BOW LAKE WIND FARM

NATURAL HERITAGE ASSESSMENT AND ENVIRONMENTAL IMPACT STUDY

Appendix H-5

BOW LAKE WIND F RM

NATURAL HERITAG : ASSESSMENT AND ENVIRONMEN 'AL IMPACT STUDY

APPENDIX H-5 - Table H-5.1

Table H-5.1: Gene alized Candidate Significant Wildlife Habitat				
Feature I)	Size (a) ¹	Composition a 1d Attributes	Figure #	
Boreal Bedstra				
although I amy species' r⊣nge t drainage /as po (sugar mable – microhabitat. T	stream-side co to bottomland loor due to und yellow bi ch fo his micronabita	Boreal Bedstraw was most commonly associated with moist to wet soil, of conditions were observed. This affinity to moist conditions generally restrict habitat, intermittent stream corridors or small moist upland depressions werlying bedrock. Specimens were most frequently observed in G058Tt correst), situated within small, poorly drained depressions that provided swatat was also closely associated with G129Tt communities (Organic Rich Cower not always present in seemingly suitable conditions.	ted the here surface ommunities amp	
BBH-10	3.2	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.8	
BBH-12	0.4	G129- Organic Rich Conifer Swamp	5.3	
BBH-15	1.3	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.4	
BBH-17	0.1	G058-Dry to Fresh, Coarse: Maple H ardwood. Suitable habitat is more likely to occur in small, moist inclusions or intermittent stream corridors within this community.	5.6	
BBH-19	6.8	G058-Dry to Fresh, Coarse: Maple H ardwood. Suitable habitat is more likely to occur in small, moist inclusions or intermittent stream corridors within this community.	5.4	
BBH-20	5.3	G058-Dry to Fresh, Coarse: Maple H ardwood. Suitable habitat is more likely to occur in small, moist inclusions or intermittent stream corridors within this community.	5.5	
BBH-21	0.5	G129- Organic Rich Conifer Swamp	5.4	
BBH-30	0.6	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.9	
BBH-31	0.5	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.9	
BBH-35	0.6		5.3	
BBH-36	5.3		5.4	
BBH-37	0.6	G129- Organic Rich Conifer Swamp	5.4	
BBH-39	0.9		5.5	
BBH-45	0.9	G129- Organic Rich Conifer Swamp	5.6	
BBH-49	8.0		5.7	
BBH-50	1.1	G129- Organic Rich Conifer Swamp	5.7	
BBH-58	3.6		5.7	
BBH-62	0.1	G058- Dry to Fresh, Coarse: Maple Hardwood	5.7	
BBH-65	0.1	G058-Dry to Fresh, Coarse: Maple H ardwood	5.6	
BBH-72	0.2	G058-Dry to Fresh, Coarse: Maple H ardwood	5.6	
BBH-77	0.1	G058-Dry to Fresh, Coarse: Maple H ardwood	5.6	
BBH-82	0.2	G058-Dry to Fresh, Coarse: Maple H ardwood	5.4	
BBH-83	0.2	G058-Dry to Fresh, Coarse: Maple H ardwood	5.4	
BBH-85	0.2	G058- Dry to Fresh, Coarse: Maple Hardwood	5.7	
BBH-93	0.2		5.6	
BBH-95	0.4	G058- Dry to Fresh, Coarse: Maple Hardwood	5.6	
BBH-100	0.0		5.4	

BOW LAKE WIND F RM

NATURAL HERITAG : ASSESSMENT AND ENVIRONMEN 'AL IMPACT STUDY APPENDIX H-5 – Table H-5.1

Table H-5.1:		ed Candidate Significant Wildlife Habitat	
Feature I)	Size (a) ¹	Composition a 1d Attributes	Figure #
Braun's Holly	Fern Habitat		
		Braun's Holly Fern was consistently as sociated with rocky ravine	
streams, or stee	ep slopes with	rocky, vegetated conditions. Within the Study Area, it appeared	d to prefer fresh to mois
		ng slopes, it was often situated at mid to toe slope positions. The to be moist forests with exposed rock and topograp lic protection.	
		nd component. Within the Study Area, Braun's holly fern was o	
		r maple – yellow birch forest). Associa ed ground co er often inc	
	evergree i woo	d fern, northern lady fern, and interrupted fern.	
BHFH-6	3.2	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.8
BHFH-8	1.3	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.4
BHFH-11	6.8	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.4
BHFH-12	5.3	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.5
BHFH-22	0.6		5.3
BHFH-23	5.3		5.4
BHFH-24	0.9		5.5
BHFH-37	0.2	G158- Cliff	5.3
BHFH-41	0.3	G129- Organic Rich Conifer Swamp	5.5
Canada /arble	er Habitat		
deciduous fores	sts with closed	The Canada Warbler is an interior forest species occupying der canopy, especially wet bottomlands of cedar or alder; and shru riparian habitats. The Canada Warble susually requires at least	bby undergrowth in coo
habitat (MNR, 2			
CWH-2	0.8	G129-Organic Rich Conifer Swamp	5.1
CWH-4	0.001	G067- Moist, Coarse: Spruce-Fir conifer	5.3
CWH-5	0.4	G067- Moist, Coarse: Spruce-Fir conifer	5.3
CWH-7	0.1	G129-Organic Rich Conifer Swamp	5.9
CWH-13	0.1	G129-Organic Rich Conifer Swamp	5.6
CWH-14	0.5	G129-Organic Rich Conifer Swamp	5.5
CWH-16	0.2	G129-Organic Rich Conifer Swamp	5.9
CWH-17	0.4	G129-Organic Rich Conifer Swamp	5.9
CWH-19	0.2	G129-Organic Rich Conifer Swamp	5.9
CWH-26	0.7	G067- Moist, Coarse: Spruce-Fir conifer	5.5
CWH-27	0.2	G129-Organic Rich Conifer Swamp	5.5
CWH-32	0.8	G129-Organic Rich Conifer Swamp	5.6
CWH-33	0.6	G129-Organic Rich Conifer Swamp	5.6
CWH-34	0.7	G129-Organic Rich Conifer Swamp	5.6
CWH-37	0.8	G129-Organic Rich Conifer Swamp	5.7
CWH-38	1.1	G129-Organic Rich Conifer Swamp	5.7
CWH-41	0.5	G129-Organic Rich Conifer Swamp	5.6
CWH-42	0.0	G129-Organic Rich Conifer Swamp	5.7
CWH-43	0.7		5.9
CWH-44	0.1		5.6
Marsh Bird Bre	eeding Habita	t	
landscapes. Ne	sting occurs in	Netlands for marsh bird species are very productive and rare in wetlands and all wetland habitats are to be considered as long	
water with emer	· · · · · · · · · · · · · · · · · · ·		le o
MBBH-1	0.9	G148-mineral Shallow Marsh	5.3

