteria or procedures established or accepted by MNR.
4. The MNR confirms that the project location is not in a provincial park or conservation reserve.
5. The MNR confirms that the environmental impact study report has been prepared in accordance with procedures established by the MNR.

This confirmation letter is valid for the project as proposed in the natural heritage assessment and environmental impact study, including those sections describing the Environmental Effects Monitoring Plan and Construction Plan Report. Should any changes be made to the proposed project that would alter the NHA, MNR may need to undertake additional review of the NHA.

Where specific commitments have been made by the applicant in the NHA with respect to project design, construction, rehabilitation, operation, mitigation, or monitoring, MNR expects that these commitments will be considered in MOE's Renewable Energy Approval decision and, if approved, be implemented by the applicant.

In accordance with S.12 (1) of the Renewable Energy Approvals Regulation, this letter must be included as part of your application submitted to the MOE for a Renewable Energy Approval.

Please be aware that your project may be subject to additional legislative approvals as outlined in the Ministry of Natural Resources' *Approvals and Permitting Requirements Document*. These approvals are required prior to the construction of your renewable energy facility.

If you wish to discuss any part of this confirmation or additional comments provided, please contact Jennifer Telford at 705-272-7130.

Yours sincerely,



Martha Heidenheim
A/District Manager
Cochrane District - OMNR

cc. Christine Greenaway, A/Renewable Energy Coordinator, Northeast Region, MNR
Narren Santos, Environmental Assessment and Approvals Branch, MOE
Sandra Guido, Senior Program Support Coordinator, MOE

Appendix G3

Ministry of Tourism and Culture

Ministry of Tourism and Culture

Culture Programs Unit
Programs and Services Branch
Culture Division
435 S. James St., Suite 334
Thunder Bay, ON P7E 6S7
Tel.: 807 475-1638
Fax: 807 475-1297

Ministère du Tourisme et de la Culture

Unité des programmes culturels
Direction des programmes et des services
Division de culture
Bureau 334, 435 rue James sud
Thunder Bay, ON P7E 6S7
Tél.: 807 475-1638
Télééc.: 807 475-1297



December 9, 2010

Tom Hockin
Northland Power
30 St. Clair Avenue West
17th Floor
Toronto, ON
M4V 3A1
Tom.Hockin@Northlandpower.ca

RE: Abitibi Solar Project

Location: Part Lots 14 & 15, Concession 8, Geographic Township of Glackmeyer, District of Cochrane

FIT #: FAQLBA0

MTC File #: HD00547

PIF: P007-279-2010

Dear Mr Hockin,

This letter constitutes the Ministry of Tourism and Culture's written comments as required by s. 22(3)(a) of O. Reg. 359/09 under the *Environmental Protection Act* regarding archaeological assessments undertaken for the above project.

Based on the information contained in the report you have submitted for this project, the Ministry believes the archaeological assessment complies with the *Ontario Heritage Act's* licensing requirements, including the licence terms and conditions and the Ministry's 1993 Archaeological Assessment Technical Guidelines. Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the report.*

The report recommends the following:

- Over the course of the Stage 2 archaeological assessment, no materials with significant cultural heritage value or interest were recovered. Accordingly, **Archaeological Research Associates Ltd.** feels that no further archaeological study of the area would be productive. It is recommended that the project be released from further heritage concerns. A **Letter of Concurrence** with these recommendations is requested.
- This report is filed with the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, R.S.O. 1990, c. 0.18 The report will be reviewed to ensure that the licensed consultant archaeologist has met the terms and conditions of their archaeological licence, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*. This condition provides for the potential for deeply buried or enigmatic local site areas not typically identified in evaluations of potential.
- The Cemeteries Act requires that any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Small Business and Consumer Services. All work in the vicinity of the discovery will be suspended immediately. Other government staff may be contacted as appropriate; however, media contact should not be made in regard to the discovery.
- Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act*, and may not be altered, or have artifacts removed, except by a person holding an archaeological licence.

The Ministry is satisfied with these recommendations.

This letter does not waive any requirements which you may have under the *Ontario Heritage Act*. A separate letter addressing archaeological licensing obligations under the Act will be sent to the archaeologist who completed the assessment and will be copied to you.

