Project/Site: 15 XXII 14				ai ailu Worineast Roman
	O CONST	the state of the s	0	al and Northeast Region Sampling Date: 11 2 20
Applicant/Owner: R. II	1511 L'00 80	City	County: CHACTO	Sampling Date: 11/12/20
Applicant/Owner: Bull	5 S. Buckson	ergy, ccc		State: NY Sampling Point: DP-60
Landform (hillslope, terrace,	and billed	Yer Secti	ion, Township, Range	VILLEROVA
(, , , , , , , , , , , , , , , , , , ,	orest Thirtsipe	Local rel	lief (concave, convex,	none): CONCAVE Slope (%):2-3
Subregion (LRR or MLRA):		104 19 1145	7/	42.440212 Datum: 10 PD 8
Soil Map Unit Name: 8	list, S. Itlac	m 3 8 - 15%	sleman.	ADAM STORES IN LLOCAL
Are climatic / hydrologic con-	ditions on the site typical	al for this time of year?	/oc X Na	(If no, explain in Remarks.)
Alle Vegetation _ (30), Soil	100, or Hydrology /	Vr) significantly dietur	hada s	
Are Vegetation No., Soil	No , or Hydrology /	No naturally problem:		mal Circumstances" present? Yes X No
				d, explain any answers in Remarks.)
COMMAN OF FINDI	NGS – Attach site	map showing sam	ipling point loca	tions, transects, important features, etc
Hydrophytic Vegetation Pre	esent? Yes	No	Is the Sampled Are	
Hydric Soil Present?	Yes X	No	within a Wetland?	Yes_X No
Wetland Hydrology Present		No		and the second s
Remarks: (Explain alternati	ive procedures here or	in a separate report	If yes, optional Wetla	and Site ID:
HYDROLOGY Wetland Hydrology Indicat	tors:			
Primary Indicators (minimum		S. Daniel		Secondary Indicators (minimum of two required)
✓ Surface Water (A1)	roi one is required; che			Surface Soil Cracks (B6)
X High Water Table (A2)	-	_ Water-Stained Leaves	(B9)	∠ Drainage Patterns (B10)
∑ Saturation (A3)		_ Aquatic Fauna (B13)		Moss Trim Lines (B16)
Water Marks (B1)	-	_ Marl Deposits (B15)	12%	Dry-Season Water Table (C2)
Sediment Deposits (B2)	$\overline{\chi}$	 Hydrogen Sulfide Odor Oxidized Rhizospheres 	(C1)	Crayfish Burrows (C8)
Drift Deposits (B3)	4	Presence of Reduced I	ron (C4)	inagely (00)
Algal Mat or Crust (B4)	n æ	Recent Iron Reduction	in Tilled Soils (Ce)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)		Thin Muck Surface (C7)	Timed Solls (Cb)	Geomorphic Position (D2)
Inundation Visible on Aer	ial Imagery (B7)	Other (Explain in Rema		Shallow Aquitard (D3)
Sparsely Vegetated Con-	cave Surface (B8)			— Microtopographic Relief (D4) X FAC-Neutral Test (D5) ✓ FAC-Neutral Test (D5)
Field Observations:	Terror in Control	The second second		Ac-Neutral Test (D5)
	Yes X No	_ Depth (inches): 0"		
Water Table Present?	Yes X No	Depth (inches): O"		
Water Table Present? Saturation Present?	Yes X No	_ Depth (inches): O" _ Depth (inches): O"	Wetland I	Hydrology Present? Vos X
Water Table Present? Saturation Present? (includes capillary fringe)	Yes X No	_ Depth (inches): 0"	Wetland I	Hydrology Present? Yes No
Water Table Present? Saturation Present? (includes capillary fringe)	Yes X No	_ Depth (inches): 0"	Wetland lous inspections), if ava	Hydrology Present? Yes No
Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes X No	_ Depth (inches): 0"	Wetland lous inspections), if ava	Hydrology Present? Yes No
Water Table Present? Saturation Present? (includes capillary fringe)	Yes X No	_ Depth (inches): 0"	Wetland lous inspections), if ava	Hydrology Present? Yes No

	Absolute	Dominant I	ndicator	Dominance Test worksheet:		
ee Stratum (Plot size: 30') Not Applicable	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
				Total Number of Dominant Species Across All Strata:	2	(B)
				Percent of Dominant Species	100	(A/B)
				That Are OBL, FACW, 011 AC.		(~0)
				Prevalence Index worksheet: Total % Cover of: M	ultiply by:	
	0	= Total Cove	er	OBL species x 1 =		_
pling/Shrub Stratum (Plot size: 15')				FACW species x 2 =		
pling/shrub stratum (Flot size				FAC species x 3 =		
Not Applicable	-			FACU species x 4 =		
•				UPL species x 5 =		
				Column Totals: (A)		
				Prevalence Index = B/A =		
				Hydrophytic Vegetation Indicators		
				1 - Rapid Test for Hydrophytic \	/egetation	
	7)	Tatal Car		★ 2 - Dominance Test is >50%		
		_ = Total Cov	rer	3 - Prevalence Index is ≤3.01		
erb Stratum (Plot size:)	30	yes	OBL	4 - Morphological Adaptations data in Remarks or on a sep	(Provide si parate shee	upporting et)
Typha angustifolia	_	Yes	034	Problematic Hydrophytic Veget		
	15	No	OBL	¹Indicators of hydric soil and wetlan		
CAREX Flora	_		FACH	be present, unless disturbed or prol	blematic.	
Schedonorus arundiniceon	2 10	100		Definitions of Vegetation Strata:		
Entrania graminifolice			FAC		or more in	diamete
Bidens aristosa		NO	FACE	Tree – Woody plants 3 in. (7.6 cm) at breast height (DBH), regardless	of height.	diamete
Alisma trivale		-		Sapling/shrub – Woody plants les and greater than or equal to 3.28 ft	s than 3 in. t (1 m) tall.	DBH
		_		Herb – All herbaccous (non-woody) p	lants, regard	
10	-			size, and woody plants less than 3.28 f	t tall.	
11				Woody vines - All woody vines great height.	er than 3.28	ft in
12	90	= Total Co	over	1000		
Woody Vine Stratum (Plot size: 30')						
1. Not Applicable			ů : 	Hydrophytic		
2				- Vegetation Present? Yes	No	
3.				- Present?	11.5	
				-		
4	0	= Total C	over			

(inches)	cription: (Describe	100	Rad	ox Features	, alcator	JI CONTIFE	ii une absence of inc	licators.)	
^	Color (moist)	%	Color (moist)	%	Type ¹	_Loc2	Texture	Dame	i.
)-8	2.5y 3/1	80	10YR.5/8	20	C	M	SIL	Remai	ks
Type: C=Co ydric Soil Ir _ Histosol (etion, RM=					² Location: PL=P	blematic Hydri	c Soils³:
Histic Epi Black His Hydrogen Stratified Depleted Thick Darl Sandy Mu Sandy Gle Sandy Red Stripped M	pedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) ucky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML	(A11) -		ce (S9) (LRI lineral (F1) (Matrix (F2) (F3) face (F6) rurface (F7) ons (F8)	RR, MLR (LRRK, L	A 149B)	5 cm Mucky P Dark Surface (Polyvalue Beld Thin Dark Surf Iron-Manganes Piedmont Floo Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	Redox (A16) (LF eat or Peat (S3) S7) (LRR K, L, w Surface (S8) ace (S9) (LRR I e Masses (F12) dplain Soils (F12) TA6) (MLRA 14 terial (F21) ark Surface (TF	RR K, L, R) (LRR K, L, R) M) (LRR K, L) (, L) (LRR K, L, R) (, L) (LRR K, L, R) (MLRA 1498 4A, 145, 1498
strictive La	ydrophytic vegetation	n and wet	and hydrology must	be present,	unless di	sturbed o	r problematic.		
	, (0.0001.104).							illum	
Type:	es):						0.44		
Type:							Hydric Soil Present	Yes X	. No
Annual Control of the	08):						Hydric Soil Present	Yes X	No_

Hydrophytic Vegetation Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) High Water Table (A2) Water Marks (B1) Sediment Deposits (B2) Diring Position (B2) Algal Mat or Crust (B4) Algal Mat or Crust (B4)	Soil Map Unit Name: Bush Are climatic / hydrologic conditions on Are Vegetation No, Soil No, or Are Vegetation No, Soil No, or	Lat: 17-1195 S. 1+1ecm. 3-8% the site typical for this time of year: Hydrology No significantly dis Hydrology No naturally problem.	? Yes No (If no, explain in Remarks.) sturbed? Are "Normal Circumstances" present? Yes X No.
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Present? Yes No Depth (inches): Surface Water (A1) Water Stained Leaves (B9) Aquatic Fauna (B13) Moss Trim Lines (B10) Moss Trim Lines (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Sturation Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Depth (inches): Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Wetland Hydrology Present?	Yes No X	Is the Sampled Area within a Wetland?
Sparsely Vegetated Concave Surface (B8) eld Observations: Inface Water Present? Yes NoX Depth (inches): turation Present? Yes NoX Depth (inches): cludes capillary fringe) Soribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No _X Depth (inches):	Wetland Hydrology Indicators: Primary Indicators (minimum of one is re Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	 Water-Stained Leaves Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odol Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction 	S (B9) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Son Living Roots (C3) Ton (C4) Stunted or Stressed Plants (C4)
No X lateral gauge, monitoring well, aerial photos, previous inspections), if available:	eld Observations: rface Water Present? Yes ater Table Present? Yes turation Present? Yes	(B8) Other (Explain in Rema (B8) NoX Depth (inches): NoX Depth (inches):	rks) — Shallow Aquitard (D3) — Microtopographic Relief (D4) — FAC-Neutral Test (D5)
narks;	narks:	nitoring well, aerial photos, previoι	is inspections), if available:

GETATION – Use scientific names of plants.	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet: Number of Dominant Species (A)
ve Stratum (Plot size: 30')		Total Number of Dominant Total Number of Dominant All Strate: (A) (B)
		Species Across All Strata: Percent of Dominant Species (A/B)
		That Are OBL, FACW, or FAC: Prevalence Index worksheet:
		Total % Cover of: Multiply by.
	= Total Cover	FACW species O x2 = O
Sapling/Shrub Stratum (Plot size: 15")		FAC species 95 x4 = 380
2		UPL species 100 (A) 395 (B)
3		Prevalence Index = B/A = 3.95
5 6.		Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
7	= Total Cover	2 - Dominance Test is >50%
(Plot size: 5		4 - Morphological Adaptations' (Provide supporting
1. Schedonorus arundinace	25 YES FAX	Problematic Hydrophytic Vegetation (Explain)
2. Trifolium repers	25 YES FR	he present, unless disturbed of present.
3. Toraxacupa officialesis	10 NO FR	Definitions of Vegetation Strata:
5. Dancers corotro		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
6 7		Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
8 9		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10		Woody vines – All woody vines greater than 3.28 ft in
11		height.
mulatoire: 20'	100 = Total Cover	
woody Vine Stratum (Plot size: 30' 1. Not Applicable.		Hydrophytic Vegetation Vos No
2		Present? Yes No 🔨
3	= Total Cover	
Remarks: (Include photo numbers here or on a s		
Remarks. (Include prior		

Profile Description: (Describe of Depth (inches) Color (moist)	0/	Redox Features	icator or con	firm the absence of	Sampling Point:
0-15 2.544/4	1	t) % T			marcators.)
	100		vpe Loc2	- i cxture	Remarks
15-20 25/6/2	88 JOYR 21	11 10 -		SIL	7 CHIBINS
	INIO A	T 10	C M	SIL	
	10YR 5/8	2 2	CIA		
			- 100	SIL	
				_	
	- 4	-		-	
	13.		-		
			4		
Type: C=Concentration, D=Depletion Hydric Soil Indicators: Histosoi (A1)	- 1				
lydric Soil Indicators:	i, RM=Reduced Matrix, M	S=Masked Sand			
		doned Sand (srains.	² Location: PL=F	Pore Lining, M=Matrix.
Histic Epipedon (A2)	— Polyvalue Belo	w Surface (S8) // I	20 D		
_ Black Histic (A3)	MLRA 149B))	XX K,		
Hydrogen Sulfide (A4) Stratified I	— Inin Dark Surfa) ace (S9) (LRR R, N Mineral (E1) (LRR R	ILRA 149R)	Coast Prairie	Redox (A16) (LRR K, L, R)
Stratified Layers (A5)	Loamy Gleyed M	Mineral (F1) (LRR I	K, L)	5 cm Mucky P	eat or Peat (S3) (LRR K, L, R)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Matrix			Dark Surface (S7) (LRR K, L, M)
Sandy Mucky Mineral (S1)	- Redox Dark Sun	fore /pe		All Adine Belo	M/ Cirefo - inc.
- Sandy Gleved Matrix (CA)	— Depleted Dark S	urfoce (FT)		Iron-Manganes	Mass (CS) (LRR K, L)
. Sandy Redox (S5)	Redox Depression	ons (F8)		Piedmont Floor	e Masses (F12) (LRR K, L, R) [plain Soils (F19) (MLRA 149B)
Stripped Matrix (Se)		/		Mesic Spodic (7	A6) (MLRA 144A, 145, 149B)
Dark Surface (S7) (LRR R, MLRA 14	49B)			Red Parent Mat	erial (F21)
icators of bydronts !!	7		1.5	Very Shallow Da	ork Surface (TELE)
trictive Layer (if observed):	wetland hydrology must b	4 25	-	Other (Explain, in	Remarks)
icators of hydrophytic vegetation and trictive Layer (if observed): Type:	y = slogy must b	e present, unless	disturbed or p	roblematic	
epth (inches):					
arks:					
arks.			Hy	dric Soil Present?	14
				* Thesent?	Yes No
					1
					100

WETLAND DETERMINATION	ON DATA FORM – Northcentral and Northeast Region
	ct City/County: Chalatoryus Cty Sampling Date: 11/12/19
Applicant/Owner: Bull Hill Wind Energy	State: Was Sampling Date. 11121.
nyestigator(s): BV.874 S B. Manna	State: Sampling Point: DP -61
andform (hillsland toward at).	Section, Township, Range: VILLEROVA
Coloresia (ISS attracts, etc.): F1660512.2	Local relief (concave, convex, none): Flat Slope (%): 0
Subregion (LRR or MLRA): LTZ R Lat:	79.114078 Long: 42.43755 Datum: 100 83
Soil Map Unit Name: Bust. 5: 1+ ldarm	
Are climatic / hydrologic conditions on the site typical for the	nis time of year? YesX_ No (If no, explain in Remarks.)
Are Vegetation no, Soil no, or Hydrology no	significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation <u>roo</u> , Soil <u>roo</u> , or Hydrology <u>roo</u>	naturally problematic? (If needed, explain any answers in Remarks.)
CLIMMA DV OF FINDINGS A	
SOMMARY OF FINDINGS – Attach site map	showing sampling point locations, transects, important features, etc
Hydrophytic Vegetation Present? Yes	No Is the Sampled Area
Hydric Soil Present? Yes	No within a Wetland? Yes X No
	No If yes, optional Wetland Site ID: Wetland 19565
Remarks: (Explain alternative procedures here or in a se	parate report.)
1.00	
wetland is a postn	ed PEM
HYDROLOGY	
Wetland Hydrology Indicators:	Cocondary Indicators (minimum of the area in all
Primary Indicators (minimum of one is required; check all	Secondary Indicators (minimum of two required)
V 0 0	0.5 (2.5)
	ter-Stained Leaves (B9) Drainage Patterns (B10) uatic Fauna (B13) Moss Trim Lines (B16)
	rl Deposits (B15)
414 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	drogen Sulfide Odor (C1) Crayfish Burrows (C8)
	dized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Pre	sence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	cent Iron Reduction in Tilled Soils (C6)
	n Muck Surface (C7) Shallow Aquitard (D3)
	er (Explain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	▲ FAC-Neutral Test (D5)
Field Observations:	= 0. 1/
Surface Water Present? Yes No De	pth (inches): 6"-2"
Water Table Present? Yes X No De	pth (inches): 6"
Saturation Present? Yes Yes No De Cincludes capillary fringe)	epth (inches): 6" Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if available:
, , , , , , , , , , , , , , , , , , , ,	asinal process, provided inspessions), il available.
2 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Remarks:	
Remarks:	

	A1 1 4	Demineral	Indicator	The Control of the Co		
ree Stratum (Plot size: 38')	Absolute % Cover	Dominant Species?		Dominance Test worksheet:		
DOT PROJECTIVE				Number of Dominant Species That Are OBL, FACW, or FAC	- 4	_ (A)
		1		Total Number of Dominant Species Across All Strata:	4	(B)
				Percent of Dominant Species That Are OBL, FACW, or FAC	100	(A/B
				Prevalence Index workshee Total % Cover of:		
		= Total Cov	er	OBL species	x 1 =	
apling/Shrub Stratum (Plot size: 15')			7	FACW species		
				FAC species		
- not applicable		-		FACU species		
		1		UPL species		
			-	Column Totals:		
				Prevalence Index = B/A		
6				Hydrophytic Vegetation Ind X 1 - Rapid Test for Hydrop		2
7						
	0	= Total Co	ver	2 - Dominance Test is >5		
Herb Stratum (Plot size: 5')				3 - Prevalence Index is ≤	3.0	
1. Thous efficies	25	405	OBL	4 - Morphological Adapta data in Remarks or or	itions' (Provide n a separate she	supportir eet)
2. CAREX Flavor	12	405	OBL	Problematic Hydrophytic	Vegetation1 (Ex	(plain)
mentha Spicata			FACW	Indicators of hydric soil and	wetland hydrolo	
			FACIN	he present unless disturbed	or problematic.	
4. Eupotorium perfoliatum 5. Ranunculus bulbosus	5	NO	FACU		trata:	
6				Tree – Woody plants 3 in. (7 at breast height (DBH), regain	6 cm) or more i	n diamet
7						
8		-	-	Sapling/shrub - Woody plan and greater than or equal to	3.28 ft (1 m) tall	i, DBN
9		-		Herb - All herbaceous (non-wo	ody) plants, rega	rdless of
10	-			size, and woody plants less than	3.28 ft tall.	
11		-		Woody vines - All woody vine	s greater than 3.2	8 ft in
12	Lass			height.		
Woody Vine Stratum (Plot size: 30)	100	_ = Total Co	over			
1. pot Applicable	-	-		136.5.5.5		
2				Hydrophytic Vegetation	,	
L.				Present? Yes	No No	
3	_					
				• 1		

Matrix Color (moist) 7.57 7.51 7.57 411	100	Color (moist)	% Features	Type ¹	_Loc ²	Texture Remarks	
	-	1092516					
2.57411	98	1092516				SI	
	-				<u>m</u>	SI	
ncentration, D=Dep	letion, RM	-Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix.	
ndicators:						Indicators for Problematic Hydric Soils ³ :	
ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) I Below Dark Surfac rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M	VILRA 149	MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depressi	ce (S9) (L dineral (F' Matrix (F2 (F3) face (F6) Surface (F6) ons (F8)	.RR R, M I) (LRR K) (7)	LRA 149B)	Coast Prairie Redox (A16) (LRR K, L, F, 5 cm Mucky Peat or Peat (S3) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, Piedmont Floodplain Soils (F19) (MLRA Mesic Spodic (TA6) (MLRA 144A, 145, Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)	L, R) L, R) L, R)
		etland hydrology mus	t be prese	ent, unles	s disturbed o	or problematic.	
.ayer (if observed):							
hoo);						Under Seil Bernand 2 Ven V No	
nes)						Hydric Soil Present? Yes No _	
1 1 1 1 1 1 1	ndicators: (A1) ippedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) I Below Dark Surface irk Surface (A12) lucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, I	ndicators: (A1) pipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) I Below Dark Surface (A11) urk Surface (A12) lucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, MLRA 149) I hydrophytic vegetation and weaper (if observed):	ndicators: (A1)	ndicators: (A1)	ndicators: (A1)	Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Stic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Below Dark Surface (A11) Depleted Matrix (F3) Ink Surface (A12) Redox Dark Surface (F6) Lucky Mineral (S1) Depleted Dark Surface (F7) Leyed Matrix (S4) Redox Depressions (F8) Matrix (S6) Inface (S7) (LRR R, MLRA 149B) Strydrophytic vegetation and wetland hydrology must be present, unless disturbed cayer (if observed):	Indicators: (A1)

WETLAND DETERMINATION DATA FOR	M – Northcentral and Northeast Region
Project/Site: BAN HIN Wind Project City/Co	punty: CHANTAN OLOG CTU Sampling Date: 11/12/15
Applicant/Owner: Ball Hill Wind Energy Let	State: NY Sampling Point: DC -61
Investigator(s): B. VIRTS, S. Brokenneger Section	n Township Pange: VIII Page 19
Landform (hillslone terrace etc.): Hill Slope	of concess control control of
Landform (hillslope, terrace, etc.): H: 1151age Local relie Subregion (LRR or MLRA): LRZ-R Lat: 79.114195	
Sublegion (LRR of MLRA): CHE Lat: / 17 170	Long: 92, 93/199 Datum: 000 83
Soil Map Unit Name: BUST 5: 1+ 19mm 3-80	Slepen NWI classification: WPLAND
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	es No (If no, explain in Remarks.)
Are Vegetation <u>N ぃ</u> , Soil <u>心 0</u> , or Hydrology <u>い ೦</u> significantly disturb	
Are Vegetation <u>ivo</u> , Soil <u>rシン</u> , or Hydrology <u>ゃぃ</u> naturally problema	tic? (If needed, explain any answers in Remarks.)
SLIMMARY OF FINDINGS Attack site was about	
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate report.)	If yes, optional Wetland Site ID:
J. San	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves	(B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odol Sediment Deposits (B2) Oxidized Rhizospheres	
	[26] 10 [15] [16] 10 [16] 12 [16] 10 [16] 10 [16] 10 [16] 10 [16] 10 [16] 10 [16] 10 [16] 10 [16] 10 [16] 10 [16]
Drift Deposits (B3) Presence of Reduced Algal Mat or Crust (B4) Recent Iron Reduction	
	7) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rema	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No _X Depth (inches):	Wetland Hydrology Present? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ	
Second recorded bata (stream gauge, monitoring well, aerial priotos, previ	ous inspections), if available:
Remarks:	

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Indicat Species? Statu	
1. NOT PROSCEDIE			Number of Dominant Species
2		-	Total Number of Dominant Species Across All Strata: 2 (B)
3			
4			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5			
6			Prevalence Index worksheet:
7			
Sapling/Shrub Stratum (Plot size: 15	_0_	= Total Cover	FACW species 10 x2= 70
			FAC species
1. Not Applicable			FACU species 90 x4= 360
2	-		UPL species x 5 =
3			Column Totals: 100 (A) 380 (B)
4			Prevalence Index = B/A = 3.50
5			Hydrophytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
7			2 - Dominance Test is >50%
61	_0	_ = Total Cover	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size:5 /)	F		4 - Morphological Adaptations (Provide supporting
1. Tr. Folium Ripens	50		
2. Schedonorns arundinaceou		Yes FA	
3 TARAXUCUM Officinale		NO FAC	he preparet uplace disturbed or problematic
4. Pantago larceolata	_>_	NO FAX	.N
5. Ranimentus bulbosus	10	NO FRO	
6,			Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.
7			Sapling/shrub – Woody plants less than 3 in. DBH
8			and greater than or equal to 3.28 ft (1 m) tall.
9			Herb - All herbaceous (non-woody) plants, regardless of
10			size, and woody plants less than 3.28 ft tall.
11	. ——		Woody vines - All woody vines greater than 3.28 ft in
12			height.
	100	_ = Total Cover	
Woody Vine Stratum (Plot size: 30')			
1. roi Applicable			Hydrophytic
2			- Vegetation
3	-		Present? Yes No ^
4			_
		= Total Cover	

0-11	Colen		D	and the	indicator	or confi	rm the absence of	Sampling Point: 04
0-11		%	Color (moist)		28		301100 01	indicators.)
	2,54411	80	2.54613	15	Type ¹	_Loc2	Texture	Remarks
3)-18	7,54411		10y2 516		C	n	_SIL_	
	2139411	55	7.54614	25	C	~	516	
18-20	2.54412	60	1042518	20	4	m		
-			7.5YR416	40		<u>_</u>	SIL	Manageria .
¹ Type: C=Con- Hydric Soil Inc Histosol (A	centration, D=Depleti	on, RM=R	educed Matrix, MS=N	Masked Sa	and Grains		2.	
Histic Epipe Black Histic Hydrogen S Stratified La Depleted Be Thick Dark S Sandy Muck	edon (A2) (A3) Sulfide (A4) Nyers (A5) Plow Dark Surface (A- Surface (A12) Mineral (S1) Ad Matrix (S4) Surface (S5)	11) 🐰	MLRA 149B) MLRA 149B) Thin Dark Surface of Loamy Mucky Mine Loamy Gleyed Matrix (F3 Redox Dark Surface Depleted Dark Surface Deplete	(S9) (LRR tral (F1) (L rix (F2) t) e (F6)	_	(149B)	2 cm Muck (A Coast Prairie 5 cm Mucky P Dark Surface (Polyvalue Belo Thin Dark Surf. Iron-Manganes Piedmont Flood Mesic Spodic (1	Pore Lining, M=Matrix. oblematic Hydric Soils ³ : 10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R) eat or Peat (S3) (LRR K, L, R) S7) (LRR K, L, M) ow Surface (S8) (LRR K, L) ace (S9) (LRR K, L) e Masses (F12) (LRR K, L, R) dplain Soils (F19) (MLRA 149B) IA6) (MLRA 144A, 145, 149B) derial (F21)
_ Dark Surface	(S7) (LRR R, MLRA rophytic vegetation ar	149B) nd wetland	hydrology must be p	oresent, un	less distu	rbed or no	Other (Explain in	ark Surface (TF12) n Remarks)
_ Dark Surface dicators of hydr strictive Layer Type:	rophytic vegetation ar	149B) nd wetland	hydrology must be p	present, un	less distu	rbed or pr	Other (Explain in	ark Surface (TF12) n Remarks)
_ Dark Surface	rophytic vegetation ar	149B) nd wetland	hydrology must be p	present, un	less distu	rbed or pr	Other (Explain in roblematic.	n Remarks)

WETLAND DETERMINATION DATA FO	ORM - Northcentral a	and Northeast Region
Project/Site: Ball Hill Wind Project Cit	ty/County: Character	Alaca CTG Sampling Date: 11/12/13
Applicant/Oumor R // H'II I I'm A A - Ass // //	yrounity	State: NY Sampling Point: DS-613
Applicant/Owner: Rull Hill Wind anergy, LLC		
Investigator(s): B.V. 125 , S. Buckenneyer Se	ection, Township, Range:	VIIIEMOVIA
Landform (hillslope, terrace, etc.): Floodpland Local		
Subregion (LRR or MLRA): LRP-R Lat; 79. [17]	Long: _ 4	2,435276 Datum: NAO 83
Soil Map Unit Name: Cherry Chanery Loan	, for, 3-840sbr	NWI classification: UPIC.nd
Are climatic / hydrologic conditions on the site typical for this time of year?	? Yes _ + No	(If no, explain in Remarks.)
Are Vegetation <u>ᠬ᠔</u> , Soil <u>᠘᠔</u> , or Hydrology <u>ᠬ᠈</u> significantly dis	sturbed? Are "Norma	Circumstances" present? Yes No
Are Vegetation <u>NOO</u> , Soil <u>NOO</u> , or Hydrology <u>NOO</u> naturally proble		explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing s	ampling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No	Is the Sampled Area within a Wetland? If yes, optional Wetland	Yes X No Site ID: Wetland AS67
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Le	aves (B9)	Drainage Patterns (B10)
∠ High Water Table (A2)	13)	Moss Trim Lines (B16)
∑ Saturation (A3) Marl Deposits (B1		Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide		Crayfish Burrows (C8)
	heres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Redu		Stunted or Stressed Plants (D1)
	oction in Tilled Soils (C6)	Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface		Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Sparsely Vegetated Concave Surface (B8)	Remarks)	Microtopographic Relief (D4) X FAC-Neutral Test (D5)
Field Observations:		A TAO-Neutral Test (BO)
Surface Water Present? Yes No Depth (inches):		
Water Table Present? Yes X No Depth (inches):	3"	
Saturation Present? Yes X No Depth (inches): (includes capillary fringe)	O Wetland I	Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if ava	ailable:
Remarks:		
Tremains.		

Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 63.6 (A/B) Prevalence Index worksheet:
Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC:
Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by:
That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FACW species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation x 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) FACU Problematic Hydrophytic Vegetation¹ (Explain) FACU Definitions of Vegetation Strata:
Prevalence Index worksheet:
Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species
Total % Cover of: Multiply by: OBL species
FACW species
FACW species
FACU species x 3 =
FACU species x 4 =
Column Totals:
Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata:
Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) HACLL 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata:
Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) FOCIA Problematic Hydrophytic Vegetation¹ (Explain) 1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata:
1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) FOCIA Problematic Hydrophytic Vegetation¹ (Explain) 1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata:
data in Remarks or on a separate sheet) FOCIA Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata:
Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata:
1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata:
be present, unless disturbed or problematic. Definitions of Vegetation Strata:
Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter
at breast height (DBH), regardless of height.
Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
and greater than or equal to 3.20 it (1 m) tall.
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Sizo, and woody plants loss than 3.20 k land
Woody vines - All woody vines greater than 3.28 ft in
over height.
over
Hydrophytic
- Vegetation
Present? Yes No
over

Sampling Point DP-613

Matrix		Dan.	lov Cart	mulcator o	confin	m the absence of i	ndicators.)
Color (moist)	%	LIEU	ox Feature	S			
10YR 3/2	90	10YR 3/6	10	<u>C</u>	M	SIL	Remarks
	etion, RM=I					² Location: PL=	Pore Lining, M=Matrix. roblematic Hydric Soils³:
ipedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface (k Surface (A12) ticky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, MLI	(A11)	MLRA 149B) Thin Dark Surfact Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Surfact Depleted Dark S Redox Depression	ce (S9) (LR ineral (F1) flatrix (F2) (F3) face (F6) urface (F7) ons (F8)	RR, MLRA (LRRK, L)	149B)	2 cm Muck (// Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangane Piedmont Flo Mesic Spodic Red Parent M Very Shallow Other (Explair	A10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) (S7) (LRR K, L, M) low Surface (S8) (LRR K, L) rface (S9) (LRR K, L) ese Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B) laterial (F21) Dark Surface (TF12)
ydrophytic vegetation	n and wetla	nd hydrology must	be present,	unless dist	urbed or	problematic.	
yo. (ii observed).							
es):							12
					1	Hydric Soil Presen	t? Yes No
	Color (moist) OYR 3/2 IOYR 3/2 Incentration, D=Depler dicators: (A1) pedon (A2) tic (A3) solfide (A4) Layers (A5) Below Dark Surface k Surface (A12) ticky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML ydrophytic vegetation yer (If observed):	Color (moist)	Color (moist) OYR 3/2 40 IOYR 3/6 IOYR 3/6	Color (moist) % Color (moist) % OVR 3/6 DOVR 3/6	Color (moist) % Type¹ OYR 3/2 40 OYR 3/6 OYR 3/6 OYR 3/6 OYR 3/6 OYR 3/6 OYR 3/6 OYR 3/6 OYR 3/6 OYR	Color (moist) % Color (moist) % Type¹ Loc² OYR 3/2 O	Color (moist) % Color (moist) % Type¹ Loc² Texture OYR 3/2 O OYR 3/6 O M S L OYR 3/2 O OYR 3/6 O M S L OYR 4/7 O M S L OYR 5/7 O M S L OYR 4/7 O M S L OYR 5/7 O M S L OYR 6/7 O M S

Datum: PAB 85 NWI classification: WP and explain in Remarks.) mstances" present? Yes No n any answers in Remarks.) transects, important features, etc. Yes No 'X D: Vel AS67
Slope (%): 1% Convex Slope (%): 1% 3534 Datum: 1045 85 NWI classification: WO and explain in Remarks.) matances" present? Yes X No an any answers in Remarks.) transects, important features, etc. Yes No X D:
Slope (%): 1% 3534
Datum: Doto 85 NWI classification: WO and explain in Remarks.) mstances" present? Yes X No any answers in Remarks.) transects, important features, etc. Yes No X D: A567
explain in Remarks.) mstances" present? Yes No n any answers in Remarks.) transects, important features, etc. Yes No X D:
explain in Remarks.) mstances" present? Yes X No nany answers in Remarks.) transects, important features, etc. Yes No X D: AS67
explain in Remarks.) mstances" present? Yes X No nany answers in Remarks.) transects, important features, etc. Yes No X D: AS67
mstances" present? Yes X No nany answers in Remarks.) transects, important features, etc. Yes No X D: AS67
ransects, important features, etc. Yes No X D: AS67
ransects, important features, etc. Yes No X D: v.l AS67
Yes No X D:
D:
D:
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vel AS67
ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Drayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
FAC-Neutral Test (D5)
logy Present? Yes No X

Tree Stratum (Plot size: 30') 1. OUT Applicable	% Cover	Dominant Species?	Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15) 1. DOT OPP I: Cable 2. 3. 4.				OBL species 0 $x 1 = 0$ FACW species 0 $x 2 = 0$ FAC species 5 $x 3 = 15$ FACU species 80 $x 4 = 370$ UPL species 15 $x 5 = 7575$ Column Totals: 100 (A) 90 (B)
5				Prevalence Index = B/A = 4, 10 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size:	_ 0	_ = Total Cov	/er	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting
1. Por Pretensis			FACH	data in Remarks or on a separate sheet)
2. Elymus Villosus	15	no	FALL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Dancus carota			MPL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Rumex Crispus	5	100	FAC	
5. Taraxacum officionale			FACH	Definitions of Vegetation Strata:
6. Cirkinm discolor 7.	-			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11			-	Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: 30*)	100	_ = Total Co	ver	
1. not Approble	-	-		
2	-			Hydrophytic Vegetation V
3		-		Present? Yes No ^
4				
	0	_ = Total Co	ver	

	Redox Features Color (moist) % Type¹ Loc²	SL TREMAINS	
D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.		
	Reduced Matrix, MS=Masked Sand Grains.		
	Reduced Matrix, MS=Masked Sand Grains.	2.	
		² Location: PL=Pore Lining, M=Matrix.	
Surface (A11) 12) (S1) S4) R R, MLRA 149B)	Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)	 Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K Piedmont Floodplain Soils (F19) (MLR, Mesic Spodic (TA6) (MLRA 144A, 145, Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 	49B) R) I, L, R) , L) (, L, R) A 149B
egetation and wetl	and hydrology must be present, unless disturbed	or problematic.	
) and the same of	Hydric Soil Present? Yes No _	<u>×</u> _
	Surface (A11)	Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Surface (A11) Depleted Matrix (F3) Redox Dark Surface (F6) (S1) Depleted Dark Surface (F7) Redox Depressions (F8) R R, MLRA 149B) Regetation and wetland bydrology much be seed at the company of the	Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) 12) Redox Dark Surface (F6) S4) Redox Depressions (F8) Contact (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Iron-Manganese Masses (F12) (LRR K Piedmont Floodplain Soils (F19) (MLR Redox Depressions (F8) Contact (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Redox Depressions (F8) Redox Depressions (F8)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: BAIL HILL WIND PRINT City/C	County: CHANTALONA CTY Sampling Date: 11/13/15
Applicant/Owner: Brit His Wind Energy, LLC	State: NY Sampling Point: DP 617
Investigator(s): B. Vints Section	on, Township, Range: Villenoua
	ief (concave, convex, none): Corvey Slope (%): 3
Subregion (LRR or MLRA): <u>LIZR-R</u> Lat: <u>79.117.856</u>	
Soil Map Unit Name: CHANTANAUA S. Itlam	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>roo</u> significantly distur	
Are Vegetation $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes ▼ No	within a Wetland? Yes No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: WETIAND ASTO
Remarks: (Explain alternative procedures here or in a separate report.)	
Grozad Pem Sleps water	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
<u>Y</u> Surface Water (A1) Water-Stained Leave	· · · · · · · · · · · · · · · · · · ·
★ High Water Table (A2) Aquatic Fauna (B13)	
X Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide Oc Sediment Deposits (B2) Oxidized Rhizospher	
Sediment Deposits (B2) Oxidized Rhizospher Drift Deposits (B3) Presence of Reduce	÷ , ,
<u> </u>	on in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (• • •
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	<u>⊀</u> FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes X No Depth (inches):	, ¹ , 3"
Water Table Present? Yes X No Depth (inches): C	
Saturation Present? Yes X No Depth (inches): 0	Wetland Hydrology Present? YesX No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
TOTAL.	

	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species? Status	Number of Deminant Species
1. PUT Applicable			That Are OBL, FACW, or FAC: (A)
2			
			Total Number of Dominant Species Across All Strata: (B)
3			Species Across Air Strata.
4			1/3/
5			That Are OBL, FACW, or FAC: 100% (A/B)
6			Burnelance Index weekshoots
			1 Total of Mark Harrison
7			Total % Cover of: Multiply by:
,		= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')			FACW species x 2 =
1. not Applicable			FAC species x 3 =
2			FACU species x 4 =
			UPL species x 5 =
3	***************************************		Column Totals: (A) (B)
4			-
5			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
7			2 - Dominance Test is >50%
		= Total Cover	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5')	20	<i>\\</i>	4 - Morphological Adaptations (Provide supporting
1. Juneus effusus	<u> 30</u>	Y OB	- 1
2. Sirpus atrovirens		N OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Ranunculus bulbosus	10	N FAC	Indicators of hydric soil and wetland hydrology must
4. Carex Flava		YOBL	
			Definitions of Vegetation Strata:
5. Eleocharis spp.	10		-
6			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7			at breast height (DBH), regardless of height.
8			Sapling/shrub - Woody plants less than 3 in. DBH
			and greater than or equal to 3.28 ft (1 m) tall.
9			Herb – All herbaceous (non-woody) plants, regardless of
10			size, and woody plants less than 3.28 ft tall.
11			Woody vines - All woody vines greater than 3.28 ft in
12			height.
	100	= Total Cover	
Woody Vine Stratum (Plot size: 3c')			
1. POT Applicable			Hudranbutia
2			Hydrophytic Vegetation
3			Present? Yes X No
4			
	·	T-1-1 O	
		_ = Total Cover	
Remarks: (Include photo numbers here or on a separate	sneet.)		

Profile Desc	ription: (Describe t	o the dept	h needed to docum	ent the i	indicator o	or confirm t	he absence o	f indicator	s.)	
Depth	Matrix		Redox	Feature	<u>s</u> _ 1	. 2	_		Damadaa	
(inches)	Color (moist)	%	Color (moist)	%		Loc ²	Texture		Remarks	
0"-9"	1042411	<u> 75</u>	10402316	5	<u></u>	<u></u>	SIL			
	•									
										
										
					· · · · · · · · · · · · · · · · · · ·					
					•		·-·-			
			**************************************	····						
		etion, RM=	Reduced Matrix, MS	=Maske	d Sand Gr	ains.			ining, M=Mati	
Hydric Soil				_					natic Hydric S	
Histosol			Polyvalue Below	Surface	(S8) (LRI	R,			LRR K, L, ML ox (A16) (LRR	
Histic Ex Black Hi	oipedon (A2)		MLRA 149B) Thin Dark Surface	ne (S9) (IRRR M	RA 149B)			or Peat (S3) (L	
	n Sulfide (A4)		Loamy Mucky M						(LRR K, L, M)	
	Layers (A5)		Loamy Gleyed N						Surface (S8) (L	
	d Below Dark Surface	e (A11)	Depleted Matrix						(S9) (LRR K,	
	ark Surface (A12)		Redox Dark Sur						fasses (F12) (
	lucky Mineral (S1) Gleyed Matrix (S4)		∠ Depleted Dark S _ Redox Depressi						ain Soils (F 19) 6) (MLRA 144)	(MLRA 149B) A 145 149B)
	tedox (S5)		Redox Deplessi	ons (Po)	ı			rent Materi		A, 140, 1400)
	Matrix (S6)								Surface (TF1	2)
	rface (S7) (LRR R, N	ILRA 1498	3)				Other (Explain in f	Remarks)	
3			g 11 1 t							
	r nydropnytic vegetat Layer (if observed):		etland hydrology mus	t be pres	sent, unies	s disturbed	or problematic	·		
Type:	Layer (ii observed).									
Depth (in	chee).						Hydric Soil	Present?	Yes 🔀	No
Remarks:	01100)						,			
Remains.										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: BAH H. H. WIND Project City/C	ounty: CHANTAUGUA CTY Sampling Date: 11/13/15
Applicant/Owner: BAU Hill WIND ENERGY, LLC	State: NY Sampling Point: OP - 61 8
	on, Township, Range: VILLENGUR
Landform (hillslope, terrace, etc.): Hi V ショウム Local reli	ef (concave, convex, none): Convex Slope (%): 3%
Subregion (LRR or MLRA): LRR-R Lat: 79, 112794	
Soil Map Unit Name: CHANTSWANA SILT Com	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	, r
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly disturb	
Are Vegetation <u>ND</u> , Soil <u>ND</u> , or Hydrology <u>ND</u> naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	ppling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area within a Wetland? Yes No 🖔
Hydric Soil Present? Wetland Hydrology Present? Yes No Yes No	
Wetland Hydrology Present? Yes No ** Remarks: (Explain alternative procedures here or in a separate report.)	If yes, optional Wetland Site ID:
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	es (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Od	
Sediment Deposits (B2) Oxidized Rhizosphere Drift Deposits (B3) Presence of Reduced	
Drift Deposits (B3) Presence of Reduced Algal Mat or Crust (B4) Recent Iron Reduction	
/ Iron Deposits (B5) Thin Muck Surface (C	1
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rer	,
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No _X_ Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Remarks.	

VIIII OOO OOO OOO OOO OOO OOO OOO			 	
Tree Stratum (Plot size: 30')		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. not Applicable				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Develop Deminent Consider
4				Percent of Dominant Species That Are OBL, FACW, or FAC:
5				That Ale OBE, I AOW, OI I AO.
6				St
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	0	_ = Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')			•	FACW species x 2 =
1. NOT Applicable				FAC species x 3 =
				FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
				Column rotals (A) (B)
4				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Cov		2 - Dominance Test is >50%
		_ = Total Co	/GI	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5') 1. Titolium vepens	60	٧	FACU	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation ¹ (Explain)
2. Ranunculus belbosus			FAC	Problematic Hydrophytic Vegetation (Explain)
3. Plantago lanceolata	10	N	FACU	¹ Indicators of hydric soil and wetland hydrology must
	10	N	FALU	be present, unless disturbed or problematic.
5. Schedonorus arundinaceous	15	<u> N</u>	FACU	Definitions of Vegetation Strata:
		-		Tree – Woody plants 3 in. (7.6 cm) or more in diameter
6		• •		at breast height (DBH), regardless of height.
7				at breast height (BBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				Woody vines – All woody vines greater than 3.28 ft in
12.				height.
	1(3)	_ = Total Co	· · · ·	0
	, 50	_ = Total Co	ver	
Woody Vine Stratum (Plot size:)				
1				
1. NOT Applicable				Hydrophytic
2	-			Vegetation
3.				Present? Yes No 🗡
٠ <u>. </u>		_		·
4				
	^	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate				
Remarks: (include photo numbers here or on a separate	sneet.)			

1		o the dep	oth needed to docun			or confirm	the absence of	of indicate	ors.)	
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	x Feature %	<u>S</u> Type ¹	_Loc²	Texture		Remark	re
01114"			1048316		C-	<u>~~</u>	SIL			
14"-70"	1042512		2.54 313		c	<u>~</u>	SIL			
			logasie	10	<u> </u>	<u>~</u>			·	
									· · · · · · · · · · · · · · · · · · ·	
										
										
							,			
¹ Type: C=Cor Hydric Soil Ir	ncentration, D=Deple	etion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.			Lining, M=I	
Histosol (A1)		Polyvalue Below	v Surface	(S8) (LRI	₹R,	Indicators f		•	MLRA 149B)
Histic Epi	pedon (A2) tic (A3)		MLRA 149B) Thin Dark Surfa				Coast P	rairie Red	ox (A16) (L	RR K, L, R) 3) (LRR K, L, R)
Hydrogen	Sulfide (A4)		Loamy Mucky N						(LRRK, L	
	Layers (A5)		Loamy Gleyed N)		Polyvalı	ue Below 9	Surface (S8) (LRR K, L)
	Below Dark Surface k Surface (A12)	(A11)	Depleted Matrix Redox Dark Sur						(S9) (LRR	
	ucky Mineral (S1)		Depleted Dark S							2) (LRR K, L, R) 19) (MLRA 149B)
	eyed Matrix (S4)		Redox Depressi		',					144A, 145, 149B)
Sandy Re				. ,				rent Mater		, , , , , , , , , , , , , , , , , ,
	Matrix (S6) ace (S7) (LRR R, M I	LRA 1498	3)				Very Sh		k Surface (*	ΓF12)
	•		etland hydrology musi	ho proof	ant unloca	a diatumbaal			, tomanto,	
Restrictive La	ayer (if observed):	on and we	enana nyarology musi	be prese	ent, unies:	aisturbea	or problematic.			
Type:										
Depth (inch	nes):						Hydric Soil F	resent?	Yes	_ No <u>}</u>
Remarks:						1				
				~						*
								·		
						;	•			
							*			

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: CHANTON OLD CTY Sampling Date: 11/3/15 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-620 B.V. R.S. M. Boberry Section, Township, Range: YILLENOVA Investigator(s): Landform (hillslope, terrace, etc.): Hilslope Local relief (concave, convex, none): Concave Slope (%): 2 (4) Subregion (LRR or MLRA): LRR-R Lat: 79-127316 Long: 42-44/699 Datum: 020 (3) 5. 1+ 10am 0 to 3% Sloper NWI classification: UPI and Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No., significantly disturbed? Are "Normal Circumstances" present? Yes X., No. Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Yes X No Yes X No within a Wetland? Hydric Soil Present? Yes X No Wetland Hydrology Present? If yes, optional Wetland Site ID: WL-1573 Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) ___ Water-Stained Leaves (B9) X Drainage Patterns (B10) X High Water Table (A2) ___ Aquatic Fauna (B13) ___ Moss Trim Lines (B16) Y Saturation (A3) __ Marl Deposits (B15) ___ Dry-Season Water Table (C2) Water Marks (B1) __ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) __ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) __ Drift Deposits (B3) __ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) _ Iron Deposits (B5) ___ Thin Muck Surface (C7) __ Shallow Aquitard (D3) __ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) ___ Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) X FAC-Neutral Test (D5) Field Observations: Yes X No Depth (inches): 5-7 1 Surface Water Present? Yes X No Depth (inches): 04 Water Table Present? Yes Y No ___ Depth (inches): 04 Saturation Present? Wetland Hydrology Present? Yes X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Tree Stratum (Plot size: 30') Not Applicable	Absolute % Cover	Species?	Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3.				Total Number of Dominant Species Across All Strata: (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
· · · · · · · · · · · · · · · · · · ·		-		Prevalence Index worksheet: Total % Cover of: Multiply by:
		= Total Cove	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 1)				FACW species x 2 = FAC species x 3 = FACU species x 4 =
3				UPL species x 5 = Column Totals: (A) (B)
1				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
	0	_ = Total Cov	er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5')			1.70%	4 - Morphological Adaptations (Provide supporting
Juneus effusus	5Q	_У	OBL	data in Remarks or on a separate sheet)
Carex flava	25	<u>y</u>	OBL	Problematic Hydrophytic Vegetation¹ (Explain)
2. Polygonum porsicaria 4. Eupotorium portoliatum	10	N	FACE	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. Juneus tenuis	5	N	OBL	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.
7 8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
Woody Vine Stratum (Plot size: 30)	100	_ = Total Co	ver	
1. Not Applicable			4	Hudrophytic
2		-		Hydrophytic Vegetation
3				Present? Yes X No
4				
T-	7	= Total Co	ver	

Matrix		Red	ox Feature	s		the absence of inc		
Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	_Loc ²		Remarks	
104E3/1	93	104R 4/8	5	<u> </u>	<u>M</u>	51L_		
Mary Mary Mary Mary Mary Mary Mary Mary		104R316	2	<u> </u>	<u>w</u>	51L		
		7						
					_			
oncentration D=Denk	etion RM	=Reduced Matrix M	S=Masker	Sand Gr	ains	2 ocation: PI =	Pare Lining M=Matrix	
Indicators:	ouon, IMV		waske(a dana di	uil 10.		roblematic Hydric Solls ³ :	
pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Aucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6)		 Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 				 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, Piedmont Floodplain Soils (F19) (MLRA 145, Mesic Spodic (TA6) (MLRA 144A, 145, 149 Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 		
	on and w	etland hydrology mu	st be prese	ent, unless	disturbed	or problematic.		
Layer (if observed):								
						ar a set a factor	12	
ches):				1		Hydric Soil Prese	ent? Yes <u>X</u> No	
	Indicators: (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Aucky Mineral (S1) Bleyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, M f hydrophytic vegetati Layer (If observed):	Indicators: (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface (A11) ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, MLRA 149) f hydrophytic vegetation and will Layer (if observed):	Indicators: (A1)	oncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Indicators: (A1)	oncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Gr. Indicators: (A1)	oncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators: (A1)	oncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators: (A1)	

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Landform (hillslope, terrace, etc.):	M. Boberey HIIS LOCK Lat: 79/12 S. 1+ Lock Che site typical for this time of year Hydrology 20 significantly of Hydrology 20 naturally professional professi	Section, Township, Range: al relief (concave, convex, 9/23 Long:	none): Convex Slope (%): 3 H 7
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative proces	Yes No X Yes No X Yes No X	Is the Sampled Are within a Wetland?	tions, transects, important features, etc a Yes No メ and Site ID:
HYDROLOGY Wetland Hydrology Indicators:		***	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imag	Water-Stained L Aquatic Fauna (I Aquatic Fauna (I Marl Deposits (E Hydrogen Sulfid Oxidized Rhizos Presence of Rec Recent Iron Red Thin Muck Surfa ery (B7) Water-Stained L Aquatic Fauna (I Aqu	B13) 315) e Odor (C1) spheres on Living Roots (C3 duced Iron (C4) duction in Tilled Soils (C6) ace (C7)	Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Water Table Present? Yes	No X Depth (inches): No x Depth (inches): No Depth (inches): ge, monitoring well, aerial photos	18" Wetland	d Hydrology Present? Yes No 🔏
Remarks:			

Tree Stratum (Plot size: 30') 1. NOT Applicable	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
23.			Total Number of Dominant Species Across All Strata: 2 (B)
4			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6			Prevalence Index worksheet:
7	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')	-	_ Total Cover	FACW species 0 x 2 = 0
1. not Applicable			FAC species 5 $\times 3 = 15$ FACU species 90 $\times 4 = 300$
2		-	UPL species _ 5 _ x5 = _ 25 _
3		-	- Column Totals: 100 (A) 400 (B)
4			Prevalence Index = B/A = 4.00
5			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
	0	= Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size:			3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting)
1. Schedonorus arundinaceous	40	Y FAC	data in Remarks or on a separate sneet)
2. Trifolium repens	30	Y FACE	Problematic Hydrophytic Vegetation¹ (Explain)
3. Juneus tenuis	_5	N FAC	
4. Taraxacum offcinale	_5	N FACE	
5. Pantago lanceolata		N FACE	
6. Rosa multifora	_ 5	N FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7. Solanum carolinense	_5_	N FAC	U
8. Paucus carota	5	N ut	Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11.			Woody vines – All woody vines greater than 3.28 ft in
12.		-	height.
2.1	100	_ = Total Cover	
Woody Vine Stratum (Plot size: 30')			
1. not Applicable			Hydrophytic
2			Present? Yes No X
4			
	0	= Total Cover	
34Remarks: (Include photo numbers here or on a separate		= Total Cover	Present? Yes No.X

