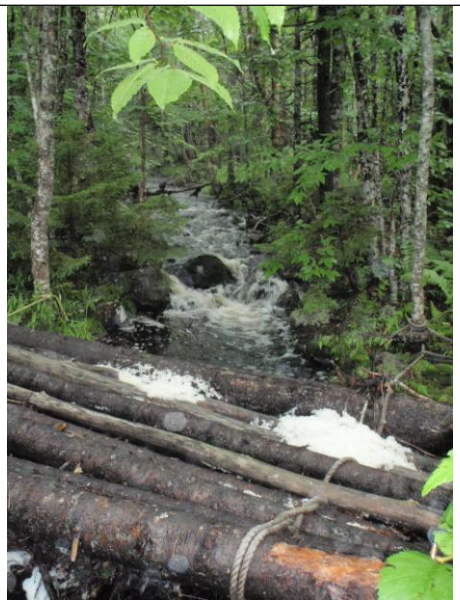
Appendix I. PHOTOS OF PROJECT LANDS

Coral fungi, *Clavulina zollingeri,* August 02, near Turbine 2

Indian Pipe *Monotropa uniflora* August 02

Yellow coral fungi, Aug 02nd.



Outlet stream from Wetland 2 during high water, June 15th at ATV trail crossing "Message Box".

Forest cover Turbine Site 2, August 13th.

Forest Cover Turbine Site 9, August 13th.

Beaver house MacKenzie Lake, August 13th.

May 05th, outlet from MacKenzie Lake.

Forest cover Turbine Site 12, August 13th.

Forest cover, Site 13, March 2010.

Intermittent stream adjacent to Turbine 2, August 02nd.

Large Round Orchid, June 2010,

Recent landowner tree cutting near Turbine Site 1, June 2010.

Early seeding Moose Maple near Turbine Site 1, June 2010.

Snow Brook March 2010.

Snow Brook June 15th.

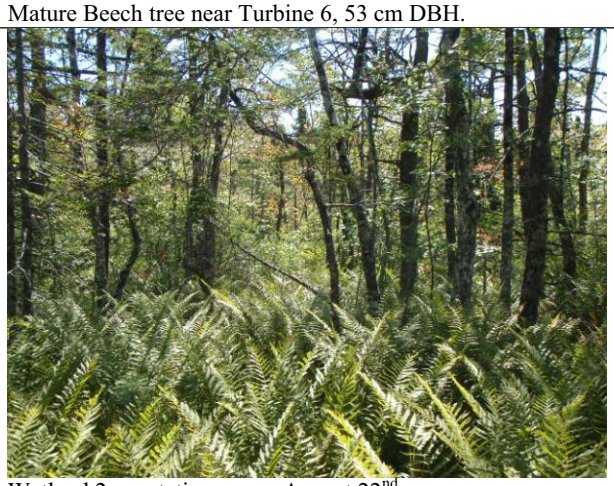
Snow Brook, May 05th,

Black bear scat, August, 2010.

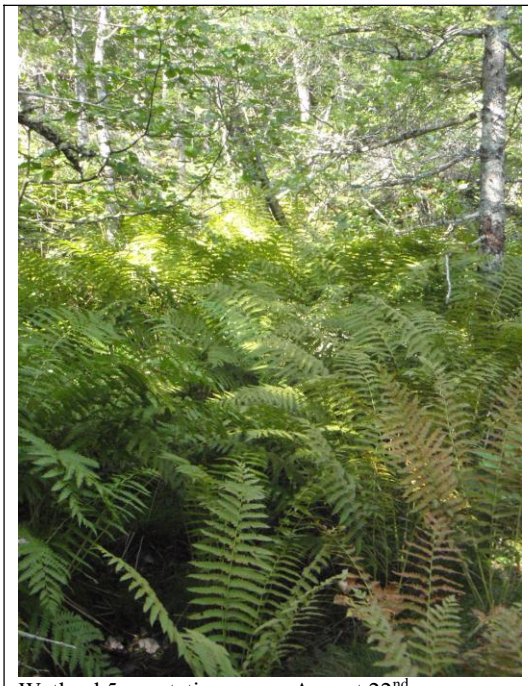
Picture Plant at Wetland 1 near Turbine Site 7,

Mature Beech tree near Turbine 6, 53 cm DBH.

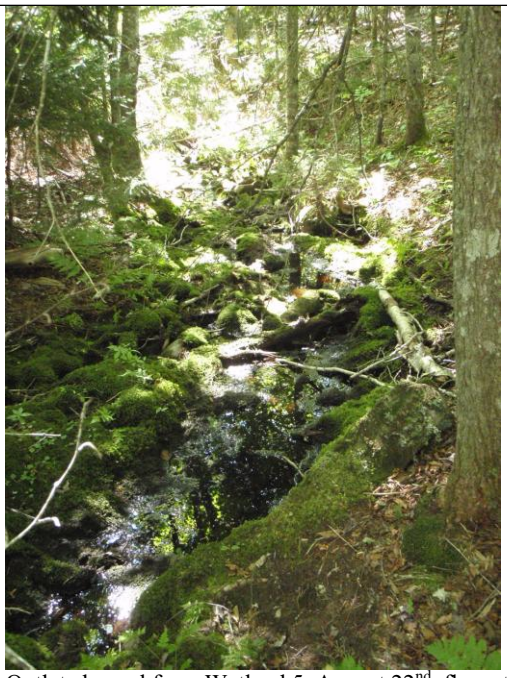
NSDNR Fire Tower, immediately west of the Project Site and Turbine 3 location.



Wetland 2 vegetative cover, August 22nd.

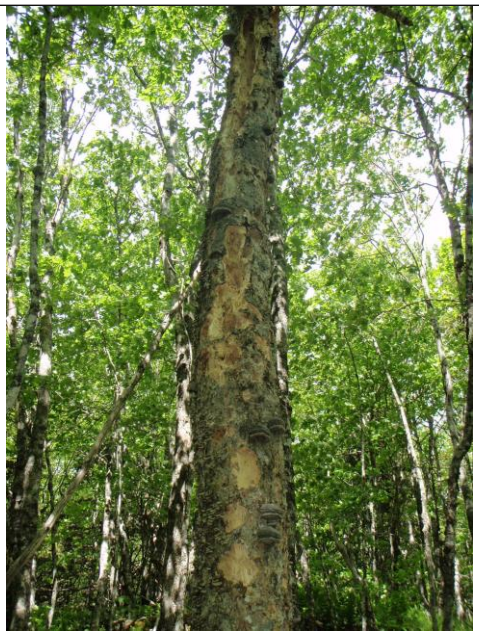


Wetland 5 vegetative cover, August 22nd.



Outlet channel from Wetland 5, August 22nd, flows to Solomon Chute Brook.

Cypripedium acaule, Pink Lady slipper in its white form, May 28th.



Cavity tree recently excavated by woodpeckers.

Racoon footprints, May 28th.

Smallmouthed Bass, MacKenzie Lake, May 05th, 2010.

ANABAT bat monitoring setup.

Facing south towards Croskill Lake
Bridgetown Water Supply

Facing east towards Bridgetown.

McKenzie Lake within project lands.

Existing vegetation around MET Tower.

Existing access trails throughout project.

Existing access trails throughout project.

Panorama facing NE across project lands. The valley is to the right in this photo. The MET tower is barely visible on the left side in this photo.

Panorama facing North across project lands. The home in the photo is located on the north side of Long Lake.

Appendix II. ENVIRONMENTAL PROTECTION PLAN

Hampton Mountain Wind Power Project

Environmental Protection Plan

Royal Bank Plaza, South Tower
200 Bay Street
Suite 2750, P.O. Box 90
Toronto, Ontario M5J 2J2

October 26, 2010

TABLE OF CONTENTS

TABLES

Environmental Protection Plan (EPP)

1.0 INTRODUCTION

This Environmental Protection Plan (EPP) has been prepared to guide the design and installation of the physical components of the Hampton Mountain Wind Power project.

The purpose of the EPP is to establish procedures and methods to be used in the construction and operation of the Hampton Mountain Wind Power project that reduce impacts on the environment. The EPP applies provincial and, where appropriate, federal regulations & guidelines for construction activities and procedures.

The EPP includes an Emergency Response Plan (ERP) to address environmental emergencies, an Environmental Management Plan which lays out the procedures to be followed during the conduct of the work and a Site Restoration Plan (SRP). This ERP will be harmonized with the contractor's ERP and will be made available to all site personnel.

The EPP incorporates approved design methods for erosion and sediment control, defines set backs from streams and wetlands and areas of environmental or heritage significance. It provides guidance for appropriate engineering designs for surface water management and stream crossings. The EPP also designates the timeframes for seasonally sensitive activities and establishes prohibitions for the project design and construction activities.

This document may be amended from time to time. Amendments will be issued by Sprott Power Corp. ('Sprott') and the project manager will ensure that all hard copies issued to contractors will receive amendments.

2.0 EMERGENCY RESPONSE

The following provides contact numbers in the case of emergencies involving: worker safety, public safety, and emergency response to address environmental emergencies.

2.1 Emergency Contact List

Organization	Contact Name	Contact Number
Fire Department	-	**911**
Ambulance	-	**911**
RCMP Police	-	**911**
Hospital	**Valley Regional Hospital** 150 Exhibition Street Kentville, NS B4N 5E3	(902) 678-7381
Poison Control	-	**1-800-565-8161**
Chief Operations Officer, Sprott Power Corp.	Don Bartlett	**1-902-476-6895**
Project Manager	Paul Pynn	**1-902-430-0819**
Health and Safety Officer	TBD	
Nova Scotia Department of Environment	Emergency Measures Office	**1-800-565-1633**
Nova Scotia Environment Kentville	Adrian Fuller Regional Director	**1-902-679-6086**
Nova Scotia Department of Labour	Health and Safety - 24 hour Response	**1 -800-952-2687**
NS Department of Natural Resources	Kentville	**1-902-679-6097**
Environmental Advisor	Robert McCallum, P.Biol McCallum Environmental Ltd.	**1-902-292-0514**

2.2 Key Personnel Contact List

Position	Name	Phone	Fax	Cell Phone
Chief Operations Officer, Sprott Power Corp.	Don Bartlett	**1-416-943-8099**	**1-416-977-9555**	**1-902-476-6895**
Project Manager EON Wind	Paul Pynn	**1-902-482-8687**	**1-866-314-5349**	**1-902-430-0819**
Environmental Advisor	Robert McCallum	**1-902-446-8252**	**1-902-446-8253**	**1-902-292-0514**
Health and Safety Officer	TBD			

3.0 ENVIRONMENTAL MANAGEMENT PLAN GENERAL PROVISIONS

The Environmental Management Plan (EMP) has been developed to guide site specific construction activities and procedures. The purpose of the EMP is:

1. To manage and minimize risks and potential environmental impacts from construction activities;
2. To ensure that Sprott's commitments to minimizing environmental effects are met;
3. To ensure construction activities meet all project specific provincial, federal and municipal requirements;
4. To provide mitigation of the potential environmental impacts due to construction activities; and,
5. To provide a reference document for planning and/or conducting construction activities that may have an impact on the environment.

This EMP was developed by Sprott to describe the protection measures to be followed by Sprott personnel and all contractors required for activities associated with construction of the Hampton Mountain Wind Power Project. Sprott's appointed project manager will be responsible for the enforcement of these procedures.

3.1 Construction Environmental Mitigation Measures

A. Design Specifications

1) Construction specifications will be completed for:
    1) Access Roads and Crane Platforms
    2) Civil works, Crane and Road Requirements
    3) Other engineering design specifications pertaining to the Hampton Mountain Wind Project as specified by SPROTT and their project engineers;

If a conflict arises between technical specifications and regulatory requirements, regulatory requirements shall prevail, unless amendments are approved by the appropriate regulatory body.

B. Work Areas

1) All construction activities will be restricted, as much as practically possible, to approved work spaces, designated access roads and turbine sites;

2) During tower foundation construction, the area around the tower may also serve as storage areas for material (e.g. reinforced steel) and machinery.

C. Runoff Control and Prevention of Sedimentation

1) When possible, the contractor will avoid grading immediately before or after heavy rain events, which would further loosen the road surface and promote runoff of graded material;

2) Aggregate which is to be used in or near watercourses will be washed quarried material;

3) For construction activities near watercourses, erosion and sediment control measures will be used to minimize erosion and ensure silt containment. The contractor will be responsible for maintaining these erosion and sedimentation control systems to ensure their effectiveness. These plans will be developed prior to and during the construction process;

4) All silt fences will maintain a minimum setback distance from water courses and wetlands of 3 metres;

5) Any water which intrudes into excavations that will be removed by pumping will not be discharged directly into any wetland or watercourse. If discharge water from pumping operations contains Total Suspended Solids (TSS) which exceeds 25 mg/l above the background condition of the watercourse at the site, discharge water from excavation will be pumped to a designated area up-gradient and downstream of the excavation. The discharge may be either be allowed to spill onto the ground and return to the watercourse following the natural topography, providing that the discharge is greater than 100 metres from a natural drainage course. Sedimentation bags, or containers with washed gravel may be used to dissipate flow and reduce erosion;

6) Following completion of construction and once vegetation has established non bio-degradeable erosion and sediment barriers will be removed from those areas which may be flooded by watercourses under high flow seasonal conditions to prevent these materials from being entrained in the watercourses;

7) Material placed in or adjacent to the watercourses for the temporary diversion will be removed as soon as possible by the contractor after the construction of work is completed;

8) During construction activities, Sprott will conduct visual assessments, both quarterly and after severe storm events, of the site to ensure the effectiveness of erosion and sedimentation control measures, unless otherwise approved by NSE. This condition will be followed and the results of these inspections will be recorded for inclusion in the annual report to NSE;

9) SPROTT and the Contractor will follow the *Nova Scotia Erosion and Sediment Control Manual* and/or follow the erosion and sediment control plan as (to be developed upon Project approval);

10) Any loss of containment or release of sediments will be reported immediately to the project manager and to NSE.

D. Bedrock Removal and Blasting

1) Where possible, rock excavation will be performed by ripping rather than blasting. Should blasting be required, no blasting will occur unless otherwise approved by NSDOE;

E. Pits

1) All aggregate sources will be approved by the project engineer and based on considerations such as the Pit and Quarry Guidelines (NSDOE May 4, 1999);

2) The Contractor will be responsible for obtaining NSE approvals for Pits greater than 2 hectares in size. Quarries of any size require NSE approval;

3) The slopes of all excavation pits will be constructed to a 3:1 slope;

4) If a pit is inconspicuous and poses a perceived safety hazard, the area will be marked with signs and/or fencing, depending on its location;

5) Pits may be backfilled with native material, and seeded with non-invasive, native, herbaceous plant species. Alternatively, pits may sloped to 3:1, stabilized, erosion controlled, and reclaimed to allow water to naturally collect within the pits to provide wetland habitat. In compliance with Section 6 of the Migratory Bird Regulations (MBR), this activity may not be conducted during the breeding season if birds which may use embankments for nesting sites are identified in the pit(s), typically between May 1st and August 31st for most species;

6) If adequate borrow pits and/or disposal sites are not available within the project area, offsite sources of fill will be used.