BOW LAKE WIND F RM

NATURAL HERITAG $\c :$ ASSESSMENT AND ENVIRONMEN "AL IMPACT STUDY

APPENDIX H-5 – Table H-5.1

Table H-5.1:	5.1: Gene alized Candidate Significant Wildlife Habitat			
Feature I)	Size (a)1	Composition a 1d Attributes	Figure #	
MBBH-2	0.4	G149-Organic Shallow Marsh	5.9	
MBBH-3	0.7	G142-Mineral Meadow Marsh	5.5	
MBBH-4	0.6	G149-Organic Shallow Marsh	5.5	
MBBH-5	0.2	G149-Organic Shallow Marsh	5.5	
MBBH-6	0.2	G149-Organic Shallow Marsh	5.5	
MBBH-7	1.1	G144-Organic Meadow Marsh	5.5	
MBBH-10	0.2	G149-Organic Shallow Marsh	5.9	
MBBH-11	0.5	G149-Organic Shallow Marsh	5.9	
MBBH-12	0.5	G149-Organic Shallow Marsh	5.9	
MBBH-13	1	G144-Organic Meadow Marsh	5.9	
MBBH-14	0.4	G149-Organic Shallow Marsh	5.9	
MBBH-15	0.2	G144-Organic Meadow Marsh	5.9	
MBBH-17	0.0	G144-Organic Meadow Marsh	5.6	
MBBH-18	0.5	G144-Organic Meadow Marsh	5.6	
MBBH-19	0.4	G149-Organic Shallow Marsh	5.6	
MBBH-20	6	G135-Organic Thicket Swamp,G194	5.9	
MBBH-21	2	G142N-Mineral Meadow Marsh	5.7	
MBBH-23	0.4	SWET-68, G142N - mineral meadow marsh	5.9	
MBBH-24	0.4	SWET-32, G146N - open shore fen	5.6	
Mountain Fir-m	noss Habitat		•	
	lopes elsewhe	Mountain fir-moss may occur on damp, acidic, igneous rocks in alpine zo ere, and along coast of Lake Superior. (Reznicek et al., 2011, Flora of N.	A. Editorial	
		G058-Dry to Fresh, Coarse: Maple H ardwood	5.3 5.7	
MFH-10 Oval-leav∋d Bi	4.1	G058-Dry to Fresh, Coarse: Maple H ardwood	5.7	
adjacent t) coni 2011, Flora of N and G129.	ferous stands I.A. Editorial c	Oval-leaved bilberry may be present in moist coniferous woods, transition, cut-over coniferous woods, verges of road cuts, or mixed woods (Rezniconmittee, 1993). Suitable habitat is lo ated in ELC communities G070, G	cek <i>et al.</i> , 6067, G224,	
OBH-26	5.3		5.4	
OBH-29	0.9		5.5	
OBH-37	0.5		5.6	
OBH-58	0.2	G058- Dry to Fresh, Coarse: Maple Hardwood	5.7	
OBH-60	0.2	G058- Dry to Fresh, Coarse: Maple Hardwood	5.6	
OBH-62	0.2	G058- Dry to Fresh, Coarse: Maple Hardwood	5.3	
OBH-64	0.0	G058- Dry to Fresh, Coarse: Maple Hardwood	5.4	
OBH-74	0.4		5.3	
OBH-76	0.1		5.6	
OBH-77	0.5		5.4	
OBH-84	0.6		5.4	
OBH-89	0.8	G129- Organic Rich Conifer Swamp	5.6	
OBH-90	0.9	G129- Organic Rich Conifer Swamp	5.6	
OBH-91	0.7	G129- Organic Rich Conifer Swamp	5.6	
OBH-92	0.8	G129- Organic Rich Conifer Swamp	5.7	
OBH-93	1.1	G129- Organic Rich Conifer Swamp	5.7	

BOW LAKE WIND F RM

NATURAL HERITAG : ASSESSMENT AND ENVIRONMEN 'AL IMPACT STUDY

APPENDIX H-5 – Table H-5.1

Table H-5.1:		ed Candidate Significant Wildlife Habitat	
Feature I)	Size (a)1	Composition a 1d Attributes	Figure #
OBH-97	3.6	G129- Organic Rich Conifer Swamp	5.7
OBH-99	0.1	G129- Organic Rich Conifer Swamp	5.
Olive-sid∍d Fl	ycatcher Habi	itat	
		The Olive-sided Flycatcher prefers se ii-open, conifer forest, particularly s	
		urns with dead trees for perching are also important components of their h	
		ded Flycatcher breeds in the boreal forest, where it uses coniferous trees	to support its
ornaped ne OFH-2	st (Cadm in et	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	E 4
OFH-3	6.3		5.4 5.5
		G052-dry to Fresh, Coarse: Spruce-Fir Conifer	
OFH-7	1.3	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.4
OFH-8	0.6	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.9
OFH-9	0.5	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.9
OFH-11	1.8	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.6
Quill Spike-ru			
General Habita (Voss <i>et a¹.</i> , 20		Quill spike-rush habitat includes moist, sandy bare d pressions in Jack pi	ne stands.
QSH-3	0.7	G142-Mineral Meadow Marsh	5.5
QSH-4	0.6	G149-Organic Shallow Marsh	5.5
QSH-5	0.2	G149-Organic Shallow Marsh	5.5
QSH-6	0.2	G149-Organic Shallow Marsh	5.5
QSH-7	1.1	G144-Organic Meadow Marsh	5.5
QSH-8	0.2	G144-Organic Meadow Marsh	5.4
QSH-17	0.0	G144-Organic Meadow Marsh	5.6
QSH-18	0.5	G144-Organic Meadow Marsh	5.6
QSH-19	0.4	G152- Open Water Marsh: Organic	5.6
QSH-20	1.6	G136-Sparse Treed Fen	5.6
QSH-21	0.4	G146-Open Shore Fen	5.6
QSH-24	4.9	G224-Mineral Rich Conifer Swamp	5.4
	acula (Snake:	-	
		For all snakes, habitat may be found in any forested ∋cosite in Central On	tario other
		wing Community Types may be directly related to snake hibernacula: Tale	
		Ivar. Hibernation occurs in sites located below frost lines in burrows, rock	
oroken and fiss	sured rock and	other natural features.	
SH-1	0.3	G058-Dry to Fresh, Coarse: Maple H ardwood, rock face, approximately 10m tall	5.5
SH-3	0.3	G058-Dry to Fresh, Coarse: Maple H ardwood, two large boulders	5.4
SH-6	0.3	G058-Dry to Fresh, Coarse: Maple H ardwood, large boulder, 5m by 5m,	5.4
		unique in landscape	
SH-7	0.3	G058-Dry to Fresh, Coarse: Maple H ardwood, fractured bedrock feature	5.4
SH-10	0.3	G058-Dry to Fresh, Coarse: Maple H ardwood	5.3
SH-12	0.3		5.6
		along slope, many crevices leading u nderground	
Turtle Overwi	ntering A ea		
		ring turtles includes open aquatic features with a mu k bottom which do not meets these conditions and may be suitable habitat for overwintering tur	
TWA-2	2.6	OA >1m in depth, with muck bottom	5.4