Profile Des	scription: (Describe	to the de	oth needed to docu	ment the	indicator	or confirm	n the absence of inc	dicators.)	ng Point: UZ
Depth (inches)	Matrix Color (moist)	%	Color (moist)	ox Feature	S				
0-10	104R 3/2	100	Color (moist)		Type ¹	Loc	<u>Texture</u>	Rema	irks
10-20	104R 414	-	.0010 8/2		-		_ S/L		
10 20	10912 - 14	85	104R3/2	15	m	PL	516		
			-						
				-	-	-	-		
		-			******	-			
						-			
			-	-		-			
-									
						-			The state of the s
	-			_					
		-							
1					-				-
Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ins.	² Location: PL=	ore Lining, M=	Matrix
Hydric Soil Histosol	indicators:						Indicators for Pr	oblematic Hyd	ric Solls ³ :
	pipedon (A2)		— Polyvalue Belov MLRA 149B)	w Surface	(S8) (LRR	R,	2 cm Muck (A	10) (LRR K, L,	MLRA 149B)
Black Hi			Thin Dark Surfa		RR R MI	RA 149R)	Coast Prairie	Redox (A16) (L	RR K, L, R)
	en Sulfide (A4)		Loamy Mucky N	lineral (F1	(LRR K,	L)	Dark Surface	(S7) (LRR K, L	3) (LRR K, L, R)
Stratified	d Layers (A5) d Below Dark Surface	(444)	Loamy Gleyed I	Matrix (F2)			Polyvalue Be	ow Surface (S8	3) (LRR K, L)
Thick Da	ark Surface (A12)	(A11)	Depleted Matrix Redox Dark Sur				Thin Dark Su	face (S9) (LRR	(K, L)
Sandy M	lucky Mineral (S1)		Depleted Dark S	lace (F6) Surface (F7	7)		Iron-Mangane	se Masses (F1	2) (LRR K, L, R)
Sandy G	Sleyed Matrix (S4)		Redox Depressi				Mesic Spodic	(TA6) (MLRA	19) (MLRA 149B) 144A, 145, 149B)
Sandy R	edox (S5) Matrix (S6)						Red Parent M	aterial (F21)	140, 140)
Dark Sur	face (S7) (LRR R, M	LRA 149R	`				Very Shallow	Dark Surface (1	ΓF12)
							Other (Explain	in Remarks)	
Indicators of	hydrophytic vegetation	on and wet	land hydrology must	be preser	nt, unless	disturbed o	or problematic.		
MODELIOTIVE E	ayer (if observed):								
Type:	de a side								
Depth (inc	:nes):						Hydric Soil Preser	t? Yes	No_X
Remarks:									
- 10115	saturated	lat	- 18"						
30113	3017 01-011 (6		,,,						

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: BAN H.11 Wind Project City/C Applicant/Owner: BAN HIN Wind Energy, LLC	State: Ny Sampling Point: 00-622
	on, Township, Range: Villenova
	ief (concave, convex, none): Corcave Slope (%): 0%
Subregion (LRR or MLRA): LRP-R Lat: 79, 1790	
Soil Map Unit Name: Bust. 5: 1+ low 0 to 3%	Slores NWI classification: UPLIANO
Are climatic / hydrologic conditions on the site typical for this time of year? Y	es X No (If no, explain in Remarks.)
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly distur	bed? Are "Normal Circumstances" present? Yes X No
Are Vegetation ~ O, Soil ~ O, or Hydrology ~ O naturally problems	
Are vegetation 190, Soil 180, or Hydrology 180 maturally problems	alice (in needed, explain any answers in remains.)
SUMMARY OF FINDINGS – Attach site map showing sam	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _★ No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: WETIAND A578
Remarks: (Explain alternative procedures here or in a separate report.)	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
✓ Surface Water (A1) ✓ Water-Stained Leave	es (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Od	
	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced	· ·
Algal Mat or Crust (B4) Recent Iron Reduction	
Iron Deposits (B5) Thin Muck Surface (C	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rel	·
Sparsely Vegetated Concave Surface (B8) Field Observations:	FAC-Neutral Test (D5)
	-a
Surface Water Present? Yes No Depth (inches): Z Water Table Present? Yes No Depth (inches): Z	• •
	W. H
Saturation Present? Yes Yes No Depth (inches): © (includes capillary fringe)	Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Remarks.	
·	

١	/EGET	ATION	معا ا	scientific	namee	of nla	nte
١	/ヒGE1/	4 HUN -	- use	scientific	names	or bia	ทเร.

not monituble

Tree Stratum (Plot size: _

301

Sampling Point: DP-622 **Dominance Test worksheet: Number of Dominant Species** That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata:

5.				Percent of Dominant Spec That Are OBL, FACW, or	
6			·····	Prevalence Index works	hoot
7				Total % Cover of:	1
		= Total C	ovor.	OBL species	
5		- IOIai C	ovei	FACW species	
Sapling/Shrub Stratum (Plot size: 15')	40	4	FACW	FAC species	
1. Cornus alba	15	-		FACU species	
2. Loni Gera tatarica		- 1	FACU		x 5 =
3. Rubus idaeus		<u>N</u>	_FACU		(A) (B)
4. Roca multiflora	<u>10</u>	<u>N</u>	FACU		
5				Prevalence Index =	: B/A =
6				Hydrophytic Vegetation	Indicators:
7				1 - Rapid Test for Hy	
	75	= Total C	over	X2 - Dominance Test	
Herb Stratum (Plot size: 5')				3 - Prevalence Index	
1. Cornus alba	15	<u> </u>	FACW	4 - Morphological Ad data in Remarks	aptations ¹ (Provide supporting or on a separate sheet)
2 Ranunculus bulbosus	5_	<u> </u>	FAC	Problematic Hydroph	nytic Vegetation ¹ (Explain)
3. Carex flava	5	y.	0BC	¹ Indicators of hydric soil a	and wetland hydrology must
4. Symphyotichum pilosum	5	<u> </u>	FAC	be present, unless distur	bed or problematic.
5 Euthamia graminifolia	S	<u> </u>	FAC	Definitions of Vegetation	on Strata:
6				Tree - Woody plants 3 ir	n. (7.6 cm) or more in diameter
7				at breast height (DBH), r	egardless of height.
8					plants less than 3 in. DBH
9				and greater than or equa	I to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (no size, and woody plants less	n-woody) plants, regardless of than 3 28 ft tall
11					
12.				Woody vines – All woody height.	vines greater than 3.28 ft in
	35	= Total (Cover		
Woody Vine Stratum (Plot size: 30')			, , , , ,		
1. POT APPLICABLE					
				Hydrophytic	
2				Vegetation	X No
3				Present? Yes	
4				•	
	<u> </u>	_ = Total (Cover		
Remarks: (Include photo numbers here or on a separate	sheet.)				

Absolute Dominant Indicator

% Cover Species? Status

Profile Desc	ription: (Describe to	the depti	needed to docum	ent the in	dicator	or confirm	the absence o	f indicators.)		
Depth (inches)	Matrix Color (moist)		Redox Color (moist)	Features	Type ¹	Loc ²	Texture		Remarks	
0"-8"	109R312		104RU16			~				
<u>~</u>							-			
										
						mass.				
										
										,
								<u></u>		
								N		
										,
	oncentration, D≃Deple	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	Location:	PL=Pore Lin for Problema	ing, M=Matri tic Hydric S	x. oils³:
Hydric Soil Histosol			Polyvalue Belov	v Surface	(S8) (I P	R R.		uck (A10) (LR		
. —	pipedon (A2)	•	MLRA 149B)		(00) (=: 1	,	Coast F	Prairie Redox	(A16) (LRR	K, L, R)
	istic (A3)		Thin Dark Surfa					ucky Peat or I		RR K, L, R)
	en Sulfide (A4) d Layers (A5)	•	Loamy Mucky Mocky Moc			(, L)		urface (S7) (L ue Below Suri		RR K, L)
	d Below Dark Surface	(A11)	Depleted Matrix		,		Thin Da	ark Surface (S	9) (LRR K, I	_)
	ark Surface (A12)		Kedox Dark Su		~ ≠\			anganese Mas		
	Mucky Mineral (S1) Bleyed Matrix (S4)		Depleted Dark : Redox Depress		/)			Spodic (TA6) ((MLRA 149B) A. 145, 149B)
	Redox (S5)	•	NOGON BODIOUS	(1 0)			Red Pa	rent Material	(F21)	
	l Matrix (S6)							hallow Dark S		2)
Dark Su	rface (S7) (LRR R, M	LRA 149B)				Other (Explain in Rei	marks)	
³ Indicators o	f hydrophytic vegetati	on and we	tland hydrology mus	st be prese	ent, unles	s disturbed	d or problematio	i.		
1	Layer (if observed):			-						
Туре:		· · · · · · · · · · · · · · · · · · ·						_	. 🔻	
Depth (in	ches):						Hydric Soil	Present?	Yes X	No
Remarks:										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ball Hill Wind Project	City/County: CHALTIANOLLY CTY Sampling Date: 11/3/15
Applicant/Owner: Ball Hill Wind energy LLC	
Investigator(s): B. V. Dis, M. Boberg	
	cal relief (concave, convex, none): Convex Slope (%): L
	27223 Long: 42 441704 Datum: 02083
Soil Map Unit Name: Broti S: It loom 0 to	NVVI classification: OF 10 PCC
Are climatic / hydrologic conditions on the site typical for this time of year	•
	disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> naturally pro-	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No 🛪	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No 🗴
Wetland Hydrology Present? Yes No 🗡	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate repo	ort.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Water-Stained	
High Water Table (A2) Aquatic Fauna	
Saturation (A3) Marl Deposits	
Water Marks (B1) Hydrogen Sulf	fide Odor (C1) Crayfish Burrows (C8) ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	reduced Iron (C4) Stunted or Stressed Plants (D1)
	eduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Sui	, ,
Inundation Visible on Aerial Imagery (B7) Other (Explair	· ·
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No <u>%</u> Depth (inches	s):
Water Table Present? Yes No _X Depth (inches	s):
Saturation Present? Yes No Depth (inches	s): Wetland Hydrology Present? Yes No 🗡
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	toe provious inspections) if available:
Describe Recorded Data (stream gauge, monitoring well, aerial prio	tos, previous inspections), il avaliable.
Remarks:	

Tree Stratum (Plot size: 30')		Dominant Species?	Status	Dominance Test worksheet:
1. Pinus resinosa	95	<u>Y</u>	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2 Prunus Serotina	_5_	N	FACU	Total Number of Dominant Species Across All Strata: (B)
3				
4				Percent of Dominant Species That Are OBL, FACW, or FAC:
5				
6				Prevalence Index worksheet:
7			·	
Sapling/Shrub Stratum (Plot size: 15')	100	= Total Cov	/ei	FACW species x 2 =
1. Lonicera tatarica	10	Υ	FACU	FAC species x 3 =
			FACU	FACU species x 4 =
2. <u> </u>		- \	FACU	UPL species x 5 =
5. Kuous Toatus	10		FACU	Column Totals: (A) (B)
4. Fagus grandifolia		N	PRCU	Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
7	25			2 - Dominance Test is >50%
	22	= Total Co	ver	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5') 1. 005 Applicable				4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation¹ (Explain)
3				¹Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				Woody vines – All woody vines greater than 3.28 ft in
12				height.
5 ,		_ = Total Co	ver	
Woody Vine Stratum (Plot size: 30')				
1. not Applicable				
2			 	Hydrophytic Vegetation
3				Present? Yes No X
4	<u> </u>			
	U	_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Depth inches)	Matrix Color (moist)	%	Redox Color (moist)	Features %	_Type ¹	Loc ²	Texture	Remarks
		100	Color (Inoist)		type	LUC	SIL	Remarks
0-10	10y R3/3			15				
10-20	7.5, 516	<u> </u>	10412		<u>D</u>		<u> </u>	
				· · · · · · · ·				
ype: C=Co /dric Soil II	ncentration, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix. r Problematic Hydric Soils³:
Histosol (Histic Epi Black His Hydroger Stratified Depleted Thick Dat Sandy Mt Sandy Gl Sandy Re Stripped I	(A1) ipedon (A2) itic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4)		Polyvalue Below MLRA 149B) Thin Dark Surfact Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Surfact Depleted Dark S Redox Depression	ce (S9) (L lineral (F1 Matrix (F2) (F3) face (F6) Surface (F	RR R, MI) (LRR K	.RA 149B)	2 cm Muc Coast Pra 5 cm Muc Dark Surl Polyvalue Thin Dark Iron-Man Piedmont Mesic Sp Red Pare Very Sha	ck (A10) (LRR K, L, MLRA 149B) airie Redox (A16) (LRR K, L, R) cky Peat or Peat (S3) (LRR K, L, R) face (S7) (LRR K, L, M) e Below Surface (S8) (LRR K, L) c Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) t Floodplain Soils (F19) (MLRA 149 hodic (TA6) (MLRA 144A, 145, 149E ent Material (F21) illow Dark Surface (TF12) kplain in Remarks)
	hydrophytic vegetation ayer (if observed):	on and we	tland hydrology must	be prese	nt, unless	disturbed	or problematic.	
Type:	ayer (it observed).							
Depth (incl	hes):						Hydric Soil Pr	resent? Yes No <u> </u>
emarks:								

WETLAND DE	TERMINATION DATA FO	RM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind P	raight com	Charles Charles 11010
		County: Chautauqua Sampling Date: 11/10/15
Applicant/Owner: Ball HIII Win	All and Lines	State: NY Sampling Point: DP-102
Investigator(s): M. BODER S. B		lion, Township, Range: Hanover
Landform (hillslope, terrace, etc.): HillS	Local re	elief (concave, convex, none): CONCOVE Slope (%): 0
Subregion (LRR or MLRA): U212-12		8448 Long: -79.12933903 Datum: NAD 85
Soil Map Unit Name: Choutauqu		NWI classification: upland
Are climatic / hydrologic conditions on the	site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation NO, Soil NO, or Hy	drology NA slanificantly distu	arbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hy	drology NO naturally problem	natic? (If needed, explain any answers in Remarks.)
100	croisal Trans. Hardran bronch	(il needed, explain any answers in Nemarks.)
SUMMARY OF FINDINGS - Att	ach site map showing sar	mpling point locations, transects, important features, etc
Hydrophytic Vegetation Present?	Yes X No	Is the Sampled Area
Hydric Soil Present?	Yes X No	within a Wetland? Yes X No
Welland Hydrology Present?	Yes X No	If yes, optional Wetland Site ID: WL- A579
Remarks: (Explain alternative procedure	s here or in a separate report.)	
HYDROLOGY Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is re-		Surface Soil Cracks (B6)
Surface Water (A1)	_X Water-Stained Leave	
High Water Table (A2)	Aquatic Fauna (B13)	
∑ Saturation (A3) Water Marks (B1)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Od	
Drift Deposits (B3)	Presence of Reduced	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) d Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)		on in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (0	
Inundation Visible on Aerial Imagery		
Sparsely Vegetated Concave Surface	A THE PARTY OF THE	FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes X	_ No Depth (inches): 0	12"
Water Table Present? Yes X	No Depth (inches): 0 ¹ /	
Saturation Present? Yes X (includes capillary fringe)	No Depth (inches): 0 17	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:		
Ē		

Tree Stratum (Plot size: 30') 1. NOT APPU CAPIL		Species?	Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2		in the last of the		Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
5				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
6	0	= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')		664.0		FACW species x 2 =
1 Alnus Mana	10_	Yes	FACH	FAC species x 3 =
2. Cornus racemosa	5	Yes	FAC	FACU species x4 =
		-		UPL species x5 =
3				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
1:1	15	= Total Co	over	X 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')		- 1730		3 - Prevalence Index is ≤3.01
1. Carexintumescens	15	No	FACH	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
2 Typha angustitolia	15	No	OBL	Problematic Hydrophytic Vegetation¹ (Explain)
	50	Yes	OBL	¹ Indicators of hydric soil and wetland hydrology must
3 Polygonum aritolium	- 5	Al	OBL	be present, unless disturbed or problematic.
4 Leersia oryzoides		. Wa.	-FACH	Definitions of Vegetation Strata:
5. Epilobium ciliatum	- 	No		
Sarex Jupulia	5	No	- ast	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7. Scirpus cypertnas	_ 5	No	OBL	Sapling/shrub - Woody plants less than 3 in. DBH
8		,		and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
0				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12	100			height.
Woody Vine Stratum (Plot size: 301)	100	_ = Total C	over	
1. NOT Applicable				
2.				Hydrophytic Vegetation
3				Present? Yes _X No
.4.				
		= Total C	over	

•	-		
	()		

Sampling Point: 625

Profile Description: (Describe to the concepts) Depth Matrix	Red	ox Feature	S			
(inches) Color (moist) %	Color (moist)	%	Type ¹		Texture	Remarks
0-8" 254 25/1 95	10462/8			<u></u>	SIL	
			_			
Type: C=Concentration, D=Depletion, R lydric Soll Indicators:	M=Reduced Matrix, M	S=Masked	Sand Gra	ains.		=Pore Lining, M=Matrix.
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14)) ace (S9) (L Mineral (F1 Matrix (F2) ((F3) rface (F6) Surface (F dions (F8)	.RR R, ML () (LRR K,)	.RA 149B) L)	2 cm Muck Coast Prairi 5 cm Mucky Dark Surface Polyvalue B Thin Dark S Iron-Mangai Piedmont Fi Mesic Spod Red Parent Very Shallor Other (Expla	Problematic Hydric Solis ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) Pelow Surface (S8) (LRR K, L) Purface (S9) (LRR K, L) Purface (TA5) (MLRA 144A, 145, 149B) Material (F21) Purface (TF12) Purface (TF12)
ndicators of hydrophytic vegetation and vestrictive Layer (if observed):	vetland hydrology mus	t be prese	nt, unless	disturbed	or problematic.	was the same of th
Type:						
Depth (Inches):					Hydric Soll Pres	onto Von Y No
emarks:				•	Hydric Soil Ples	ent? Yes X No
	-4	*				

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua ___ Sampling Date: 11/10/15 Applicant/Owner: Ball Hill WIM Energy, U.C. State: NY Sampling Point: DP- 626 Investigator(s): M. Biberg 5. Buckenmeyer Section, Township, Range:____ Hanover Landform (hillslope, terrace, etc.): HIIISIOPE Local relief (concave, convex, none): CONCOVE Slope (%): 2 Subregion (LRR or MLRA): LV2-12 Lat: 42.44516235 Long: -79.1287335 Datum: NAD83 Soil Map Unit Name: Chautauqua Silt Loam NWI classification: LoiGOC Are climatic / hydrologic conditions on the site typical for this time of year? Yes __X___ No_____ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No significantly disturbed?

Are "Normal Circumstances" present? Yes X Are Vegetation No. Soil No., or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? If yes, optional Wetland Site ID: WL-A580 Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) > Surface Water (A1) __ Water-Stained Leaves (B9) ★ Drainage Patterns (B10) High Water Table (A2)
Saturation (A3) ___ Aquatic Fauna (B13) ___ Moss Trim Lines (B16) _ Marl Deposits (B15) ___ Dry-Season Water Table (C2) Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) ___ Sediment Deposits (B2) __ Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) __ Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) ___ Recent Iron Reduction In Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) ___ Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerlal Imagery (B7) __ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes X No Depth (inches): 0-1" Yes X No Depth (inches): W Water Table Present? Saturation Present? No ____ Depth (inches): 0 11 Wetland Hydrology Present? Yes X (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

EGETATION - Use scientific names of plants			Sampling Point: <u>626</u>
Tree Stratum (Plot size: 301) 1. NOT APPII CABLE 2.		Species? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strate: (B)
),			Percent of Deminant Spacies
5			That Are OBL, FACW, or FAC:(A/B)
7,			Prevalence Index worksheet: Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15') NOT APPITCABLE	<u> </u>		OBL species
4,			Prevalence Index = B/A =
6.			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
7	0	= Total Cover	2 - Dominance Test is >50% 3 - Prevalence Index Is ≤3.0¹
Herb Stratum (Plot size: 51)	<u>30</u>	Yes OBL	
2 Carexflava 2 Ranunculus bulbasus	20	Yes FACK	1 Indicators of hydric soil and wetland hydrology must
5 Symphytrichum pilosum 5 Epilobium ciliatum	10	No FAC	Definitions of Vegetation Strata:
7,			Tree Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11	-		Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: 30') 1. NOT APPILCABLE	100	2 = Total Cover	Hydrophytic
2	-		Vegetation Present? Yes X No
3			
	n	= Total Cover	

Matrix Color (molet)		Redo	x Features	T1	1 - 2	Tartona	Demade
Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture	Remarks
2.54971		101/25/1	5	<u> </u>	<u></u>	<u> </u>	
	<u></u>						1.7.7
oncentration, D=Depl	etion, RM	=Reduced Matrix, MS	S=Masked S	Sand Gra	ains.		ore Lining, M=Matrix.
ark Surface (A12) Mucky Mineral (S1) Bleyed Matrix (S4) Bedox (S5) Matrix (S6) rface (S7) (LRR R, M	ILRA 1491	MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depress	ce (S9) (LR fineral (F1) Matrix (F2) (F3) (F3) face (F6) Surface (F7) lons (F8)	RR, ML (LRRK)	.RA 149B) , L)	Coast Prairie 5 cm Mucky P Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangane Pledmont Floo Mesic Spodic Red Parent M Very Shallow Other (Explair	Dark Surface (TF12)
Layer (if observed):		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,			•
ches):						Hydric Soll Preser	nt? Yes X No
	oncentration, D=Deplindicators; (A1) Olpedon (A2) Istic (A3) On Sulfide (A4) Id Layers (A5) Id Below Dark Surface Indicky Mineral (S1) Oleyed Matrix (S4) Redox (S5) Matrix (S6) Ifface (S7) (LRR R, M If hydrophylic vegetat Layer (If observed):	concentration, D=Depletion, RMindicators: (A1) Olpedon (A2) stic (A3) on Sulfide (A4) d Layers (A5) d Below Dark Surface (A11) ark Surface (A12) Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR R, MLRA 1496 f hydrophylic vegetation and we Layer (If observed):	oncentration, D=Depletion, RM=Reduced Matrix, MS Indicators: (A1)	concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sindicators: (A1)	concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Graindicators: (A1)	concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators: (A1)	oncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Concentration

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua sampling Date: 1111415 Applicant/Owner: Ball Hill Wind Energy State: NY Sampling Point: DP- 627 Investigator(s): M. Poberg S. Buckenmuyer Section, Township, Range:_______

Landform (hillslope, terrace, etc.): HillSlope Local relief (concave, convex, none): ______ none Slope (%): O Subregion (LRR or MLRA): LRQ-R Lat: 47-44460263 Long: 79.12882435 Datum: NHO-83 Soil Map Unit Name: Fremont Silt Loam NWI classification: upland No _____ (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes Y Are Vegetation No., Soil No. or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes ____ No X within a Wetland? Hydric Soil Present? _ NoX Wetland Hydrology Present? Yes If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soll Cracks (B6) __ Drainage Patterns (B10) Surface Water (A1) ___ Water-Stained Leaves (B9) ___ Moss Trlm Lines (B16) High Water Table (A2) ___ Aquatic Fauna (B13) Saturation (A3) ___ Dry-Season Water Table (C2) __ Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) __ Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) __ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Geomorphic Position (D2) __ Shallow Aquitard (D3) Iron Deposits (B5) ___ Thin Muck Surface (C7) __ Inundation Visible on Aerial Imagery (B7) __ Other (Explain in Remarks) ___ Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes _____ No ____ Depth (inches): Surface Water Present? Water Table Present? Yes ____ No ___ Depth (inches): Saturation Present? Yes ____ No ___ Depth (inches): Wetland Hydrology Present? Yes ____ No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Tree Stratum (Plot size: 30') 1. NOT Apolicable		Species?	Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: (B)
5,				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15) 1. Not Applicable 2				OBL species 0 x 1 =
5,				Prevalence Index = B/A = L
6	30 20 5	= Total Cor	FACU FACU FACU	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Control of the Contro
3	,		FACU	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.
6			FACU	Tree - Woody plants 3 in. (7.6 cm) or more in diamete
6			FACU	Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in
6				Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
7	100			Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in

20" 2.5y 4/3 90	2.5y 6/4	% Typ	Loc²	51L	Remarks
<u>20" 2.54 4/3 9(</u> ————————	2.59 4/4	10 C		SIC .	
					1
				•	
					West to the second seco
				2	Inter McMatule
pe: C=Concentration, D=Depletion, dric Soll Indicators:	RM=Reduced Matrix, N	/IS=Masked San	d Grains.	² Location: PL=Pore I	natic Hydric Solls ³ :
Histosof (A1) Histic Epipedon (A2) Black Histic (A3)	MLRA 149	ow Surface (S8) B) face (S9) (LRR I		2 cm Muck (A10) (Coast Prairie Redo 5 cm Mucky Peat o	LRR K, L, MLRA 149B) ox (A16) (LRR K, L, R) or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4)		Mineral (F1) (LF		Dark Surface (S7)	
Stratified Layers (A5)	Loamy Gleyed				urface (S8) (LRR K, L)
Depleted Below Dark Surface (A11				Thin Dark Surface	
Thick Dark Surface (A12)	Redox Dark S				tasses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)		Surface (F7)			ain Soils (F19) (MLRA 1495 5) (MLRA 144A, 145, 149B
Sandy Gleyed Matrix (S4)	Redox Depres	ssions (F8)		Red Parent Materi	
Sandy Redox (S5)				Very Shallow Dark	
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA	149B)			Other (Explain in F	Remarks)
dicators of hydrophytic vegetation ar strictive Layer (if observed):	nd wetland hydrology m	ust be present, u	ınless disturbed	or problematic.	
Type: Depth (Inches):				Hydric Soll Present?	Yes No _X
marks:					

WETLAND DETERMINATION DATA FO	RM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project City/ Applicant/Owner: Ball Hill Wind Energy, WC Investigator(s): M. Boberg S. Birchenwayer Sect Landform (hillslope, terrace, etc.): Hillshope Local re Subregion (LRR or MLRA): LRL-R Lat: 42.44659 Soil Map Unit Name: Fremont Sit Local Are Vegetation No., Soil No., or Hydrology No. significantly distorted to the site of the site of the significantly distorted to the site of	Sampling Date: IIIII 15 State: NY Sampling Point: DP - 62 tion, Township, Range: HANOVEY ellef (concave, convex, none): CONCO/L Slope (%): Z 1 6 3 Long: 79.13040717 Datum: NAD-83 NWI classification: UDIOYO Yes X No (If no, explain in Remarks.) urbed? Are "Normal Circumstances" present? Yes X No
Hydrophytic Vegetation Present? Hydric Soli Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.)	Is the Sampled Area within a Wetland? Yes X No If yes, optional Wetland Site ID: WL - A581
Drift Deposits (B3) Presence of Reduce	Moss Trim Lines (B16) Dry-Season Water Table (C2) dor (C1) Crayfish Burrows (C8) eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) ed Iron (C4) Stunted or Stressed Plants (D1) ion in Tilled Soils (C6) Geomorphic Position (D2) (C7) Shallow Aquitard (D3)
Surface Water Present? Water Table Present? Saturation Present? (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, presents:	Wetland Hydrology Present? Yes 7 No