F. Vehicle and Equipment Operation and Fueling

1) All personnel, vehicles, equipment, etc…will follow all applicable traffic regulations and posted site speed limits and traffic controls;

2) Appropriate dust suppression measures will be used as required. Water will be used for dust suppression. In the event of excessive water use, Mag Water or SAP water may be used;

3) Storage of petroleum, oil and lubricants (POL) on site during the construction phase will be in designated areas and will be done in compliance with applicable provincial and federal regulations, codes and guidelines;

4) The contractor will maintain an onsite emergency spill containment kit to adequately control any loss of fuel or lubricant by equipment;
5) Waste petroleum products, oils and lubricants (POL) will be properly contained and not released into the environment. Waste POL and all spent containers will be contained and removed from the site for proper disposal at an approved disposal facility;
6) Vehicles will be fueled at designated sites away from wetlands and watercourses (minimum distance 50 m);
7) The transportation of dangerous goods will be conducted in compliance with the Transportation of Dangerous Goods Act;
8) The construction site will have restricted access signage to prevent trespassing or inadvertent entrance by public vehicles. ''Restricted Access'' signs will be posted at the entrance of primary access roads which leave private property and enter onto public right-of-ways;
9) Equipment and vehicles will yield the right-of-way to wildlife;

G. Construction Waste

1) Construction waste will be removed from the project area and disposed of at an approved location or facility;
2) Disposal of waste materials from construction activity will be in accordance with NSDTC's Standard Specifications (1980 and revisions) for Access Road Construction;
3) Unless otherwise directed by the project manager, limbs and timber will be chipped at the site, in accordance with the Nova Scotia Forest Fire Protection Act. Non-combustible material, overburden and rock will be disposed of where their use as fill material is impractical;
4) Waste disposal areas will be located where they do not negatively impact rivers, wetlands or any watercourse.
5) Portable toilets will be used at the construction site so that no untreated sewage is disposed of in the watercourses or on site;

H. Species of Concern, Rare and Endangered Species, and Historic Artifacts

1) Should excavation uncover historic artifacts, work at the excavation site will cease and the project engineer will be contacted immediately. The project manager will contact the appropriate authorities from the Department of Tourism, Culture and Heritage and First Nations. Work on site will re-commence work following regulatory clearance;

I. Surface Water, Wetlands, Watercourses

1) No construction will occur within a wetland or watercourse unless otherwise authorized by Nova Scotia Environment (NSDOE);
2) Culverts will be installed as per the requirements of NSDOE;
3) The design of all water crossings and culverts will be approved by an individual who has successfully completed Nova Scotia Watercourse Alteration training;
4) Disposal of any agent, either directly or indirectly, will not be permitted into any watercourse or wetland;
5) Prior to construction, watercourses will be inspected at locations upstream, adjacent to, and downstream of the site. The conditions of these areas will be photographed as background information on the riparian zone and stream features at each water crossing.

J. Wildlife Encounters

1) Garbage disposal will occur at designated disposal locations throughout the project for removal;
2) Harassment of any wildlife by site personnel will not be permitted;
3) Wildlife sightings will be reported to the project engineer or designate;
4) Any disruption or injury to wildlife will be reported to the local Provincial Wildlife Officer;
5) In the event of encounters with injured wildlife at the worksite, the project engineer or designate will contact the local Provincial Wildlife Officer. No attempt will be made to move the animal and no person at the worksite will come into direct contact with the animal;
6) Dead animals will be reported, as soon as possible, to the project engineer or designate who will notify the local Provincial Wildlife Officer. The locations of animals will be marked and reported to the project engineer or designate. The project engineer or designate will record the date and time it was found; state of decomposition; injury sustained (if identifiable); and species. This information will be kept on file with Sprott for incorporation into the post-construction monitoring program;

K. Fires / Medical Emergencies

1) All site personnel will be responsible for fire prevention and will conduct their work in a safe manner to prevent fires;

2) Flammable waste will not be disposed of on site but will be removed for disposal in an appropriate manner;
3) Smoking will be prohibited within 50 m of flammable products;
4) Some personnel will have taken the training course for dealing with energy industry fires but not for wildland fires. In the event of a wildfire, the workers will follow the Contractor Emergency Response Plan;
5) In the event of a fire on or near the turbine site, onsite personnel will attempt to put out the fire if it is safe to do so, using the onsite firefighting equipment. The fire will be reported immediately to the project engineer or designate. If the fire cannot be contained, the nearest fire department (Barney's River Volunteer Fire Department) will be contacted at 9-1-1.
6) In case of medical emergencies, the Contractor Emergency Response Plan will be adhered to;
7) Sprott Power Corp. will provide members of the nearest fire departments and medical rescue personnel with project plans and access road layouts for the project area. GPS coordinates for the road alignments and turbine locations will be provided to emergency responders for their reference;

4.0 ENVIRONMENTAL PROTECTION PLAN

The following are general guidelines that promote environmental protection:

- Plan operations from "cradle to grave";
- Report unsafe acts and/or acts that could result in harm to the environment;
- Conserve soil;
- Protect water resources;
- Prepare emergency response plans;
- Manage waste;
- Do not litter;
- Conduct HSE inspections;
- If an incident occurs follow proper procedures;
- Practice good housekeeping at all times;
- Report HSE issues internally and externally as required;
- Maintain records as required;

4.1 Access Road Construction

4.1.1 Clearing and Grubbing

- Any merchantable timber present on the road alignment will be cut, decked for landowner use and/or removed for sale or reuse;
- Only the areas required for the road and power line alignment, construction work areas and laydown areas will be cleared and grubbed;

- Burning of cleared and grubbed material is not permitted. Excess brush and cleared materials will be chipped and the chips distributed over the site unless otherwise directed.

4.1.2 Road Specifications

- The specifications for the road characteristics will be provided by the civil design engineer and the contractor providing the heavy lift crane. However, road side slopes will be designed to achieve a maximum 2:1 slope (horizontal:vertical);
- Prior to construction, the final road specifications will be reviewed by the project manager, project engineer (civil) and environmental advisor for compliance with applicable provincial standards and environmental guidelines.

4.1.3 Construction Methods

- The access road will be logged and all timber skidded to appropriate log decks;
- All stumps will be stripped by bulldozer and piled along the boundary of the flagged areas;
- Surface soils will be stripped to both sides of the access road;
- Subsoils will be stripped to the underlying parent material layer and piled on both sides of the access road, adjacent to surface soil piles;
- Subsoils will be stripped from the ditchline and placed in the middle of the road to build up the road traveling surface;
- During road construction, a trench will be dug with a backhoe, running parallel to the road. The ditch will be filled with stripped non-salvageable materials, and ultimately filled in;
- Previously piled subsoils will be feathered back into the ditchline;
- Previously piled topsoils will be feathered back into the ditchline over the subsoils;
- Where steep hills, small hills or knolls are encountered, the tops of the hills will be cut and pushed down the road to reduce the slopes required for travel;

4.2 Water Crossings

Within Phase I of the Project, twelve (12) watercourses will be crossed by access roads. Watercourses include intermittent and permanent streams, ephemeral drainages, and areas of low relief resulting in standing water. Excluding Snow Brook (see below), all watercourses were dry for some extended period of time during the dry season of 2010. The following outlines characteristics of each crossing location. Each watercourse crossing requires approval from NSDOE under the Watercourse Alteration Application and Approval process. At the time of this EA submission, application for crossing 12 of the 13 water courses using temporary bridges had been applied for.
The purpose of these applications is to construct temporary bridges over watercourses to allow access by timber cutting, and subsequently geotechnical drilling equipment. Upon completion of the geotechnical investigation, all watercourse crossings will be removed. New applications for culverts will be made upon Project approval in anticipation of road construction.

Please note that not all crossings within the Project are currently being applied for. For example, Crossing 1 (refer to diagram titled "Hampton Study Area Water Crossing Map") is an existing culvert that will require replacement during access road construction.

Crossing 2. New Installation

Name of Watercourse:	Snow brook (between McKenzie Lake and Snow Lake)
Our Crossing Label:	2
PID	05127725
Coordinates:	Easting: 318709.44 Northing: 4973344.00
Drainage Area	10 ha = 10 ha/100 = 0.1 km^2
Design Flow (Q m^3/sec)	1.5 x 0..1 km^2 = 0.1572 m^3/ sec.
Channel depth (at crossing)	40 cm
Channel width	1.4 m (bank to bank width)
Opening (r x s) = a	=1.4 * 0.4 = 0.56 m2
Velocity = Q/a	=0.157/0.56 = 0.28 m/s which is < 1.8 m/s
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	See Section 5d(ii) above for description

Crossing 3. New Installation

Name of Watercourse:	Low seasonal drainage between upslope of McKenzie Lake
Our Crossing Label:	3
PID	05127725
Coordinates:	Easting: 318958.49

	Northing: 4973174.72
Drainage Area	0.8846 ha = 0.8846ha/100 = 0.0088 km^2
Design Flow (Q m^3/sec)	1.5 x 0.0088 km^2 = 0.0133 m^3/ sec
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, vegetation, bedrock. No defined channel development.
Channel depth (at crossing)	0-5 cm
Channel width	0.3 m (bank to bank width)
Opening (r x s) = a	=.45 * 3 = 1.35
Velocity = Q/a	=0.133/1.35 = 0.0098 m/s which is < 1.8 m/s
Comments	Headwaters in a wetland, and flows north between wetlands before dropping along much steeper gradients to the north.

Crossing 4. New Installation

Name of Watercourse:	Low seasonal drainage which drains small area located to north of wetland upslope of Chute Brook
Our Crossing Label:	4
PID	05126925
Coordinates:	Easting: 318892.71 Northing: 4972618.65
Drainage Area	2.3615 ha = 2.3615a/100 = 0.02 km^2
Design Flow (Q m^3/sec)	1.5 x 0.02 km^2 = 0.035 m^3/ sec.
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, vegetation, bedrock. No defined channel development.
Channel depth (at crossing)	5 cm
Channel width	0.3 m (bank to bank width)
Opening (r x s) = a	=.45 * 3 = 1.35
Velocity = Q/a	=0.035/1.35 = 0.0262 m/s which is < 1.8 m/s
Comments	No defined channel or banks but vegetation clearly indicates a drainage channel at crossing location. Drainage drains a small shoulder to the north.

Crossing 5. New Installation

Name of Watercourse:	Low seasonal drainage between upslope wetland and Chute Brook
Our Crossing Label:	5
PID	05127758
Coordinates:	Easting: 319007.13 Northing: 4972419.06
Drainage Area	23.23 ha = 23.23ha/100 = 0.23 km^2
Design Flow (Q m^3/sec)	1.5 x 0.23 km^2 = 0.3485 m^3/ sec.

Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, vegetation, bedrock. No defined channel development.
Channel depth (at crossing)	30 cm
Channel width	1.95 m (bank to bank width)
Opening (r x s) = a	=.3 * 3 = 0.9
Velocity = Q/a	=0.3485/0.9 = 0.387 m/s which is < 1.8 m/s
Comments	This channel widens to 1.95m, and has a bankfull depth of 0.3m, but remains intermittent despite carrying significant flow early in the year. During a May 07 survey, the pH of the water in this channel was 5.8. The channel then flows south down the mountain face and into Solomon Chute Brook on the valley floor below.

Crossing 6. New Installation

Name of Watercourse:	Low seasonal drainage between upslope wetland and Chute Brook
Our Crossing Label:	6
PID	05127725
Coordinates:	Easting: 319389.99 m E Northing: 4972698.91 m N
Drainage Area	49.018 ha = 49.0148ha/100 = 0.49 km^2
Design Flow (Q m^3/sec)	1.5 x 0.49 km^2 = 0.7353 m^3/ sec.
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, vegetation, bedrock. No defined channel development.
Channel depth (at crossing)	30 cm
Channel width	1.5 m (bank to bank width)
Opening (r x s) = a	=.45 * 3 = 1.35
Velocity = Q/a	=0.7353/1.35 = 0.5446 m/s which is < 1.8 m/s
Comments	This channel widens to 1.5m, and has a bankfull depth of 0.3m, but remains intermittent despite carrying significant flow early in the year. The channel flows south down the mountain face and into Solomon Chute Brook on the valley floor below.

Crossing 7. New Installation

Name of Watercourse:	Seasonal drainage channel between two adjacent wetlands
Our Crossing Label:	7

PID	05126990
Coordinates:	Easting: 319569.56 Northing: 4972991.48
Drainage Area	20 ha = 20 ha/100 = 0.20 km^2
Design Flow (Q m^3/sec)	1.5 x 0.20 km^2 = 0.3 m^3/ sec.
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, vegetation, bedrock. No defined channel development.
Channel depth (at crossing)	5-10 cm
Channel width	30 cm (estimated)
Opening (r x s) = a	=.45 * 3 = 1.35
Velocity = Q/a	=0.3108/1.35 = 0.232 m/s which is < 1.8 m/s
Comments	No defined channel or banks but vegetation clearly indicates a drainage channel at crossing location. Drainage drains a small wetland to the south, to a larger wetland to the north west. That wetland ultimately drains south toward crossing 6.

Crossing 8. New Installation

Name of Watercourse:	Seasonal drainage channel at south edge of wetland
Our Crossing Label:	8
PID	05126966
Coordinates:	Easting: 319644.13 Northing: 4973149.34
Drainage Area	8 ha = 8 ha/100 = 0.080 km^2
Design Flow (Q m^3/sec)	1.5 x 0.08 km^2 = 0.126 m^3/ sec.
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, vegetation, bedrock. No defined channel development.
Channel depth (at crossing)	5-10 cm
Channel width	30 cm (estimated)
Opening (r x s) = a	=.45 * 3 = 1.35
Velocity = Q/a	=0.126/1.35 = 0.0938 m/s which is < 1.8 m/s
Comments	No defined channel or banks but vegetation clearly indicates a drainage channel at crossing location.

Crossing 9. – New Installation

Name of Watercourse:	Seasonal drainage channel that enters adjacent wetland and drains a ridgeline and small plateau to the east
Our Crossing Label:	9
PID	05126966
Coordinates:	Easting: 319590.46 m E Northing: 4973231.08 m N
Drainage Area	6.67 ha = 6.67 ha/100 = 0.060 km^2
Design Flow (Q m^3/sec)	1.5 x 0.06 km^2 = 0.101 m^3/ sec.
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, vegetation, bedrock.
Channel depth (at crossing)	30 cm
Channel width	1 metre
Opening (r x s) = a	=.45 * 3 = 1.35
Velocity = Q/a	=0.101/1.35 = 0.0741 m/s which is < 1.8 m/s
Comments	Small drainage channel with seasonal influences only. No permanent water in water course.

Crossing 10. New Installation

Name of Watercourse:	Seasonal drainage channel that enters adjacent wetland and drains a ridgeline and small plateau to the east
Our Crossing Label:	10
PID	05013651
Coordinates:	Easting: 318628.49 m E Northing: 4972668.91 m N
Drainage Area	5.198 ha = 5.19 ha/100 = 0.052 km^2
Design Flow (Q m^3/sec)	1.5 x 0.05 km^2 = 0.078 m^3/ sec.
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, vegetation, bedrock.
Channel depth (at crossing)	5-10 cm
Channel width	10-30 cm estimated by vegetation
Opening (r x s) = a	=.45 * 3 = 1.35
Velocity = Q/a	=0.078/1.35 = 0.0578 m/s which is < 1.8 m/s
Comments	Small drainage channel with seasonal influences only. No permanent water in water course. Receives some overflow drainage from MacKenzie Lake.

Crossing 11. New Installation

Name of Watercourse:	Seasonal drainage channel that drains a wetland located to the east/north east and acts as tributary to Croskill Lake
Our Crossing Label:	111
PID	05170683
Coordinates:	Easting: 317994.80 m E Northing: 4972009.67 m N
Drainage Area	4.4594 ha = 4.45ha/100 = 0.045 km^2
Design Flow (Q m^3/sec)	1.5 x 0.045 km^2 = 0.0669 m^3/ sec.
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, vegetation, bedrock.
Channel depth (at crossing)	5-10 cm
Channel width	10-30 cm estimated by vegetation
Opening (r x s) = a	=.45 * 3 = 1.35
Velocity = Q/a	=0.0669/1.35 = 0.0495 m/s which is < 1.8 m/s
Comments	Small drainage channel with seasonal influences only. No permanent water in water course.

Crossing 12. New Installation

Name of Watercourse:	Low seasonal drainage that drains a small shoulder area towards Long Lake.
Our Crossing Label:	12
PID	05127386
Coordinates:	Easting: 318197.27 Northing: 4972497.14
Drainage Area	2 ha = 2 ha/100 = 0.02 km^2
Design Flow (Q m^3/sec)	1.5 x 0.02 km^2 = 0.03 m^3/ sec.
Bridge size	450 mm (rise over water) x 3000mm (length)
Channel bottom	muck, various sized rock and bedrock
Channel depth (at crossing)	5-10 cm
Channel width	0.5 m (estimated by vegetation)
Opening (r x s) = a	=.45 * 3 = 1.35
Velocity = Q/a	=0.03/1.35 = 0.0224 m/s which is < 1.8 m/s
Comments	Small drainage channel with seasonal influences only. No permanent water in water course.