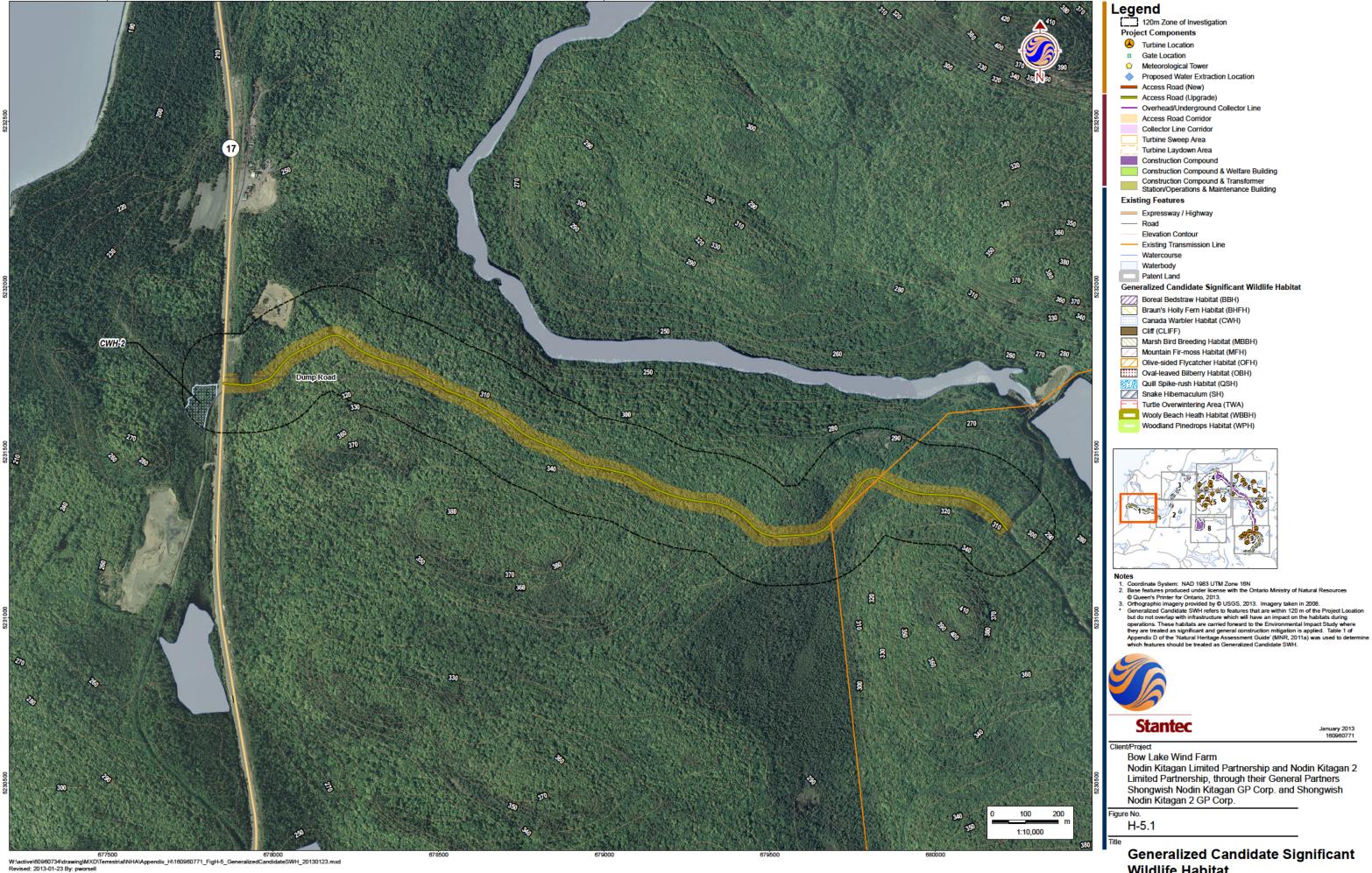
BOW LAKE WIND F RM

NATURAL HERITAG: ASSESSMENT AND ENVIRONMEN 'AL IMPACT STUDY

APPENDIX H-5 - Table H-5.1

Table H-5.1:	Gene alize	ed Candidate Significant Wildlife Habitat	
Feature I)	Size (a) ¹	Composition a 1d Attributes	Figure #
TWA-3	5.7	OA >1m in depth, with muck bottom	5.4
TWA-5	2.3	OA >1m in depth, with muck bottom	5.6
Wooly Beach F	leath Habitat		
		Vooly beach heath may occur on sandy or silty beaches, on sand pla (Reznicek <i>et al.</i> 2011, Flora of N.A. Editorial committee, 1993).	ins, or in sandy
WBHH-2	6.1	G049-Dry to Fresh, Coarse, Jack Pine-Black Spruc : Dominated	5.8
WBHH-4	4.1	G049-Dry to Fresh, Coarse, Jack Pine-Black Spruc : Dominated	5.8
Woodlan Pine	Drops labit	at	
also hemlock, s	pruce, fir, white	Voodland pine drops are nearly always in habitats with conifers (espe e-cedar), in dry-mesic (usually sandy or rocky) soil, often with commo znicek et al., 2011, Flora of N.A. Editorial committee, 1993).	
WPH-11	1.3	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.4
WPH-12	0.4	G055-Dry to Fresh, Coarse: Aspen-Birch Hardwood	5.6
WPH-15	1.6	G014-Very Shallow, Dry to Fresh: Conifer	5.6
WPH-17	6.8	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.4
WPH-18	6.3	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.5
WPH- :6	0.6	G052-dry to Fresh, Coarse: Spruce-Fir Conifer	5.3
WPH- :7	1.1	G055-Dry to Fresh, Coarse: Aspen-Birch Hardwood	5.5
Woodlan ∣ Rap	tor Nesting H	abitat	
forests or conife	er plantations, v	Voodland raptors may be found in all forested ELC community types woodlands or forest stands. Stick nests may be found in a variety of i or mixed forests in the tops or crotches of trees.	
WRNH-2	3.1		5.4
Cliff and falus	Habitat		
		Cliffs and Talus slopes in Ecoregion 5E are primarily Precambrian room can vary from patchy and barren to tree cover, bulless than 60%.	ck and typically
CLIF:	n/a	G158-Cliff	5.3
Uhler's S ındra	igon		
		Suitable habitat for Uhler's Sundragon includes clear, slow-moving foow acidity (Jones <i>et al.</i> , 2008; Dunkle, 2000).	rest streams,
UHLS	n/a		

¹ Area inclu les ecosite and radius.