Absolute % Cover	Dominant Species?		Dominance Test worksheet: Number of Dominant Species
			That Are OBL, FACW, or FAC:(A)
			Total Number of Dominant Species Across All Strata: (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
0	= Total Cov	/er	OBL species x 1 =
			FACW species x 2 =
10	Y	FAC	FAC species x 3 =
	V	FACU	FACU species x 4 =
•		TICA	UPL species x 5 =
			Column Totals: (A) (B)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
15			X 2 - Dominance Test is >50%
72	= Total Co	/er	3 - Prevalence Index is ≤3.01
35	У	FAC.	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	V		Problematic Hydrophytic Vegetation¹ (Explain)
	10		
		. ,	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	-		
10	N	OBL	Definitions of Vegetation Strata:
	N	FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
			Sapling/shrub – Woody plants less than 3 in. DBH
		-	and greater than or equal to 3.28 ft (1 m) tall.
-		-	
			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
			Woody vines - All woody vines greater than 3.28 ft in height.
	- T-1-1 O-		neight.
100	. ≖ Total Co	ver	
			Livelyamburita
			Hydrophytic Vegetation
			Present? Yes X No
			D = Total Cover

	Color (moist)	%	Color (moist)	ox Feature %		Loc2	Texture	Rema	arks	
nches))-9"	2543/1	98	10YP 6/8	2	(m	CIL			
			all divine and the second							
ype: C=C	oncentration, D=Dept	etion, RM	≔Reduced Matrix, N	/S=Maske	d Sand Gr	ains.	²Location: PL	≖Pore Lining, N	√=Matri	х.
Histosol Histic Ej Black Hi Hydroge Stratifier Deplete Thick D: Sandy N Sandy F Stripped Dark Su	pipedon (A2) Istic (A3) Istic (A3) Istic (A4) Istic (A4) Istic (A4) Istic (A6) Istic (A6) Istic (A12)	ILRA 149		3) face (S9) (Mineral (F Matrix (F X (F3) urface (F6 C Surface (F8)	(LRR R, M =1) (LRR K 2) 3) (F7)	LRA 149B)	Coast Prais 5 cm Muck Dark Surfa Polyvalue Thin Dark Iron-Mang Piedmont I Mesic Spo Red Parer Very Shall Other (Exp	(A10) (LRR K, rie Redox (A16) y Peat or Peat ce (S7) (LRR K Below Surface Surface (S9) (Lanese Masses Floodplain Solls dic (TA6) (MLR t Material (F21) ow Dark Surface lain in Remarks	L, MLF (CRR I (S3) (LI (C, L, M) (S8) (LF RR K, L (F12) (L (F12) (L (A 144A) (CR) (TF12) (CR) (TF12)	RA 149B) K, L, R) RR K, L, R) RR K, L) -) LRR K, L, R) (MLRA 149B)
	f hydrophytic vegetat Layer (if observed):		etland hydrology m	ust be pre	sent, unles	s disturbed	or problematic.			
Type:										
Depth (in			-1				Hydric Soll Pre	sent? Yes_	X	No
emarks:										

WEI	LAND DETERMINATION DATA	FORM – Northcentra	and Northeast	Region
Project/Site: Ball Hill		City/County: Chauta	ugua	Sampling Date: 11/10/15
Applicant/Owner: Ball H	ill wind Energy, LLC		State: NY	_ Sampling Point: U29
	g s. Buckermeyer	Section, Township, Range:		Hanover
	etc.): Hillslope Lo			
	LDR-R Lat: 42.441			
	emont silt Loam	LVIII.		ation: upland
	litions on the site typical for this time of y	oor? Von V No		The second secon
	NO, or Hydrology significantly			resent? Yes X No
Are Vegetation NU, Soil_	ND, or Hydrology naturally pr	oblematic? (If needed	i, explain any answe	rs in Remarks.)
SUMMARY OF FINDIN	NGS - Attach site map showing	a sampling point locat	ions, transects	important features, etc.
Hydrophytic Vegetation Pres		is the Sampled Area within a Wetland?		_ No X_
Hydric Soil Present?				
Wetland Hydrology Present	ve procedures here or ln a separate repo	If yes, optional Wetla	nd Site ID:	· · · · · · · · · · · · · · · · · · ·
remarks. (Explain alternati	ve procedures here or in a separate repo	лт.)		
HYDROLOGY			-	
Wetland Hydrology Indica	tors:	A CONTRACTOR OF THE PARTY OF TH	Secondary Indica	tors (minimum of two required)
	n of one is required; check all that apply)		Surface Soil	
Surface Water (A1)	Water-Stained		Drainage Par	
High Water Table (A2)	Aquatic Fauna	and the second s	Moss Trim Li	7.00
Saturation (A3)	Mari Deposits			Water Table (C2)
Water Marks (B1)	Hydrogen Sulf		Crayfish Buri	Carlot Ca
Sediment Deposits (B2)		ospheres on Living Roots (C3		sible on Aerial Imagery (C9)
Drift Deposits (B3)		educed Iron (C4)		tressed Plants (D1)
Algal Mat or Crust (B4)		eduction in Tilled Solls (C6)	Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Sur	face (C7)	Shallow Aqui	itard (D3)
Inundation Visible on A	erial Imagery (B7) Other (Explain	in Remarks)	Microtopogra	aphic Relief (D4)
Sparsely Vegetated Cor	ncave Surface (B8)		FAC-Neutral	Test (D5)
Field Observations:				
Surface Water Present?	Yes No Depth (inches	s):		
Water Table Present?	Yes No Depth (Inches	s):		
Saturation Present?	Yes No Depth (Inches	s): Wetland	d Hydrology Preser	it? Yes No X
(Includes capillary fringe)	ream gauge, monitoring well, aerial phot	toe provious inspections) if :	wallable:	
Describe Recorded Data (St	ream gauge, monitoring well, aenai phot	os, previous inspections), ir a	valiable.	
Remarks:			1,000	
	*			

Dominant Indicator Species? Y FACU. Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: D (A) Total Number of Dominant Species That Are OBL, FACW, or FAC: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species FACW species X 2 = D
Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 5 x 1 = 5
Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 5 x 1 = 5
Species Across All Strata:
Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: OBL species 5 x 1 = 5
That Are OBL, FACW, or FAC: (A/E Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 =
Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 95 x 1 = 5
Total Cover OBL species <u>95</u> x1= <u>5</u>
100 Mar 100
UPI species () x5= D
Column Totals: 105 (A) 405 (B)
Prevalence Index = B/A = 4.05
Hydrophytic Vegetation Indicators:
1 - Rapid Test for Hydrophytic Vegetation
Total Cover 2 - Dominance Test is >50%
3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting
data in Remarks or on a separate sheet)
Y NI _ Problematic Hydrophytic Vegetation¹ (Explain)
Y FACU Indicators of hydric soil and wetland hydrology must
N OBL be present, unless disturbed or problematic.
N Forty Definitions of Vegetation Strata:
Tree – Woody plants 3 in. (7.6 cm) or more in diameter
at breast height (DBH), regardless of height.
and greater than or equal to 3.28 ft (1 m) tall.
Herb - All herbaceous (non-woody) plants, regardless of
size, and woody plants less than 3.28 ft tall.
Woody vines - All woody vines greater than 3.28 ft in
height.
Total Cover
Hydrophytic Vegetation
Present? Yes No X
= Total Cover

epth Matrix	Redo	x Features		the absence of inc	Remarks
nches) Color (moist) %	Color (moist)		oe ¹ Loc ²		Remarks
-20" 104R3/2 95	10462/8	<u>5</u> <u>C</u>	_ m		
		D-Masked Con	d Crains	21 contion: DI	Pore Lining, M=Matrix.
ype: C=Concentration, D=Depletion, R ydric Soll Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14)	Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri X Redox Dark Si Depleted Dark Redox Depres	ow Surface (S8) i) ace (S9) (LRR Mineral (F1) (LI Matrix (F2) x (F3) urface (F6) Surface (F7) sions (F8)	(LRR R, R, MLRA 149B) RR K, L)	Indicators for P 2 cm Muck of Coast Prairi 5 cm Mucky Dark Surfact Polyvalue B Thin Dark S Iron-Manga Pledmont F Mesic Spool Red Parent Very Shallo Other (Expl	roblematic Hydric Solls ³ : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L, M) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Solls (F19) (MLRA 149B) ic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) aln in Remarks)
ndicators of hydrophytic vegetation and estrictive Layer (if observed):	wettand hydrology mu	ist be present, t	iniess disturbed	or problematic.	AND A CONTRACT OF THE PARTY OF
Type: Depth (inches):				Hydric Soil Pres	ent? Yes X No
emarks:					

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua Sampling Date: 11110/15 Project/Site: Ball Hill Wind Project Applicant/Owner: Rall Hill Wind Energy, U.C. State: NY Sampling Point: DP - 630 Investigator(s): M. PODETO S. PUCKEDMEURY Section, Township, Range: Hanover Landform (hillslope, terrace, etc.): HILSINDE Local relief (concave, convex, none): CONCOVE Slope (%): 0 Subregion (LRR or MLRA): 122-12 Lat: 42.4474133 Long: -79.1352377 Datum: NAD 83 Soil Map Unit Name: Chartaugua SII+ Loam NWI classification: upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No_ Are Vegetation NO, Soil NO, or Hydrology ND naturally problematic? (if needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WL-A582 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soll Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ✓ Drainage Patterns (B10) X Surface Water (A1) X Water-Stained Leaves (B9) X High Water Table (A2) ___ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) X Saturation (A3) Dry-Season Water Table (C2) Marl Deposits (B15) ___ Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) __ Drift Deposits (83) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) _ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Shallow Aquitard (D3) Iron Deposits (B5) __ Thin Muck Surface (C7) __ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) ___ Microtopographic Relief (D4) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No ___ Depth (inches): 0-1 Yes X No ___ Depth (Inches): 5 Water Table Present? Wetland Hydrology Present? Yes X No_ No ____ Depth (Inches): 3" Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Absolute % Cover 50	Dominan Species?	t Indicator Status FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
80	Yes	FACU	
15	No		Total Number of Dominant Species Across All Strata: (B)
15	No		Burney Columnia Columnia
		Those	Percent of Dominant Species That Are OBL, FACW, or FAC: 37.5 (A/B)
_			
			Prevalence Index worksheet:
100	-		
100	= Total Co	ver	OBL species 2 x1 = 2
	M	Chatt	FACW species $\frac{18}{15}$ $\times 2 = \frac{36}{15}$
5	Yes	FACU	1160
5	yes	FACIL	
5	Yes	FAC12	UPL species x5= U82
5	Yes	FACU	Column Totals: 135 (A) 483 (B)
		111201	Prevalence Index = B/A = 3.6
	***************************************	-	Hydrophytic Vegetation Indicators:
	_		1 - Rapid Test for Hydrophytic Vegetation
20			2 - Dominance Test is >50%
90	= Total Co	ver	3 - Prevalence Index is ≤3.01
AEA	u.	^	X 4 - Morphological Adaptations (Provide supporting
8_	Yes	+ACL	data in Remarks or on a separate sheet)
5	Yes	FACIN	Problematic Hydrophytic Vegetation¹ (Explain)
2	No	OBL	Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
			Definitions of Vegetation Strata:
-			Definitions of Vogetation Strata.
			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
			at breast height (DBH), regardless of height.
			Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.
			Herb - All herbaceous (non-woody) plants, regardless of
			size, and woody plants less than 3.28 ft tall.
			Woody vines - All woody vines greater than 3.28 ft in
15	T-1-10-		height.
	= otal Co	ver	
	-		The description of the second
	-		Hydrophytic Vegetation
			Present? Yes No
0	= Total Co		
	50 20 15 15 100 55 55 5	50 Yes 30 Yes 15 No 15 No 15 No 100 = Total Co 5 Yes 5 Yes 5 Yes 5 Yes 100 = Total Co 8 Yes 2 No	50 Yes FACU 30 Yes FACU 15 No FAC 15 No FACU 15 No FACU 100 = Total Cover 5 Yes FACU 5 Yes FACU 5 Yes FACU 5 Yes FACU 2 No OBL

Depth	Matrix	10 1110 110	pth needed to docu Red	ox Feature	8		ii tiio abbolloo b	,
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc2	Texture	Remarks
5-10	2.54 25/1	90	10425/8	10	C	m	_511	
10-8	10425/6	100	10412 5/8	40	<u>C</u>	M	<u> </u>	
	Press							
¹Type: C=C	oncentration D=Der	oletion RA	/=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soll		action, ren	Troducou Matix, II	O MADICO	Cana Or		Indicators fo	or Problematic Hydric Solls ³ :
Black H Hydroge Stratifie Deplete Thick D Sandy N Sandy C Sandy F Stripped Dark Su	pipedon (A2) Istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfacerk Surface (A12) Mucky Mineral (S1) Bleyed Matrix (S4) Redox (S5) I Matrix (S6) Iface (S7) (LRR R, I	MLRA 149	MLRA 1498 Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Surf Depleted Dark Redox Depres BB) wetland hydrology mu	, ace (S9) (I Mineral (F ² Matrix (F2 x (F3) urface (F6) Surface (F slons (F8)	i) (LRR K) 7)	, L)	i) 5 cm Mu Dark Su Polyvalu Thin Dai Iron-Mai Piedmoi Mesic S Red Par Very Sh Other (E	rairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R) uface (S7) (LRR K, L, M) us Below Surface (S8) (LRR K, L) rk Surface (S9) (LRR K, L) nganese Masses (F12) (LRR K, L, R) nt Floodplain Soils (F19) (MLRA 149B) podic (TA6) (MLRA 144A, 145, 149B) rent Material (F21) allow Dark Surface (TF12) Explain in Remarks)
	Layer (if observed)		voluna nyarology ma	st bo prost	ont, unico	y diotal bot	or problemane.	
Туре:		- ANTO-	_					
Depth (in	ches):		-				Hydric Soll F	Present? Yes X No

WETLAND DETERM	IINATION DATA FORM	I – Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	- Cltv/Cou	inty: Chautaugua Sampling Date: 11/10/15
		State: NY Sampling Point: DP-1031
Investigator(s): M.BDDER S.BUKLENY	Aller Section	Township, Range:
Landform (hillslope, terrace, etc.): Hillslo		
		Long: -79.1326629 Datum: NAD
Soil Map Unit Name: Fremont SI	It Loan	NWI classification: upland
Are climatic / hydrologic conditions on the site typ	ical for this time of year? Yes	No (If no, explain in Remarks.)
Are Vegetation NO , Soll No , or Hydrology	No significantly disturbed	d? Are "Normal Circumstances" present? Yes 🗶 No
Are Vegetation $N0$, Soil $N0$, or Hydrology	NO naturally problematic	? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach si	te map showing samp	ling point locations, transects, important features, etc
	110 /	s the Sampled Area vithin a Wetland? Yes No X
	- N	yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here		yes, optional wettand site ib.
	or in a copulate repairing	
-		
Note the model was made to the first terms of the state o	(minute) a frame	
HYDROLOGY	With the second	the state of the s
Wetland Hydrology Indicators:	and the second	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (이 그래요 그 그 그 그 그 그 그 그 그는 그는 그는 그는 그는 그를 다니고 있다. 그리고 있다고 있는 그는 그를 다고 있다고 있다고 있다.
Sediment Deposits (B2)	Oxidized Rhizospheres	
Drift Deposits (B3)	Presence of Reduced In	
Algal Mat or Crust (B4)	Recent Iron Reduction in	
Iron Deposits (B5)	Thin Muck Surface (C7)	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remar	
Sparsely Vegetated Concave Surface (B8) Field Observations:	and the same of th	FAC-Neutral Test (D5)
	Depth (Inches):	
Water Table Present? Yes No		
	Depth (inches):	Wetland Hydrology Present? Yes No X
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previo	us inspections), if available:
Remarks:		
- <u>e</u>		
	•	

Absolute		Indicator	Dominance Test worksheet:
	V		Number of Dominant Species
	Yes	FACU	That Are OBL, FACW, or FAC: (A)
20	Yes	FACU	Total Number of Dominant
20	Yes	FACU	Species Across All Strata: (B)
20	Ves	FACU	Percent of Dominant Species
			That Are OBL, FACW, or FAC: (A/B)

	-	-	Prevalence Index worksheet:
			Total % Cover of: Multiply by:
80	= Total Co	ver	OBL species x 1 =
			FACW species x 2 =
_5	Yes	FACU	FAC species x3=
5	Yes	FACU	FACU species 105 $\times 4 = 420$
5	Vec		UPL species x5=
5			Column Totals: 105 (A) 420 (B)
<u> </u>	163	Thu	Prevalence Index = B/A = 4,0
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
20	= Total Co	ver	2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.01
5	Vec	ENLI	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	10	THU	Problematic Hydrophytic Vegetation¹ (Explain)
			Problematic Hydrophytic Vegetation (Explain)
			Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
			Definitions of Vegetation Strata:
			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
		75-5	at breast height (DBH), regardless of height.
			Sapling/shrub - Woody plants less than 3 in. DBH
			and greater than or equal to 3.28 ft (1 m) tall.
			FT I AND I WAS A STATE OF THE S
			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
			Woody vines - All woody vines greater than 3.28 ft in height.
5	- Total Co	Wor	IIVIBIN.
	_ = 10141 00	VCI	
	-		Hydrophytic
			Vegetation
		_	Present? Yes No X
	-		
^	= Total Co	wor	
	20° 20 20 20 20 5 5 5 5	201 Yes 20 Yes 20 Yes 20 Yes 20 Yes 20 Yes 5 Yes 5 Yes 5 Yes 5 Yes 5 Yes 6 Yes 6 Yes 6 Yes 7 Yes	20 Yes FACU 20 Yes FACU 20 Yes FACU 80 = Total Cover 5 Yes FACU

Sampling Point: 431 SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features Remarks (Inches) Cotor (moist) Color (moist) 2" 40 INR 3/2 40 D 90 104R 5/B 10 2.545/6 ²Location: PL=Pore Lining, M=Matrix. ¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators for Problematic Hydric Soils3: Hydric Soll Indicators: ___ 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histosol (A1) Polyvalue Below Surface (S8) (LRR R, __ Coast Prairie Redox (A16) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) ___ Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Stratified Layers (A5) __ Loamy Gleyed Matrix (F2) Thin Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Iron-Manganese Masses (F12) (LRR K, L, R) Redox Dark Surface (F6) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Solls (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Gleyed Matrix (S4) __ Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Hydric Soil Present? Yes Depth (inches):_ Remarks:

WETLAND DETERN	/IINATION DATA FORM - No	orthcentral and Northeast Region
Project/Site: Ball Hill Wind Proje	c+ Clty/County: (PAUTAUQUA Sampling Date: 11/110/15
Applicant/Owner: Call Hill Wind F		State: N Sampling Point: DP-103
Investigator(s): M. BOBLIG S. BUCK		
andform (hillslope, terrace, etc.): HillSlop		ve, convex, none): CONCOVE Slope (%): 0-7
Subregion (LRR or MLRA): LRU-R		Long: -79,13402909 Datum: NRD -8
Soil Map Unit Name: <u>Fremont Si</u>		NWI classification: \u00e401000
Are climatic / hydrologic conditions on the site typ		
Are Vegetation Mo., Soil Mo., or Hydrology		Are "Normal Circumstances" present? Yes No
Are Vegetation NO , Soil NO , or Hydrology	/ No naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Affach si	ite man showing sampling r	point locations, transects, important features, etc.
Community of Findshood Attach St		· · · · · · · · · · · · · · · · · · ·
Hydrophylic Vegetation Present? Yes _	tutthin a	ampled Area a Wetland? Yes X No
Hydric Soil Present? Yes	NO	
Wetland Hydrology Present? Yes	No If yes, o	ptional Wetland Site ID: WL-A583
Remarks: (Explain alternative procedures here	or in a separate report.)	
IYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required:	check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	X Water-Stained Leaves (B9)	★ Drainage Patterns (B10)
X High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	ng Roots (C3) Saturation Visible on Aerlal Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction In Tilled	Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes X No		
Water Table Present? Yes X No		
Saturation Present? Yes X No _ (includes capillary fringe)	Depth (inches): D''	Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous insp	pections), if available:
December		
Remarks:		
40		
		3

Tree Stratum (Plot size: 30') 1. Fraxinus amuricana 2. Acer saccharum 3	<u>40</u> 20	Dominar Species	TACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
sapling/Shrub Stratum (Plot size: 151) 1. Fraxinus americana 2. Fagus granditalla 3. Alei soccharum 4.		= Total Co	FACU FACU	Prevalence Index worksheet:
Herb Stratum (Plot size: 51) 1 Epilablum ciliatum 2 symphyotichum vavae-angliae 3 bnoclea sensibilis 4 Rosa multiflora 5 Rubus idaeus 6 Carex flava 7. 8. 9. 10. 11.	20 30 28 6 2 2 2 2	= Total Co	FACW FACW FACW FACU FACU OBL	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree — Woody plants 3 In. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) talt. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft talt. Woody vines — All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: 30') 1. Not Applicable 2. 3. 4. Remarks: (Include photo numbers here or on a separate of the specific share adapted to murphological adaptations and shallow roots - species: White Ash, Sue	sheet.) UVing		cover WUX	

Depth	Matrix		B	edox Features	2 _ 1	. 2	-	Demodra
inches)	Color (moist)	%	Color (moist)		Type ¹		Texture	Remarks
D-8	2.54 2.5/1	95	10/C 5/8	5_	<u>C</u>	M.	5)L	
	-	-					-	The state of the s
						-		
-								
			· · · · · · · · · · · · · · · · · · ·					
		-	101					
	oncentration, D=Dep	oletion, RM	=Reduced Matrix	, MS=Masked	Sand G	ains.		=Pore Lining, M=Matrix.
	Indicators:							Problematic Hydric Solls ³ :
_ Histosol	The state of the s		The second secon	Below Surface	(S8) (LR	RR,	2 cm Muck	(A10) (LRR K, L, MLRA 149B) rie Redox (A16) (LRR K, L, R)
The second second second	olpedon (A2) stic (A3)		MLRA 1	งยา) Surface (S9) (I	PP P M	I RA 149R)		ky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)			ky Mineral (F				ice (S7) (LRR K, L, M)
The state of the s	Layers (A5)			yed Matrix (F2		·, -/		Below Surface (S8) (LRR K, L)
	Below Dark Surfac	e (A11)	Depleted M		,			Surface (S9) (LRR K, L)
The second secon	ark Surface (A12)	, , , , ,		Surface (F6)				anese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)			ark Surface (F				Floodplain Solls (F19) (MLRA 1498
	Bleyed Matrix (S4)			ressions (F8)	.,			dic (TA6) (MLRA 144A, 145, 149B
	Redox (S5)							nt Material (F21)
	Matrix (S6)							ow Dark Surface (TF12)
	rface (S7) (LRR R,	MLRA 149	9B)					olain in Remarks)
	f hydrophytic vegeta		etland hydrology	must be pres	ent, unles	s disturbed	or problematic.	
	Layer (if observed)	:						
Type:	- to a N		•				Hydric Soil Pre	esent? Yes No
	ches):		-				Hydric Soil Pre	sentr les No
temarks:								
					*			

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project _ City/County: Chautaugua Sampling Date: 11/10113 Applicant/Owner: Ball HIII Wind Energy, LLC Sampling Point: DP-1033 State: N Investigator(s): M. Bobern S Buckenmeyer Section, Township, Range: Hanover Landform (hillslope, terrace, etc.): HIISlope Local relief (concave, convex, none): CONVEX Slope (%): 0 Subregion (LRR or MLRA): LIZZ-IZ Lat: 42.44841489 Long: -79.13349488 Datum: NAD 83 Soil Map Unit Name: Fremont 311+ Loam ____ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No_ Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? No X Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) __ Drainage Patterns (B10) Water-Stained Leaves (B9) __ High Water Table (A2) Moss Trim Lines (B16) Aquatic Fauna (B13) ___ Dry-Season Water Table (C2) Saturation (A3) Marl Deposits (B15) Water Marks (B1) Crayfish Burrows (C8) _ Hydrogen Sulfide Odor (C1) __ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) __ Stunted or Stressed Plants (D1) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) ___ Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) __ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes ____ No ___ Depth (Inches): Yes ____ No ___ Depth (inches): Water Table Present? Saturation Present? _ No ____ Depth (inches): Wetland Hydrology Present? Yes_ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