- All temporary structures will be designed to meet, and installed in accordance with the requirements of the NS Watercourse Alteration Specifications;
- No fording of the crossing will occur during installation;
- All work will occur in the dry. Machinery used will be properly maintained and checked for any leaks/ maintenance issues prior to beginning work on the crossing activities;

- All temporary bridges will completely span the watercourse with abutments placed approximately 0.5 metres back from the bank and/or water edge;
- All bridges will only be constructed to allow passage of a single vehicle;
- Deck height on all temporary structures will be at least 250 mm above the bank height;
- During installation and removal, temporary bridges will be lifted in place and removed by the same method;
- Approach roads on both sides will be stabilized against erosion and to prevent rutting using Brush mats to a minimum distance of 30 metres from either side of the crossing;
- All temporary bridges will be constructed to prevent material from dropping through the bridge into the watercourse. Plastic sheeting will be placed between the bridge deck and bottom structures to prevent this;
- Any soils/debris on the surface of the bridges will be removed with shovels; brooms; etc to prevent material from falling into watercourses;
- Bridges will have vertical posts on either side to allow for skidding of salvaged timber over the bridge and to prevent timber from sliding/falling into the watercourse;
- The watercourse will not to be disturbed outside the footprint of the access boundaries;
- At no time will equipment be allowed to enter the watercourses;
- Sediment and erosion control structures will remain in place and intact until permanent vegetation has been established or the site is otherwise stabilized;
- Upon completion, all material used for bridge support will be removed and disposed of without entering watercourse (excavated soil, wood debris, excess rip rap);
- Upon removal of the bridges, brush mats will be left in place to maintain effective erosion control.

4.3 TURBINE SITES

The preparation and construction of turbine sites will follow the applicable requirements of Section 3.1 *a* through *m*. In addition, the following requirements will apply.

4.3.1 Clearing and Grubbing

- Any merchantable timber present on the turbine sites will be cut, decked for landowner use and/or removed for sale or reuse.
- Only the areas required for the turbine layout, construction pad and crane will be cleared and grubbed;
- Burning of cleared and grubbed material is not permitted. Excess brush and cleared materials will be chipped and the chips distributed over the site unless otherwise directed;
- In consultation with the environmental advisor, brush piles may be created around cleared areas as wildlife habitat. The locations and size of such brush piles will be determined by the requirements of individual sites on the advice and discretion of NSDNR and the wildlife advisor;
- Two lift stripping of soils may occur if subsoils are suitable to do so;
- Surface soils will be stripped and pushed to the boundary of the cleared site;
- A second stripping of subsoils may occur if possible, and will be pushed to the boundary of the turbine sites;
- Subsoils will be leveled to provide a suitable working surface;

4.4 Project Erosion & Sediment Control Options

Sprott would like to emphasize that it recognizes that successful erosion / sedimentation control requires correct installation of controls specific to site conditions, while also recognizing that ongoing maintenance is essential for successful outcome.

The planning strategies and structural components presented in this document are as equally important as the conceptual understanding of the principles of their implementation to ensure good construction performance and protection of the environment.

As such Sprott is providing what it perceives to be Best Management Practices for the project. Within the project, at the field level, any of these practices may be installed. Each area within the project will require specific control plans to be developed on-site using the principles and guidelines presented in conjunction with the lead Contractor (TBD).

The difference between erosion and sediment control methods is defined and summarized for the purposes of this document and all related activities on at construction projects as follows:

- Erosion Control is the process whereby the potential for erosion is minimized and is the primary means in preventing the degradation of downstream aquatic resources;
- Sedimentation Control is the process whereby the potential for eroded soil being transported and/or deposited beyond the limits of the construction site is minimized and is, for all intents and purposes, a contingency plan.

Both erosion and sedimentation control measures are dynamic and need to respond to requirements encountered throughout construction. Therefore, both temporary and permanent erosion and sedimentation control measures should be expected to evolve throughout construction to varying degrees based on site conditions and field performance of implemented measures.

Sprott will install erosion controls immediately after a disturbance resulting from a project in an erosion prone area. Erosion controls will be properly maintained, reinstalled as necessary and/or replaced until restoration is complete.

Erosion and sedimentation control measures required can be classified into two categories:

1. Temporary Measures: Those measures during the construction phase that may be completely removed to facilitate further construction that has other erosion control measures associated with it; and
2. Permanent Measures: Incorporated into the overall design of the development to address long-term post construction erosion and sedimentation control.

Temporary erosion and sedimentation control measures will be constructed at the start of the construction phase. However, additional measures will likely need to be constructed throughout construction. Permanent erosion and sedimentation control measures can be constructed during or at the end of the construction phase.

Examples of temporary measures include:

- Seeding;
- Slope texturing;
- Synthetic permeable barrier,
- Mulching;
- Hydroseeding;
- Biodegradable coverings;
- Filter fence;
- Fibre rolls;

Examples of permanent measures include:

- Offtake ditches;
- Energy dissipater;
- Earth dyke
- Gabion;
- Rock check;
- Sediment pond/basin;

Dependent on site conditions, some temporary measures will be retained for a longer duration to render its life span more permanent. With both temporary and permanent measures, the functional longevity of the method to be used will be taken into account prior to implementation.

This is not limited to the duration of the project, but to return to pre-disturbance conditions. The Construction Consultant/Environmental Monitor will consult with construction personnel on the appropriate measures to be taken. The measures outlined in the following tables discuss various erosion and sedimentation control locations of ideal use, advantages and limitations.

Table 1. Methods for Protection of Exposed Surfaces

Method	Slopes	Ditches & Channels	Large Flat Surface Areas	Borrow & Stockpile Areas	Advantages	Limitations
Topsoiling	X	X	X	X	Placing topsoil provides excellent medium for vegetation root structure to develop in; organic content promotes plant growth, reuse organics (topsoil or peat) stripped from the site at start of grading; absorb raindrop energy to minimize erosion potential	Cannot be effective without seeding and allowing time for plant growth; not appropriate for slopes steeper than 2H:1V (steep slopes will require soil covering over topsoil and specialized design); dry topsoil susceptible to wind erosion, susceptible to erosion prior to establishment of vegetation
Seeding	X	X	X	X	Inexpensive and relatively effective erosion control measure, effectiveness increases with time as vegetation develops, aesthetically pleasing, enhances terrestrial and aquatic habitat	Must be applied over prepared surface (topsoiled), grasses may require periodic maintenance (mowing), uncut dry grass may be a fire hazard, seeding for steep slopes may be difficult, seasonal limitations on seeding effectiveness may not coincide with construction schedule, freshly seeded areas are susceptible to runoff erosion until vegetation is established, reseeding may be required for areas of low growth
Mulching	X	X	X	X	Used alone to protect exposed areas for short periods, protects soil from rainsplash erosion, preserves soil moisture and protects germinating seed from temperature extremes, relatively inexpensive measure of promoting plant growth and slope protection	Application of mulch on steep slopes may be difficult, may require additional specialized equipment not commonly used.
Hydroseeding-Hydromulching	X	X	X	X	Economical and effective on large areas, mulch tackifier may be used to provide immediate protection until seed germination and vegetation is established, allows re-vegetation of steep slopes where conventional seeding/mulching techniques are very difficult, relatively efficient operation, also provides dust and wind	Site must be accessible to Hydroseeding Hydromulching equipment (usually mounted on trucks with a maximum hose range of approximately 150 m), may require subsequent application in areas of low growth as part of maintenance program

					erosion control	
Riprap Armoring	X	X			Most applicable as channel lining with geotextile underlay, used for soils where vegetation not easily established, effective for high velocities or concentrations, permits infiltration, dissipates energy of flow from culvert inlets/outlets, easy to install and repair, very durable and virtually maintenance free, flexible lining for ditches with ice build-up	Expensive, may require heavy equipment to transport rock to site and place rock, may not be feasible in areas of the province where appropriate rock is not readily available, may be labour intensive to install (hand installation); generally thickness of riprap is higher when compared to gabion mattress
Gravel Blankets	X	X			Stabilizes soil surface with rock lining thus minimizing erosion, permits construction traffic in adverse weather, may be used as part of permanent base construction of paved areas, easily constructed and implemented, can be used to stabilize seepage piping erosion of slope	Must be designed by qualified geotechnical personnel, expensive, may not be feasible in areas of the province where gravel is not readily available, areas of high groundwater seepage may require placement of non-woven geotextile underlay and additional drainage measures
Biodegradable Erosion Control Products	X	X			Provides a protective covering to bare soil or topsoiled surface where degree of erosion protection is high, can be more uniform and longer lasting than mulch, wide range of commercially available products	Use must be based on design need of site, certification of physical properties and performance criteria (tractive resistance) is required, labour intensive to install, temporary blankets may require removal prior to restarting construction activities, not suitable for rocky slopes, proper site preparation is required to seat onto soil correctly; high performance is tied to successful vegetation growth
Cellular Confinement System	X	X		X	Lightweight cellular system and easily installed, uses locally available soils or grout for fill to reduce costs	Not readily used in construction, expensive, installation is labour intensive (hand installation), not suitable for slopes steeper than 1H:1V

Planting Trees and Shrubs	X		X	X	Establishes vegetative cover and root mat, reduces flow velocities on vegetative surface, traps sediment laden runoff, aesthetically pleasing once established, grows stronger with time as root structure develops, usually has deeper root structure than grass	Expensive, revegetated areas are subject to erosion until plants are established, plants may be damaged by wildlife, watering is usually required until plants are established
Riparian Zone Preservation	X	X	X	X	Preserve a native vegetation buffer to filter and slow runoff before entering sensitive (high risk) areas, most effective natural sediment control measure, slows runoff velocity, filters sediment from runoff, reduces volume of runoff on slopes	Stipulate construction activities with careful planning to include preservation areas, freshly planted vegetation for newly created riparian zones requires substantial periods of time before they are as effective as established vegetation at controlling sediment
Slope Texturing	X			X	Roughens slope surface to reduce erosion potential and sediment yield; suitable for clayey soils	Additional cost; not suitable for silty and sandy soils; not practical for slope length <8 m for dozer operation up/down slope

Table 2. Methods for Runoff Control

Method	Slopes	Ditches & Channels	Large Flat Surface Areas	Borrow & Stockpile Areas	Advantages	Limitations
Slope Texturing	X		X	X	Contouring and roughening (tracking) of slope face reduces runoff velocity and increases infiltration rates; collects sediment; holds water, seed and mulch better than smooth surfaces; promotes development of vegetation, provides loss of soil reduction in soil erosion compared with untracked slopes	May increase grading costs, may cause sloughing in sensitive (wet) soils, tracking may compact soil, provides limited sediment and erosion control and should not be used as primary control measure
Offtake Ditch	X		X	X	Collects and diverts sheet flow or runoff water at the top of a slope to reduce down slope erosion potential, incorporated with permanent project drainage systems	Channel must be sized appropriately to accommodate anticipated flow volumes and velocities, lining may be required, may require design by qualified personnel, must be graded to maintain positive

						drainage to outlets to minimize ponding
Energy Dissipater	X	X			Rip rap or sandbags slow runoff velocity and dissipate flow energy to non-erosive level in relatively short distances, permits sediment collection from runoff	Small diameter rocks/stones can be dislodged; grouted rip-rap armouring may breakup due to hydrostatic pressures, frost heaves, or settlement; may be expensive, may be labour intensive to install; may require design by qualified personnel for extreme flow volumes and velocities
Gabions		X			Relatively maintenance free, permanent drop structure, long lasting (robust), less expensive and thickness than rip-rap, allows smaller diameter rock/stones to be used, relatively flexible, suitable for resisting high flow velocity	Construction may be labour intensive (hand installation), extra costs associated with gabion basket materials, synthetic liner required underneath to prevent undercutting
Log Check Dam		X			Equally effective as silt fences for sediment trapping and straw bale barriers as drop structure, may include timber salvaged from site during clearing operations, most applicable at clearing/grubbing stages of construction	May be expensive, not commonly used after stripping stage, not appropriate for channels draining areas larger than 4 ha (10 acres), labour intensive to construct, gaps between logs may allow sediment laden runoff to escape, logs/timbers will rot over time (not permanent)
Synthetic Permeable Barriers		X			Reusable/moveable, reduces flow velocities and dissipate flow energy; retains some sediments; used as grade breaks in grades	Not to be used as check structures, must be installed by hand in conjunction with Biodegradable components, become brittle in winter and are easily damaged by construction. Only partially effective in retaining some sediment, primarily used for reducing flow velocities and energy dissipation
Fibre Rolls and Wattles	X				Function well in freeze-thaw conditions, low cost solution to sheet flow and rill erosion on slopes, low to medium cost flow retarder and silt trap, can be used on slopes too steep for silt fences or straw bale barriers, biodegradable	Labour intensive to install (hand installation), designed for slope surfaces with low flow velocities, designed for short slope lengths with a maximum slope of 2:1

Table 3. Methods for Sediment Control

Method	Slopes	Ditches & Channels	Large Flat Surface Areas	Borrow & Stockpile Areas	Advantages	Limitations
Riparian Zone Preservation	X	X	X	X	Preserve a native vegetation buffer to filter and slow runoff before entering sensitive (high risk) areas, most effective natural sediment control measure, slows runoff velocity, filters sediment from runoff, reduces volume of runoff on slopes	Stipulate construction activities with careful planning to include preservation areas, freshly planted vegetation for newly created riparian zones requires substantial periods of time before they are as effective as established vegetation at controlling sediment
Brush or Rock Filter Berm	X	X	X	X	More effective than silt fences, uses timber and materials salvaged from site during clearing and grubbing, can be wrapped and anchored with geotextile fabric envelope	More expensive than silt fences, temporary measure only, not effective for diverting runoff, expensive to remove, not to be used in channels or ditches with high flows
Fibre Rolls and Wattles	X				Function well in freeze-thaw conditions, low cost solution to sheet flow and rill erosion on slopes, low to medium cost flow retarder and silt trap, can be used on slopes too steep for silt fences or straw bale barriers, biodegradable	Labour intensive to install (hand installation), designed for slope surfaces with low flow velocities, designed for short slope lengths with a maximum slope of 2:1
Pumped Silt Control Systems (Silt Bag)		X			Filter bag is lightweight and portable, simple set up and disposal, sediment-laden water is pumped into and contained within filter bag for disposal, different aperture opening sizes (AOS) available from several manufacturers; for emergency use only under overflow conditions	May be expensive, requires special design needs, requires a pump and power source for pump, suitable for only short periods of time and small volumes of sediment laden water, can only remove particles larger than aperture opening size (AOS)
Silt Fence	X		X	X	Economical, most commonly used sediment control measure, filters sediment from runoff and allows water to pond and settle out coarse grained sediment, more effective than straw bale barriers	May fail under high runoff events, applicable for sheet flow erosion only, limited to locations where adequate space is available to pond collected runoff, sediment build up needs to be removed on a regular basis, damage to filter fence may occur during sediment removal, usable life of

						approximately one year
Earth Dyke/Barrier			X	X	Easy to construct, relatively inexpensive as local soil and material is used; can be easily converted to Sediment Pond/Basin	Geotechnical design required for fill heights in excess of 3 m, may not be suitable for all soil types or sites; riprap spillway and/or permeable outlet may be required
Gabions		X			Relatively maintenance free, permanent drop structure, long lasting (robust), less expensive and thickness than rip-rap, allows smaller diameter rock/stones to be used, relatively flexible, suitable for resisting high flow velocity	Construction may be labour intensive (hand installation), extra costs associated with gabion basket materials, synthetic liner required underneath to prevent undercutting
Rock Check Dam		X		X	Permanent drop structure with some filtering capability, cheaper than gabion and armouring entire channel, easily constructed	Can be expensive in areas of limited rock source, not appropriate for channels draining areas larger than 10 ha (4 acres), requires extensive maintenance after high flow storm events, susceptible to failure if water undermines or outflanks structure
Log Check Dam		X			Equally effective as silt fences for sediment trapping and straw bale barriers as drop structure, may include timber salvaged from site during clearing operations, most applicable at clearing/grubbing stages of construction	May be expensive, not commonly used after stripping stage, not appropriate for channels draining areas larger than 4 ha (10 acres), labour intensive to construct, gaps between logs may allow sediment laden runoff to escape, logs/timbers will rot over time (not permanent)
Synthetic Permeable Barriers		X			Reusable/moveable, reduces flow velocities and dissipate flow energy; retains some sediments; used as grade breaks in grades	Not to be used as check structures, must be installed by hand in conjunction with Biodegradable components, become brittle in winter and are easily damaged by construction. Only partially effective in retaining some sediment, primarily used for reducing flow velocities and energy dissipation

Table 4. Control Methods and Appropriate Construction Activity.