Wildlife Habitat



Project Components

Turbine Location

Gate Location

Meteorological Tower

Proposed Water Extraction Location

Access Road (New) Access Road (Upgrade)

Overhead/Underground Collector Line

Access Road Corridor

Collector Line Corridor Turbine Sweep Area

Turbine Laydown Area

Construction Compound

Construction Compound & Welfare Building Construction Compound & Transformer Station/Operations & Maintenance Building

Existing Features

Expressway / Highway

---- Road

Elevation Contour

- Existing Transmission Line

Watercourse Waterbody

Patent Land

Generalized Candidate Significant Wildlife Habitat

Boreal Bedstraw Habitat (BBH)

Braun's Holly Fern Habitat (BHFH) Canada Warbler Habitat (CWH)

Cliff (CLIFF)

Marsh Bird Breeding Habitat (MBBH) Mountain Fir-moss Habitat (MFH)

Olive-sided Flycatcher Habitat (OFH) Oval-leaved Bilberry Habitat (OBH)

Quill Spike-rush Habitat (QSH) Snake Hibernaculum (SH)

Turtle Overwintering Area (TWA) Wooly Beach Heath Habitat (WBBH)

Woodland Pinedrops Habitat (WPH)



Notes

1. Coordinate System: NAD 1983 UTM Zone 16N

2. Base features produced under license with the Ontario Ministry of Natural Resources

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Generalized Candidate SWH refers to features that are within 120 m of the Project Location but do not overlap with infrastructure which will have an impact on the habitats during operations. These habitats are carried forward to the Environmental Impact Study where they are treated as significant and general construction mitigation is applied. Table 1 of Appendix D of the "Natural Heritage Assessment Guide" (MNR, 2011a) was used to determine which features should be treated as Generalized Candidate SWH.

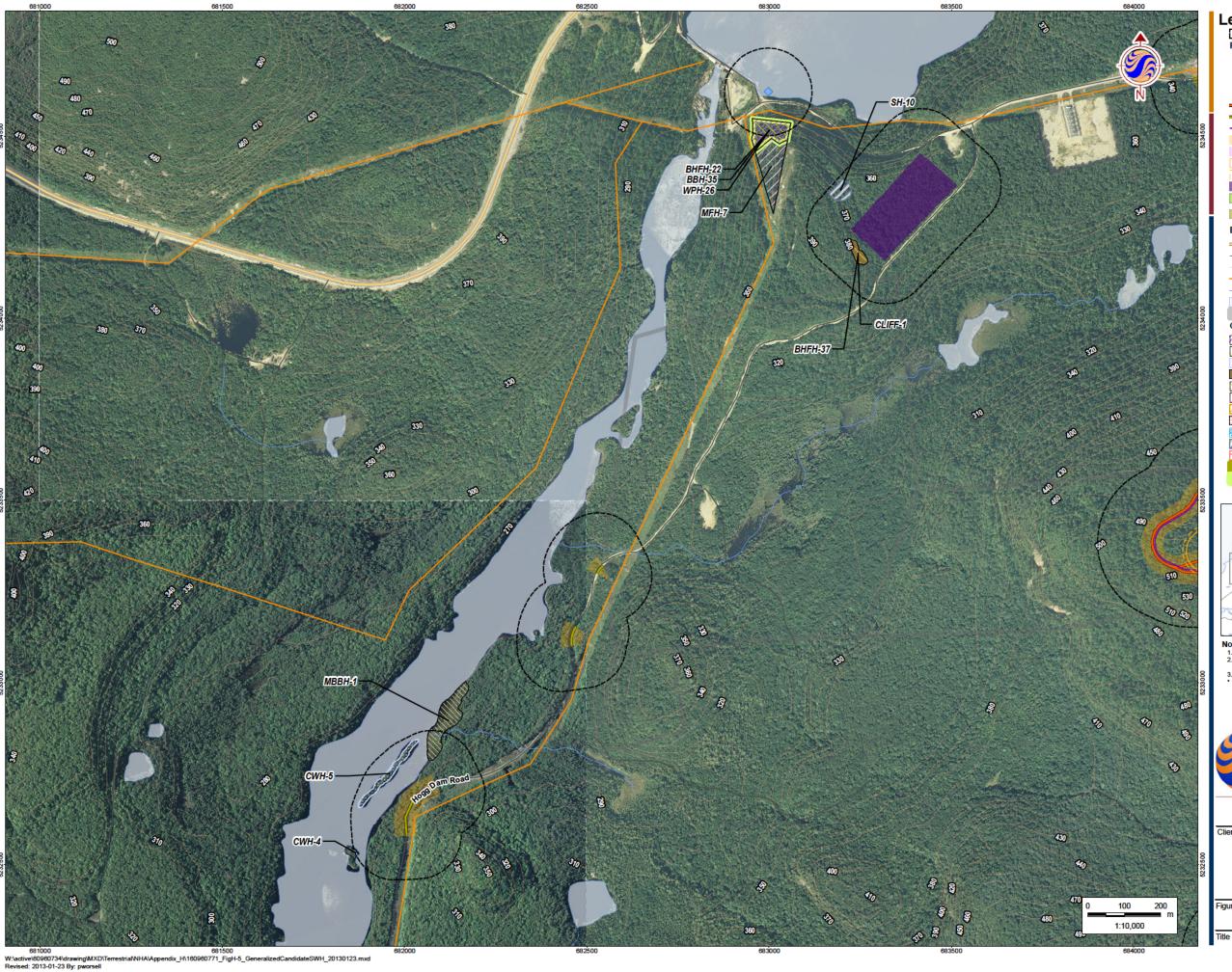


Stantec

Bow Lake Wind Farm

Nodin Kitagan Limited Partnership and Nodin Kitagan 2 Limited Partnership, through their General Partners Shongwish Nodin Kitagan GP Corp. and Shongwish Nodin Kitagan 2 GP Corp.