201	Absolute		t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 301)	W Cove	Species?		Number of Dominant Species That Are OBL FACW or FAC: (A)
1. Fraxinus americana 2. Fagus arandifolia	20		FACU	That Are OBL, FACW, or FAC: (A)
The state of the s	20		FACU	Total Number of Dominant
3. Populus grandidentuta		N	FACU	Species Across All Strata:
4. Prunus seroting	10		Facu	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5. Acer saccharum	10	<u>N</u> _	FACU	That Are OBE, I ACV, OT AC.
6	-			Prevalence Index worksheet:
7		-		Total % Cover of:Multiply by:
161	100	_ = Total Co	ver	OBL species
Sapling/Shrub Stratum (Plot size: 15		.,		FACW species 0 x2 = 0
1. Hagus giarrantolia	40	<u> </u>	FACU	FAC species 0 x3 = 0 FACU species 105 x4 = 000
2. Acer Saccharum	10	У_	FACU	
3				UPL species $0 \times 5 = 0$ Column Totals: 105 (A) $0 \times 6 = 0$
4			100	
5				Prevalence Index = B/A = 4
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	50	= Total Co		2 - Dominance Test Is >50%
5 1	00	_= Total Co	over	3 - Prevalence Index is ≤3.01
Herb Stratum (Plot size:)	_	V	-40.	4 - Morphological Adaptations¹ (Provide supporting
1. Fagus granditalia	-5		FACU	data in Remarks or on a separate sheet)
2. Acer saccharum			- FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Fraxinus americana	5	- y _	FACY	Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10.				Herb - All herbaceous (non-woody) plants, regardless of
11				size, and woody plants less than 3.28 ft tall.
12.				Woody vines - All woody vines greater than 3.28 ft in
12,	15	T-1-1 O		height.
371		_ = Total Co	over	
Woody Vine Stratum (Plot size: 30 1) 1. NOT APPLICABLE				
1. INOT Applicable	-			Hydrophytic
2,		-		Vegetation
3,		-		Present? Yes No X
4				
	0	_ = Total Co	over	
Remarks: (Include photo numbers here or on a separate	sheet.)			L 11,7414 134 034

inahaal	Matrix		Red	ox Feature:	5		the absence of indicat			
(Inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	_Loc²		Remarks		
0-4	2.54413	100					<u> </u>	i de la composition della comp	···	
1-20	2.545/4	75	10425/8	26	<u>c</u>	<u>m</u>	SIL	7		
	2		2.54412	5	D	m	<u> </u>			
									and the second	
		-								
				-		-,				
****	1		**************************************							
	The Art Market Control			-						
					-					
	anaphralia D. D.	della Dia	-Dadus-J M-14	10-11-1			² Location: PL=Pore	Lining M-M-	atriv	
	oncentration, D=Dep Indicators:	pletion, Riv	=Reduced Matrix, N	S=Masked	Sand Gr	ains.	Indicators for Proble	ematic Hydric	Soils ³ :	
_ Histoso	(A1)		Polyvalue Beld		(S8) (LR	RR,	2 cm Muck (A10)			
	pipedon (A2)		MLRA 1498 Thin Dark Surf		DD D M	DA 440D)	Coast Prairie Re			
	listic (A3) en Sulfide (A4)		Loamy Mucky				5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)			
_ Stratifle	d Layers (A5)		Loamy Gleyed	Matrix (F2						
	ed Below Dark Surfact ark Surface (A12)	e (A11)	Depleted Matr Redox Dark S				Iron-Manganese			
	Mucky Mineral (S1)		Depleted Dark				Piedmont Floods	lain Solls (F19	9) (MLRA 149B	
	Gleyed Matrix (S4)		Redox Depres	sions (F8)			Mesic Spodic (T/		4A, 145, 149B)	
	- I- (OF)						Red Parent Mate		12)	
_ Sandy F	Redox (S5)									
_ Sandy F	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I	MLRA 149	В)				Other (Explain in			
Sandy F	d Matrix (S6) urface (S7) (LRR R, I			et ha pras	ant unlee	e disturbad	Other (Explain in			
Sandy I Stripped Dark Su	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in			
Sandy I Stripped Dark Su	d Matrix (S6) urface (S7) (LRR R, I	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in		-104	
Sandy F Stripped Dark Su ndicators of estrictive	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in	Remarks)	No_X_	
Sandy i Stripped Dark Su ndicators d estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be preso	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy i Stripped Dark Su ndicators d estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy i Stripped Dark Su ndicators d estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy I Stripped Dark Su ndicators d estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ist be prese	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy F Stripped Dark Su ndicators c estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy I Stripped Dark Su ndicators of estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy I Stripped Dark Su ndicators of estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy F Stripped Dark Su ndicators c estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be pres	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy I Stripped Dark Su ndicators coestrictive Type:	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be preso	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy i Stripped Dark Su ndicators d estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy I Stripped Dark Su ndicators d estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be pres	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy F Stripped Dark Su ndicators c estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		
Sandy F Stripped Dark Su dicators c estrictive Type: Depth (in	d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	ition and w		ust be prese	ent, unles	s disturbed	Other (Explain in or problematic.	Remarks)		

Applicant/Owner, Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: No LLC And Research State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: No LLC And Research State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: No LLC And Research State: NY Sampling Pate: 11/17 Investigator(s): M. Ball Hill Wind Energy, LLC State: No LLC And Research State: No LLC				
Investigator(s): M. BADOG R. PYCICSY Section, Township, Range: HADOVEC Landform (fillslope, terrace, etc): HIDDODE Local relief (concave, convex, none): CDOCAVE Slope (8): Dept. (1) Landform (fillslope, terrace, etc): HIDDODE Local relief (concave, convex, none): CDOCAVE Slope (8): Dept. (1) Landform (fillslope, terrace, etc): HIDDODE Local relief (concave, convex, none): CDOCAVE Slope (8): Dept. (1) Landform (fillslope, terrace, etc): HIDDODE Landform (fillslope, etc): HIDDODE Landform (fillslope, terrace, etc): HIDDODE Landform (fillslope, terrace, etc): HIDDODE Landform (fillslope, etc)	Investigatoria: M. Babom P. Povacsvi		Gialo.	ampling Point: UP- (U
Landform (fillislope, terrace, etc.)	The state of the s	Section, Township, Range:_		
Submider of Miray: LRRR Lat 42.45109239 Long: -79.13433237 Datum: NAD 8: Soil May Unit Name: LRRR Lat 42.45109239 Long: -79.13433237 Datum: NAD 8: Soil May Unit Name: LRRR Lat 42.45109239 Now Long Later Comment Com	Landform (hillslope, terrace, etc.): HILISIOPE			
Note Continue Co	Subregion (LRR or MLRA): LRR-R Lat: 42	1.2.0-40		
Are climatic / hydrologic conditions on the sile typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation \(\frac{1}{1} \) Soil \(\frac{1}{1} \) or Hydrology \(\frac{1}{1} \) significantly disturbed? Are Vegetation \(\frac{1}{1} \) Soil \(\frac{1}{1} \) or Hydrology \(\frac{1}{1} \) instinctions, instinctions, included, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: \(\frac{1}{1} \) O \(\frac{1}{1} \) No Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: \(\frac{1}{1} \) O \(\frac{1}{1} \) Surface Soil Crack (Bi) X Surface Water (A1) Weter-Stained Leaves (B9) X Drainage Patterns (B10) X Surface Water (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Yes Aquatic Fauna (B13) Moss Trim Lines (B16) Weter Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Yes Aquatic Fauna (B16) Dry-Season Water Table (C2) Crayfish Burrows (C3) Saturation (Vai) Sturied or Streased Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Sparasely Vegetated Concave Surface (B3) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparasely Vegetated Concave Surface (B3) FAC-Neutral Test (D5) Tim Muck Surface (C7) Wetland Hydrology Present? Yes X No Depth (inches): 0 1 1 No Depth (inches): 0 1 No Dep				
Are "Normal Circumstances" present? Yes X No naturally problematic? (if needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, a Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No If yes, optional Wetland Site ID: NOL.—A SY No Indicators (minimum of two requires Yes X No Indicators (Explain any answers in Remarks.) Wetland Hydrology Indicators (Explain any answers in Remarks.) Secondary Indicators (Indicators (Indica				
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, of Hydrophytic Vegetation Present? Yes X No				
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, e Hydrophytic Vegetation Present? Yes X No within a Wetland? Yes X No within a	Are Vegetation NA, Soll NA, or Hydrology NA na		장희 가수 가능하는 모든 이번 가게 되었다.	
Hydrophytic Vegetation Present? Yes X No Hydrophytic Soil Present? Yes X No Hydric Soil Present? Yes X No Hydric Soil Present? Yes X No Hydric Soil Present? Yes X No Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apoly)				
Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Hydrophytic Vegetation Present? Yes X No	is the Sampled Area	L	
APPOROLOGY Secondary Indicators: Secondary Indicators (minimum of two requires formary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water (B16) Dry-Season Water (B16) Dry-Season Water Table (C2) Craylish Burrows (C8) Saturation (A3) Marf Deposits (B15) Dry-Season Water Table (C2) Craylish Burrows (C8) Saturation (B16) Dry-Season Water Table (C2) Drift Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Sturted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Concides capillary fringe) Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () " Wetland Hydrology Present? Yes No Depth (Inches): () "	[1] "[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]			(Q))
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Stained Leaves (B9) Aquatic Fauna (B13) Moss Trim Lines (B16) Pry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Solis (C6) Inon Deposits (B5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (Inches): () " Wetland Hydrology Present? Yes X No Depth (Inches): () "		If yes, optional Wetlar	nd Site ID: WL-A	204
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Marks (B8) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) Saturation Present? Yes X No Depth (Inches): (1) 1/1 Water Table Present? Yes X No Depth (Inches): (1) 1/1 Water Table Present? Yes X No Depth (Inches): (1) 1/1 Wetland Hydrology Present? Yes X No Depth (Inches): (1) 1/1 Wetland Hydrology Present? Yes X No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Surface Water (A1)			Secondary Indicators (r	minimum of two required)
High Water Table (A2) Aquatic Fauna (B13) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Aquatic Fauna (B13) Marl Deposits (B15) Dry-Season Water Table (C2) Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes X No Depth (inches): Surface Water Present? Yes X No Depth (inches): Wetland Hydrology Present? Yes X No Depth (inches): Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		t apply)	Surface Soil Cracks	s (B6)
Saturation (A3)		Stained Leaves (B9)	X Drainage Patterns	(B10)
Water Marks (B1)	V			
Sediment Deposits (B2)				The state of the s
Drift Deposits (B3)				
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes X No Depth (inches): 7" Water Table Present? Yes X No Depth (inches): 7" Saturation Present? Yes X No Depth (inches): 7" Saturation Present? Yes X No Depth (inches): 7" Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			네트 리트 - 	
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Vester Tester Present?				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Vegetated Concave Surface (B8) Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Vegetated Concave Surface (B8) Vegetated Concave Sur	Iron Deposits (B5) Thin M	지구 아이지 그 없다. 그목으로 모든 그리고 보고 있다. 그리고 있다고 있다.		Charles and Charle
Field Observations: Surface Water Present? Yes X No Depth (inches): 0 1 1		Explain in Remarks)		
Surface Water Present? Yes X No Depth (inches): 7" Water Table Present? Yes X No Depth (inches): 7" Saturation Present? Yes X No Depth (inches): 7" Wetland Hydrology Present? Yes X No Depth (inches): 7" Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			FAC-Neutral Test (D5)
Water Table Present? Yes X No Depth (inches): 74" Saturation Present? Yes X No Depth (inches): 74" Wetland Hydrology Present? Yes X No Depth (inches): 74" Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Saturation Present? Yes No Depth (inches): () '				
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Name of the State		. X
	(includes capillary fringe)		The second second second	es _^_ No
Remarks:	Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previous inspections), if av	ailable:	
Kemarks:				
	cemarks:			

		Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant Species Across All Strata: (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC:
			Prevalence Index worksheet:
0	= Total Cov	er	OBL species x 1 =
-		20.0	FAC energies x 2 =
5	<u>y</u>		FAC species x 3 = FACU species x 4 =
2		FACW	UPL species x 5 =
5	<u>y</u>	FACIL	Column Totals: (A) (B)
			Column Totals (A)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
15	T-1-1 0		X 2 - Dominance Test is >50%
10	= Total Cov	er	3 - Prevalence Index is ≤3.01
		224	4 - Morphological Adaptations1 (Provide supporting
	_X	Section Assessed	data in Remarks or on a separate sheet)
	N	DIBL	Problematic Hydrophytic Vegetation ¹ (Explain)
15	N	FAIN	¹ Indicators of hydric soil and wetland hydrology must
		FACW	be present, unless disturbed or problematic.
5	N		Definitions of Vegetation Strata:
			Total Minute state 2 in (7.8 am) as more in discussion
			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
	-		
			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
			Woody vines - All woody vines greater than 3.28 ft in height.
100	= Total Cov	er	
		77	
			Hydrophytic
			Vegetation
			Present? Yes _X No
_			
	5 5 5 5 5 15 15 15 5	0 = Total Cov 5	

	Sy 25/1		Color (moist)	x Features %	Type ¹	1002	Tendore		ALC: U	
		90	104R 3/8	10	С		Texture		Remarks	
pe: C=Concen	tration, D=Deple	ation, RM=	-Reduced Matrix, MS	=Masked S	and Gra		² Location:	PL=Pore	Lining, M=M:	atrix.
dric Soil Indica Histosol (A1) Histic Epipedo	itors:		Polyvalue Belov MLRA 149B)	v Surface (S			Indicators t	or Proble: uck (A10) (matic Hydric	c Solis³: ILRA 149B)
Thick Dark Sur Sandy Mucky I Sandy Gleyed Sandy Redox (Stripped Matrix Dark Surface (ide (A4) urs (A5) w Dark Surface (rface (A12) Mineral (S1) Matrix (S4) (S5) x (S6) S7) (LRR R, ML	.RA 149B	Thin Dark Surfa Loarny Mucky M Loarny Gleyed I Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depressi	lineral (F1) (Matrix (F2) (F3) face (F6) Surface (F7) ons (F8)	(LRR K,	L)	Dark Su Polyvale Thin De Iron-Ma Piedmo Mesic S Red Pa Very Sh Other (6)	irface (S7) ue Below S rk Surface nganese N nt Floodpla podic (TA6 rent Materi	(LRR K, L, I Surface (S8) (S9) (LRR M Masses (F12) Ain Soils (F13 B) (MLRA 14 al (F21) Surface (TF	(LRR K, L) (, L) (LRR K, L, R) 9) (MLRA 1498 4A, 145, 1498
strictive Layer ((if observed):		auta nyarology mas	Do prosont	, unicas	distance (n problemanc.			
Туре:										
Depth (inches):_ marks:							Hydric Soil F	Present?	Yes X	No

	d Project	City/Cour	nty: Chautaugua	County	Sampling Date: 11/17/15
Applicant/Owner: Ball Hill			1	State: NY	_ Sampling Point: DP- (6)
Investigator(s): M. BOD	erg & Peru	CSV Section	Township, Range:_		Hadover
Landform (hillslope, terrace,			concave, convex, no	The state of the s	
Subregion (LRR or MLRA):		Lat: 42.45122406			Slope (%): ()
Soil Map Unit Name: FY	and the second second		Long: <u>- /</u>		
		It Loam	te.	NWI classific	
Are climatic / nydrologic cond	Altions on the site typ	oical for this time of year? Yes		(If no, explain in Re	
Are Vegetation (N), Soil	100, or Hydrology	y No. significantly disturbed	? Are "Norma	il Circumstances" p	resent? Yes No
Are Vegetation NO , Soil	100, or Hydrology	naturally problematic?	(If needed,	explain any answer	s in Remarks.)
SUMMARY OF FINDI	NGS – Attach si	te map showing sampli	ng point location	ons, transects,	important features, etc
Hydrophytic Vegetation Pre Hydric Soil Present? Wetland Hydrology Present	Yes _	No X wit	the Sampled Area	Yes	_ No X
Remarks: (Explain alternation			es, optional Wetland	a Site ID:	
					4
	3				
IYDROLOGY					
Wetland Hydrology Indicat	A.P.	1			
Primary Indicators (minimum		chack all that apply			ors (minimum of two required)
Surface Water (A1)	or one is required, t	A CONTRACTOR AND A CONTRACTOR OF THE PARTY O	ns	Surface Soil C	
High Water Table (A2)		Water-Stained Leaves (B9 Aquatic Fauna (B13)	9)	Drainage Patt	
Saturation (A3)		Mari Deposits (B15)		Moss Trim Lin	es (B16) /ater Table (C2)
Water Marks (B1)		Hydrogen Sulfide Odor (C	1)	Crayfish Burro	
Sediment Deposits (B2)		Oxidized Rhizospheres on			ible on Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Reduced Iron			essed Plants (D1)
Algai Mat or Crust (B4)		Recent Iron Reduction in 1	130 - 2 10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Geomorphic P	
Iron Deposits (B5)		Thin Muck Surface (C7)		Shallow Aquita	The state of the s
Inundation Visible on Ae		Other (Explain in Remarks	3)		hic Relief (D4)
Sparsely Vegetated Con	cave Surface (B8)			FAC-Neutral 7	est (D5)
Field Observations:		Text and the second			
Surface Water Present?		Depth (inches):			
		Depth (inches):			
Nater Table Present?			The same		
Nater Table Present? Saturation Present?	Yes No _		Wetland H	lydrology Present	? Yes No
Nater Table Present? Saturation Present? Includes capillary fringe)	Yes No				7 Yes No
Nater Table Present? Saturation Present? Includes capillary fringe)	Yes No	Depth (inches):			? Yes No

Tree Stratum (Plot size:30') 1. NOT Applicable. 2		Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
7	_			Total % Cover of: Multiply by:
101	_0_	= Total Cov	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 151	-	X.		FACW species
1. Rosa multiflora	5	4	FACU	FACU species 105 x4= 420
2. Rubus idaeus			EALL	UPL species x 5 =
3			_	Column Totals: 110 (A) 420 (B)
4			_	Prevalence Index = B/A = 3.81
5		-	_	
6			-	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
7	10	3.55		2 - Dominance Test is >50%
and the second of the second	10	= Total Cov	ver .	3 - Prevalence Index is ≤3.01
Herb Stratum (Plot size: 5)	7.0			4 - Morphological Adaptations ¹ (Provide supporting
1. soliclage canadensis	35		FACU	data in Remarks or on a separate sheet)
2. schedombrus arundinaceous	7 107 7 7	<u>X</u>	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Phelum pratense		<u>y</u>	FACU	¹ Indicators of hydric soll and wetland hydrology must be present, unless disturbed or problematic.
4. Rosa muititiona		<u>y</u>	FACU	
5. <u>Carex Flava</u>	_5_	N	DOL	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7		-		
8				Sapling/shrub - Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.
9		-		
10		-		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
Woody Vine Stratum (Plot size: 301)	100	= Total Cov	/er	
. Not applicable		-		Hydrophytic
2		-		Vegetation Present? Yes No X
3				Liesairt ies Wo Tra
4				
	0	= Total Co	/er	

(inches)	Matrix		Redox	K Feature	8	or confirm		
(1) - 11)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks
0-10	2.51 7/3	100					514	
10-14	2544/2	100					SIL	
14-20	25Y 1/2	90	104R 5/8	5	(M	311	
			254417	5	$\overline{\Lambda}$	17		
-			20 112					
					1			
	-							
Type: C=Con	ncentration, D=Deple	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ins.	² Location: PL=Pore	Lining, M=Matrix.
lydric Soil In			2017				Indicators for Problem	ematic Hydric Soils³:
Histosol (A	A1) pedon (A2)		Polyvalue Below MLRA 149B)	Surface	(S8) (LRR	R,	2 cm Muck (A10)	(LRR K, L, MLRA 149B)
Black Hist			Thin Dark Surfac	e (S9) (L	RR R. ML	RA 149B)	Coast Praine Re	dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Loamy Mucky M	ineral (F1) (LRR K,		Dark Surface (S7	
	Layers (A5)	(444)	Loamy Gleyed M	707-1011-150, 4116			Polyvalue Below	Surface (S8) (LRR K, L)
	Below Dark Surface k Surface (A12)	(A11)	Depleted Matrix Redox Dark Surf					e (S9) (LRR K, L)
	cky Mineral (S1)		Depleted Dark S		7)		Piedmont Floods	Masses (F12) (LRR K, L, R) Iain Soils (F19) (MLRA 149B)
	eyed Matrix (S4)		Redox Depression				Mesic Spodic (T/	46) (MLRA 144A, 145, 149B)
Sandy Red Stripped M							Red Parent Mate	rial (F21)
	ice (S7) (LRR R, ML	RA 149E)				Very Shallow Da Other (Explain In	rk Surface (TF12)
								rtomantoy
ndicators of h	ydrophytic vegetatio yer (if observed):	n and we	tland hydrology must	be prese	nt, unless	disturbed of	or problematic.	
Type:	yor (ii oboorycu).					1		
100000000000000000000000000000000000000	es):							
Depth (inche							Hydric Soil Present?	Yes No _X

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: \\// Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- (0310 Investigator(s): M. BADERQ R. PEYAVSKI __ Section, Township, Range: Hanover Landform (hillslope, terrace, etc.): HIIISIOD? Subregion (LRR or MLRA): LRR-R Lat: 42.45204165 Long: -79.13509953 Datum: NAD 83 Soil Map Unit Name: BUST 5117 LOOM _____NWI classification: Upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes __X__ No _____ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No. Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: WL-A.585 Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) Water-Stained Leaves (B9) X Drainage Patterns (B10) ✓ High Water Table (A2) __ Aquatic Fauna (B13) ___ Moss Trim Lines (B16) ✓ Saturation (A3) __ Marl Deposits (B15) __ Dry-Season Water Table (C2) _ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) ___ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) ___ Geomorphic Position (D2) Iron Deposits (B5) __ Thin Muck Surface (C7) Shallow Aquitard (D3) ___ Inundation Visible on Aerial Imagery (B7) __ Other (Explain in Remarks) ___ Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes X No Depth (inches): () - (0" Surface Water Present? Yes X No Depth (inches): 7" Water Table Present? No ____ Depth (Inches): Saturation Present? Wetland Hydrology Present? Yes X No _ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Tree Stratum (Plot size: 301)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Acer Saccharum	50	y	FALL	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2. Fraxinus americana	20	У	FACIL	
3				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: ZG (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	70	= Total Cov	er	OBL species x1=
Sapling/Shrub Stratum (Plot size: 151				FACW species 12 x2= ZY
1. Fagus grandiforia	15	_Y	FACU	FAC species x 3 = \ \bar{\cappa}
2. Acer sacharum	5	У	FACU	FACU species 100 x4= 400
3. Fraxinus americana	5	Ý	EACU	UPL species x5=
4				Column Totals: 120 (A) 440 (B)
5				Prevalence Index = B/A = 3.7
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	25	= Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 51				3 - Prevalence Index is ≤3.01
1. Symphyotichum vovae-angliae	15	V	FACW	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Epilobium Ciliatum	5	Ý	FACW	Problematic Hydrophytic Vegetation¹ (Explain)
3. Rubus ideaeus	5	N	FACU	
4. Euthamia graminifolia	u	N	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. Thelypteris novemmenses	7	N	FA	Definitions of Vegetation Strata:
6. Carex flava		N	DBL	
7. (noclea sensibilis		N	FACIN	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8			TACIN	Sapling/shrub – Woody plants less than 3 in, DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
11.				size, and woody plants less than 3.28 ft tall.
12.				Woody vines - All woody vines greater than 3.28 ft in
12.	35	- Total Cau		height.
Woody Vine Stratum (Plot size: 301)		= Total Cov	er	
1. Nut Applicable			-	Hydrophytic
2	-			Vegetation
3			$\overline{}$	Present? Yes X No
	0	Total Co		
Remarks: (Include photo numbers here or on a separate s		= Total Cov	BI	

Trees/shrub species have adapted to living in wet conditions through morphological adaptations. These species have flutted trunks, and shallow roots.