METHOD	Clearing & Grubbing	Stripping	Borrow Sources	Sub Excavation	Stockpiles	Cut Slope	Fill Slope	Ditches / Channels	Culverts	Temporary Haul Roads
Silt Fence	X	X	X		X	X	X	**	X*	X
Brush or Rock Filter Berm	X	X	X		X	X	X			
Continuous Berm	X	X	X		X	X	X			X
Earth Dyke Barrier	X	X	X		X	X	X			X
Inlet Protection								X	X	
Rock Check Structure								X		
Synthetic Permeable Barrier								X		
Straw Bale Check								X		
Straw Bale Barrier			X		X	X	X			X
Biodegradable Erosion Products					X	X	X	X		
Rip Rap Armouring								X	X	
Gravel Blankets						X	X	X		
Energy Dissipaters								X	X	
Sediment Ponds and Basins		X						X		
Slope Drains						X	X			
Offtake Ditches		X	X	X		X	X			
Seeding			X		X	X	X	X		
Mulching			X		X	X	X	X		
Hydroseeding			X		X	X	X	X		
Topsoiling			X		X	X	X	X		
Planting Trees and Shrubs						X	X	X		
Fibre Rolls			X		X	X	X			
Riparian Zone Preservation	X	X	X	X	X	X	X	X		X
Pumped Silt Control Systems								X	X	
Slope Texturing			X	X	X	X	X			X

Notes:
* Suitable for spilling basin at culvert inlet
** May be suitable for trapezoid bottom channels (minimum 2 m bottom) with anticipated low flow (<0.03 m3/s)

Personnel associated with this project will adhere to the following generic guidelines:

- Maintain existing vegetation cover whenever possible and minimize the area of disturbance by minimizing travel. Maintaining existing vegetation cover is the best and most cost-effective erosion control practice;
- Retain and protect vegetation layer to reduce erosion potential;
- All vehicular traffic must stay within designated accesses. All suspected off R/W travel must be reported immediately to the Environmental Monitor/Construction Consultant;
- Install all erosion and sediment control practices prior to any soil disturbing activities, when applicable;
- Avoid frequent or unnecessary travel over erosion prone areas;
- Install silt fence on the down-slope perimeter of all steep (3:1 or greater slope) disturbed areas according to the attached installation instructions;
- Add mulch, straw crimping or silage along with native vegetation seed to all disturbed areas as required;
- Upon final abandonment, areas that have erosion potential may be straw crimped and or matted and seeded to return the area to pre-disturbance conditions in a timely fashion.

Inspection & Maintenance

Continued inspection and maintenance of erosion and sedimentation control measures may be required after completion of construction. Regular inspections should be conducted on a weekly basis or as required with respect to storm events and snow melt.

The contractor will be responsible for maintenance of the erosion control works installed under this EPP during construction. During operations, Sprott will be responsible for maintenance.

Inspection and maintenance will continue until the erosion control is no longer required. The following circumstances and conditions will determine this outcome:

a. Revegetation of bare soil was successful;
b. No obvious erosion scour is observed;
c. No obvious bedload of silt and sediment laden runoff is observed;
d. Inspection and maintenance report indicates satisfactory performance;

All maintenance preformed on erosion and sediment control measures will be recorded.

4.5 Vegetation Management Program

Sprott recognizes that each operational region is unique and that weed management that is effective in one area, may not be effective in another. However, Sprott's policy to control

vegetation will be based upon the species identified during discussions with landowners, regulators and field assessments.

.

Sprott will take the following approach to vegetation management:

- Prevention
- Chain of Custody
- Procedures for Vegetation Control
- Monitoring
- Identification

4.5.1 Prevention

- Prevention is paramount to an effective weed management program;
- Sprott will attempt to minimize the potential for weed introduction/invasion by seeding all disturbed areas with landowner approved seed mixes or planting with trees.

4.5.2 Seeding

- Use a certified native seed mix. Purchase only certified seed from a recognized member of the Canadian Seed Growers Association (CSGA);
- Broadcast seeding shall be utilized. If the area has minimal disturbance then broadcast the seed but use a packing wheel attachment or covered chains dragged over the seed to enhance contact with the soil. Or if deemed appropriate, straw with an included seed mixture may be used, and subsequently "bale busted" over the area to both limit erosion potential and to increase seeding success;

4.5.3 Operational Considerations

- Avoid driving vehicles across infestations. Fence off areas of infestation if necessary;
- Ensure imported materials (gravel, clay) are free of vegetative matter and soil. Avoid importing straw because it is very difficult to assess for weeds;
- Ensure equipment used during treatment programs is clean and free of any weed debris before entering the area that has been treated.

4.5.4 Chain of Custody

Successful implementation of the weed management program is dependent on awareness and participation by all parties active in the pasture and immediate surrounding area. It requires commitment from management, planning, communication, training, reporting and follow-up.

Sprott's Vegetation Management Policy guidelines will include:

- If landowners manage or implement a vegetation control program on surrounding lands, during the planning process Sprott will solicit their participation in a cooperative weed management program;
- Only licensed applicators licensed in the jurisdiction in which the lands are located may enter upon and treat vegetation on a Sprott site;
- The Senior/Lead Operator, in consultation with the Environmental Co-coordinator and licensed contractor, shall specify the herbicide (mixture) to be used on the access roads, turbine locations or other facilities;
- The Senior/Lead Operator shall insure that the contractor complies with all Workplace Hazardous Material Information System requirements, and that the contractor has a spill response plan and appropriate spill response equipment in place;
- The Senior/Lead Operator shall review site-specific environmental sensitivities with the contractor as part of the required project Pre-Job Meeting;
- Sprott employees will fulfill the day-to-day components of the weed management program.

4.5.5 Procedures for Vegetation Control

Sprott will use information collected in prior seasons to evaluate the infestation of noxious and invasive species over time and prepare a weed treatment plan for operations in the upcoming year.

As no one method of vegetation control may be effective, the following procedures will be implemented in a synergistic manner for all Sprott operations on project lands:

- The most effective and least costly method of weed control is to prevent their establishment;
- Integrated weed management may combine chemical, mechanical and natural controls with each measure implemented as needed. Treatments should not be employed on a scheduled basis but used in response to a situation identified during past monitoring;
- After a site has been cleared, prepared and seeded, regular monitoring and weed pulling is necessary in order to keep the site from being overrun by undesirable plant species. This prevents extensive root systems from forming. Once established, these root systems become extremely difficult and costly to remove completely;
- Preventative control must be incorporated for all operations. Construction machinery used in decommissioning is to be washed before entering work areas. This is to help prevent spread of nuisance, restricted or noxious weeds;
- Monitoring of the areas is required to alleviate problems as they occur or until weeds are controlled and vegetation is established as appropriate. As monitoring occurs, disturbed areas will also be checked for new occurrences of weeds, and appropriate control methods will be applied to any outbreaks;

4.5.5.1 MOWING

- Sprott may rely on mowing as an effective form of weed control in the area;
- Repeated mowing controls perennial weeds by depleting root reserves. It will also prevent seed production of annual and biennial weeds;
- If only one mowing is planned, it should be completed during the budding stage of perennial weeds;
- Mowing must be completed early in the season, before vegetation sets seeds and multiple mowing treatments may be utilized;
- Mower selection will also be considered. Rotary mowers with one or more horizontal blades will cut plants at the highest setting above ground level to reduce potential impacts to nesting species. Lightweight mowers may be used to cut herbaceous weeds;
- Mowing will be completed during the construction phase and may be ongoing through operations as part of the Weed Management Program;
- To prevent conflicts with nesting birds, the *Migratory Birds Act* and *Species at Risk Act,* and still maintain effective weed control, mowing will not be completed during the critical breeding season and will be completed after July 15 unless vegetation characteristics dictate mowing within the time frame. Where weed control requires earlier intervention, field surveys will be done to identify active nests or other conflicts so that these may be avoided during the mowing operations;
- Direct impacts to vegetation will be limited to within the surveyed boundaries of the access and lease boundaries. Mowers will travel off trails while mowing but otherwise will utilize existing access roads, minimizing additional soil disturbance.

4.5.5.2 HAND PULLING

- Hand pulling may be effective for small patches of perennial weeds however it is most effective for annual and biennial weeds. Pulling of annual weeds prevents seed production. If weeds are in flower, bag and dispose of them at an approved garbage facility to prevent seed spread;
- Hand pulling is most effective when you are trying to prevent the establishment of new species;
- Pulling and digging individual plants may be used to eradicate very small-scale infestations;

4.5.5.3 CHEMICAL CONTROLS

- Herbicide application that results in soil sterilization is strictly prohibited;
- Always notify adjacent landowners/occupants prior to the application of herbicides;

- If required permits will be obtained from regulatory bodies for the application of herbicides within 30 metres of an open water body. Pesticides must not be stored, mixed or equipment cleaned within 30 metres of an open body of water;
- Herbicide drift is a concern for ground application. Contractors are responsible for ensuring that any herbicide applications conducted are done so in a safe and responsible manner. The choice of chemical should be made with adjacent land uses in mind;
- Herbicides should not be sprayed when winds are excessive (winds over 16 km/hr are considered a drift hazard). Applications should occur only when winds are blowing away from water bodies, sensitive sites, or areas of concern (as identified by regulators and/or landowners). Conditions of temperature inversions should also be avoided;
- Presently, chemical control on leases is accomplished through low-volume application of approved herbicides directed specifically toward weed species. The herbicide application is performed primarily with backpack sprayers, although some applications have been completed with hand-held nozzles attached to hydraulic truck-mounted sprayers via a rubber hose. Regardless of the specific spray equipment, reasonable efforts must be made to minimize impacts to desirable low-growing shrub and herbaceous species present. Low-volume applications entail lightly wetting of the foliage of undesirable woody species. The herbicide is then transferred throughout the plant, including into the roots, resulting in the death of the plant. Since foliar herbicide application requires leaves on the target plant, this method of herbicide treatment is performed only during the summer months when the vegetation is actively growing. There is very little impact to adjacent vegetation or the environment due to the limited amount of herbicide applied, the selected application to only undesirable weeds, and the careful selection of the herbicide mixture;
- During rainfall, herbicides are moved from land into waterbodies by runoff. The occurrence of herbicides in the waterbodies depends on the intensity and timing of the rainfall and location and timing of herbicide applications. Herbicide application requires extra care and caution to ensure water quality, and aquatic and riparian habitats will not be affected by the application. Natural vegetation should be left along natural water bodies to ensure bank stability and to provide a natural buffer and filter for chemicals;

4.5.6 Monitoring

Monitoring of locations is required to alleviate problems as they occur or until weeds are controlled and vegetation established as appropriate;

4.5.7 Protection of Flora & Fauna SARA Species during Vegetation Management

- In order to comply with the SARA and MBCA, as a requirement of the regulatory approval process, Sprott has already conducted flora and fauna assessments on the affected lands;
- The data collected during those assessments will be used to identify known, probable, or other habitat types, species at risk locations, and the likelihood of species at risk

occurring within a specific area (i.e. LSD, section, etc…). The information collected in the preliminary stages will be used to create effective vegetation management strategies that avoid or protect species at risk, and ultimately comply with SARA and MBCA;

- For example, vegetation requiring control may require mowing but occur within a setback distance identified in assessments. In that instance, hand spraying or tillage, or weed pulling may be an appropriate response;
- As with any effective management strategy, Sprott's vegetation management strategy will be dynamic and require thoughtful execution.

4.6 Culvert Maintenance

All maintenance will be carried out in accordance with the *Nova Scotia Watercourse Alteration Specifications (2006)* or updated versions thereof.

4.6.1 Inspect them regularly during the course of construction and make all necessary repairs if any damage occurs;

4.6.2 Limit the removal of accumulated material (i.e., branches, stumps, other woody materials, garbage, etc) to the area within the culvert, immediately upstream of the culvert and to that which is necessary to maintain culvert function;

4.6.3 Remove accumulated material and debris slowly to allow clean water to pass, to prevent downstream flooding and reduce the amount of sediment-laden water going downstream.

5.0 ENVIRONMENTAL MONITORING PROGRAMS

A follow-up program will monitor the effectiveness of mitigation measures and management programs. This follow-up program will be implemented to address potential changes to species at risk, vegetation, wildlife communities and ecosystem health.

The follow-up program will provide data for bird, bat, moose and vegetation surveys along transects which may represent the range of conditions and activity across the regional study area.

The results will include a compilation and analysis of data, interpretation, conclusions and potentially recommendations for improvement on mitigations if deemed required.

5.1 Monitoring Program for Avian Species

Monitoring programs for avian species are required to support the Hampton Mountain Wind project. The survey requirements are summarized in below and include three programs which can be divided into preconstruction and post construction surveys. SPROTT has responsibility for reporting the findings. The reporting requirements are outside the scope of this document.

5.1.1 Program Requirements

Program	Program Requirements	Schedule	Reporting
Monitoring Programs	1. Bat Monitoring Program 2. Migratory bird surveys	1. Fall and spring for two years – post construction 2. Fall and spring for two years – post construction	All - Annual report
Bird/Bat Mortality Surveys	1. Develop protocol 2. Conduct carcass surveys at turbine sites based on CWS standard.	1. Pre-construction 2. Annually for two years – post construction	1. Review protocol with DNR/CWS 2. Annual report
Breeding Bird Surveys	1. Develop breeding bird survey plan to be used if work is to proceed between 01 May and 31 August. 2. Conduct breeding bird survey 3. Develop mitigation measures in consultation with Sprott Power Corp. and project engineer	1. Prior to construction 2. Before any construction if in 01 May to 31 August period 3. Before any construction if in May 1 to August 31 period	• Review with DNR and CWS • As required • As required

6.0 SITE RESTORATION PLAN (SRP)

The objective of the SRP is to remove all garbage from site, control erosion as may be necessary, restore soil capability, and reclaim the project areas and associated disturbed portions to a land capability which is equivalent to pre-disturbance characteristics.

Reclamation will take place once construction equipment has left the location or as soon as soil and weather conditions permit. The landowners will be notified prior to the initiation of the reclamation activities and again upon completion. Reclamation success is dependent good landowner communication and upon favourable conditions in the root zone for optimum crop growth. The key soil factors that determine root zone quality include the water holding capacity, organic content, structure and consistence, salinity, nutrient balance and soil regime.

6.1 Interim Reclamation

Sprott Power Corp. shall attempt to reclaim all disturbed land surfaces within 2 growing seasons. Interim reclamation, including site and debris clean-up, slope stabilization and re-contouring with subsoil, and spreading of topsoil shall be done progressively and concurrently with operations.

Reclamation of the sites during production requires re-contouring the non-use portion of each surveyed lease.

The subsoil will be used to re-contour each site to allow natural drainage patterns to exist without creating slopes that have the potential for erosion.

Any unexpected disturbances that occur outside the immediate working area of the sites will be reclaimed to pre-development conditions immediately.