H-5.2



Project Components

Turbine Location

Gate Location

 Meteorological Tower Proposed Water Extraction Location

Access Road (New)

Access Road (Upgrade) Overhead/Underground Collector Line

Access Road Corridor

Collector Line Corridor

Turbine Sweep Area

Turbine Laydown Area

Construction Compound

Construction Compound & Welfare Building Construction Compound & Transformer Station/Operations & Maintenance Building

Existing Features

Expressway / Highway

---- Road

Elevation Contour

Existing Transmission Line

Watercourse Waterbody

Patent Land

Generalized Candidate Significant Wildlife Habitat

Boreal Bedstraw Habitat (BBH)

Braun's Holly Fern Habitat (BHFH) Canada Warbler Habitat (CWH)

Cliff (CLIFF)

Marsh Bird Breeding Habitat (MBBH) Mountain Fir-moss Habitat (MFH)

Olive-sided Flycatcher Habitat (OFH)

Oval-leaved Bilberry Habitat (OBH) Quill Spike-rush Habitat (QSH)

Snake Hibernaculum (SH)

Turtle Overwintering Area (TWA)

Wooly Beach Heath Habitat (WBBH) Woodland Pinedrops Habitat (WPH)



Notes

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4. Generalized Candidate SWH refers to features that are within 12D m of the Project Location but do not overlap with infrastructure which will have an impact on the habitats during operations. These habitats are carried forward to the Environmental Impact Study where they are treated as significant and general construction mitigation is applied. Table 1 of Appendix D of the 'Natural Heritage Assessment Guide' (MNR, 2011a) was used to determine which features should be treated as Generalized Candidate SWH.