Color (moist)			x Feature	98				
2.5/	%	Color (moist)	%_	Type ¹	_Loc ²	Texture	Remarks	
25y ²⁵ /1	95	104/2 5/8	_5_	<u></u>	_W_			
	_							
	etion, RM	=Reduced Matrix, MS	=Masked	Sand Grai	ins.			
A1) pedon (A2) tic (A3) I Sulfide (A4) Layers (A5) Below Dark Surface Ik Surface (A12) Icky Mineral (S1) Eyed Matrix (S4) Idox (S5) Matrix (S6) Idox (S7) (LRR R, Mineral (S7)	LRA 1491	MLRA 149B) Thin Dark Surfar Loarny Mucky M Loarny Gleyed M Depleted MatrixX Redox Dark Sur Depleted Dark S Redox Depression B)	ce (S9) (I lineral (F- Matrix (F2 (F3) face (F6) Surface (F ons (F8)	LRR R, MLI 1) (LRR K,) 7)	RA 149B) L)	2 cm Muck (A Coast Prairle 5 cm Mucky F Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangane Piedmont Floo Mesic Spodic Red Parent M Very Shallow	n10) (LRR K, L, ML Redox (A16) (LRR Peat or Peat (S3) (I (S7) (LRR K, L, M ow Surface (S8) (L face (S9) (LRR K, ese Masses (F12) (odplain Soils (F19) (TA6) (MLRA 144 aterial (F21) Dark Surface (TF1	LRA 149B) R K, L, R) LRR K, L, R) LRR K, L) LR K, L) (LRR K, L, F (MLRA 149 A, 145, 149
	on and we	etland hydrology must	be prese	ent, unless	disturbed o	r problematic.		
.yo. (ii obool vou).								
nes):						Hydric Soil Preser	nt? Yes X	No
THE LEE WE	adicators: A1) pedon (A2) tic (A3) Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) ticky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, M mydrophytic vegetation	adicators: A1) pedon (A2) tic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A11) k Surface (A12) ticky Mineral (S1) eyed Matrix (S4) dox (S5) Atrix (S6) ace (S7) (LRR R, MLRA 149) tydrophytic vegetation and we tyer (if observed):	Adicators: A1)	Adicators: A1)	Adicators: A1)	A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) pedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Sulfide (A4) Loarny Mucky Mineral (F1) (LRR K, L) Layers (A5) Loarny Gleyed Matrix (F2) Below Dark Surface (A11) Depleted Matrix (F3) k Surface (A12) X Redox Dark Surface (F6) loky Mineral (S1) Depleted Dark Surface (F7) eyed Matrix (S4) Redox Depressions (F8) dox (S5) Matrix (S6) ace (S7) (LRR R, MLRA 149B) hydrophytic vegetation and wetland hydrology must be present, unless disturbed on the company of the company o	Adicators: A1)	Indicators for Problematic Hydric A1)

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project __ City/County: Chautauqua County ___ Sampling Date: _i1/17/15 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 437 Investigator(s): M. Bobera R. Perarski Hanover _ Section, Township, Range:__ Landform (hillslope, terrace, etc.): HIIIS100C Local relief (concave, convex, none): COOVEX Slope (%): 3-5 Subregion (LRR or MLRA): LRR-R Lat: 42.45232509 Long: -79.13504189 Datum: NAD 83 Soil Map Unit Name: BUST SILL LOAM NWI classification: Upin nd Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes ______ No Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? Yes ____ No X within a Wetland? Yes ____ No X Hydric Soil Present? Yes ____ No X Wetland Hydrology Present? No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) __ Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) __ Moss Trim Lines (B16) Saturation (A3) Marl Deposits (B15) __ Dry-Season Water Table (C2) _ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) __ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) _ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) _ Algai Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) _ Thin Muck Surface (C7) Shallow Aquitard (D3) _ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes ____ No ___ Depth (inches): Water Table Present? Yes ____ No __ Depth (inches): Saturation Present? Yes ____ No __ Depth (inches): Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	***************************************	Dominance Test worksheet:
1. Fagus grandifolia	20	У	FACU	Number of Dominant Species That Are ORL FACW or FAC:
2 Acer Sonhourum	10	y	FACU	marrie obz, rvevi, errve.
3. Prunus serotina	10	·	FACU	Total Number of Dominant Species Across All Strata: (B)
	5	-		Species Across All Strata: (B)
4. 15uga (a) back (5)		N	FACUL	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
5				THAT ALE COL, I ACVI, OI I AC.
6	-			Prevalence Index worksheet:
7	1:0			Total % Cover of: Multiply by:
	45	= Total Cov	er	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x2 =
1. Fagus granditolia	10	4	FACIL	FAC species
2. Aier Saccharum	5	Y	FACU	FACU species <u>NS</u> x4= <u>ZWD</u>
3. Drunus seistina	_5_	Y	FALL	UPL species 0 x 5 = 0 Column Totals: 105 (A) 210 (B)
4				Column Totals: 105 (A) 200 (B)
5				Prevalence Index = $B/A = \dot{V} \cdot 0$
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	7/	= Total Cov		2 - Dominance Test is >50%
		= I otal Cov	er	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5)				4 - Morphological Adaptations ¹ (Provide supporting
1. Not Applicable	-			data in Remarks or on a separate sheet)
2			_	Problematic Hydrophytic Vegetation¹ (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8			1	Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tail.
10.				Herb - All herbaceous (non-woody) plants, regardless of
Ak				size, and woody plants less than 3.28 ft tall.
11,			_	Woody vines - All woody vines greater than 3.28 ft in
12				height.
301	0	= Total Cov	er	
Woody Vine Stratum (Plot size: 30')				
1. Not Applicable				Undrankuda
2	-			Hydrophytic Vegetation
3				Present? Yes No _^_
4				
	0	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate	sheet.)			1

Color (molet)	(inches)	Matrix		th needed to docur Redo	x Feature							
SPL	171	Color (moist)	%	Color (moist)		Type ¹	_Loc ²	Texture		Rema	rks	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 10 K 3	1								LA	of lit	Wer -	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 10 K 3	3-1	104R 3/3	100					SILI	-	4. 1.1		
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. A	1-8	10		1000 212	10		M	(11				
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. rdrife Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Dark Surface (F8) Sandy Gleyed Matrix (S4) S	220	2 1		11 11 1		<u>– h</u>		314				
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. rdric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thic Dark Surface (A11) Depleted Matrix (F3) Thic Dark Surface (A11) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S4) Redox Depressions (F8) Dark Surface (S7) (LRR R, MLRA 149B) Depleted Surface (T12) Chark Surface (T12) Chark Surface (T12) Other (Explain in Remarks) Hydric Soil Present? Yes No	3-10	1018318	60	454 618	10		_M_	-116				
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Indicators for Problematic Hydric Soils*: 2 cm Muck (A10) (LRR K, L, MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Stratified Layers (A5) Loarny Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Depleted Dark Surface (F7) Sandy Redox (S5) Stripped Matrix (S4) Polyvalue Below Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Find-manganese Masses (F12) (LRR K, L, R) Mesic Spodic (TA6) (MLRA 144A, 145, 145, 145, 145, 145, 145, 145, 145				251 1/2	10		M_	314				
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Pledmont Floodplain Soils (F19) (MLRA 144 145, 145 145 145 145 145 145 145 145 145 145				10 YR 31 9	10	_0_	<u>M</u>	-51L				
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Pledmont Floodplain Soils (F19) (MLRA 144A, 145, 148 Sandy Redox (S5) Stripped Matrix (S6) Redox Depressions (F8) Red Parent Material (F21) Dark Surface (S7) (LRR R, MLRA 149B) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type: Depth (Inches): Type: Depth (Inches): Hydric Soil Present? Yes No			\equiv			\equiv						
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A10) (LRR K, L, R) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, F) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, S) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Pledmont Floodplain Soils (F19) (MLRA 144 Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S8) Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes No					=	Ξ						
Histosol (A1)	/pe: C=Co	oncentration, D=Deple	tion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ins.					
Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR K, L) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 148) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Mile A 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, F) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, I) Iron-Manganese Masses (F12) (LRR K, L, I) Pledmont Floodplain Soils (F19) (MLRA 144 145, 148 I) Mesic Spodic (TA6) (MLRA 144A, 145, 148 II) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Type: Depth (Inches): Hydric Soil Present? Yes No				not be a		(00) # ==				H-100 - 10.50		
Strictive Layer (if observed): Type: Depth (Inches): Hydric Soil Present? Yes No	Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	on Sulfide (A4) Id Layers (A5) Id Below Dark Surface In Reference (A12) Incky Mineral (S1) Incky Mineral (S4) Incky (S5) Index (S5) Index (S6) Index (S6) Index (S7) (LRR R, ML	_RA 149B	Loamy Mucky M Loamy Gleyed N Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depressi	lineral (F1 Matrix (F2) (F3) face (F6) Surface (F ons (F8)) (LRR K,) 7)	L)	Dark Su Polyvalu Thin Dal Iron-Mal Pledmor Mesic S Red Par Very Sh Other (E	rface (S7) le Below S rk Surface linganese M nt Floodple podic (TA) lent Mater allow Dari	(LRR K, I Surface (S (S9) (LRI Masses (Fain Soils (I 6) (MLRA ial (F21) c Surface (L, M) 8) (LRR M R K, L) 12) (LRR F19) (MLF 144A, 14	K, L) K, L, R RA 149
Type:	strictive L	aver (if observed):	n and we	and nydrology must	be prese	nt, unless	disturbed d	or problematic.				
Depth (Inches): No No		, (0.500,1004).										
13 10 10 10 10 10 10 10 10 10 10 10 10 10		thes):					, i	Hydric Soil P	resent?	Voc	No	X
								riyaric doli r	resentr	165	NO	

Annilogati/Cumam Dell Dill V	d Project Wind Energy, LLC		ity/County: Chautauqua	104	Sampling Date: 1 1 1 5
	- CO - C - C - C - C - C - C - C - C - C	CLIC	- ut		_ Sampling Point: DP- ()
Investigator(s): M BOOL		0	ection, Township, Range:_		
Landform (hillslope, terrace, e		Loca	l relief (concave, convex, n	one): CONVEX	Slope (%): 0 2
Subregion (LRR or MLRA): L	RR-R	Lat: 42.453221	D2Long: -7	9.1348622	5 Datum: NAD 83
Soil Map Unit Name:Bus	STI SILT B	cam		NWI classific	ation: upland
Are climatic / hydrologic condi	tions on the site typi	cal for this time of year	? Yes X No	TOTAL SECTION OF SECTION	
Are Vegetation Λ)(), Soil Λ				al Circumstances" p	./
Are Vegetation N_0 , Soil J	NO or Hydrology	No naturally probl	ematic? (If needed	explain any answer	
					important features, etc
Hydrophytic Vegetation Pres		X No	is the Sampled Area		
Wetland Hydrology Present?		X No	If yes, optional Wetlar		
Remarks: (Explain alternativ	e procedures here o	r in a separate report.)			
IYDROLOGY					
Wetland Hydrology Indicate	ors:	2. O. DOK - T.		Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum	of one is required; c	heck all that apply)		Surface Soil 0	Cracks (B6)
X Surface Water (A1)			aves (B9)	∠ Drainage Pati	
High Water Table (A2)		Aquatic Fauna (B1	13)	Moss Trim Lir	
X Saturation (A3)		Marl Deposits (B1			Vater Table (C2)
Water Marks (B1)		Hydrogen Sulfide		Crayfish Burn	
Sediment Deposits (B2)		X Oxidized Rhizosph	neres on Living Roots (C3)	Saturation Vis	ible on Aerial Imagery (C9)
Drift Deposits (B3)		Presence of Redu	ced Iron (C4)		ressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduc	ction in Tilled Soils (C6)	Geomorphic F	
Iron Deposits (B5)		Thin Muck Surface	(C7)	Shallow Aquit	ard (D3)
Inundation Visible on Aer	ial Imagery (B7)	Other (Explain in F	Remarks)	Microtopograp	phic Relief (D4)
Sparsely Vegetated Cond	ave Surface (B8)			FAC-Neutral	The state of the s
Field Observations:	**				
Surface Water Present?	Yes X No_	Depth (inches):)-12"		
Water Table Present?	Yes X No _	Depth (inches): ()	ď		
	Yes X No _	Depth (inches):	Wetland	Hydrology Present	? Yes X No
Saturation Present?					
Saturation Present? (includes capillary fringe) Describe Recorded Data (stre					
Surface Water Present? Water Table Present?	Yes X No	Depth (inches): ()	ď	Hydrology Present	? Yes <u>×</u> No_

Tree Stratum (Plot size: 30 ^t)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Salix petiolaris	5	У	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: (/) (A)
2. Fraxinus americana	5	y	FACU	
3. Acer saccharum	.5	¥	FACU	Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 15 (A/B)
5			_	
6				Prevalence Index worksheet:
7		2000		Total % Cover of: Multiply by:
	15	= Total Cov	er	OBL species <u>U5</u> x1= <u>U5</u>
Sapling/Shrub Stratum (Plot size: 15)		×.	-	FACW species <u>3550</u> x2 = <u>100</u> FAC species 30 x3 = 90
1. Salix petiolaris		<u>y</u>	FAIN	FAC species 30 x3 = 90 FACU species 10 x4 = 40
2. Cornus alba		У	EAUN	UPL species
3. COMUS racemosa	10	X	FAC	Column Totals: (A) 295 (B)
4				155
5				Prevalence Index = B/A = \ \ \ O
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
3	40	= Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5)				X 3 - Prevalence Index is ≤3.01
1. Polyaphum as tifolium	50	Y	DBL	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
· Euthamia graminitalia	20	V	FAC	Problematic Hydrophytic Vegetation¹ (Explain)
Eupotorium pertolium	15	N	FACIN	
그렇게 하게 되었다. 이 아이에 아무슨 이 집에 되었다. 그래요 그 아이에 가장 아니는 그 사람이 아니다.		7		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Scirpus cyperinas		-	OBL	
5. Carex lupilina	5	N	OBL	Definitions of Vegetation Strata:
6. JUNIUS PARWUS		10	DBL	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				at breast neight (DDH), regardless of neight.
В				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
12				Woody vines – All woody vines greater than 3.28 ft in height.
	100	= Total Cov	er	
Woody Vine Stratum (Plot size:30 ')	-			
1. NOT Applicable				
2.	-	•		Hydrophytic
				Vegetation Present? Yes × No
4	-			
•				
		= Total Cov	er	

(inches)	Matrix Color (moist)	%	Color (moist)	ox Features %	Type ¹	Loc2	Texture		Remark	•
8-0	25425/1	90	10152/8	10	C		SIL		Kemark	
Type: C=Co	oncentration, D=Depl Indicators:	letion, RM	-Reduced Matrix, M	S=Masked S	Sand Grai	ns.	² Location:		Lining, M=M matic Hydri	
Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped	oipedon (A2)		Polyvalue Belo MLRA 149B Thin Dark Surfa Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress) ace (S9) (LR Mineral (F1) Matrix (F2) ((F3) rface (F6) Surface (F7)	RR, MLF (LRRK, I	RA 149B)	Coast P 5 cm Mi Dark St Polyvalu Thin Da Iron-Ma Piedmo Mesic S Red Pai	rairie Red ucky Peat urface (S7) ue Below S rk Surface nganese M nt Floodpl podic (TA rent Mater	ox (A16) (LF or Peat (S3) o (LRR K, L, Surface (S8) o (S9) (LRR Masses (F12 aln Soils (F1 6) (MLRA 14 ial (F21) c Surface (Ti	(LRR K, L) K, L) () (LRR K, L, R 9) (MLRA 149 44A, 145, 149
	hydrophytic vegetati		tland hydrology mus	t be present	, unless o	disturbed	or problematic.			
Type:	ayer (if observed):									
Depth (inc	hes):						Hydric Soil F	resent?	Yes X	No
emarks:										

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 11/10/15 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 439 Investigator(s): M. BODERG R. PEKONSKI Section, Township, Range: Handver Landform (hillslope, terrace, etc.): HIVSIDE Local relief (concave, convex, none): 100 VeX Slope (%): 3-5 Subregion (LRR or MLRA): LRR-R Lat: 42.45371903 Long: -79.13493859 Datum: NAD 83 Soil Map Unit Name: BUSTI SIIT LOGIN ____ NWI classification:____ UDIOUTO Are climatic / hydrologic conditions on the site typical for this time of year? Yes __X__ No _____ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation No., Soil No., or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? is the Sampled Area No X within a Wetland? Yes____ No X Hydric Soil Present? Yes No X Wetland Hydrology Present? No Y If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) __ Surface Soil Cracks (B6) Surface Water (A1) ___ Water-Stained Leaves (B9) __ Drainage Patterns (B10) __ High Water Table (A2) __ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) __ Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) __ Saturation Visible on Aerial Imagery (C9) __ Drift Deposits (B3) Presence of Reduced Iron (C4) __ Stunted or Stressed Plants (D1) ___ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Solls (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) __ Shallow Aquitard (D3) ___ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) ___ Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes ____ No _X Depth (inches): Surface Water Present? Water Table Present? Yes ____ No _X Depth (inches): Yes ____ No X Depth (inches): Saturation Present? Wetland Hydrology Present? Yes ____ No X__ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

6	Tree Stratum (Plot size: 30') 1. Prunus seratina 2. Acer saccharum 3. Fagus grandifalia 4. populus grandidentata	50 20 10	Species? Status Y FAU N FAU N FAU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species
Frevalence Index = B/A = 4 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <3.0° 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb Stratum (Plot size:	5	90	= Total Cover	Prevalence Index worksheet:
	5		= Total Cover	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree — Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Weedy vines — All woody vines greater than 3.28 ft in
= Total Cover Remarks: (Include photo numbers here or on a separate sheet.)	Woody Vine Stratum (Plot size:30') 1. NUT Applicable 2 3 4	sheet.)		Hydrophytic Vegetation

Depth	Matrix			lox Feature	S					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc2	Texture		Remai	
2"	2.10.111	-						_lcaf	litter	
0-2	1048 4/4	100					SIL			
2-14	104/24/4	95	104R 5/8	5	C	m	SIL			
4-20	104R 4/4	90	1042 4/4	ID	D	\overline{m}	SIL			
	10.11					1.1				
					_					
_			-		_					
					-					
						_	_			
ype: C=Co	oncentration, D=Depl	letion, RM	l=Reduced Matrix, M	IS=Masked	Sand Gra	ains.		PL=Pore		
ydric Soil li							Indicators	for Proble	matic Hyd	ric Soils³:
_ Histosol ((A1) ipedon (A2)		Polyvalue Belo		(S8) (LRR	R,				MLRA 149B)
_ Black His			MLRA 149E		RR R. MI	RA 149B)				RR K, L, R) 3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky					urface (S7)		
	Layers (A5)		Loamy Gleyed							3) (LRR K, L)
	Below Dark Surface	(A11)	Depleted Matri					ark Surface		
_ Thick Da	rk Surface (A12)		Redox Dark Su							2) (LRR K, L, R)
				Surface (F	7)		Pledmo	ont Floodpla	ain Soils (F	19) (MLRA 149E
_ Sandy M	ucky Mineral (S1) leved Matrix (S4)		Depleted Dark	The state of the s						444A 44P 446D
_ Sandy Mi _ Sandy Gl	leyed Matrix (S4)		Redox Depress	The state of the s			Mesic S	Spodic (TA	6) (MLRA	144A, 145, 149B
_ Sandy Mo _ Sandy Gl _ Sandy Re	leyed Matrix (S4)			The state of the s			Mesic S Red Pa	Spodic (TAI rent Mater	6) (MLRA lai (F21)	
Sandy Me Sandy Gl Sandy Re Stripped	leyed Matrix (S4) edox (S5)	LRA 149	Redox Depress	The state of the s			Mesic S Red Pa Very Si	Spodic (TA	6) (MLRA lal (F21) c Surface (
Sandy Mo Sandy Gl Sandy Re Stripped I Dark Surf	leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M		Redox Depress	sions (F8)	nt, unless	disturbed o	Mesic S Red Pa Very Si Other (Spodic (TA) rent Mater nallow Dark Explain in F	6) (MLRA lal (F21) c Surface (
Sandy Mo Sandy Gl Sandy Re Stripped I Dark Surf	leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M		Redox Depress	sions (F8)	nt, unless	disturbed o	Mesic S Red Pa Very Si Other (Spodic (TA) rent Mater nallow Dark Explain in F	6) (MLRA lal (F21) c Surface (144A, 145, 149B TF12)
Sandy Mo Sandy Gi Sandy Re Stripped I Dark Surf	leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetati ayer (if observed):		Redox Depress	sions (F8)	nt, unless	disturbed d	Mesic S Red Pa Very Si Other (Spodic (TA) rent Mater nallow Dark Explain in F	6) (MLRA lal (F21) c Surface (TF12)
Sandy Mo Sandy Gl Sandy Re Stripped I Dark Surf	leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetati ayer (if observed):		Redox Depress	sions (F8)	nt, unless	disturbed o	Mesic S Red Pa Very Si Other (Spodic (TA) rent Mater nallow Dark Explain in F	6) (MLRA lal (F21) c Surface (

Datum: NAD 83 NWI classification: LADIAN Par? Yes X No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No Oblematic? (If needed, explain any answers in Remarks.)
cal relief (concave, convex, none):
Datum: NAD 83 NWI classification: LADIAN Par? Yes X No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No Oblematic? (If needed, explain any answers in Remarks.) J sampling point locations, transects, important features, etc. Is the Sampled Area within a Wetland? Yes X No If yes, optional Wetland Site ID: WC-A587
NWI classification: NAD 83
NWI classification: NWI classification:
ear? Yes _X No (If no, explain in Remarks.) I disturbed? Are "Normal Circumstances" present? Yes _X No Oblematic? (If needed, explain any answers in Remarks.) I sampling point locations, transects, important features, etc. Is the Sampled Area within a Wetland? Yes _X No If yes, optional Wetland Site ID: _W_A587
disturbed? Are "Normal Circumstances" present? Yes X No_ poblematic? (If needed, explain any answers in Remarks.) Is sampling point locations, transects, important features, etc. Is the Sampled Area within a Wetland? Yes X No If yes, optional Wetland Site ID: WC-A587
Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: WL-A587
Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: WC-A587
Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: WL-A587
If yes, optional Wetland Site ID: WL-A587
If yes, optional Wetland Site ID: WL-A587
rt.)
Secondary Indicators (minimum of two required)
Surface Soil Cracks (B6)
Leaves (B9) X Drainage Patterns (B10)
(B13) Moss Trim Lines (B16)
B15) Dry-Season Water Table (C2)
de Odor (C1) Crayfish Burrows (C8)
spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
duced Iron (C4) Stunted or Stressed Plants (D1) duction in Tilled Soils (C6) Geomorphic Position (D2)
duction in Tilled Soils (C6) Geomorphic Position (D2) ace (C7) Shallow Aquitard (D3)
n Remarks) Microtopographic Relief (D4)
FAC-Neutral Test (D5)
: D W"
:0"
:⊘ [#] Wetland Hydrology Present? Yes X No
s, previous inspections), if available:
7, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
(E : : : : : : : : : : : : : : : : : :

1. ACEY SCUC DUVILLY	Absolute % Cover	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Fraxinus americana	5	У	FALL	Total Number of Dominant
3	-			Species Across All Strata: (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	10		_	Total % Cover of: Multiply by:
Sepling/Shrub Stratum (Plot size: 15'	10	= Total Cov	er	OBL species 5 x1= 5 FACW species 95 x2= 190
	10	Y	EACW	FAC species ZO x3 = LLO
2. Comus racemosa		V	FAC	FACU species x4=44
3				UPL species $0 \times 5 = 0$ Column Totals: 13) (A) 299 (B)
4				
5				Prevalence Index = B/A = 2.28
6				Hydrophytic Vegetation Indicators:
7	-10			1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
	20	= Total Cov	er	X 3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5') 1. Eo lobium Ciliatum	50	V		4 - Morphological Adaptations (Provide supporting
2. Bidens aristasa	10		FALLY	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
3. Eupathrium peritaliatum	10	11	FACIN	
4. Sumphyptichum vovae-anguae		-N	FACW	¹ Indicators of hydric soll and wetland hydrology must be present, unless disturbed or problematic.
5. Ettinamia graminifolia	10	N	FAC	Definitions of Vegetation Strata:
6. Scirpus cyperinas	5	N	OBL	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Onoclea sensibilis	5	N	FACIN	at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
201	700	= Total Cov	er	
Woody Vine Stratum (Plot size: 301)	1	V	TACL	
1. Parthanocissus quinquetoua			FACU	Hydrophytic
2				Vegetation Present? Yes X No
				100 22 10
4		= Total Cov	er	

ed Matrix, MS=Mask yvalue Below Surface MLRA 149B) n Dark Surface (S9) my Mucky Mineral (my Gleyed Matrix (F3) dox Dark Surface (F6) cleted Dark Surface (F6) cleted Dark Surface (F6) cleted Dark Surface (F8)	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	R, RA 149B)	Indicators for 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	Lining, M=Matrix. natic Hydric Soils ³ : LRR K, L, MLRA 149B) ox (A16) (LRR K, L, R) or Peat (S3) (LRR K, L,
ed Matrix, MS=Mask yvalue Below Surfac MLRA 149B) in Dark Surface (S9) amy Mucky Mineral (amy Gleyed Matrix (F3) dox Dark Surface (F0) leted Dark Surface	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	ns.	² Location: Indicators fo 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	natic Hydric Soils³: LRR K, L, MLRA 149B) × (A16) (LRR K, L, R)
yvalue Below Surface MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (F3) Idox Dark Surface (F6) Deted Dark Surface	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	R, RA 149B)	Indicators for 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	natic Hydric Soils³: LRR K, L, MLRA 149B) × (A16) (LRR K, L, R)
yvalue Below Surface MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (F3) Idox Dark Surface (F6) Deted Dark Surface	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	R, RA 149B)	Indicators for 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	natic Hydric Soils³: LRR K, L, MLRA 149B) × (A16) (LRR K, L, R)
yvalue Below Surface MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (F3) Idox Dark Surface (F6) Deted Dark Surface	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	R, RA 149B)	Indicators for 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	natic Hydric Soils³: LRR K, L, MLRA 149B) × (A16) (LRR K, L, R)
yvalue Below Surface MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (F3) Idox Dark Surface (F6) Deted Dark Surface	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	R, RA 149B)	Indicators for 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	natic Hydric Soils³: LRR K, L, MLRA 149B) × (A16) (LRR K, L, R)
yvalue Below Surface MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (F3) Idox Dark Surface (F6) Deted Dark Surface	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	R, RA 149B)	Indicators for 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	natic Hydric Soils³: LRR K, L, MLRA 149B) × (A16) (LRR K, L, R)
yvalue Below Surface MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (F3) Idox Dark Surface (F6) Deted Dark Surface	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	R, RA 149B)	Indicators for 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	natic Hydric Soils³: LRR K, L, MLRA 149B) × (A16) (LRR K, L, R)
yvalue Below Surface MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (F3) Idox Dark Surface (F6) Deted Dark Surface	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	R, RA 149B)	Indicators for 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	natic Hydric Soils³: LRR K, L, MLRA 149B) × (A16) (LRR K, L, R)
yvalue Below Surface MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (F3) Idox Dark Surface (F6) Deted Dark Surface	e (S8) (LRR (LRR R, MLI F1) (LRR K, F2) 6) (F7)	R, RA 149B)	Indicators for 2 cm Mu Coast P 5 cm Mu Dark Su	or Problem uck (A10) (L rairie Redo ucky Peat o	natic Hydric Soils³: LRR K, L, MLRA 149B) × (A16) (LRR K, L, R)
MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (Fo) Ideted Matrix (F3) Idox Dark Surface (F6) Ideted Dark Surface	(LRR R, MLI F1) (LRR K, F2) 6) (F7)	RA 149B)	2 cm Mu Coast P 5 cm Mu Dark Su	uck (A10) (L rairie Redo ucky Peat o	LRR K, L, MLRA 149B) x (A16) (LRR K, L, R)
MLRA 149B) In Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (Fo) Ideted Matrix (F3) Idox Dark Surface (F6) Ideted Dark Surface	(LRR R, MLI F1) (LRR K, F2) 6) (F7)	RA 149B)	Coast P 5 cm Mu Dark Su	rairie Redo ucky Peat o	x (A16) (LRR K, L, R)
n Dark Surface (S9) Imy Mucky Mineral (Imy Gleyed Matrix (F Dieted Matrix (F3) dox Dark Surface (F0 Dieted Dark Surface	F1) (LRR K, F2) B) (F7)	RA 149B) L)	5 cm Mu Dark Su	ıcky Peat o	
amy Mucky Mineral (amy Gleyed Matrix (F oleted Matrix (F3) dox Dark Surface (Fo oleted Dark Surface	F1) (LRR K, F2) B) (F7)	L)	Dark Su		
ırny Gleyed Matrix (F Dleted Matrix (F3) dox Dark Surface (F0 Dleted Dark Surface	F2) B) (F7)			III GOO (OI)	(LRR K, L, M)
dox Dark Surface (Fo	(F7)				urface (S8) (LRR K, L)
oleted Dark Surface	(F7)			rk Surface ((S9) (LRR K, L)
					asses (F12) (LRR K, L,
iox Depressions (F8					in Soils (F19) (MLRA 14
)		Mesic S	podic (TA6)) (MLRA 144A, 145, 14
				ent Materia	
				allow Dark Explain in R	Surface (TF12) emarks)
drology must be pre	sent, unless o	disturbed o	r problematic.		
			Hydric Soil P	resent?	Yes <u>X</u> No
				Hydric Soil P	Hydric Soil Present?