6.2 Final Project Reclamation

Timeline

Decommissioning	Activity	Timeline	Off Site Land Use Requirements
Turbines	Removal of tower and turbine infrastructure	May – July	Use provincial, municipal or private roads for access to water or soils; May require temporary work space for equipment storage prior to removal from project lands; Use of water from local sources for reclamation purposes; Reclamation of borrow
	Removal of transformers	May – July	
	Partial excavation and removal of cement base to depth	June – July	
	Removal of gravel pads and gravel from access	July – August	
	Recontouring of pad and access roads	July – August	
	Reclamation of surface soils	August – September	
	Re-seeding	September -	

		October	pits at pre-approved locations; Use of landfill or recycling activities for equipment/waste disposal.
Power Lines/ Transformer Station	Removal of above ground poles and lines	May – July	
	Removal of transformer station and associated infrastructure	May – July	
	Removal of gravel pads	June – July	
	Removal of interconnection lines and infrastructure	July – August	
	Removal of access roads	July – August	
	Recontouring of pad and access roads	August – September	
	Reclamation of surface soils	September - October	

Soils

- Upon cancellation and abandonment of the locations, all disturbed areas are to be re-contoured to pre-construction conditions. Loading of slopes with unconsolidated material will be avoided during slope re-contouring;
- All grades and drainages will be restored by removing any culverts and fills;
- Topsoil replacement should not be done until all subsoil leveling and cleanup has been completed, to prevent mixing by leveling after topsoil replacement;
- Surface diversion berms will be installed, as required. Run-off will be diverted to stable and vegetated off-right-of-way areas;
- In areas that have compaction problems, rip compacted subsoils, with a multi-shank ripper to an approximate depth of thirty (30) centimetres. Postpone ripping until subsoils dry out so that they fracture when ripped. Disc ripped subsoils to smooth the surface. Limit discing to that necessary to break up clods so as to minimize the potential for further compaction. Topsoil compaction on cultivated fields will be alleviated by cultivation;
- Remove all foreign materials including geotextile;
- Bridges, fences and culverts are to be restored to meet or exceed pre-construction conditions;
- Rocks/stones exposed on the surface as a result of construction activity will be removed from the right-of-way prior to and after topsoil/surface material replacement. The concentration of surface and profile rocks will be equivalent to, or better than the surrounding fields. Rocks/stones will be disposed of at a site approved by the landowners;

- Any areas with rutting or erosion gullies will be re-contoured and all strippings will be replaced evenly over all portions of disturbed areas. Replacement of soils during wet weather or high winds will be avoided. This will prevent damage to soil structure and reduce the potential for erosion of topsoil;
- Once sub-soil has been adequately reclaimed, topsoil will be replaced.
- Erosion control in the form of matting, hale bales and/or cross ditching may be necessary on slopes;
- Complete re-contouring and stabilization of disturbed areas. Smooth water channeling ruts and outside berms. Ensure that all erosion control and water management measures (e.g. water bars, drainage dips, culverts and ditches) are working;
- Where soils have been disturbed, implement appropriate reclamation procedures (i.e. seeding, erosion blankets, slash rollback, straw crimping, etc.) to promote stability of the site, soil preservation, and plant re-establishment. Ensure the natural drainage is restored;

Vegetation

- Once topsoil has been re-distributed, disturbed areas will be re-seeded, as soon as weather permits, with an approved Canada #1 Certified Seed mixture from a local source. The Certificates of Analysis will be retained for documentation. Seed mixture design will be based upon observations of vegetation species in surrounding areas, discussions and recommendations put forth by the landowners and regulators, and availability of seed mixtures;
- Additionally, disturbed areas will likely require perennial species for long-term protection. The seed mix approved by the regulators and/or landowners/occupants will be used on all disturbed soils. The contract inspectors will mark these areas needing seeding on survey maps, so that crews can easily locate the areas and apply the seed as soon after disturbance as possible. In areas away from water, and where natural seed sources are available, contractors may depend on natural seeding.
- Seeding rates and methods will be based upon characteristics of the area, weather conditions, erosion potential of slopes, and landowner recommendations;
- Locations should be monitored monthly during growing seasons. Typical monitoring should occur in June, July, and August or until a Memorandum of Surrender has been obtained. Monitoring will consist of visually inspecting the areas to ensure vegetation has been established and is healthy, erosion has been mitigated, and landowner concerns have been adequately mitigated;
- Restore gates and fences;

7.0 Monitoring Program for Surface Water Impacts

7.1.1 Sprott's Commitments

As part of its environmental program, Sprott Power Corp. has made the following commitments regarding monitoring the project for surface water impacts during construction; operations; and maintenance:

- Sprott Power Corp. will conduct visual inspections, both quarterly, and after severe storm events, on the site to ensure the effectiveness of erosion and sedimentation controls until those controls are deemed effective under severe storm conditions;
- If issues are noted during these assessments, Sprott Power Corp. will take the necessary steps to ensure erosion and sedimentation controls are repaired, replaced, upgraded, or installed as necessary;
- Sprott Power Corp. will provide summaries of the monitoring program to NSE on as requeste, and reports will be submitted to NSE within 30 days from the last day of the preceding quarter;
- If an immediate or large scale impact is noted following a severe storm event, updates may be provided to NSE at that time;

8.0 Spill Response

Sprott Power Corp. recognizes its responsibility for its operations and the effects that these operations have on employees, landowners, the public and the environment. Although facilities and operating procedures are designed to prevent upsets that could result in a spill, spills may occur.

To a large extent, effective spill response is dependent on the amount of planning that is undertaken before a spill occurs. Sound planning will help reduce the number of spills, improve the success of response activities, reduce environmental impact, decrease conflict with regulatory agencies and the public, and lower spill response costs. Spill planning is a continuous process that requires commitment, cooperation and input. Components of planning include:

- Company policy and spill strategy;
- Spill prevention;
- Contingency plans;
- Equipment readiness (know local contractors);

Sprott Power Corp. will take immediate action to control a spill including:

- Shut in the source of the spill and start documentation;
- Assess the spill;

- Initiate containment and recovery;
- Protect the public and worker safety;
- Supervise the spill clean-up;
- Prepare status reports;
- Remediate and reclaim the affected area; and
- Conduct a de-briefing session to help prevent a similar incident.

Sprott Power Corp.'s policy in regard to spill planning and control operations involves:

- Authority to initiate emergency actions;
- Reporting structures for notification and approvals;
- Authority for expenditures related to spill activities;
- Authority to activate additional resources as needed;
- Authority to respond to unidentified spills.

If a spill occurs, a single authority will immediately assume overall responsibility for coordination of response actions. For small spills one individual can oversee the entire operation, especially if that individual can obtain advice and support from internal resources, spill specials, regulatory staff and others.

8.1.1 Containment and Recovery

Once a spill has occurred, it is important for Sprott to initiate a well-organized response that includes shutting in the source, initiating containment and recovery, clean-up and reclamation. As no two spills are alike, it is impossible to provide a rigid set of instructions. Trained personnel must adapt to the unique circumstances of the spill and use available resources. If one technique fails, a new approach or improvisation of existing methods must be attempted. In general, spill response should be approached as follows:

- **Spill notification** - is the starting point for initial response. Documentation starts at this stage and must be continued until the site is reclaimed. Activate the spill contingency plan, mobilize resources, confirm spill and shut-in the spill source;
- **Assessment of incident factors** - includes the identification of hazards associated with the incident (hazard assessment), the site assessment and security of the impact.
- **Set objectives** – following the site assessment, the response team should develop an action plan that includes clear and concise objectives. The priorities are to protect human life, property and the environment. An action plan that outlines objectives will likely be developed by company personnel with input from regulatory agencies**;**

- **Incident control** – includes containment, recovery and spill management with a focus on communication. Control is accomplished by having a defined incident commander with authority and availability to resources;
- **Evaluation** – the spill response must be evaluated on a continuous basis and changes made to the action plan if necessary. The entire response team must be briefed when changes occur.

8.1.2 Containment and Recovery Techniques

- **Dikes, bellholes, trenches** – the most common method of containing a land spill is to use a combination of dikes, bellholes and trenches around the spill perimeter, with feeder trenches inside the spill itself to move fluids towards a recovery area. Feeder trenches can be constructed by hand or mechanical excavation only when the area has been deemed safe and continuous monitoring is undertaken.
- **Inverted weirs** – this technique is used when it is necessary to allow the natural movement of water to leave the spill site. An inverted weir consists of an earthen berm supported with sand bags or a plastic liner and the appropriate-sized culverts on an angle to contain oil inside the spill perimeter.
- **Filter fences** – can be constructed with pins and chicken wire or snow fence and bales (straw or hay). Filter fences can be effective to contain spills without severely affecting the natural movement of water.
- **Sorbent** – It may be appropriate to use a combination of natural sorbents (like straw or hay) with commercial synthetic sorbents. The overuse of sorbents can create a disposal problem and generate unnecessary waste.

8.1.3 Spill Waste Disposal

- Waste materials that are generated from a spill should be minimized and managed so that there are no long-term problems with disposal. The following are some of the common waste materials associated with spills and some options for disposal:
- **Contaminated fresh water** – removal and hauling by vacuum truck to an approved disposal facility;
- **Contaminated soil** – excavation by machinery or hand, loading, hauling, and disposal at an approved disposal facility
- **Vegetation/sorbents** – incineration, approved landfill;
- **Garbage** – incineration, approved landfill;

- **Construction materials** – clean and reuse, approved landfill, incineration;
- **Contaminated ice and snow** – store in secure containment until ice melts and recover spilled product for disposal.

Appendix I: Spill Report Form

Spill Report

AREA _____	LOCATION _____
LANDOWNER _____	PHONE # _____
OCCUPANT _____	PHONE # _____

INCIDENT DATE _____

SOURCE OF SPILL _____

SPILL VOLUME (m^3) _____

AREA AFFECTED (m^2) _____

AREA AFFECTED (m^2) _____

SPILL TYPE _____

REASON FOR SPILL _____

VOLUME RECOVERED (m^3) _____

WELL STATUS _____

METHOD OF RECOVERY _____

DISPOSAL LOCATION _____

SPILL REPORT SUBMITTED TO REGULATORY AGENCY: ❑ YES ❑ NO DATE:

SPILL LOCATION AND DETAILS:

Appendix III. INQUIRY & COMPLAINT RESOLUTION

Inquiry & Complaint Reporting Procedures

Sprott Power Corp. ('Sprott) has developed a procedure for receiving, recording, investigating, resolving and reporting public inquiry or non-compliance events which may occur from time to time on the Hampton Mountain Wind Power Project. One of the key outcomes of the process is to ensure there are steps taken so that Sprott can learn from our experiences and maintain diligence in its ongoing operations.

Sprott Power Corp. is implementing a Contact Management Program to:

- Record enquiries, comments and complaints;
- Develop, manage and record responses to enquiries, comments and complaints;
- Support data collection and reporting requirements;
- Support communication, liaison and notification activities;
- Record communication, consultation and liaison activities; and
- Assist the project team in managing issues;

Sprott Power Corp. will handle all comments and complaints concerning the Hampton Mountain Wind Power Project in a timely and prudent fashion.

Procedures

Sprott Power Corp. will manage the contact management data with responsibility to:

- Track and report out on enquiries and follow-up actions required; and
- Coordinate responses to enquiries.

Public Complaints

Complaints will be considered either reportable or non-reportable as follows:

- **Reportable** – An expression of concern or inquiry related to a specific topic or event that is related specifically to Sprott Power Corp.'s operations and requires Sprott to take corrective action;
- **Non-Reportable** – An expression of concern or inquiry related to general industry-related activities, and includes non-project specific issues and concerns. These complaints typically will not require action by Sprott Power Corp. Responses to Non-Reportable public complaints will be as described in Sections 1, 3, 4, 11, and 12 below.

Recording

1. Public or regulatory concerns and enquiries will be recorded by the person(s) receiving the complaint. Any person witnessing, or involved in, an event shall report it verbally to their supervisor and on an Inquiry/Complaint form.

2. If required by regulations or the terms and conditions of approval the appropriate/designated person(s) shall immediately report the event to appropriate regulatory authorities.

Management

3. Recorded information will be provided to the Sprott Power Corp. person(s) delegated by the COO to receive such information;
4. The recorded information will be entered into Sprott Power Corp.'s internal Contact Management Database within 96 hours of occurrence outlining the circumstances as known at that time and indicating what further investigations may be required. Responses will be as indicated below.

Resolution

5. Sprott Power Corp. will designate person(s) for ensuring that a Reportable Public Complaint is addressed, as outlined in this document. Sprott Power Corp. will acknowledge receipt of Reportable Public Complaints within 5 business days of receiving the complaint back to the complainant or inquirer.
6. Toward resolution, Sprott Power Corp. will evaluate the root causes of the complaint, investigate the issue(s) and report the findings back to Sprott Power Corp. management.
7. If resolution of the complaint can be handled in the 5 business day time frame (indicated in Step 5) Sprott will include information related to the response with the acknowledgement of receipt.
8. Sprott Power Corp. will make suitable efforts to resolve complaints and inquiries through thoughtful and timely responses or negotiations with complainants or inquirers.
9. In such a case that Sprott Power Corp. commits to implementing a solution, Sprott Power Corp. shall inform the complainant of the expected time frame for implementation.
10. An issue is "resolved" where Sprott Power Corp. has considered complaints and inquiries in good faith and has formulated and implemented, or committed to implementing, the appropriate solutions in a time frame acceptable to both parties.

Communicating Responses

11. Responses will be coordinated and provided by Sprott Power Corp. in a manner appropriate to the type of inquiry, and may include:
    - Meetings in person
    - Telephone calls
    - Emails
    - Letters

Record Keeping

12. Documentation to support recording, management, resolution and communication response standards shall be filed in accordance with the Sprott Power Corp. Corporate Records Management Program.

13. Sprott Power Corp. will use its Contact Management Database to record Reportable Public Complaints [and Regulator Inquiries], acknowledgements of receipt, and responses to any such complaints. The database will ensure accurate records maintained and will be used to develop required reports.

Self Auditing

14. Within 90 days of a Reportable Public Complaint being entered into the Contact Management Database, Sprott Power Corp. shall review the file to verify that the resolution has been achieved.
15. Unless a file in the Contact Management Database is referred to mediation or becomes the subject of a judicial proceeding or an arbitration, any outstanding actions under this process shall be audited every 90 days until the file is resolved.

Mediation

16. If the Self Auditing demonstrates that a Reportable Public Complaint has not been resolved through the resolution process herein, and subject to Sections 17 and 18, below, Sprott Power Corp. will engage a mediator who will be responsible for attempting to facilitate an agreement of resolution between Sprott Power Corp. and a complainant. Sprott Power Corp. will therefore send a notice of mediation to the complainant within 5 business days of having completed the Self Auditing.
17. Engagement of the mediator under Section 16, above, is conditional on the complainant providing agreement in writing to participate in mediation upon receiving notice of mediation from Sprott Power Corp.
18. Mediation is not required where, after the first 90-day audit period, the issue has been resolved.
19. The “Mediation Period” is the later of 30 days from the issuance of the notice of mediation or a date to be agreed on in writing by Sprott and the complainant in question.

Alternative Dispute Resolution

20. In lieu of mediation or if no agreement is reached through mediation within the Mediation Period, Sprott Power Corp. will consider other appropriate forms of alternative dispute resolution. Alternative dispute resolution may include, but is not limited to, arbitration.

21. Where Sprott Power Corp. identifies arbitration as an appropriate dispute resolution mechanism, it shall follow the applicable procedural rules set out in the *Arbitration Act*, R.S.N.S., c. 19, s. 1, if the complainant agrees to the following terms:

    a) All arbitration costs due in advance of a decision from an arbitrator or umpire shall be paid by each party submitting to arbitration in equal parts;

    b) Where payment of arbitration costs are specified, billed or estimated prior to the decision from an arbitrator or umpire, but are not due until after a decision is rendered, the complainant's portion shall be submitted and held in trust to the benefit of Sprott Power Corp. for the duration of arbitration; and

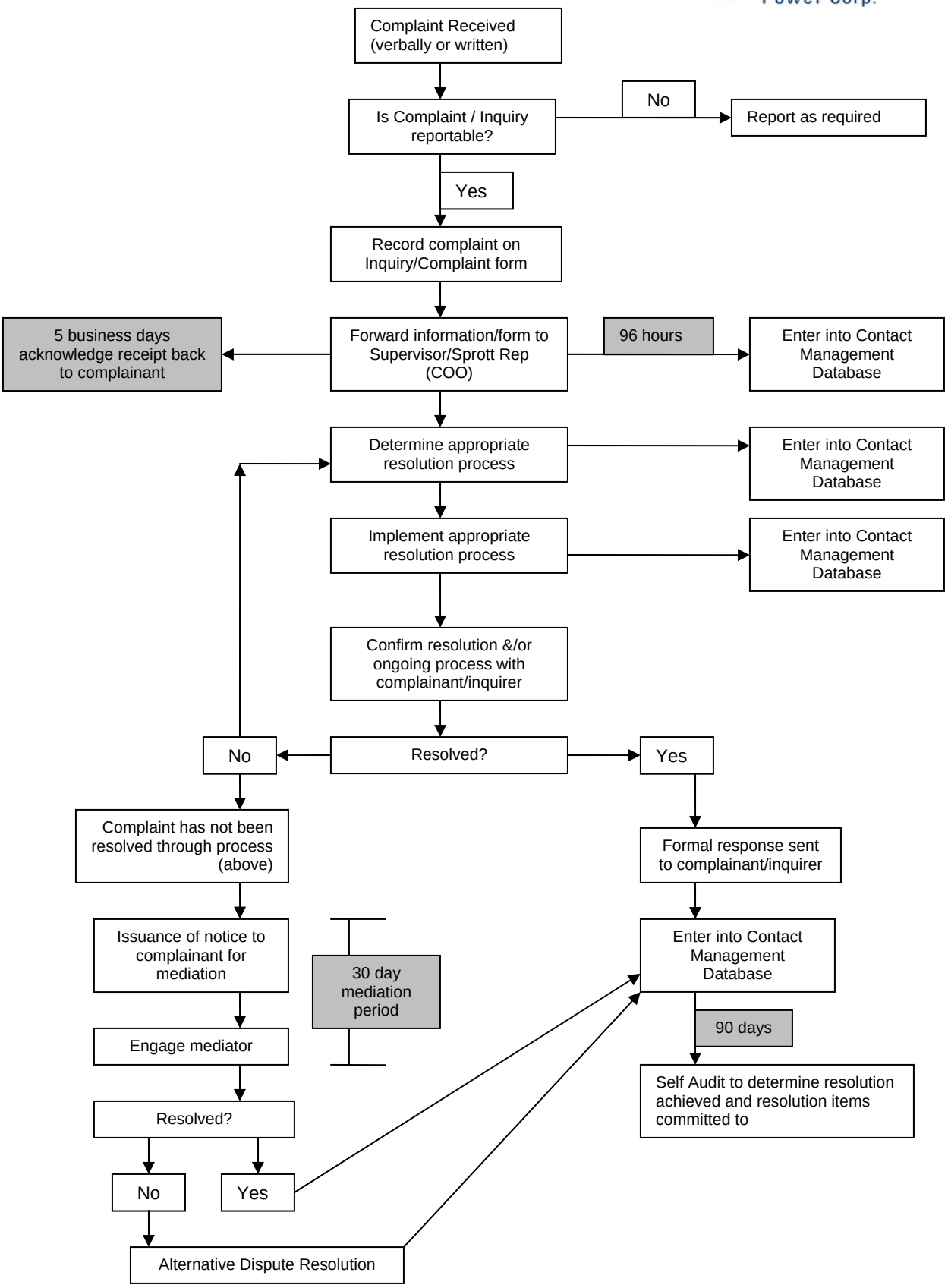
    c) If non-binding arbitration is identified as the appropriate alternative dispute resolution mechanism, and unless otherwise agreed to and specified by Sprott Power Corp. and the complainant, only the provisions relating to timelines and selection, removal and misconduct of arbitrators, umpires and referees shall apply. To be clear, unless otherwise agreed to and specified by Sprott Power Corp. and the complainant, the decision or award made by an arbitrator or umpire shall not be final and binding on the parties and agreement to non-binding arbitration does not constitute "submission" under the *Arbitration Act*, R.S.N.S., c. 19, s. 1.