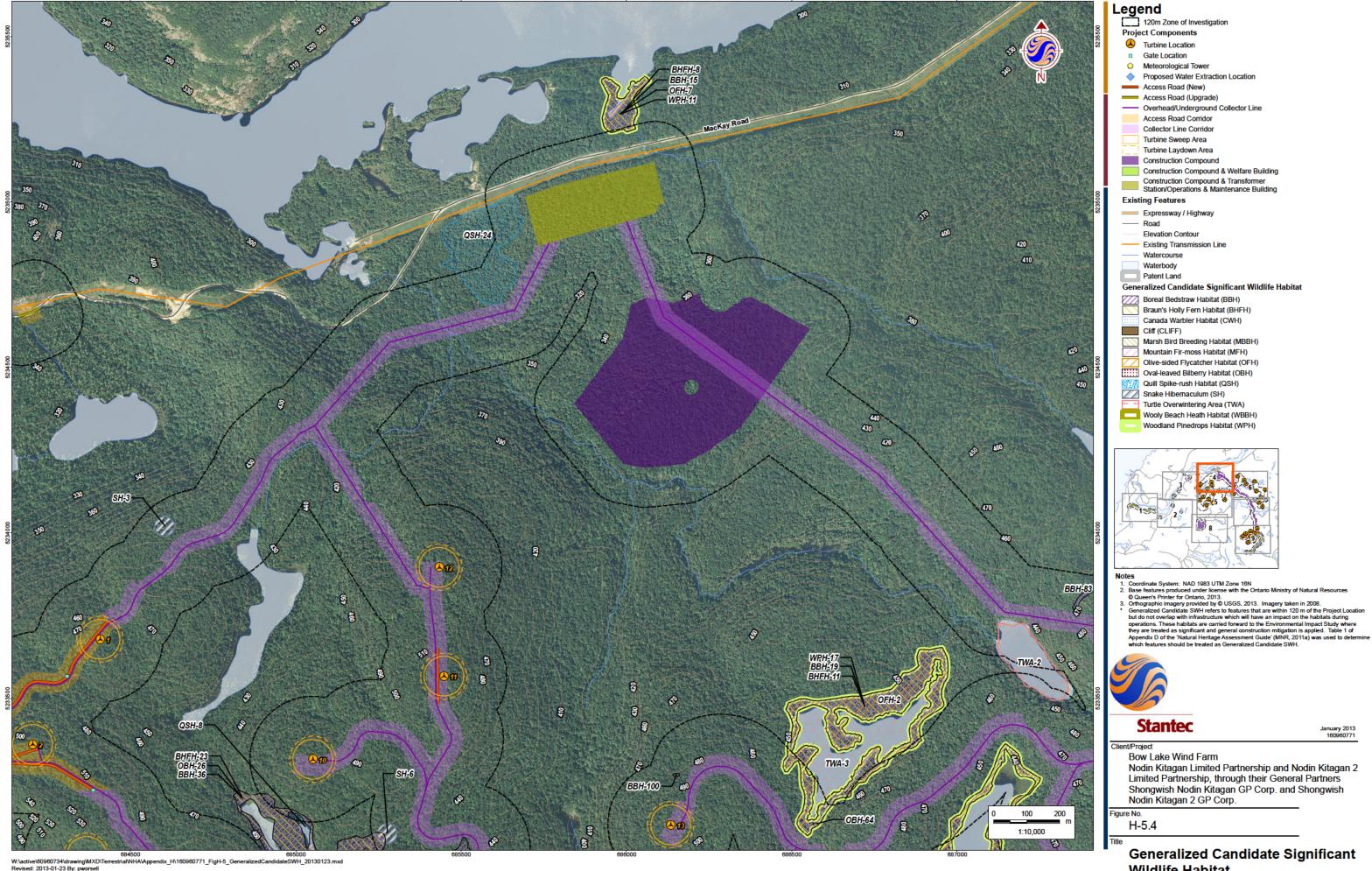


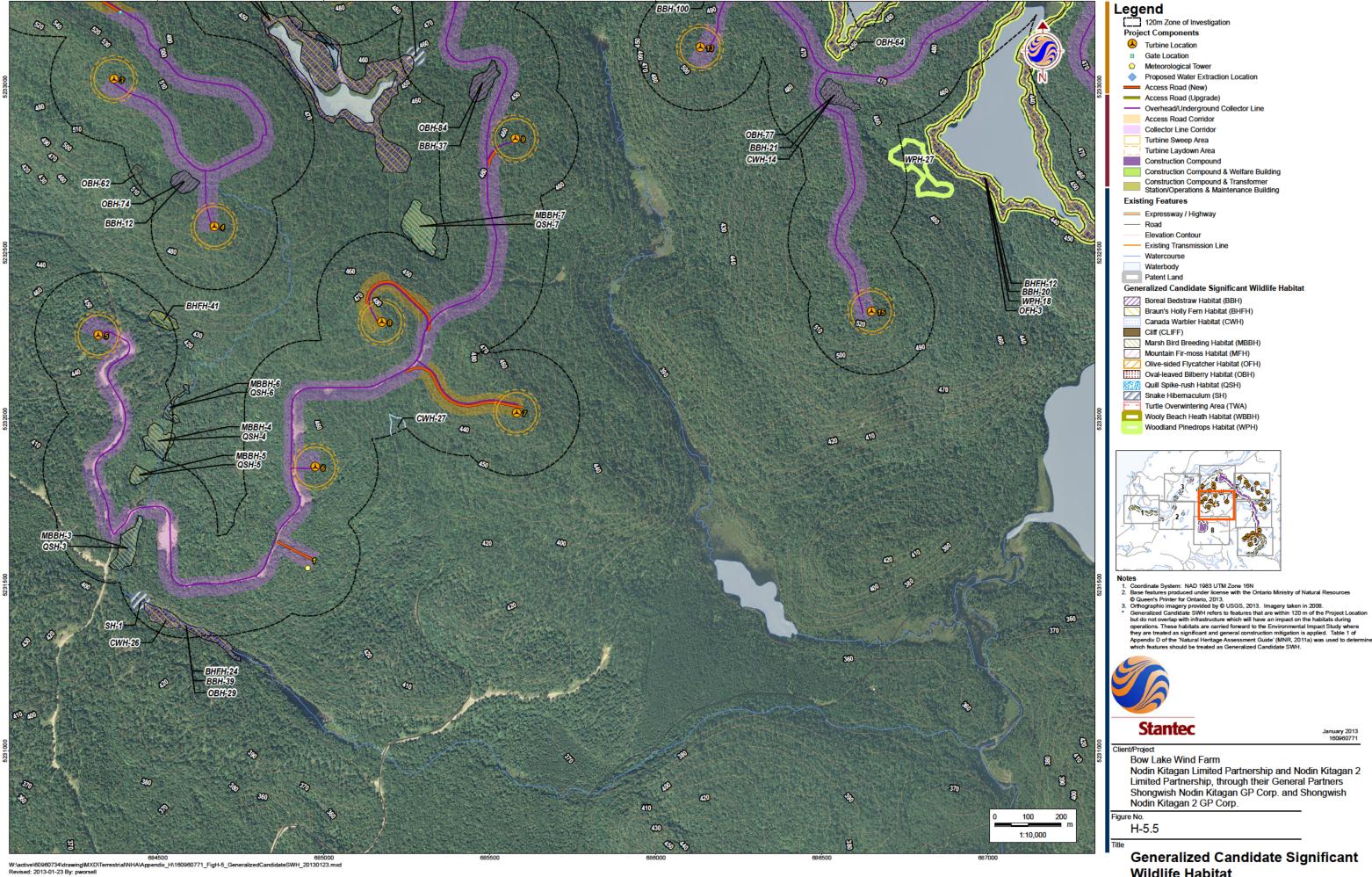
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Bow Lake Wind Farm

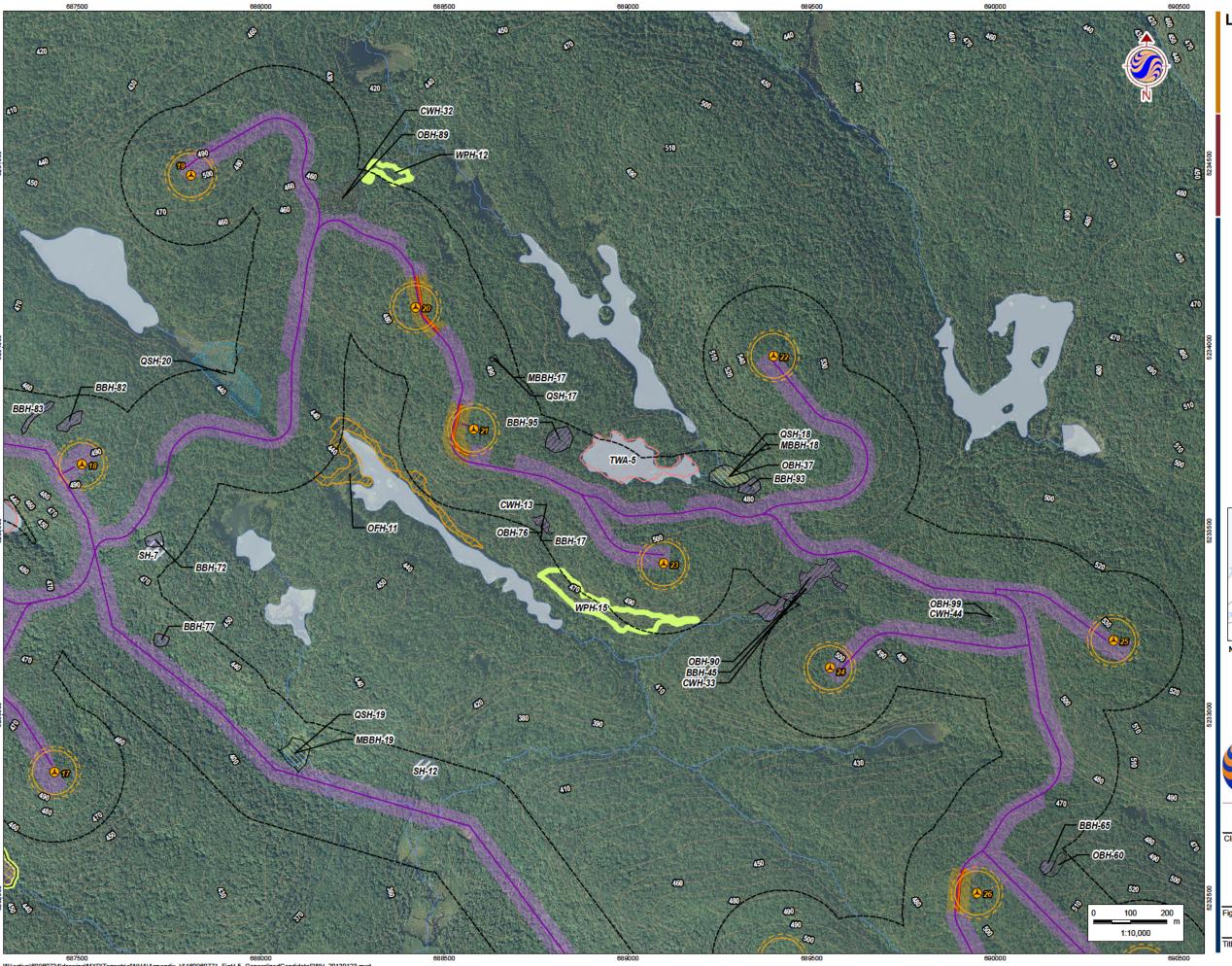
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H-5.3





Wildlife Habitat



Project Components

Turbine Location

Gate Location

Meteorological Tower

Proposed Water Extraction Location Access Road (New)

Access Road (Upgrade)

Overhead/Underground Collector Line

Access Road Corridor Collector Line Corridor

Turbine Sweep Area

Turbine Laydown Area

Construction Compound

Construction Compound & Welfare Building Construction Compound & Transformer Station/Operations & Maintenance Building

Existing Features

Expressway / Highway

---- Road

Elevation Contour

Existing Transmission Line

Watercourse Waterbody

Patent Land

Generalized Candidate Significant Wildlife Habitat

Boreal Bedstraw Habitat (BBH)

Braun's Holly Fern Habitat (BHFH) Canada Warbler Habitat (CWH)

Cliff (CLIFF)

Marsh Bird Breeding Habitat (MBBH) Mountain Fir-moss Habitat (MFH)

Olive-sided Flycatcher Habitat (OFH)

Oval-leaved Bilberry Habitat (OBH) Quill Spike-rush Habitat (QSH)

Snake Hibernaculum (SH)

Turtle Overwintering Area (TWA) Wooly Beach Heath Habitat (WBBH)

Woodland Pinedrops Habitat (WPH)



Notes

1. Coordinate System: NAD 1983 UTM Zone 18N

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Bow Lake Wind Farm

Nodin Kitagan Limited Partnership and Nodin Kitagan 2 Limited Partnership, through their General Partners Shongwish Nodin Kitagan GP Corp. and Shongwish Nodin Kitagan 2 GP Corp.