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 11/17 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 1041 Investigator(s): M. B. Dera R. De Kurski Section, Township, Range: Hanover Landform (hillslope, terrace, etc.): HINSIOOC Local relief (concave, convex, none): CONVEX Slope (%): 3 -5 Subregion (LRR or MLRA): LRR-R Lat: 42.45399529 Long: -79.13526398 Datum: NAD 83 Soil Map Unit Name: Chauthiana Sit Com NWI classification: unicand Are climatic / hydrologic conditions on the site typical for this time of year? Yes _X___ No _____ (If no, explain in Remarks.) Are Vegetation No., Soil No. or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X Are Vegetation Mo, Soil MO, or Hydrology Mo naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? No X Yes ___ No X within a Wetland? No X Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) __ Surface Soil Cracks (B6) Water-Stained Leaves (B9) Surface Water (A1) ___ Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) ___ Moss Trim Lines (B16) _ Saturation (A3) ___ Marl Deposits (B15) ___ Dry-Season Water Table (C2) _ Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) _ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) __ Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) _ Iron Deposits (B5) _ Thin Muck Surface (C7) _ Shallow Aquitard (D3) _ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes ____ No X Depth (inches): Surface Water Present? Yes ____ No > Depth (inches): Water Table Present? Saturation Present? Yes ____ No _X Depth (Inches): Wetland Hydrology Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Fraxinus americana		v	FACU	Number of Dominant Species
2. Aler sarcharum	35	ý	FALL	That Are OBL, FACW, or FAC: (A)
3. Fagus arandifolia	5	N	FACU	Total Number of Dominant Species Across All Strata: (1) (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				marke obt, i now, of no (AB)
6	-			Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	80	= Total Cov	er	OBL species x1 = 5
Sapling/Shrub Stratum (Plot size: 15'				FACW species x 2 =
1. Fagus grandifolia	5	У	FACL	FAC species x3=
2. Acter Saccharum	5	Y	FACU	FACU species 100 x4= 400
3				UPL species x5=
4				Column Totals: 100 (A) 400 (B)
5				Prevalence Index = B/A = \(\frac{1}{4}\)
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
**		= Total Cov		2 - Dominance Test is >50%
Herb Stratum (Plot size: 51)	10	- Total Cov	er	3 - Prevalence Index is ≤3.01
		×1	-	4 - Morphological Adaptations ¹ (Provide supporting
1. Aler Sorchrum		y	FALL	data in Remarks or on a separate sheet)
2. Rubus ideals		<u> </u>	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
	_			size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12			-	height.
201	10	= Total Cov	er	
Woody Vine Stratum (Plot size: 30')				
1 000 00000			_	The second second
1. Not Applicable				Hydrophytic Vegetation
2				Present? Yes No X
				110001111
	\equiv			100100

Type: C=Concentration Type: C=Concentration Hydric Soil Indicators: Histosol (A1)	iv/(¢ 8)	Matrix, MS		Type¹ C D Sand Gra		SIL SIL SIL	1eat	Remark	S	
Type: C=Concentration lydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4) Depleted Below Dai	n, D=Depletion	5 10 y (2 10 y (2	Matrix, MS		D D Sand Gra	2230	SIL		Ciller		
Type: C=Concentration ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4) Depleted Below Date	n, D=Depletion	5 10 y (2 10 y (2	Matrix, MS		D D	2230	SIL				
Type: C=Concentration ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4) Depleted Below Da	n, D=Depletion	, RM=Reduced	Matrix, MS		D Sand Gra	2230					
ydric Soll Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A) _ Stratified Layers (A8) _ Depleted Below Dal		, RM=Reduced	Matrix, MS		D	<u>m</u>	5)(
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A) _ Stratified Layers (A8) _ Depleted Below Dai		Polyv		=Masked	Sand Gra						
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A) _ Stratified Layers (A8) _ Depleted Below Dai		Polyv		=Masked							
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A) _ Stratified Layers (A8) _ Depleted Below Dai		Polyv		=Masked							
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A) _ Stratified Layers (A8) _ Depleted Below Dai		Polyv		=Masked	Sand Gra						
ydric Soll Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A _ Stratified Layers (A8 _ Depleted Below Dal		Polyv		=Masked	Sand Gra						
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A _ Stratified Layers (A8 _ Depleted Below Dai		Polyv		=Masked	Sand Gra			_			
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A _ Stratified Layers (A8 _ Depleted Below Dai		Polyv		=Masked	Sand Gra						
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A) _ Stratified Layers (A) _ Depleted Below Dai		Polyv		=Masked	Sand Gra						
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A) _ Stratified Layers (A) _ Depleted Below Dai		Polyv		=Masked	Sand Gra					_	
ydric Soll Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A) _ Stratified Layers (A8) _ Depleted Below Dal		Polyv		=Masked	Sand Gra						
Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (A4) Depleted Below Dai						ains.	² Location	: PL=Pore	Lining, M=N	Matrix.	
Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A Stratified Layers (At Depleted Below Dat)		plus Polow	Curfoco	(CO) (I DE	D D		for Proble			
Hydrogen Sulfide (AStratified Layers (ADepleted Below Da			RA 149B)	Surface	(36) (LKF	c rc,		luck (A10) Prairie Red			
Stratified Layers (A!Depleted Below Dai		Thin	Dark Surfac				5 cm N	lucky Peat	or Peat (S3	(LRR K	
Depleted Below Dar			y Mucky Mi			, L)		urface (S7)			
			y Gleyed Matrix					lue Below S ark Surface			, L)
	(A12)	Redo	x Dark Surf	ace (F6)			Iron-M	anganese M	Masses (F12	2) (LRR H	
Sandy Mucky Miner			eted Dark S		7)			ont Floodpla			
 Sandy Gleyed Matri Sandy Redox (S5) 	X (34)	Redo	x Depression	ons (F8)				Spodic (TA) arent Mater		44A, 145	, 149E
_ Stripped Matrix (S6)								hallow Darl		F12)	
_ Dark Surface (S7) (I	LRR R, MLRA	149B)					Other	Explain in I	Remarks)		
ndicators of hydrophyti	c vegetation ar	nd wetland hydr	ology must	be prese	nt. unless	disturbed o	or problematic				
estrictive Layer (if ob		33.000.450.1.				51,511,115,115					
Туре:											
Depth (inches):		_					Hydric Soil	Present?	Yes	No	X
emarks:											

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County __ Sampling Date: 11/19/15 Applicant/Owner: Ball Hill Wind Energy, LLC __ Sampling Point: DP- (048 Investigator(s): M. BODERO S. BUCKENMUOY Section, Township, Range: FORESTVINE Landform (hillslope, terrace, etc.): HINDION Local relief (concave, convex, none): CONTONO Slope (%): 0 1 Subregion (LRR or MLRA): LRR-R Lat: 42.4625645 Long: 79.14864427 Datum: NAD 83 Soil Map Unit Name: OV DOVIC 511+ LOam NWI classification: union Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are Vegetation (\(\frac{\lambda}{\lambda}\), Soil (\(\lambda\lambda\rangle\) or Hydrology (\(\lambda\lambda\rangle\) significantly disturbed? Are "Normal Circumstances" present? Yes X No. Are Vegetation No., Soil No., or Hydrology No. naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? Yes X No within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WI-759 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) Water-Stained Leaves (B9) X Drainage Patterns (B10) X High Water Table (A2) Aguatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) Mari Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Solls (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes X No Depth (Inches): 0 - 4 11
Yes X Depth (Inches): 0 - 4 11 Surface Water Present? Water Table Present? Saturation Present? No ____ Depth (inches): \(\text{if } \) Wetland Hydrology Present? Yes X No _ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Sampling Point: DP- UMZ

			Total Number of Dominant Species Across All Strata:
		\equiv	That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet:
10 10 10			That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet:
10 10 10	-		
10 10 10	= Total Co	 ver	Total % Cover of Multiply by
10 10 10	= Total Co	ver	
10	<u>у</u> ∨		OBL species x 1 =
10		-0000	FACW species x 2 =
10	V	FACU	FAC species x3 = FACU species x4 =
		FACW	UPL species x 5 =
_		FAC	Column Totals: (A) (B)
			14 Charles and Assessment Control
			Prevalence Index = B/A =
		-	Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50%
30	= Total Co	ver	3 - Prevalence Index is \$3.01
	.,		4 - Morphological Adaptations ¹ (Provide supporting
40	<u>Y</u>	FACU	data in Remarks or on a separate sheet)
20	<u>y</u>	FAC	Problematic Hydrophytic Vegetation¹ (Explain)
15	1	OBL	¹ Indicators of hydric soil and wetland hydrology must
10	N	OBL	be present, unless disturbed or problematic.
10	N	OBL	Definitions of Vegetation Strata:
5	N	FACU	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
			at breast height (DBH), regardless of height.
			Sapling/shrub - Woody plants less than 3 in. DBH
			and greater than or equal to 3.28 ft (1 m) tall.
			Herb - All herbaceous (non-woody) plants, regardless of
			size, and woody plants less than 3.28 ft tall.
			Woody vines – All woody vines greater than 3.28 ft in height.
100	= Total Co	ver	
			Hydrophytic
			Vegetation Present? Yes X No
0	= Total Co	VOT	
sheet.)	- TOTAL CO	rot .	
6.40.			
	<u>5</u>	5 N = Total Cov	5 N FACU FACU Total Cover Total Cover

(inches)	Color (moist)	%	Color (moist)	x Features %	Type ¹	Loc2	Texture		Remarks	
8-0	2.54 4/2	40	-		C	m	SIL		Komarks	
	-	_								
				_	_					
lydric Soil I Histosol Histic Ep Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Stripped Dark Sur	ndicators: (A1) sipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) I Below Dark Surfactive Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, Matrix (S7)	e (A11) MLRA 1498		v Surface (S ce (S9) (LR dineral (F1) Matrix (F2) (F3) face (F6) Surface (F7) ions (F8)	68) (LRR RR, ML (LRR K,	R, RA 149B) L)	Indicators 2 cm M Coast I 5 cm M Dark S Polyva Thin D Iron-M: Piedmo Mesic S Red Pa Very S Other (for Problem fluck (A10) (I Prairie Redo flucky Peat o urface (S7) lue Below S ark Surface anganese M ont Floodpla Spodic (TA6 arent Materia hallow Dark (Explain in R	(LRR K, L, M urface (S8) (I (S9) (LRR K, lasses (F12) (in Soils (F19) i) (MLRA 144 al (F21) Surface (TF1	Soils ³ : _RA 149B) RK, L, R) LRR K, L, R)) LRR K, L) L) (LRR K, L, R) (MLRA 149B) A, 145, 149B
estrictive L	hydrophytic vegetal ayer (if observed):		etland hydrology mus	t be present	t, unless	disturbed	or problematio			
Type: Depth (inc	hes):						Hydric Soil	Present?	Yes X	No
emarks:										

WETLAND DETERMINATION DATA FORM — Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: ////9/ Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP- () Investigator(s): M. Bobso S. Buckenmeyer Section, Township, Range: Forestville Landform (hillslope, terrace, etc.): 1/1/15/ODE Local relief (concave, convex, none): CONEX ___ Slope (%): 0 -2 Subregion (LRR or MLRA): LRR-R Lat: 42.46130332 Long: -79.14892645 Datum: NAD 83 Soil Map Unit Name: Fremont Silt Loam NWI classification: UDIANO No _____ (If no, explain in Remarks.) Are Vegetation M., Soil Mi), or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation NO., Soil NO., or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? is the Sampled Area No X within a Wetland? Yes____ No X Hydric Soil Present? No X Wetland Hydrology Present? No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) ___ Drainage Patterns (B10) High Water Table (A2) ___ Aquatic Fauna (B13) __ Moss Trim Lines (B16) Saturation (A3) Marl Deposits (B15) _ Dry-Season Water Table (C2) _ Water Marks (B1) _ Hydrogen Sulfide Odor (C1) _ Crayfish Burrows (C8) _ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) _ Thin Muck Surface (C7) Shallow Aquitard (D3) _ Inundation Visible on Aerial Imagery (B7) _ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes ____ No _X Depth (inches): Surface Water Present? Yes No X Depth (inches): Water Table Present? Saturation Present? No V Depth (inches): Wetland Hydrology Present? Yes____ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Sampling Point: DP- / NYC **VEGETATION** – Use scientific names of plants. Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: % Cover Species? Status **Number of Dominant Species** 1. Not Applicable That Are OBL, FACW, or FAC: (A) **Total Number of Dominant** Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species Sapling/Shrub Stratum (Plot size: 15 0 0 **FACW species** FAC species 1. Controla tatarica FACU species 110 Cornus racemosa 0 UPL species Column Totals: Prevalence Index = B/A = **Hydrophytic Vegetation Indicators:** 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% = Total Cover 3 - Prevalence Index is ≤3.01 Herb Stratum (Plot size: _ 4 - Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) orus arundinaleous 18 N FAC ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. axinus americana FACU 5. Arer Sarrharum **Definitions of Vegetation Strata:** FALL Carex flava 2 MBG Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 100 = Total Cover Woody Vine Stratum (Plot size: 30' 1. Not Applicable **Hydrophytic** Vegetation Present? Remarks: (Include photo numbers here or on a separate sheet.)

(inches)	Matrix		Redox Features			
	Color (moist)	%	Color (moist) %	Type ¹ Loc ²		Remarks
)-20	2.54 414	100			SIC	
		1,500				
_						
				$\overline{}$		
		-				
						Marin and Albania
/pe: C=Co	ncentration, D=Dep	letion, RM	=Reduced Matrix, MS=Masked	Sand Grains.	² Location: PL=Pore	Lining, M=Matrix.
dric Soil I					Indicators for Proble	
_ Histosol (LOWER BURNESS OF THE PARTY OF T		Polyvalue Below Surface (S8) (LRR R,		(LRR K, L, MLRA 149B)
	ipedon (A2)		MLRA 149B)			ox (A16) (LRR K, L, R)
_ Black His			Thin Dark Surface (S9) (LI			or Peat (S3) (LRR K, L, R)
	Sulfide (A4)		Loamy Mucky Mineral (F1)		Dark Surface (S7)	
	Layers (A5)	- 11.44	Loamy Gleyed Matrix (F2)			Surface (S8) (LRR K, L)
	Below Dark Surfac	e (A11)	Depleted Matrix (F3)		Thin Dark Surface	
	rk Surface (A12)		Redox Dark Surface (F6)			Masses (F12) (LRR K, L, R
	ucky Mineral (S1)		Depleted Dark Surface (F7)		ain Soils (F19) (MLRA 149
	eyed Matrix (S4)		Redox Depressions (F8)			6) (MLRA 144A, 145, 149E
_ Sandy Re	Matrix (S6)				Red Parent Mater	
	face (S7) (LRR R, N	#I DA 4401	2)		Very Shallow Dark	
_ Duik Ouii	ace (O) (ENIVIC)	ILION 149E	"		Other (Explain in I	Remarks)
	hydrophytic vegetat	ion and we	etland hydrology must be preser	nt unless disturbed	or problematic	
dicators of			mana nyarology mast be presen	it, uriless disturbed t	or problematic.	
strictive La	ayer (II observed):				20	
strictive La Type:	A Property of the Control of the Con					
strictive La Type:	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No <u>X</u>
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
estrictive La Type: Depth (Inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
estrictive La Type: Depth (Inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
estrictive La Type: Depth (Inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X
strictive La Type: Depth (inch	A Property of the Control of the Con				Hydric Soil Present?	Yes No X

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 1) 119 115 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- (050) Investigator(s): M. Boberg 5. Buckenmuger Section, Township, Range: Hanover Landform (hillslope, terrace, etc.): Hill.5/op & Local relief (concave, convex, none): CONCOVE Slope (%): 01 Subregion (LRR or MLRA): LRR-R Lat: 42.45717264 Long: -79.14740587 Datum: NAD 83 Soil Map Unit Name: Fremont Silt Loam NWI classification: Upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.) Are Vegetation Mb, Soil Mb, or Hydrology Mb significantly disturbed? Are "Normal Circumstances" present? Yes ______ No Are Vegetation No., Soil No., or Hydrology No. naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? Yes X No within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WL-AF92 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Water-Stained Leaves (B9) X Drainage Patterns (B10) Nurface Water (A1) X High Water Table (A2) ___ Aquatic Fauna (B13) __ Moss Trim Lines (B16) X Saturation (A3) __ Marl Deposits (B15) ___ Dry-Season Water Table (C2) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) __ Crayfish Burrows (C8) _ Sediment Deposits (B2) __ Oxidized Rhizospheres on Living Roots (C3) __ Saturation Visible on Aerial Imagery (C9) __ Stunted or Stressed Plants (D1) Drift Deposits (B3) Presence of Reduced Iron (C4) __ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ___ Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) _ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes X No Depth (inches): ()-2" Surface Water Present? Yes X No Depth (inches): \" Water Table Present? Yes X No Depth (inches): (\" Wetland Hydrology Present? Yes X No _ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Tree Stratum (Plot size: 30'	Absolute % Cover	Dominant Species?	Indicator	Dominance Test worksheet:
1. Fraxinus americana	10	У	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				
3				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 80 (A/B)
6				
7				Prevalence Index worksheet:
	10	= Total Co	ver	OBL species 10 x1= 10
Sapling/Shrub Stratum (Plot size: 15)		,		FACW species 45 x2= 90
1. Cornus airos	i5	y	FACIN	FAC species ZD x3= UO
	10	y	FAC	FACU species 10 x4= 40
3. Crataegus moilis	10	y	FAC	UPL species O x5=
4				Column Totals: 145 (A) 200 (B)
5				Prevalence Index = B/A = 179
6				Hydrophytic Vegetation Indicators:
7	\ 		_	1 - Rapid Test for Hydrophytic Vegetation
	35	= Total Cov	mr.	X 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 i)		- Total Cov	761	X 3 - Prevalence Index is ≤3.01
1. SCIPPUS cuperings	40	У	OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2 Juneus effusus	30	ý	OBL	Problematic Hydrophytic Vegetation (Explain)
3. Euthamia graminitolia	20	ý	FACU	
4. Eupotorium perfoliatum	10	N	FACIN	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5			·	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in, DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
11				size, and woody plants less than 3.28 ft tall.
12				Woody vines - All woody vines greater than 3.28 ft in height.
	100	= Total Cov	ver	noight.
Woody Vine Stratum (Plot size: 30)				
				Hydrophytic
1. NOT Applicable				
	\equiv			Vegetation Present? Yes X No
1. NOT Applicable	\equiv			Vegetation

Depth _	Matrix		Red	ox Features			Late of the second	
inches)	Color (moist)	%	Color (moist)		Type ¹	_Loc ² _	Texture	Remarks
<u>-8"</u> 2	2.5y ³ /1	_ <u>85</u> _	10425/8	15	_	<u>m</u>	51L	
					_	_		
		_		_		_		
		_		=		=		
vpe: C=Con	centration D=Den		=Reduced Matrix, M	S=Masked !	Sand Gra		²l ocation: Pl	.=Pore Lining, M=Matrix.
ydric Soil Inc			, todasod madia, M	- HIGGREG	June Gr	an IG.	Indicators for	Problematic Hydric Soils ³ :
Stratified L Depleted B Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Mi Dark Surface	nedon (A2) c (A3) Sulfide (A4) ayers (A5) Selow Dark Surface s Surface (A12) cky Mineral (S1) yed Matrix (S4) lox (S5) latrix (S6) ce (S7) (LRR R, N	/ILRA 149I		o) ace (S9) (LF Mineral (F1) Matrix (F2) x (F3) urface (F6) Surface (F7 sions (F8)	RR R, MI (LRR K	.RA 149B) , L)	Coast Prair 5 cm Muck Dark Surfa Polyvalue I Thin Dark S Iron-Manga Piedmont F Mesic Spoo Red Paren Very Shallo	(A10) (LRR K, L, MLRA 149B) the Redox (A16) (LRR K, L, R) ty Peat or Peat (S3) (LRR K, L, R) ty Peat or Peat (S3) (LRR K, L, R) ty Peat or Peat (S4) (LRR K, L, R) ty Peat or Peat (S4) (LRR K, L) ty Surface (S9) (LRR K, L) ty Surface (S9) (LRR K, L) ty Surface (S9) (LRR K, L, R) ty Surface (S4) (MLRA 149B) ty Control (S4) (MLRA 144A, 145, 149B) ty Material (F21) ty Dark Surface (TF12) ty In Remarks)
	yer (if observed):		etland hydrology mus	st be presen	it, uniess	aisturbea d	or problematic.	
Type:	yer (ii observed).							
Depth (inche	es):		i.				Hydric Soil Pres	sent? Yes X No
emarks:	7.		A				Tiyano con Tio	

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project _____ City/County: Chautauqua County ____ Sampling Date: 11/19/15 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- (05) Investigator(s): M. BODER S. BULKENMILLER Section, Township, Range: Hanover Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): CONVEX Slope (%): 0-2 Subregion (LRR or MLRA): LRR-R Lat: 47.45829341 Long: -79.14847895 Datum: NAD 83 Soil Map Unit Name: Chautaugua Silt Lana NWI classification: upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ____ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area No X Hydrophytic Vegetation Present? Yes____ No X within a Wetland? Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) ___ Surface Soil Cracks (B6) Surface Water (A1) ___ Water-Stained Leaves (B9) ___ Drainage Patterns (B10) High Water Table (A2) __ Aquatic Fauna (B13) ___ Moss Trim Lines (B16) _ Saturation (A3) __ Marl Deposits (B15) ___ Dry-Season Water Table (C2) ___ Water Marks (B1) __ Hydrogen Sulfide Odor (C1) ___ Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) ___ Stunted or Stressed Plants (D1) ___ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ___ Iron Deposits (B5) __ Thin Muck Surface (C7) _ Shallow Aquitard (D3) _ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) ___ Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes ____ No X __ Depth (inches): Yes ____ No X Depth (inches): Water Table Present? Yes ____ No _X Depth (inches): Saturation Present? Wetland Hydrology Present? Yes _____ No 🗶 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. NOT Applicable	C. A. D. D. L. C.		-	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3	_			Species Across Ali Strata:(B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:(A/E
8		-		Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
151	_0_	= Total Cov	er	OBL species
Sapling/Shrub Stratum (Plot size: 15') 1. NOT APPUCABLE				FACW species
				FACU species 100 x4= 400
2. 3		_		UPL species 0 x 5 = 0
				Column Totals: 100 (A) 400 (B
5				Prevalence Index = B/A = 4
3				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	0	= Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')				3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting
. Trifolium repens	45	<u> y</u>	FACU	data in Remarks or on a separate sheet)
schedonorus arundinaceous	<u> 70</u>	<u>y</u>	FALL	Problematic Hydrophytic Vegetation ¹ (Explain)
Pantago ianceolata	-	N	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Pheum pratense	5	N	FACU	
Dauaus pushins		-17	FACU	Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.
				Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
0.			_	Herb - All herbaceous (non-woody) plants, regardless of
1				size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in
2				height.
201	100	= Total Cov	er	
Voody Vine Stratum (Plot size: 30')				
Not Appucable				Hydrophytic
•				Vegetation
				Present? Yes No /
·	0	= Total Cov	_	

Remarks: (Include photo numbers here or on a separate sheet.)