Contact Information Provided to the Public

The Sprott Power Corp. corporate website will provide advice on how to contact Sprott Power Corp. to register concerns and complaints.

Flow Chart

See following page.


Complaint Received (verbally or written)
Is Complaint / Inquiry reportable?
No
Report as required
Yes
Record complaint on Inquiry/Complaint form
5 business days acknowledge receipt back to complainant
Forward information/form to Supervisor/Sprott Rep (COO)
96 hours
Enter into Contact Management Database
Determine appropriate resolution process
Enter into Contact Management Database
Implement appropriate resolution process
Enter into Contact Management Database
Confirm resolution &/or ongoing process with complainant/inquirer
No
Resolved?
Yes
Complaint has not been resolved through process (above)
Formal response sent to complainant/inquirer
Issuance of notice to complainant for mediation
30 day mediation period
Enter into Contact Management Database
Engage mediator
90 days
Resolved?
Self Audit to determine resolution achieved and resolution items committed to
No
Yes
Alternative Dispute Resolution

APPENDIX I INQUIRY / COMPLAINT FORM

INQUIRY / COMPLAINT FORM	
Date of Inquiry:	Time:
Name of Person Taking Inquiry:	Title:

Name of Person(s) Making Inquiry/Complaint:
Mailing Address:
Phone Number of Person(s) making Inquiry:
Other Number (specify):
Email Address:

Inquiry or Complaint Details:

Inform the person that Sprott Power Corp. will respond within 5 business days.

CHAIN OF CUSTODY:

1. **Person Taking Complaint:** _____ **Signature**

2. **Person Accepting Complaint form from #1.**

Name	**Signature**	**Date**

3. **Person Responsible for Resolution**

Name	**Signature**	**Date**

Appendix IV. HISTORICAL RESOURCE IMPACT ASSESSMENT OF THE PROJECT

HAMPTON MOUNTAIN WIND POWER PROJECT: ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT

HERITAGE RESEARCH PERMIT A2010NS70

OCTOBER 2010

REPORT SUBMITTED TO:
McCallum Environmental Ltd.
208 Kingswood Drive
Hammonds Plains, Nova Scotia B4B 1L2

HAMPTON MOUNTAIN WIND POWER PROJECT: ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT

Heritage Research Permit A2010NS70
Category C

Davis MacIntyre & Associates Limited

Principal Investigator: Laura A. de Boer
Report Compiled by: Laura A. de Boer & Stephen A. Davis

Cover: A panoramic view from a look-off site on North Mountain near the proposed impact area. Looking south.

Table of Contents

List of Figures

List of Plates

Executive Summary

Davis MacIntyre & Associates Limited conducted an archaeological resource impact assessment of the proposed Hampton Mountain Wind Power Project in Annapolis County. The assessment included consultation of historic maps, and manuscripts, as well as the Maritime Archaeological Resource Inventory in order to determine the potential for archaeological resources in the study area. A field reconnaissance of the study area was also conducted. The assessment indicated that no heritage resources of significance would be impacted by the proposed wind farm project. No further mitigation is recommended at this time.

1.0 INTRODUCTION

In September 2010, Davis MacIntyre & Associates Limited was contracted by McCallum Environmental to conduct an archaeological resource impact assessment of the proposed Hampton Mountain Wind Power Project in Annapolis County. The purpose of the assessment was to determine the potential for archaeological resources within the development zone and to provide recommendations for further mitigation if deemed necessary. This assessment included consultation of the Maritime Archaeological Resource Inventory in the Heritage Division of the Nova Scotia Museum as well as historic maps, manuscripts and published resources. A field reconnaissance was also conducted.

This assessment was conducted under Category C Heritage Research Permit A2010NS70 issued by the Nova Scotia Heritage Division. This report conforms to the standards required by the Heritage Division under the Special Places program.

2.0 STUDY AREA

The developer is proposing to construct a wind farm on North Mountain in the Hampton area. The project will consist of twelve (12) turbines, spaced along the upper elevations of North Mountain in the vicinity of McKenzie Lake (Figure 2.0-1). As a fundamental component of the project development various access roads, above and below ground transmission lines, a substation, crane pads, staging and storage yards, and temporary work space will be required. Ground disturbance will include clearing, grubbing, grading, and excavation where necessary in order to accommodate the wind turbines, access roads, substations, and other necessary infrastructure.

The study area is located in the Basalt Ridge region (Natural Theme Region #720), which extends from Cape Split along the southern shore of the Bay of Fundy to Gulliver's Cove (Figure 2.0-2). This region is a ridge of basalt formed from several lava flows, rising above the current sea level by up to 225m. The ridge slopes steeply on its southern side leading up from the Annapolis Valley, possibly representing a fault line, before dropping more gently into the Bay of Fundy on the north side. The shoreline is smooth and rocky, with little sediment. Erosion is gradually narrowing the basalt ridge from the Bay of Fundy side, through the formation of wave-cut platforms helps to slow this process.

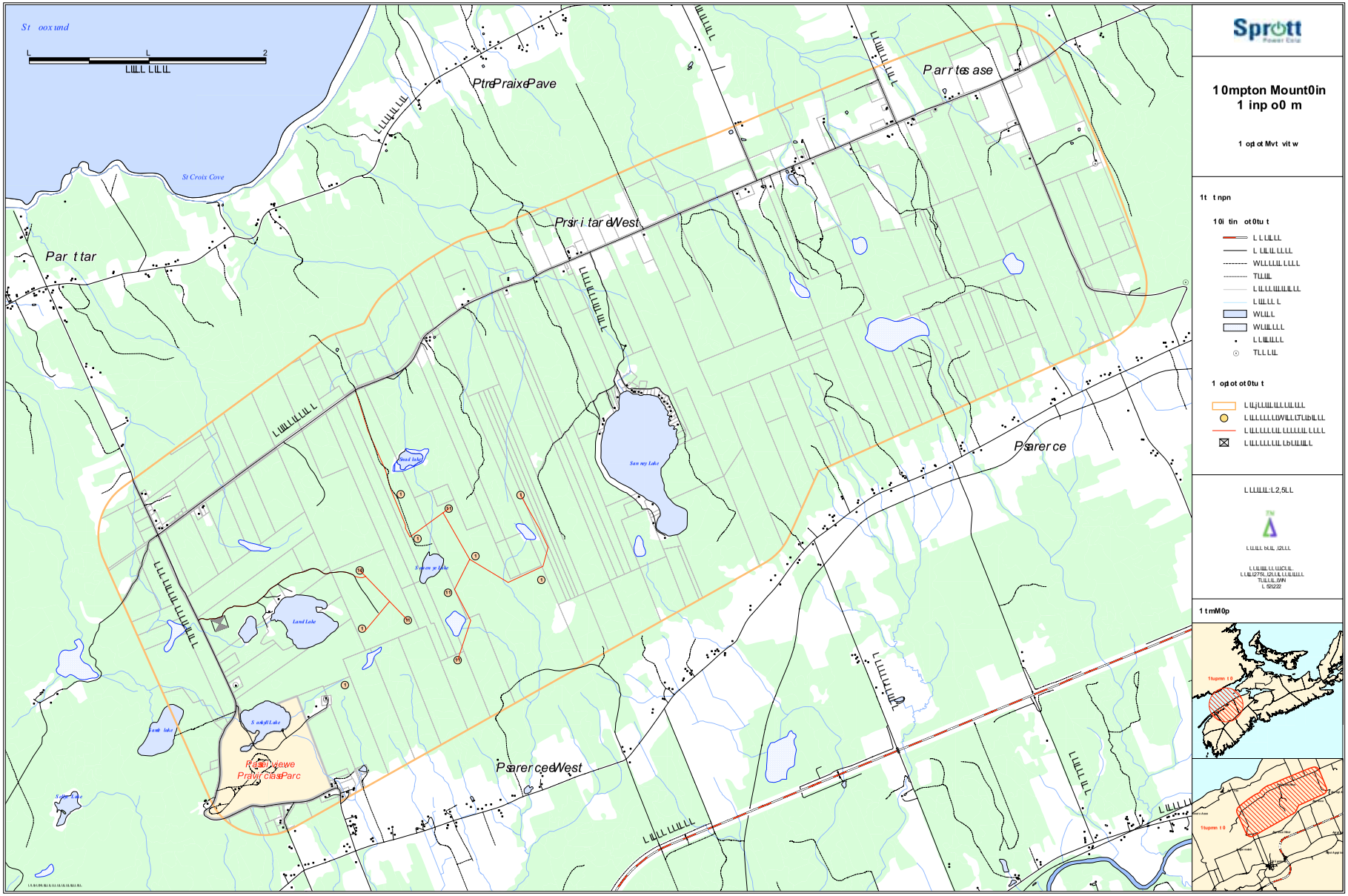


Figure 2.0-1: Map of the Project Study Area showing the proposed turbines and access roads.

Soils in this region tend to be shallow where they have developed from the basalt lying below. Much of this type of soil is Rossway, which is a well-drained silt loam. On the plateau at the crest of the central ridge there is also a fine sandy loam known as Glenmont, which incorporates both basalt and the redder Wolfville Till. Between Mount Hanley and Arlington West is a large area of Middleton soil, a moderately well-drained sandy clay loam. This same area also features patches of Kingsport and Nictaux soils, formed from water-deposited sands and gravels. The unusually high action of earthworms has caused their surface "mull" to be incorporated into the mineral-based soil throughout the region.

The higher elevations of this region, less prone to the cold air travelling off the Bay of Fundy, feature forests of shade-tolerant hardwoods. Red and White Spruce are found here, the latter often growing over abandoned fields. The higher elevations set farther back from the coast also host Sugar Maple, Yellow Birch, and American Beech, while the lower elevations are home to a more typical mix of spruce, fir, pine, maple, and birch.

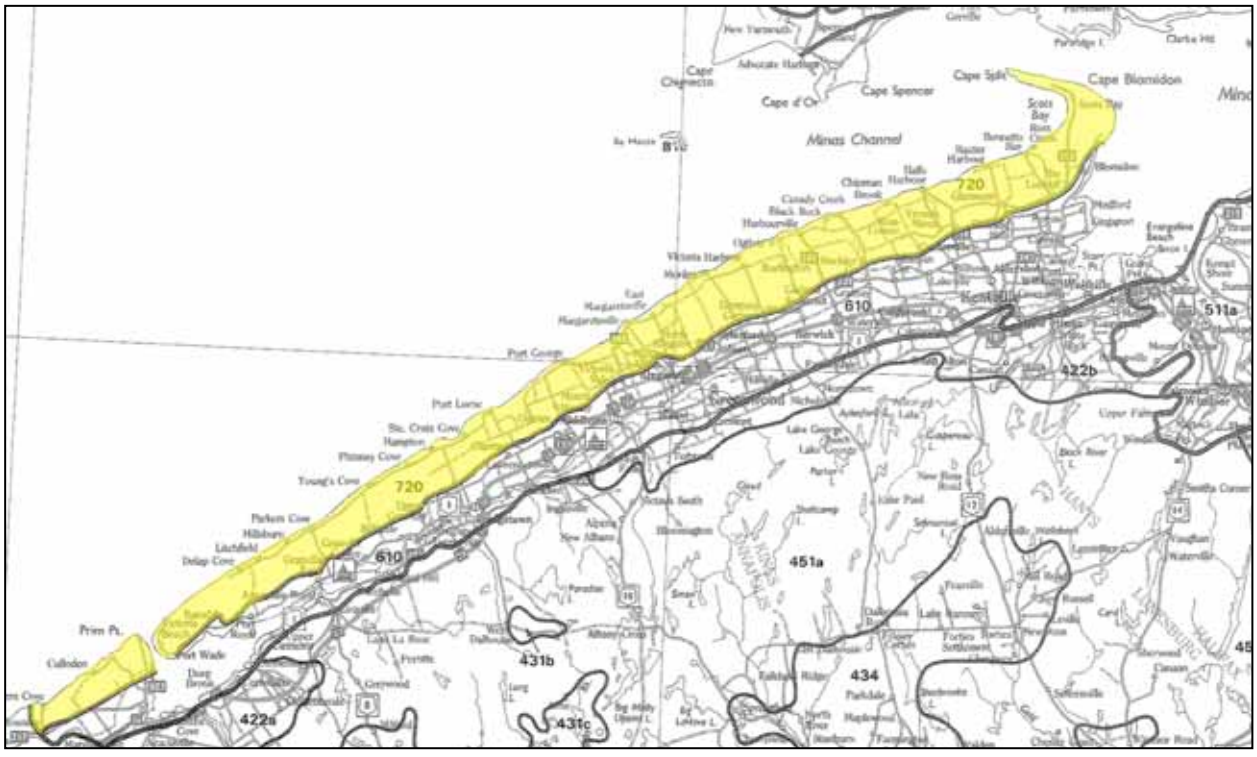


Figure 2.0-2: Natural Theme Regions of Nova Scotia, showing region #710 (highlighted) - Basalt Headland.

The region's heavy forest, mostly devoid of wetlands and lakes, supports a large deer population, but bear and bobcat are more rare, and the diversity of small mammals is moderate. The ridge "funnels" the movements of migratory birds moving north-south, and may have the same impact upon bats. Subtidal molluscs and crustaceans make their homes around wharves along the shore, while the rocky intertidal zone provides a good habitat for other near-shore life.[1]

3.0 METHODOLOGY

A historic background study was conducted by Davis MacIntyre & Associates Limited in May 2010. Historical maps and manuscripts and published literature were consulted at Nova Scotia Archives and Records Management in Halifax. The Maritime Archaeological Resource Inventory, held at the Nova Scotia Museum's Heritage Division, was searched to understand prior archaeological research and known archaeological resources neighboring the study area.

3.1 Maritime Archaeological Resource Inventory

The Maritime Archaeological Resource Inventory, a Provincial database of known archaeological sites held at the Nova Scotia Heritage Division, was consulted in May 2010 to understand prior archaeological research and known archaeological resources neighboring the study area.

Several sites yielding Precontact finds of 'indeterminate age' was noted of Lequille River (Allain's River), as was a shell midden, though the latter was reported over a century ago. Isolated finds (stemmed points near Bridgetown and on Mutton island, some lithic material near West Lawrencetown, flake scatters in several areas around Paradise) have been noted throughout this area of the valley. A copper pot was recovered near Lawrencetown, but no associated material was recovered to indicate whether or not it was a burial. A single core and some stone flakes were located eroding

[1] Davis and Browne, 1996:172-175.

out of the shoreline along the Bay of Fundy Coast, between Cottage Cove and Port Lorne.