H-5.6



Project Components

Turbine Location

Gate Location

 Meteorological Tower Proposed Water Extraction Location

Access Road (New)

Access Road (Upgrade)

Overhead/Underground Collector Line

Access Road Corridor Collector Line Corridor

Turbine Sweep Area

Turbine Laydown Area

Construction Compound

Construction Compound & Welfare Building Construction Compound & Transformer Station/Operations & Maintenance Building

Existing Features

Expressway / Highway

---- Road

Elevation Contour

- Existing Transmission Line

Watercourse Waterbody

Patent Land

Generalized Candidate Significant Wildlife Habitat

Boreal Bedstraw Habitat (BBH)

Braun's Holly Fern Habitat (BHFH) Canada Warbler Habitat (CWH)

Cliff (CLIFF)

Marsh Bird Breeding Habitat (MBBH)

Mountain Fir-moss Habitat (MFH) Olive-sided Flycatcher Habitat (OFH)

Oval-leaved Bilberry Habitat (OBH)

Quill Spike-rush Habitat (QSH) Snake Hibernaculum (SH)

Turtle Overwintering Area (TWA)

Wooly Beach Heath Habitat (WBBH)

Woodland Pinedrops Habitat (WPH)



Notes

1. Coordinate System: NAD 1983 UTM Zone 16N

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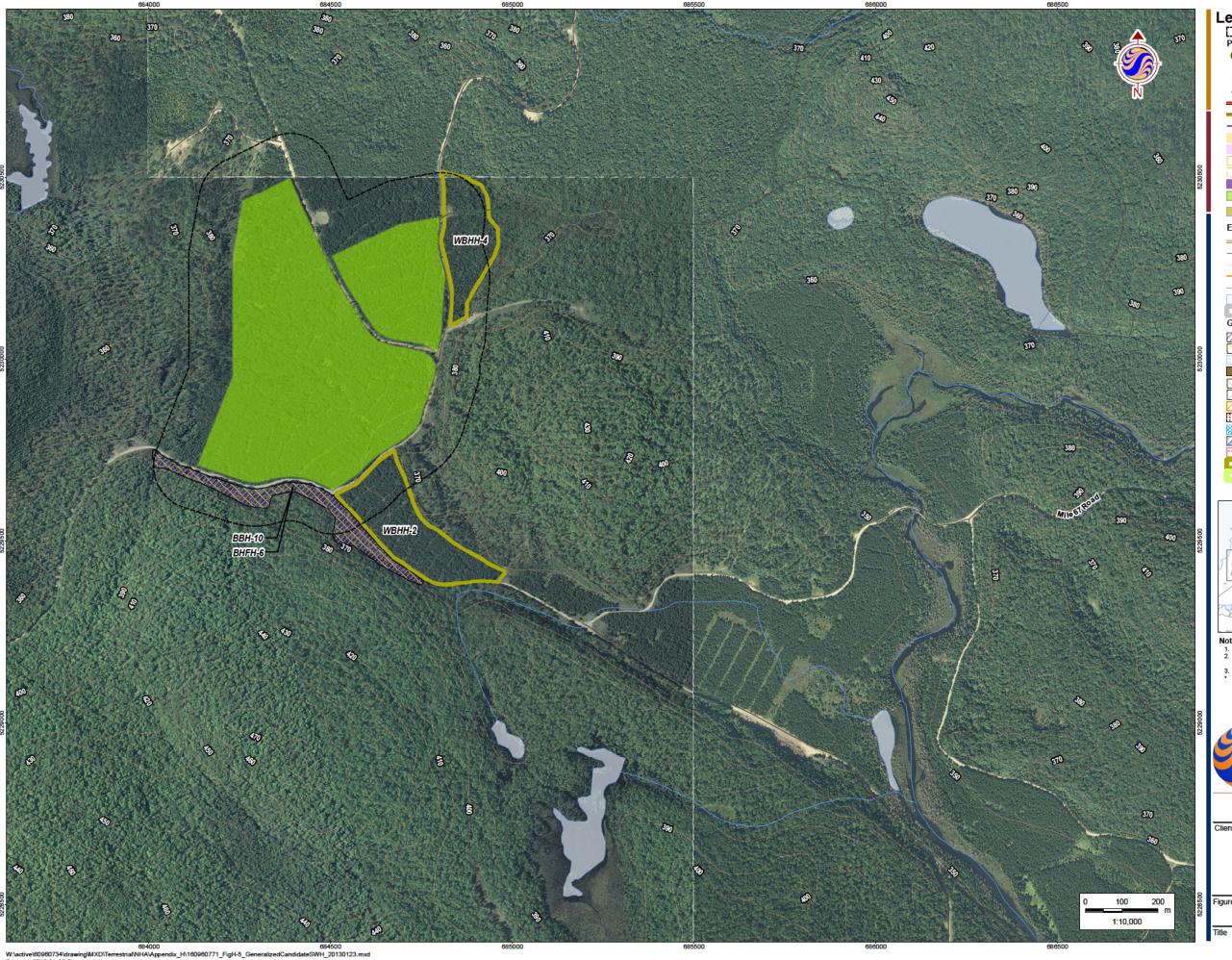


Stantec

Bow Lake Wind Farm

Nodin Kitagan Limited Partnership and Nodin Kitagan 2 Limited Partnership, through their General Partners Shongwish Nodin Kitagan GP Corp. and Shongwish Nodin Kitagan 2 GP Corp.