This letter does not constitute approval of the renewable energy project. Approvals of the project may be required under other statutes and regulations. It is your responsibility to obtain any necessary approvals or licences. Please feel free to contact me if you have questions or require additional information.

Sincerely,

A handwritten signature in black ink that reads "Paige Campbell". The signature is written in a cursive, flowing style.

Paige Campbell
Archaeology Review Officer
paige.campbell@ontario.ca

cc. Paul Racher, Archaeological Research Associates Ltd.
Kimberley Arnold, Hatch Ltd.
Shari Prowse, ARO/GEA Coordinator, Ministry of Tourism and Culture

*In no way will the Ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the report or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.

Ministry of Tourism,
Culture and Sport

Ministère du Tourisme,
de la Culture et du Sport

Culture Programs Unit
Programs and Services Branch
Culture Division
435 S. James St., Suite 334
Thunder Bay, ON, P7E 6S7
Telephone: 807-475-1632
Facsimile: 807-475-1291

Unité des programmes culturels
Direction des programmes et des services
Division de culture
435 rue James sud, Bureau 334
Thunder Bay, ON, P7E 6S7
Téléphone: 807-475-1632
Télécopieur: 807-4751291



Email: andrew.hinshelwood@Ontario.ca

June 15, 2012

Hatch Ltd.
4342 Queen St., Suite 500
Niagara Falls, ON L2E 7J7

Northland Power
30 St. Clair Ave. W., 17th Floor
Toronto, ON M4V 3A1

Attn.: Kimberley Arnold
larnold@hatch.ca

Tom Hockin
tom.hockin@northlandpower.ca

RE: 115kV Transmission Line

**Geo. Twp. Glackmeyer, Clute and Calder,
District of Cochrane**

MTC File HD000675

MTC PIF P007-378-2011

Dear Proponent:

This letter constitutes the Ministry of Tourism and Culture's written comments as required by s. 22(3)(a) of O. Reg. 359/09 under the *Environmental Protection Act* regarding archaeological assessments undertaken for the above project.

Based on the information contained in the report(s) you have submitted for this project, the Ministry believes the archaeological assessment complies with the *Ontario Heritage Act's* licensing requirements, including the licence terms and conditions and the Ministry's 1993 Archaeological Assessment Technical Guidelines or the 2011 Standards and Guidelines for Consultant Archaeologists (whichever apply). Please note that the Ministry makes no representation or warranty as to the completeness, accuracy or quality of the report(s).*

The Archaeological Assessment Report Entitled, *Stage 1 and 2 Archaeological Assessments 115 kV Transmission Line Geo. Townships of Glackmeyer, Clute and Calder District of Cochrane, Ontario*, dated December 12, 2011, received MTCS Toronto office, December 08, 2011, recommends the following:

- *The Stage 1 and 2 archaeological assessment of the project lands were completed in November, 2011. The Stage 1 background study demonstrated that the study area*

consisted of areas of archaeological potential and areas of no archaeological potential. The Stage 2 property assessment of the project lands, conducted under optimal conditions, did not result in the identification of any archaeological materials.

- *Based on these findings, ARA feels that no further archaeological assessment of the study area would be productive. It is recommended that the project lands be released from further archaeological concerns.*

The Ministry is satisfied with these recommendations.

This letter does not waive any requirements which you may have under the Ontario *Heritage Act*. A separate letter addressing archaeological licensing obligations under the Act will be sent to the archaeologist who completed the assessment and will be copied to you.

This letter does not constitute approval of the renewable energy project. Approvals of the project may be required under other statutes and regulations. It is your responsibility to obtain any necessary approvals or licences.

Please feel free to contact me if you have questions or require additional information.

Sincerely,

A handwritten signature in cursive script that reads "A Hinshelwood." The signature is written in black ink on a light blue rectangular background.

Andrew Hinshelwood
Archaeology Review Officer

cc. Paul Racher, ARA, pracher@arch-research.com
Mansoor Mahmood, MOE, mansoor.mahmood@ontario.ca

* In no way will the Ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.