There are a great many cellar depressions of probable Acadian origin along the Annapolis River on the valley floor. These include Belleisle, Round Hill, Pre Rond, Mochelle, and many others. Acadian villages are known to have been abundant in the area.

Some historic artifacts related to farming or logging activity have been recovered from South Mountain near Paradise. An 18th or 19th century cemetery has been identified near the eastern town limits of Lawrencetown. A brick manufacturing site has also been recorded near Bridgetown.

No sites have been reported on the slope of North Mountain in the Bridgetown and Hampton area. The absence of recorded archaeological resources within or immediately adjacent the proposed development area may be an indication that this area was not subjected to previous archaeological assessments.

3.2 Historical Background

3.2.1 The Precontact Period

The history of human occupation in Nova Scotia has been traced back approximately 11,000 years ago, to the Palaeo-Indian period or *Sa'qewe'k L'nu'k* (11,000 – 9,000 years BP). The only significant archaeological evidence of Palaeo-Indian settlement in the province exists at Debert/Belmont in Colchester County.

The *Saqiwe'k Lnu'k* period was followed by the *Mu Awsami Kejikawe'k L'nu'k* (Archaic period) (9,000 – 2,500 years BP), which included several traditions of subsistence strategy. The Maritime Archaic people exploited mainly marine resources while the Shield Archaic concentrated on interior resources such as caribou and salmon. The Laurentian Archaic is generally considered to be a more diverse hunting and gathering population.

The Archaic period was succeeded by the Woodland/Ceramic period or *Kejikawek L'nu'k* (2,500 – 500 years BP). Much of the Archaic way of subsistence remained although it was during this period that the first exploitation of marine molluscs is seen in the archaeological record. It was also during this time that ceramic technology was first introduced.

The Woodland period ended with the arrival of Europeans and the beginning of recorded history. The initial phase of contact between First Nations people and Europeans, known as the Protohistoric period, was met with various alliances particularly between the Mi'kmaq and French.

The Mi'kmaq inhabited the territory known as *Mi'kma'ki* or *Megumaage*, which included all of Nova Scotia including Cape Breton, Prince Edward Island, New Brunswick (north of the Saint John River), the Gaspé region of Quebec, part of Maine and southwestern Newfoundland (Figure 3.2-1). Much of Annapolis County rested in the district known as Kespukwik, or Last Flow.[2]

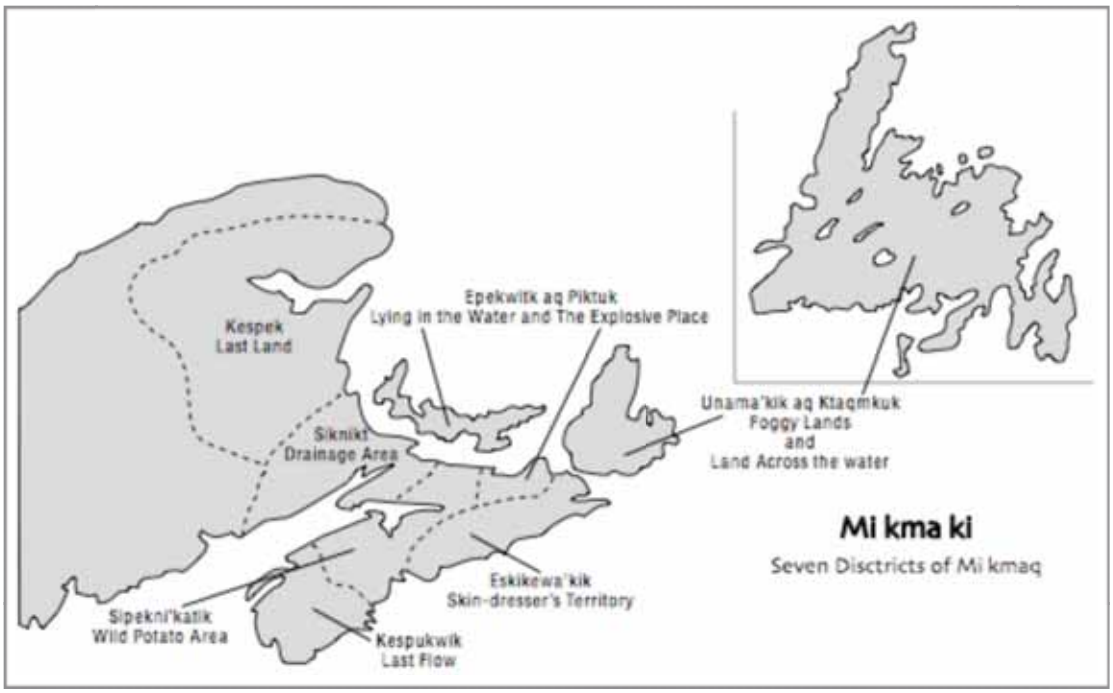


Figure 3.2-1: Map of the Mi'kmaq territories.[3]

[2] Eaton, 1910:20.
[3] Confederacy of Mainland Mi'kmaq, 2007:11.

3.2.2 European Settlement

The floor of the Annapolis Valley has been host to a great deal of European settlement and activity, particularly following the arrival of the Acadians in the mid-seventeenth century. The tidal marshes and sandy soils of the valley floor are ideal for agriculture. The nearest known Acadian villages to the study area along the valley floor were those of Bernard Gaudet (Godet), Gaudet Village (Ruffee's Hill; Godet's Village), and Préjean (Prejeants) (Figure 3.2-2). Maps from this period show no indication of Acadian habitation extending up the slope of North Mountain, and historical accounts seem to concur.

Figure 3.2-2: A 1757 map showing the remains of Acadian villages following the start of the deportation. North is to the top.[4]

[4] Library of Congress 1757.

After the deportation of the Acadians beginning in 1755, a new wave of settlers from New England known as the New England Planters was brought to the Annapolis Valley. They arrived in the 1760s and shortly thereafter, establishing settlements and receiving land grants extending from the Annapolis Valley up into North and South Mountains. These grants were laid out in the form of long narrow rectangles, allowing access to water for all grantees by extending from the Annapolis River or the Bay of Fundy up into North Mountain.

Granville Township, which encompasses the study area, was laid out and granted in 1764 for the arrival of the New England Planters. This first generation of new settlers established themselves mostly on the valley floor, and it was "not they but their sons and grandsons who were the pioneers of the Mountain settlements."[5] By 1809 or 1810, the area of North Mountain located inland from Hampton and St. Croix Cove began to be settled by those moving outwards from the valley. The mountain area westward of St. Croix Cove was known as Granville Mountain Settlement.[6]

This area of North Mountain was host to a number of families of Black Loyalist descent, and a few believed to have descended from freed slaves. The names of these families include Tallow or Tyler, Brown, Clements, Mitchell, Kimber, Simms, Cuff, Peters, Jackson, Hill, Scarborough, Camps or Champs, and Mansfield.[7] Records suggest that many of these inhabitants "lived on an old road which went from the Mitchell fiels [*sic*] to the old Chute Road and on to the old Phinney Mountain Road. Old cellars are all that remain to show that people once lived there. There is said to be a Negro graveyard in Phinney Cove, location not now known."[8]

Many of these families seem to have moved to different locations around the mountain from generation to generation. A Miss Scarborough (perhaps either Dinah or Bathsheba), possibly the descendant of a Black Loyalist, lived in Hampton toward the end of the nineteenth century. Her home reportedly stood on an extension of the road

[5] Dexter 1983:5.

[6] Dexter 1983:6.

[7] Dexter 1983:20

[8] Dexter 1983:28.

running along the Fundy shore east of the Upper Shore Road, where several old cellars were still visible in the 1980s.[9]

The Kimber, Cuff, and Tallow families appear to have lived in the closest vicinity to the impact area, the first on Arlington Road near its junction with what is now Hampton Mountain Road, and the second near Foster Lake on the opposite (west) side of Hampton Mountain Road.[10] The Tallows reportedly lived in the area to the west of Hampton Mountain Road, "near what is commonly called the 'Mitchell Field', and were descendants of a man who had been a slave to Joshua T. de St. Croix named Newport Tallow. Some of the family are said to have been buried in the Mitchell Field."[11] Unfortunately, the exact location of the Mitchell Field is unclear, though it appears to be safely beyond the reach of the impact area of primary concern in this report.

Families of European descent also have several generations within the same general vicinity, but moving from community to community. The family names are numerous but many are still familiar in the Annapolis Valley as the descendants of Planters, Loyalists, and other early settlers. They include: Anderson, Anthony, Armstrong, Baltzer or Balsor or Balser, Banks, Breadsley, Bent, Blanchard, Brinton, Brooks, Brown, Chute, Clark, Clayton, Collins, Corbett, Cropley, DeLong, Douglas, Dunn, Durland or Durling, Early or Earley, Easson, Elliot, Farnsworth, Fash, Foester, Gaskill, Grant, Garves, Hall, Hawkesworth, Healy, Hill, Hines, Hudson, Johnson, Kathrens, Kearns, Lent, Litch, McAndrews, Milbury, Miller, Mitchell, Munro, Mosher, Neaves, O'Neal, Osinger, Pack or Peck, Parker, Phinney, Poole, Qureau, Ray, Reese, Rhodes, Ricketson, Risteen, Roach, Rumsey, Sabean, Slocomb or Slocum, Smith, Snow, Sproule, Stark, Starratt, Steadman, Taylor, Templeman, Titus, Whitman, Wilkins, Williams, Wilson, Woodworth, Worthylake, and Young.[12]

The land on the mountain is mostly rocky and infertile. Census returns seem to suggest that a staple in the mountain diet was the potato. An 1827 census indicated that 45 bushels of the tuber were available for every man, woman, and child in the area. Most listed occupations at the time were farmers and millers, with a small amount of

[9] Dexter 1983:26.

[10] Dexter 1983:23.

[11] Dexter 1983:20.

[12] Dexter 1983.

diversity along the coast in the form of fishermen, blacksmiths, and carpenters. Towards the end of the nineteenth century more specialization had developed, but surprisingly, no "lumbermen" were listed.[13]

It has been suggested that lumbering on the mountain in the nineteenth century was conducted mostly by farmers in their spare time.[14] The absence of large-scale lumber harvesting in the nineteenth century might be related to the scarcity of rivers and streams large enough to drive the cut logs. Transportation of lumber would have been a slow wagon ride to sawmills or ships on either side of the mountain, and would likely not have been as profitable as it was on South Mountain and elsewhere in the province.

By 1824, there were only two schools on North Mountain, at Mount Hanley and Gates Settlement. By 1828, another had been added at Hampton, and "The sum of ten pounds was allowed Mr. Leslie, the teacher of a school at Chute's Cove [Hampton], Bay of Fundy, in the Township of Granville. The inhabitants of that district are in very poor and destitute circumstances and in much need of Provincial aid to enable them to educate their children. This school consists of about thirty pupils."[15]

At about the same time as this school addition, the locals had formed a Baptist Church, but the church was in truth an organization rather than a building. Sunday services were held in various local houses until the construction of a church structure in 1835.[16] Two decades later, several families were "excluded" from this church because they had joined another church under the leadership of Richard Preston without being granted formal dismission from the Baptist Church. Richard Preston was "an escaped slave who was sent by the Baptists of Halifax to England for further training and ordination. On his return, he organized and supervised Black churches throughout Nova Scotia, including one in Granville Township."[17] Many of these "excluded" families appear to have been the descendants of Black Loyalists and former slaves who settled the area.

[13] Dexter 1983:16.

[14] Dexter 1983:16.

[15] Dexter 1983:7.

[16] Dexter 1983:11.

[17] Dexter 1983:21.

The scenic value of this area of North Mountain has been noted for many years. In 1843, Colonel Poyntz, a well-known military man, travelled to Chute's Cove from Saint John after hearing about the beauty of the Annapolis Valley. Chute's Cove had been named after the Chute family of settlers, but was renamed in 1864 after Lieutenant Colonel Hampton, "a circus man."[18] Upon arrival, Colonel Poyntz walked over North Mountain, presumably on the Hampton Mountain Road, which had already been laid out, and upon seeing the valley below him from a crest on the mountain he was "entranced with the scene that lay before him."[19] He retired and brought his family to Bridgetown the next year.

Mapping and historical documents suggests that there was little cultural activity in the area immediately surrounding Croskill, McKenzie, Long, and Ramsey Lakes. Several houses are indicated near Arlington Road on Ambrose F. Church's 1876 map of Annapolis County, but the area south of the road appears to have remained unoccupied.

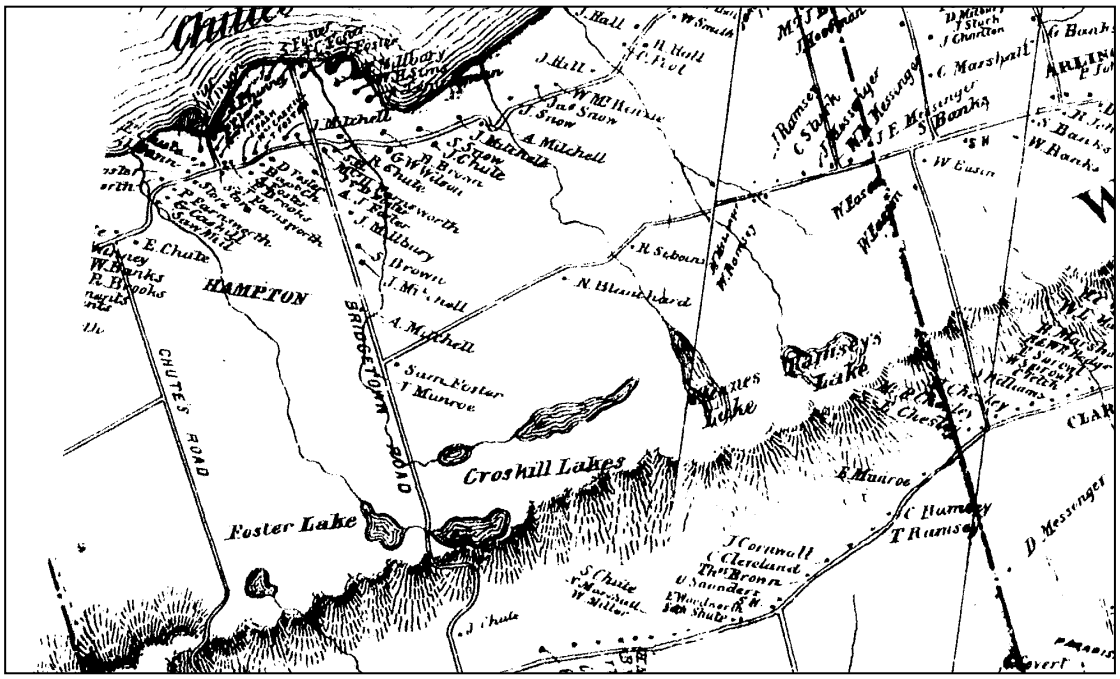


Figure 3.2-3: Detail of Church's map of Annapolis County.[20]

[18] Dexter 1983:4.

[19] Coward 1955:157.

[20] Church 1876.

It appears that the local population in these intial settlements never increased dramatically, and as a result few of these mountain communities are notably more populous now than they were in the nineteenth century. By the late nineteenth century, many settlements on the Fundy shore of North Mountain were described by their relation to towns and villages in the Annapolis Valley, and how distant they were from train stations along the Windsor and Annapolis rail line.[21] An early twentieth century rural directory map shows that several residents owned large tracts of land on North Mountain, but many more land owners held property with no clear boundaries in the sparsely populated southern slope of the mountain (Figure 3.2-4).