H-5.7



Project Components

Turbine Location

Gate Location

 Meteorological Tower Proposed Water Extraction Location

Access Road (New)

Access Road (Upgrade)

--- Overhead/Underground Collector Line Access Road Corridor

Collector Line Corridor

Turbine Sweep Area

Turbine Laydown Area

Construction Compound

Construction Compound & Welfare Building Construction Compound & Transformer Station/Operations & Maintenance Building

Existing Features

Expressway / Highway

---- Road

Elevation Contour

Existing Transmission Line

Watercourse Waterbody

Patent Land

Generalized Candidate Significant Wildlife Habitat

Boreal Bedstraw Habitat (BBH)

Braun's Holly Fern Habitat (BHFH) Canada Warbler Habitat (CWH)

Cliff (CLIFF)

Marsh Bird Breeding Habitat (MBBH)

Mountain Fir-moss Habitat (MFH) Olive-sided Flycatcher Habitat (OFH)

Oval-leaved Bilberry Habitat (OBH) Quill Spike-rush Habitat (QSH)

Snake Hibernaculum (SH)

Turtle Overwintering Area (TWA)

Wooly Beach Heath Habitat (WBBH) Woodland Pinedrops Habitat (WPH)



Notes

1. Coordinate System: NAD 1983 UTM Zone 16N

2. Base features produced under license with the Ontario Ministry of Natural Resources

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Generalized Candidate SWH refers to features that are within 120 m of the Project Location but do not overlap with infrastructure which will have an impact on the habitats during operations. These habitats are carried forward to the Environmental Impact Study where they are treated as significant and general construction mitigation is applied. Table 1 of Appendix D of the Natural Hentage Assessment Guide' (MNR, 2011a) was used to determine which features should be treated as Generalized Candidate SWH.

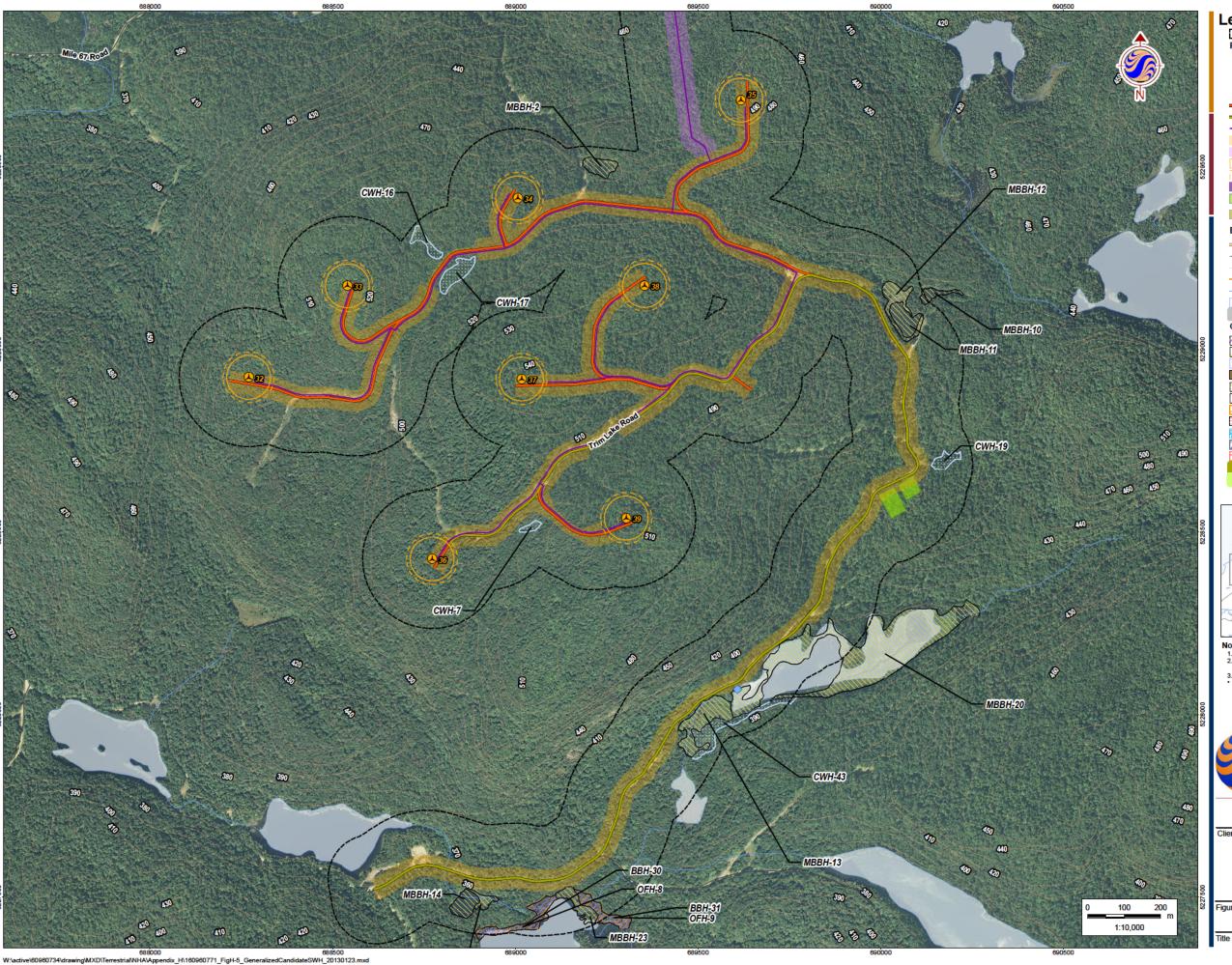


Stantec

Bow Lake Wind Farm

Nodin Kitagan Limited Partnership and Nodin Kitagan 2 Limited Partnership, through their General Partners Shongwish Nodin Kitagan GP Corp. and Shongwish Nodin Kitagan 2 GP Corp.

H-5.8



Project Components

Turbine Location

Gate Location

Meteorological Tower

Proposed Water Extraction Location Access Road (New)

Access Road (Upgrade)

Overhead/Underground Collector Line

Access Road Corridor Collector Line Corridor

Turbine Sweep Area

Turbine Laydown Area

Construction Compound

Construction Compound & Welfare Building Construction Compound & Transformer Station/Operations & Maintenance Building

Existing Features

Expressway / Highway

---- Road

Elevation Contour

Existing Transmission Line

Watercourse Waterbody

Patent Land

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Snake Hibernaculum (SH) Turtle Overwintering Area (TWA)

Wooly Beach Heath Habitat (WBBH)

Woodland Pinedrops Habitat (WPH)



Notes

1. Coordinate System: NAD 1983 UTM Zone 16N

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3. Orthographic imagery provided by © USGS, 2013. Imagery taken in 2008.

4. Generalized Candidate SWH refers to features that are within 12D m of the Project Location but do not overlap with infrastructure which will have an impact on the habitats during operations. These habitats are carried forward to the Environmental Impact Study where they are treated as significant and general construction mitigation is applied. Table 1 of Appendix D of the 'Natural Heritage Assessment Guide' (MNR, 2011a) was used to determine which features should be treated as Generalized Candidate SWH.



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