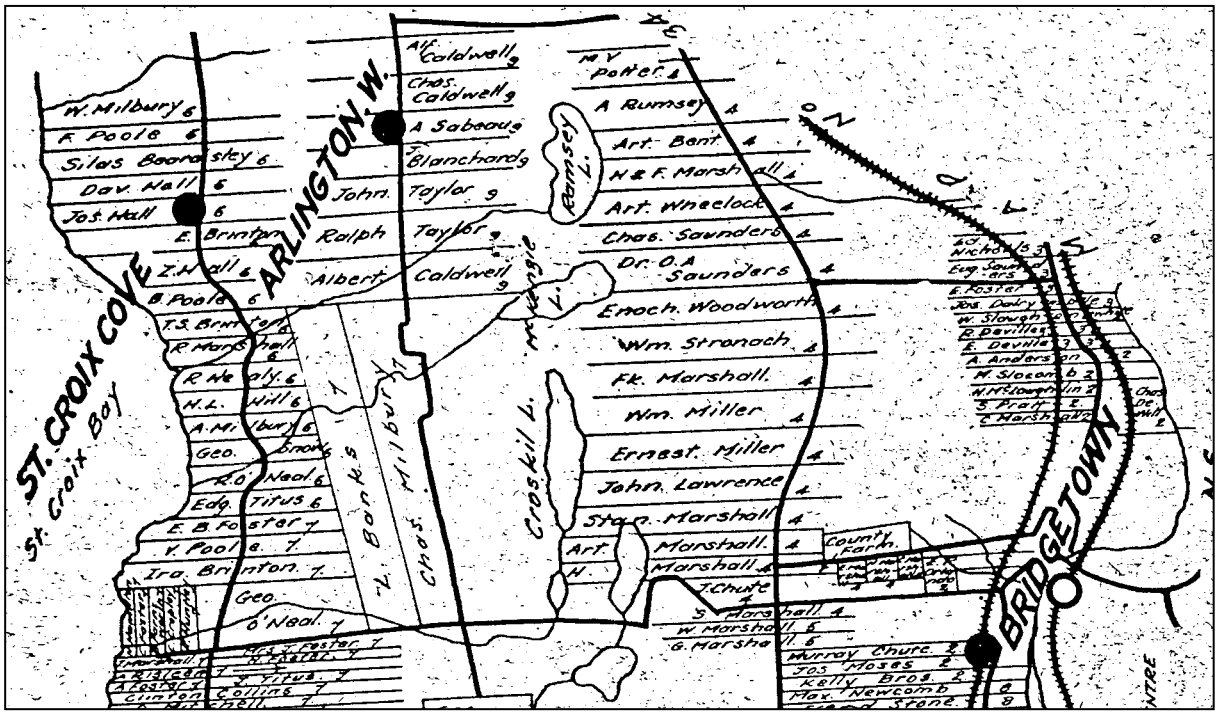


Figure 3.2-4: A rural directory map shows indistinct property boundaries in the wilderness of North Mountain.[22] North is to the left.

A 1930s geological survey map of the area shows once again that no structures have been built within the impact area (Figure 3.2-5). Farming was practiced in some areas of

[21] Lovell 1871.

[22] Cummins Map Company n.d.

the mountain, but there is no positive indication that a farm or other settlement existed within the impact area.

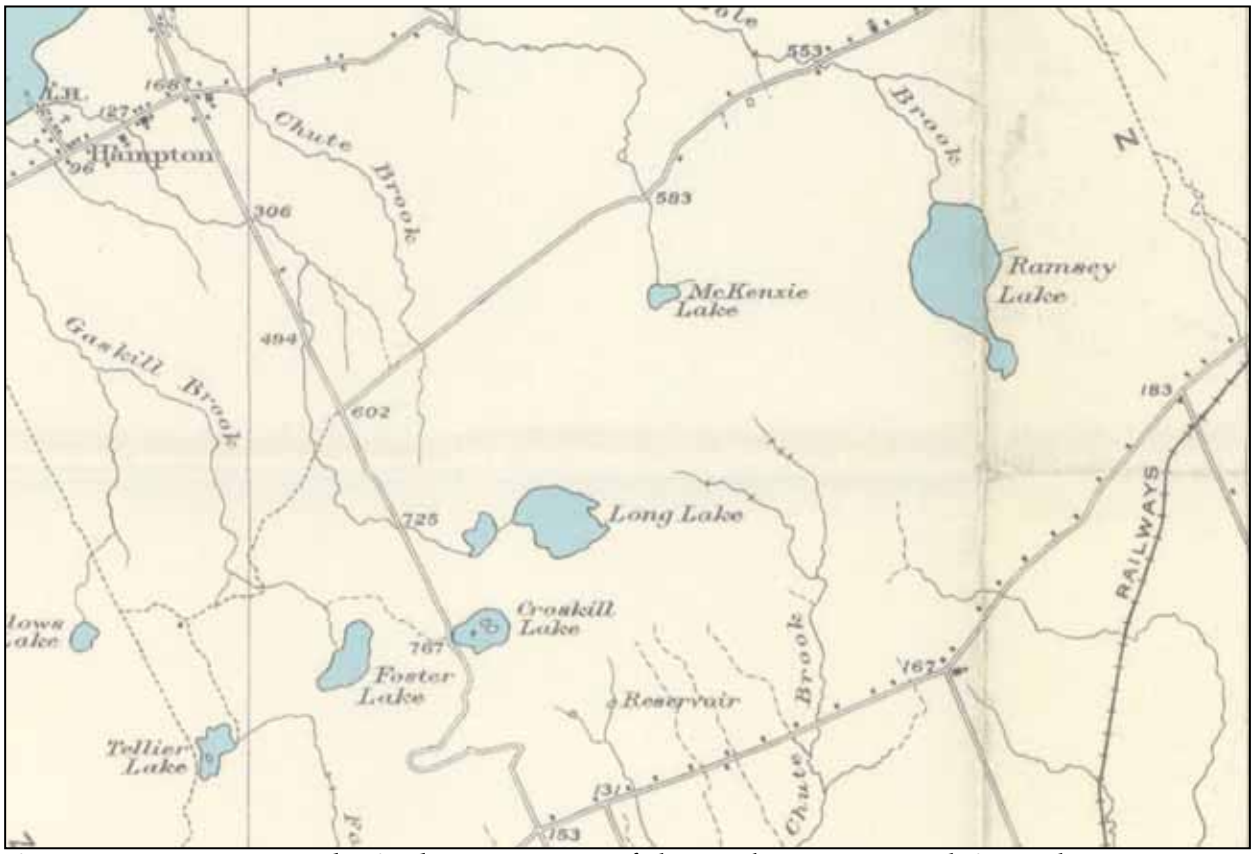


Figure 3.2-5: A 1930 geological survey map of the study area.[23] North is to the top.

4.0 FIELD RECONNAISSANCE

A field reconnaissance of the impact area was conducted on October 7th and 8th, 2010, by archaeologists Stephen Davis and Laura de Boer. The reconnaissance consisted of a walk-over survey of both the turbine locations and the proposed access roads, guided by GPS coordinates and in many cases by the flagging tape placed in trees by earlier surveyors for the project. The project's twelve turbines are to be located at coordinates provided in Table 1 below. Note that turbine sites 5 and 8 were eliminated prior to the

[23] Boyd et al. 1930.

field survey. The paths of proposed access roads were estimated during the field survey, or revealed by flagging tape, as GPS coordinates were unavailable.

Table 1: Coordinates for the twelve proposed turbine locations.

Turbine #	Turbine	Turbine
11	1181151	19821901
21	1181101	19815201
11	1189801	19819151
11	1191501	19815111
11	1190801	19810001
81	1185821	19811111
91	1191111	19828111
101	1180911	19828801
111	1188191	19821921
121	1185001	19821101
111	1189201	19821251
111	1188151	19811001

4.1 Turbine Locations

Much of the impact area occupies a uniform section of North Mountain's forest, consisting of mixed growth but dominated by hardwoods like maple and beech, with the occasional fir and birch. The trees are typically 60 years old or more, resulting in undergrowth that is far less dense than that of more recently logged areas.

Turbine 1 is located bordering a very recent clear cut, but is itself located in the hardwood forest described above (Plate 1). The ground slopes gently to the north. Turbines 2 and 3 (Plate 2) are likewise located in areas dominated by hardwood growth, the former with even less fir than many parts of the forest. Both sites are level overall, though the forest features hummocks that suggest the land was never plowed or used as pasture.

Turbine 4 is located in an imperfectly drained area dominated by fir, with some beech and maple present. Moss and ferns cover the ground, which is level but has not been plowed or otherwise impacted by historical settlement.

Turbine 6 is located on a gentle slope at the edge of a steep terrace. The forest consists of mixed mature hardwood and some young fir. A scattering of glacial erratics, up to approximately 1.5m in diameter, were noted on the terrace (Plate 3).

Like turbine 4, turbine 7 is located in a forest consisting mostly of fir. It is level and somewhat imperfectly drained, resulting in a thick covering of moss on the forest floor. To the north, a gentle slope leads gradually down from the turbine site and drains some of the excess water away.

The proposed location for turbine 9 is notably different than the other sites. It is located at the top of a rounded hill formed of glacier-shattered bedrock (Plate 4). The stone is extremely close to the surface throughout this area, and no human activity beyond some probable logging and an ATV road approximately 60 metres north were noted. The hill is forested by maple with some fir, and a great many blown-down trees were noted on the western slope.

Another poorly drained area is found around the proposed site of turbine 10, likely resulting from the extremely shallow nature of the bedrock. The site is immediately adjacent to an existing access road, which itself passes over sections of exposed bedrock. Beech, maple, fir, and birch are all present, as are ferns and some species of wetland grass. The surface is level overall but too hummocky to have been impacted by settlement or agriculture.

Turbine 11 is also in a poorly drained area, adjacent to an ATV trail that was completely waterlogged at the time of the survey. The usual beech, maple, and birch trees were found, as well as moss and ferns, but less fir was noted growing in the vicinity. Turbine 12 is located on a likewise level and imperfectly drained area, dominated by maple, beech, birch, and fir. Again, no evidence of cultural impact through settlement or agriculture was noted.

The area surrounding the proposed location of turbine 13 is dominated by fir growth, but includes some beech and maple (Plate 5). The site is on a ridge and bordered by a steep 10m drop to a lower level of forest. The ridge's surface is itself reasonably level, but shows no indication that it was used for human occupation and settlement.

Finally, turbine 14 is located in a mixed hardwood forest on a gradual eastern slope. It is approximately 200 metres from a stream that runs between McKenzie Lake and Snow Lake. This watercourse was the largest and most permanent of those noted throughout the survey, but it is far too small and rough to allow navigation via canoe.

5.0 RESULTS AND DISCUSSION

Although several terrace features were noted in the course of the survey, none were adjacent to waterways that would allow for navigation or abundant subsistence resources. Due to this inaccessibility, the probability of encountering First Nations resources is considered to be minimal.

The same is true of historical resources. There is no evidence, documentary or artifactual, to suggest that the impact area was used for historic settlement, agriculture, or any activity other than small-scale logging practices. Although the presence of Black Loyalist settlers is known to have been adjacent to the impact area, they do not appear to have settled within the impact area itself.

Besides minor differences in predominant tree species, the entire study area appears to be uniform throughout, suggesting that no archaeological resources of significance are to be found within the forest surrounding the study area, where as indicated above staging areas, temporary workspaces, and transmission lines will be placed.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Through a documentary, archival, and field survey, this assessment has indicated that no heritage resources of significance are likely to be impacted by the proposed wind farm project. No further mitigation is recommended at this time.

Avoidance is the preferred method of mitigation in all instances where archaeological resources are present. This investigation has indicated that nothing of archaeological significance will be impacted during construction activities. However, should any archaeological resources be encountered during ground disturbance activities, it is recommended that all activity cease and the Coordinator of Special Places, Laura Bennett (902-424-6475) be contacted immediately to determine a suitable method of mitigation.

7.0 REFERENCES CITED

Boyd, W H, Chipman, K G, Butterworth, J V, Faribault, E R, and Mclean, S C. 1930. Geological Survey of Canada, "A" Series Map 253A: Bridgetown Sheet.

Church, Ambrose F. 1876. *Topographical Township Map of Annapolis County*. Halifax: A. F. Church & Co.

Confederacy of Mainland Mi'kmaq. 2007. *Kekina'muek: Learning about the Mi'kmaq of Nova Scotia*. Truro: Eastern Woodland Publishing.

Coward, E.R. 1955. Bridgetown Nova Scotia: Its History to 1900. Kentville: Kentville Publishing Co.

Cummins Map Company. n.d. Cummins Rural Directory Map – Annapolis County. Toronto: Cummins Map Company.

Davis, Derek and Sue Browne. 1996. *Natural History of Nova Scotia, Volume II: Theme Regions*. Halifax: Nimbus Publishing and Nova Scotia Museum.

Dexter, Janetta M. 1983. Pioneers of the Mountain, Vol. 1. Hand-typed manuscript on file, NSARM. MG4 Vol. 293 #1-3

Library of Congress. "Plan of the River of Annapolis Royal in Nova Scotia," 1757. G3422.A5 1757 .P5.

Lovell, John. 1871. Lovell's Province of Nova Scotia Directory for 1871. Montreal : John Lovell. http://www.collectionscanada.gc.ca/databases/canadiandirectories/

Province of Nova Scotia. 2006. Crown Land Grants Index Sheet #68.

Public Archives of Nova Scotia. 1967. Place-Names and Places of Nova Scotia. Halifax: Public Archives of Nova Scotia.

PLATES

Plate 1: The proposed location of turbine 1, looking west from a clear-cut area into the tree line where flagging tape was found confirming the turbine site.

Plate 2: Turbine location 3, looking southwest.

Plate 3: A glacial erratic noted near the turbine 6 site. Looking east.

Plate 4: The proposed site of turbine 9, at the top of a rocky hill. Looking east.

Plate 5: The marked site of turbine 13, looking east over a small hump towards the drop 10m to a lower level.

APPENDIX A: HERITAGE RESEARCH PERMIT

NOVA SCOTIA
Tourism, Culture and Heritage

Heritage Division

Special Places Protection Act, R.S.N.S. 1989

Heritage Research Permit (Archaeology)

(Original becomes Permit when approved by the Executive Director of the Heritage Division)

Office Use Only
Permit Number:
A2010NS70

Greyed out fields will be made publically available. Please choose your project name accordingly

Surname de Boer	First Name Laura
Project Name Hampton Mountain Wind Power Project	
Name of Organization Davis MacIntyre and Associates	
Representing (if applicable)	
Permit Start Date 1 July 2010	Permit End Date 30 September 2010

General Location: Annapolis County

Specific Location: *(cite Borden numbers and UTM designations where appropriate and as described separately in accordance with the attached Project Description. Please refer to the appropriate Archaeological Heritage Research Permit Guidelines for the appropriate Project Description format)*

Hampton Mountain, West of Bridgetown in the North Mountain range.

Permit Category:
Please choose one:

☐ Category A - Archaeological Reconnaissance
☐ Category B - Archaeological Research
☒ Category C - Archaeological Resource Impact Assessment

☒ I certify that I am familiar with the provisions of the *Special Places Protection Act* of Nova Scotia and that I have read, understand and will abide by the terms and conditions listed in the Heritage Research Permit Guidelines for the above noted category.

☐ I currently hold a treasure trove license or pending application for a licence related to this Heritage Research Permit.

Signature of applicant Laura de Boer	Date 29 June 2010
Approved by Executive Director	Date July 2/10

DAVIS MACINTYRE & ASSOCIATES
ARCHAEOLOGICAL CONSULTANTS

OFFICE
109 JOHN STEWART DRIVE
DARTMOUTH, NOVA SCOTIA B2W 4J7

PHONE
902.209.4004

FAX
902.444.2854

EMAIL
DARCH@EASTLINK.CA

WEBSITE
WWW.DAVISMACINTYRE.COM

HST # 845064856

September 20, 2010

Laura Bennett
Coordinator, Special Places
Stewardship Programs and Promotion
Tourism, Culture and Heritage
1747 Summer Street
Halifax, NS B3H 3A6

Dear Ms. Bennett,

I am writing to request an amendment to Heritage Research permit A2010NS70. Our client has requested a field evaluation of the site in addition to a desktop study. This amendment would therefore allow for a field reconnaissance of the proposed turbines and access roads of the Hampton Mountain Wind Power Project. I realize that the permit is in my name, and therefore please be assured that Dr. Stephen Davis will accompany me for the field component of this project.

Regards,

Laura de Boer
Senior Archaeologist

NOVA SCOTIA
Tourism, Culture and Heritage
Heritage Division

1747 Summer Street
Halifax, Nova Scotia
Canada B3H 3A6

902 424-7344 t
902 424-0560 f
www.gov.ns.ca

September 27, 2010

Laura de Boer
Senior Archaeologist
Davis MacIntyre & Associates
109 John Stewart Drive
Dartmouth, NS B2W 4J7

Dear Ms. de Boer:

RE: Heritage Research Permit A2010NS70

Thank you for submitting your request for amendment to Heritage Research Permit A2010NS70, Hampton Mountain Wind Power Project. Heritage Division staff have reviewed your request, and find the amendment acceptable as submitted.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

Laura Bennett
Coordinator, Special Places