)~2()	Matrix		Red	ox Feature	<u>s</u> .				
)-20_	Color (moist)		Color (moist)	%	Type ¹	_Loc2	Texture	Remarks	
	2.5y 313	95	104R 6/8	5_	<u>C</u>	<u>m</u>	51C		
					=======================================	<u> </u>			
					<u>=</u>	=			
ype: C=Cc	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	²Location: PL=	Pore Lining, M=Matri	ix.
ydric Soil I Histosol	ndicators:		Polyvalue Belo				Indicators for Pr	oblematic Hydric S	oils³:
Histic Ep Black His Hydrogei Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	pipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) I Below Dark Surface ork Surface (A12) lucky Mineral (S1) eleyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, N	ILRA 149	MLRA 149B Thin Dark Surfa Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress) ace (S9) (I Mineral (F' Matrix (F2 x (F3) urface (F6) Surface (F6) sions (F8)	LRR R, MI i) (LRR K)	.RA 149B) , L)	Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Piedmont Flo Mesic Spodio Red Parent M	A10) (LRR K, L, MLF Peat or Peat (S3) (LI Peat or Peat (S3) (LI Peat or Peat (S3) (LI Peat or Peat (S8) (LI Peat (S9) (LRR K, L Pease Masses (F12) (LI Peat (F12) (Peat (P13)	K, L, R) RR K, L, R) RR K, L) -) .RR K, L, R) MLRA 1498 , 145, 1498
	ayer (if observed):		stiand nydrology mus	st be prese	ent, uniess	aisturped	or problematic.		
Туре:									
Depth (inc	hes):						Hydric Soil Prese	ent? Yes	No X

nd Project		Chauteur	Countr	
		Chautauqua		Sampling Date: 11/2011
		Saic Arreit		Sampling Point:_DP- 65
	1000		The state of the state of	10
		Long:		
			NWI classific	cation: PFO1/551E
		X No	(If no, explain in R	temarks.)
, or Hydrolog	y No significantly disturbed?	Are "Norm	al Circumstances" ¡	present? Yes No
100, or Hydrolog	y _\frac{1}{2} naturally problematic?	(If needed,	explain any answe	rs in Remarks.)
NGS – Attach s	ite map showing samplin	g point locati	ions, transects	, important features, etc.
esent? Yes_	X No Is th	e Sampled Area		
Yes _	X No with	in a Wetland?	Yes X	_ No
	No If yes	, optional Wetlar	d Site ID: Wi	-A593
ators:			Secondary Indica	tors (minimum of two required)
	; check all that apply)			
	The table of the first of the second of the			PART OF STREET STREET
	Aquatic Fauna (B13)		Moss Trim Li	
	Marl Deposits (B15)			Water Table (C2)
			Crayfish Burn	
,				sible on Aerial Imagery (C9)
	and the state of t			
	Thin Muck Surface (C7)	104 00110 (00)		
	Other (Explain in Remarks)			phic Relief (D4)
ncave Surface (B8)			FAC-Neutral	Test (D5)
	100.4			
<u> </u>	Depth (inches): () ()			
V -		Western	Underland Barre	Y
				17 Yes _A No
ream gauge, monito	ring well, aerial photos, previous i	nspections), if av	ailable:	
	I Wind Energy, L PROSE BULLE A COLO SING LRR-R AGOLO SING INGS - Attach s esent? Yes Yes Yes tive procedures here ators: m of one is required; yes X No Yes X No Yes X No Yes X No No	Wind Energy, LLC Procedures Free Procedures F	Wind Energy, LLC CLAS BULL CANALY CL Section, Township, Range: Act.) SINCLE CANALY CL Section, Township, Range: Act.) SINCLE CANALY CL Section, Township, Range: Act. SINCLE CANALY CONTROLL CONTROLL ACT SINCLE CANALY CONTROLL ACT SINCLE CANALY ACT SINCLE CONTROLL ACT SITE CONTRO	Wind Energy, LLC State: NY

Tree Stratum (Plot size: 301) 1. TSUGG CANAGPASIS	Absolute % Cover	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Acer saccharinum	_ID_	N	FKW	Total Number of Dominant Species Across All Strata: (B)
4 5.		_	_	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6	=			Prevalence Index worksheet:
7	100	= Total Cov	er	Total % Cover of: Multiply by: OBL species
Sapling/Shrub Stratum (Plot size: 151				FACW species 30 x2= 40
1. Acer sarcharmum	10	У	FAW	FAC species x3 =
2. Fravinus americana	10	У	FACU	FACU species 100 x4= 400
3. Limeria benzoin	10	Ý	FALIN	UPL species
4			-	Prevalence Index = $B/A = 3.5$
6.				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
	30	= Total Cov	er	★ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5)		100000	7	3 - Prevalence Index is ≤3.01
1. Dryopteris intermidia	_5_	<u>y</u>	FAC	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
3.				Indicators of hydric soil and wetland hydrology must
4.	-			be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7			_	Sapling/shrub – Woody plants less than 3 in. DBH
8				and greater than or equal to 3.28 ft (1 m) tall.
40				Herb - All herbaceous (non-woody) plants, regardless of
10	_			size, and woody plants less than 3.28 ft tall.
11	_			Woody vines - All woody vines greater than 3.28 ft in
12	5	= Total Cov		height.
Woody Vine Stratum (Plot size: 301) 1. NOT Applicable		- Total Cov		
2				Hydrophytic Vegetation
3,				Present? Yes No
4				
	0	= Total Cov	er	
species have adapte through morphological roots and flutted trunk		liv Stati East	ing i ons.	n wet conditions species had shallow Hemlock

edox Features % Ti * Ti * Ti * Ti * Ti * Ti * Ti * Ti * Ti * Ti * Ti * Ti * Ti	nd Grains. (LRR R, R, MLRA 149B)	²Location: PL: Indicators for F 2 cm Muck Coast Prairi	Remarks GUNIC PORT I HE Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A10) (LRR K, L, MDR A 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	nd Grains. (LRR R, R, MLRA 149B)	²Location: PL: Indicators for F 2 cm Muck Coast Prairi	=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	nd Grains. (LRR R, R, MLRA 149B)	²Location: PL: Indicators for F 2 cm Muck Coast Prairi	=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	nd Grains. (LRR R, R, MLRA 149B)	² Location: PL: Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
elow Surface (S8 9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	(LRR R, R, MLRA 149B)	Indicators for F 2 cm Muck Coast Prairi	Problematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	R, MLRA 149B)	2 cm Muck Coast Prairi	(A10) (LRR K, L, MLRA 149B)
9B) urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)	R, MLRA 149B)	Coast Prairi	
urface (S9) (LRR ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)			
ky Mineral (F1) (L ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)			ie Redox (A16) (LRR K, L, R) y Peat or Peat (S3) (LRR K, L, R)
ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7)			ce (S7) (LRR K, L, M)
atrix (F3) Surface (F6) ark Surface (F7)			Below Surface (S8) (LRR K, L)
ark Surface (F7)			Surface (S9) (LRR K, L)
and the second second second second second		Iron-Manga	nese Masses (F12) (LRR K, L, F
pesions (FR)			loodplain Soils (F19) (MLRA 149
Coolorio (i c)			dic (TA6) (MLRA 144A, 145, 149 i
			Material (F21)
			ow Dark Surface (TF12)
		Other (Expi	lain in Remarks)
nust be present,	unless disturbed	or problematic.	
		T	
		Hydric Soil Pres	sent? Yes X No
		Tryanto con Fred	Jenti 163 <u>7 </u>
			Hydric Soil Pres
			Hydric Soil Pres

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11 /20 115 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 653 Investigator(s): M. BODER S BULKERMUYEV Section, Township, Range: Hanover Landform (hillslope, terrace, etc.): HILS OP Local relief (concave, convex, none): NONE Slope (%): OI Subregion (LRR or MLRA): LRR-R Lat: 42.50058109 Long: -79.15380229 Datum: NAD 83 Soil Map Unit Name: Cananadagua 511+ Lam NWI classification: Upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? _ No X Yes ____ No X within a Wetland? Hydric Soil Present? Yes No X Wetland Hydrology Present? No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) __ Surface Soil Cracks (B6) Surface Water (A1) ___ Water-Stained Leaves (B9) __ Drainage Patterns (B10) High Water Table (A2) __ Moss Trim Lines (B16) Aquatic Fauna (B13) __ Saturation (A3) __ Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) ___ Stunted or Stressed Plants (D1) ___ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ___ Iron Deposits (B5) __ Thin Muck Surface (C7) Shallow Aquitard (D3) _ Inundation Visible on Aerial Imagery (B7) ___ Microtopographic Relief (D4) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes ____ No _X Depth (inches): Yes ____ No X Depth (inches): Water Table Present? Saturation Present? Yes ____ No X Depth (inches): Wetland Hydrology Present? Yes _____ No _____ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VEGETATION – Use scientif	ic names of plants.
----------------------------------	---------------------

Sampling Point: DP- 1053

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Acer saccharum	50	y	FALL	Number of Dominant Species
2. Fraxinus americana	70	Ý	FAU	That Are OBL, FACW, or FAC: (A)
3			1112	Total Number of Dominant Species Across All Strata: (B)
4				
				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				(42)
6				Prevalence Index worksheet:
7	70	-		Total % Cover of: Multiply by:
1 (2)	10	= Total Cov	er	OBL species x1=
Sapling/Shrub Stratum (Plot size: 15)		V		FACW species 5 x2= 10
1. Fraxinus americana	5	1	FRU	FAC species 0 x3= 0 FACU species 0 x4= 344
2. Acer saccharum	5_	7	EAU	UPL species 0 x5= 0
3 Lindera benzein	5		FAUN	Column Totals: 91 (A) 354 (B)
4				
5				Prevalence Index = B/A = 3.89
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	15	= Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5)				3 - Prevalence Index is ≤3.01
1. Rosa multiflora	2	y	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. ALLY SOCHATUM	7	У	FACIA	Problematic Hydrophytic Vegetation¹ (Explain)
3. Fagus granditalia	7	V	FACU	
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Vegetation Strata:
5				
6			$\overline{}$	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7			$\overline{}$	
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12			_	height.
241	10_	= Total Cov	er	
Woody Vine Stratum (Plot size: 30')				
				0.2.2.2.0
1. Not Applicable				Hydrophytic Vegetation
1. NOT APPLICABLE				
				Present? Yes No
2	_			
2		= Total Cove		

Type: C=Concentration, I- Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A	D=Depletion, RI		10 0		²Location: PL=		Vert	
Type: C=Concentration, [ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S	D=Depletion, RI	M=Reduced Matrix, M	MS=Masked Sand (²Location: PL=			
ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5) _ Depleted Below Dark S		Polyvalue Bel		Grains.	²Location: PL=	Pore Lining, M=1		
rdric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5) _ Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=1		
dric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=1		
rdric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5) _ Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=1		
rdric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5) _ Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=1		
rdric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5) _ Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=1		
rdric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5) _ Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=1		
rdric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5) _ Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=1		
dric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=1		
dric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=I		
rdric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2) _ Black Histic (A3) _ Hydrogen Sulfide (A4) _ Stratified Layers (A5) _ Depleted Below Dark S		Polyvalue Bel		Grains.	² Location: PL=	Pore Lining, M=1		
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S			ow Surface (S8) (L				Matrix.	
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S				RRR	Indicators for Pr	oblematic Hydi 410) (LRR K, L,		
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S				ur,		Redox (A16) (L		
Stratified Layers (A5) Depleted Below Dark			face (S9) (LRR R,) (LRR K, L, R)	
Depleted Below Dark		Loamy Mucky	Mineral (F1) (LRR	K, L)		(S7) (LRR K, L low Surface (S8		
_ Thick Dark Surface (A	Surface (A11)	Depleted Mate			Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)			
그리고 하나 내용하는데 하다 중요한 것이 없다.	0.45	Redox Dark S			Iron-Mangan	ese Masses (F1	2) (LRR K, L, R)	
Sandy Mucky Mineral	00000		k Surface (F7)				19) (MLRA 149E	
_ Sandy Gleyed Matrix (_ Sandy Redox (S5)	34)	Redox Depres	ssions (F8)		Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12)			
Stripped Matrix (S6)								
Dark Surface (S7) (LR	R R, MLRA 14	9B)				in in Remarks)		
dicators of hydrophytic v		wetland hydrology m	ust be present, unle	ss disturbed	or problematic.			
strictive Layer (if obse	rved):							
Type: Depth (inches):					Hudria Sail Bross	mt2 Von	No X	
emarks:		_			Hydric Soil Prese	ent? Yes	NoX	

		Northcentral and Northeast Regio	on
Project/Site: Ball Hill Wind Project	City/County:		ng Date:
Applicant/Owner: Ball Hill Wind Energy, LLC		State: NY Sam	pling Point: DP- 69
Investigator(s): M. Boberg S BUCKENT	NUYPY Section, Tow	mship, Range: Hanover	
Landform (hillslope, terrace, etc.): HILS/OPL	Local relief (con-	cave, convex, none):	Slope (%): 0 -2
Subregion (LRR or MLRA): LRR-R Lat:	12.50549219	Long: -79.15257143	Datum: NAD 83
Soil Map Unit Name: NIOGOTO SIIT LOO	am	NWI classification:	upland
Are climatic / hydrologic conditions on the site typical for th	his time of year? Yes X)
Are Vegetation N_{∂} , Soil N_{∂} , or Hydrology N_{∂}		Are "Normal Circumstances" present?	
Are Vegetation \overline{M} , Soil \overline{M} , or Hydrology \overline{M}	naturally problematic?	(If needed, explain any answers in Re	
SUMMARY OF FINDINGS – Attach site map			
Hydrophytic Vegetation Present? Yes Yes Yes Yes Yes Yes Yes	No Is the within	Sampled Area a Wetland? optional Wetland Site ID: WL-AS9	
Remarks: (Explain alternative procedures here or in a se	parate report.)	optional Westalia Site ID. Voc 1701	_
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Aquation Aquatio	that apply) Iter-Stained Leaves (B9) Iter-Stained Leaves (B9) Iter-Stained (B13) It Deposits (B15) Iterogen Sulfide Odor (C1) Idized Rhizospheres on Liverine (Company of Reduced Iron (C7))	4) Stunted or Stressed F	B6) 10) 3) able (C2) 5) Aerial Imagery (C9) Plants (D1) (D2)
	er (Explain in Remarks)	Microtopographic Rel	
X Sparsely Vegetated Concave Surface (B8)	The state of the s	FAC-Neutral Test (D	A 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Water Table Present? Yes No De	epth (inches): epth (inches): epth (inches): \(\inc\) ^{il} aerial photos, previous ins	Wetland Hydrology Present? Yes	s <u>X</u> No
Remarks:			

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksheet:	
1. Quercus rubra	80	yes	FACU	Number of Dominant Species	
2. Acerrubrum	10	No	FAC		A)
3. Acer saccharum	5	No	FACU	Total Number of Dominant Species Across All Strata:	B)
4. Fraxinus americana	5	No	FACU	Percent of Dominant Species /	-,
5					A/B)
8				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
151	100	= Total Cov	/er	OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: 15			-	FACW species x 2 =	
Quercus rubra		yes.	FACH	FAC species x 3 =	
2. Lindera benzoin	10	Yes	FACH	FACU species x4=	
1.				UPL species x 5 =	
Ĺ				Column Totals: (A)	(B)
5,	7.2			Prevalence Index = B/A =	
В				Hydrophytic Vegetation Indicators:	
Q				1 - Rapid Test for Hydrophytic Vegetation	
-1	20	= Total Cov	er	× 2 - Dominance Test is >50%	
Herb Stratum (Plot size: 5)				3 - Prevalence Index is ≤3.0¹	
1. Ono dea Sensibilis	20	Yes	FACW	4 - Morphological Adaptations ¹ (Provide suppo data in Remarks or on a separate sheet)	rting
Symphytrichum vovae-angliae	10	Yes	FACH	Problematic Hydrophytic Vegetation ¹ (Explain)	
Euthania graminitolia	5	No	FAC	¹ Indicators of hydric soil and wetland hydrology mu	
Quercus rubra	5	No	FACH	be present, unless disturbed or problematic.	st
Lindera benzoin	4	No	FACH	Definitions of Vegetation Strata:	_
Acer rubrum	2	No	FAC		4
Acersacharum	2	No	FACU	Tree – Woody plants 3 in. (7.6 cm) or more in diam at breast height (DBH), regardless of height.	eter
	2		FACU		
. Rosa multitlora		NO	+ HCU	Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
0.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	f
1.				size, and woody plants less than 5.26 it tall.	
2				Woody vines - All woody vines greater than 3.28 ft in height.	
201	50	= Total Cov	er		_
Noody Vine Stratum (Plot size: 30')					
. Not Applicable					
				Hydrophytic Vegetation	
				Present? Yes No	
	0	= Total Cov	er		

	Matrix		Redo	x Features		. 2	- Amelian	2	043.
(inches)	Color (moist)	<u>%</u>	Color (moist)		ype ¹	11.27	Texture	Ren	narks
)-8	2.544/1	85	104R 5/10			<u>_M_</u>	SIL		
					=				
						=			
vne: C=Co	ncentration D=Deni	etion RM	I=Reduced Matrix M	S=Masked S	and Gra	lne	² l ocation:	PI =Pore I ining	M=Matrix
Type: C=Concentration, D=Depletion, RI Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 145)		 Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loarny Mucky Mineral (F1) (LRR K, L) Loarny Gleyed Matrix (F2) ✓ Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) 			Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)				
	ayer (if observed):	on and w	edand nydrology mus	t be present,	uniess	aisturpea	or problematic.		
Туре:									
Depth (incl	nes):						Hydric Soil I	resent? Yes_	X No

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ball Hill Wind Project C	ity/County: Chautauqua County Sampling Date: 5)19)16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-659
Application owner. S. Vicas N. Dutalana	Section, Township, Range: Town of Villenova
	al relief (concave, convex, none): Concave Slope (%): 1-73%
Landform (missope, terrace, etc.).	1/6/ Long: -79.125850 Datum: NAD 83
Subregion (LRR or MLRA): Lat: 12.14.1	Long: 171111 O O O D Datum.
	% Slopes NWI classification: UPI and
Are climatic / hydrologic conditions on the site typical for this time of year	· · · · · · · · · · · · · · · · · · ·
Are Vegetation No, Soil vo, or Hydrology vo significantly d	
Are Vegetation 100, Soil 100, or Hydrology 100 naturally prob	olematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland A595
Remarks: (Explain alternative procedures here or in a separate report	
Tromando (Aspinio Aspinio Aspi	
	·
HYDROLOGY	
	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained L	
X High Water Table (A2) Aquatic Fauna (
∑ Saturation (A3) Marl Deposits (B	
Water Marks (B1) Hydrogen Sulfid	
	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Re	i e
	duction in Tilled Soils (C6) Geomorphic Position (D2) ace (C7) Shallow Aquitard (D3)
Iron Deposits (B5) Thin Muck Surfa Inundation Visible on Aerial Imagery (B7) Other (Explain i	
Inundation Visible on Aerial Imagery (B7) Other (Explain i Sparsely Vegetated Concave Surface (B8)	× FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes X No Depth (inches)	:O"-Z"
Water Table Present? Yes X No Depth (inches)	: 8''
Saturation Present? Yes X No Depth (inches)	Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	or provious inspections) if available:
Describe Recorded Data (stream gadge, monitoring well, aerial process	s, previous inspositoris), it available.
Remarks:	

Tree Stratum (Plot size: 30')	Absolute	Dominar Species	t Indicator	Dominance Test worksheet:
1. NOT APPICABLE				Number of Dominant Species
2				That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata: (B)
4				
				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				. ,
		•		Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
15'	<u> </u>	_ = Total Co	over	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')	10	V	ch	FAC openies x 2 =
1. Swide Sericea Cornus alba	<u>~~~</u>	- - [-	FACW	FAC species x 3 = FACU species x 4 =
2 Sambucus niga		. <u>Y</u>	FACW	UPL species x5 =
3				Column Totals: (A) (B)
4				Column Totals (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	15	_ = Total Co	over	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')		_ 1014101	, , , , , , , , , , , , , , , , , , ,	3 - Prevalence Index is ≤3.0 ¹
1. Onoclea sensibilis	40	Y	FACH	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Impatiens Capensis	20	<u>Y.</u>	FACW	Problematic Hydrophytic Vegetation¹ (Explain)
3. Sulda Serraca Cornus alba	10	N	FACW	¹ Indicators of hydric soil and wetland hydrology must
4. Solidago Rugora	10	N	FAC	be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				Herb – All herbaceous (non-woody) plants, regardless of
10		-		size, and woody plants less than 3.28 ft tall.
11		· ·		Woody vines - All woody vines greater than 3.28 ft in
12				height.
	100	_ = Total Co	over	
<u>Woody Vine Stratum</u> (Plot size: <u>ろ</u>)				
1. MOT APPLICABLE	- 			
2				Hydrophytic Vegetation
3		_		Vegetation Present? Yes No
4				
	0	_ = Total C	over	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Desc	ription: (Describe 1	to the dep	th needed to docum	ent the i	ndicator	or confirm t	he absence of indicators.)
Depth	Matrix			CFeatures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-6	10yrz11	100)LL
6-20"	2.58511	93	7.54R518	_5_	<u> </u>	<u>m</u>	SIL
			2,542416	_2_	<u> </u>	PL_	

		letion, RM	=Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Hydric Soil							-
Histosol	• •		Polyvalue Belov MLRA 149B)		(S8) (LR	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	oipedon (A2)		Thin Dark Surfa		LRR R. M	LRA 149B)	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Mucky N				Dark Surface (S7) (LRR K, L, M)
	d Layers (A5)		Loamy Gleyed			• •	Polyvalue Below Surface (S8) (LRR K, L)
	d Below Dark Surfac	e (A11)	X Depleted Matrix		•		Thin Dark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (I	=7)		Piedmont Floodplain Soils (F19) (MLRA 149B
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	Redox (S5)						Red Parent Material (F21)
Stripped	Matrix (S6)						Very Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, I	MLRA 149	B)				Other (Explain in Remarks)
³ Indicators o	f hydrophytic vegeta	tion and w	etland hydrology mus	st be pres	ent, unles	s disturbed	or problematic.
Restrictive I	Layer (if observed):						
Type:	NA						x x x x
Depth (in	ches):						Hydric Soil Present? Yes X No
Remarks:							
,							
l							

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region __ City/County: Chautauqua County ____ Sampling Date: __ 5 1911 _ Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-660 Investigator(s): B. Vias N. Dutcher Section, Township, Range: Town of Villenova hillslope Local relief (concave, convex, none): Convex Slope (%): 3 Landform (hillslope, terrace, etc.): ___ _ Datum: NAD 83 42.429005 Long: -79.125769 Subregion (LRR or MLRA): LRR-R _____ Lat: ____ Soil Map Unit Name: Bust, SIL Loam, 3 to 8% Slopes NWI classification: Unland Are climatic / hydrologic conditions on the site typical for this time of year? Yes __X_ No ____ (If no, explain in Remarks.) Are Vegetation $\frac{N_{\odot}}{N_{\odot}}$, Soil $\frac{N_{\odot}}{N_{\odot}}$, or Hydrology $\frac{N_{\odot}}{N_{\odot}}$ significantly disturbed? Are "Normal Circumstances" present? Yes X No____ (If needed, explain any answers in Remarks.) Are Vegetation No., Soil No., or Hydrology No. naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes No X within a Wetland? Yes _____ No 💢 Hydric Soil Present? Wetland Hydrology Present? Yes _____ No X

Remarks: (Explain alternative procedures here or in a separate report.) If yes, optional Wetland Site ID:_ Upland dusupoint for Wetland AS95 **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: __ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) Surface Water (A1) ___ Moss Trim Lines (B16) __ Aquatic Fauna (B13) High Water Table (A2) ___ Dry-Season Water Table (C2) Marl Deposits (B15) Saturation (A3) Hydrogen Sulfide Odor (C1) ___ Crayfish Burrows (C8) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) ___ Presence of Reduced Iron (C4) __ Drift Deposits (B3) ___ Geomorphic Position (D2) ___ Recent Iron Reduction in Tilled Soils (C6) _ Algal Mat or Crust (B4) Shallow Aquitard (D3) ___ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No Depth (inches): Surface Water Present? Yes ____ No ____ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes ____ No X Yes ____ No _X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VEGETATION – Use scientific names of plants.

2 * '	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30')	% Cover	Species?	<u>Status</u>	
1. Prunus Serotina	70	Υ	FACU	Number of Dominant Species
		- 7	-	That Are OBL, FACW, or FAC:(A)
2. Acer Saccharum	20		FACU	Total Number of Dominant
2				Species Across All Strata:(B)
3		***************************************		Opecies Across Air otrata.
4				Percent of Dominant Species
,				That Are OBL, FACW, or FAC: (A/B)
5				(100)
6				B1
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	90	= Total Co	ver	OBL species x 1 =
1 </td <td></td> <td>- 10tai 00</td> <td>•0.</td> <td></td>		- 10tai 00	•0.	
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Rhampus Cathartica	10	Ν	FAC	FAC species x 3 =
1. Populations extractives	10	-1-		·
2. Fagus americana	10	N	FACU	FACU species x 4 =
11 Harris land the	20	V	FACU	UPL species x 5 =
3. Vi Burnum lantanoides	20		PACU	Column Totals: (A) (B)
4				Column Totals: (b)
				Dravelance Index - D/A -
5,				Prevalence Index = B/A =
•				Hydrophytic Vegetation Indicators:
6,				
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Co		2 - Dominance Test is >50%
~ <i>(</i>		= Total Co	ver	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5')				1
Coll 1111	2 .	V	ra all	4 - Morphological Adaptations (Provide supporting
1. Crythronium albidum	<u> </u>		FACU	data in Remarks or on a separate sheet)
2. Panus Serotra	5	Ň	FACU	Problematic Hydrophytic Vegetation¹ (Explain)
2. Franks Scrottia				(Z/plant)
3. Pteridieum aquilinum		<u>N</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				
5				Definitions of Vegetation Strata:
6			_	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
/				
8				Sapling/shrub – Woody plants less than 3 in, DBH
0				and greater than or equal to 3.28 ft (1 m) tall.
9,				1771- A1111
10				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				Woody vines – All woody vines greater than 3.28 ft in
12				height.
	1.11	***************************************		noight
- /	90	= Total Co	ver	
Woody Vine Stratum (Plot size: 30)				
A / I / I i i i i i i i i i i i i i i i i				
1. Not Applicable				
^ ' '				Hydrophytic
Z				Vegetation
3.				Present? Yes No _X
				·
4				
	0	= Total Co	ver	
Demarks (Include abote numbers have as an a consiste	abaat)			
Remarks: (Include photo numbers here or on a separate	sneet.)			
				{
				1

Profile Desc	ription: (Describe t	o the dep	th needed to docum	nent the ir	ndicator o	r confirm	the absence of inc	dicators.)
Depth (inches)	Matrix Color (moist)	%	Redor Color (moist)	x Features %	_Type ¹ _	Loc ²	Texture	Remarks
0.4	2.5 y 2.5/	100					Sil+	
4-15	10YR 3/6	100					5'14	
15-20	10 YR 5/6	100					Silt loam	
<u> </u>	10 112 10							
								
<u> </u>								
								1,1-1,1-1,1-1,1-1,1-1,1-1,1-1,1-1,1-1,1
1			Dadward Marketin Ad	Caldeda -			2l postion: DI	=Pore Lining, M=Matrix.
Hydric Soil	oncentration, D=Depli Indicators:	etion, KM	Reduced Matrix, M	S=Masked	Sand Gr	airis.		Problematic Hydric Soils ³ :
Histosol	•		Polyvalue Belo		(S8) (LR I	R,		(A10) (LRR K, L, MLRA 149B)
Histic Er	oipedon (A2)		MLRA 149B Thin Dark Surfa	,	RR R. M	LRA 149B	-	ie Redox (A16) (LRR K, L, R) y Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky	Mineral (F	1) (LRR K		Dark Surface	ce (S7) (LRR K, L, M)
	d Layers (A5) d Below Dark Surface	(A11)	Loamy Gleyed Depleted Matri:		2)			Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)	, (, (, 1, 1,	Redox Dark Su	ırface (F6)			Iron-Manga	anese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1) Bleyed Matrix (S4)		Depleted Dark Redox Depress					Floodplain Soils (F19) (MLRA 149B) dic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)		Nodox Bopros	5,0,,0 (, 0)			Red Paren	t Material (F21)
	l Matrix (S6) rface (S7) (LRR R, M	II DA 1 <i>1</i> 01	3)					ow Dark Surface (TF12) lain in Remarks)
								(a.i. ii) (a.i. ii)
	f hydrophytic vegetat	on and we	etland hydrology mu	st be pres	ent, unles	s disturbe	d or problematic.	
Type:	Layer (if observed):							
Depth (in	ches):						Hydric Soil Pre	sent? Yes No
Remarks:								
		•						
,								

WETLAND DETERMINATION DATA FOR	M – Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project City/Co	ounty: Chautauqua County Sampling Date: 5/20/16
· · · · · · · · · · · · · · · · · · ·	State: NY Sampling Point: DP- 661
Investigator(s): B.V. n. N. Dutcher Section	n, Township, Range: Town of Villenova
Landform (hillslope, terrace, etc.): Toeofslope Local relie	
Subregion (LRR or MLRA): LRR-R Lat: 42.3990	81 Long: -79.103 513 Datum: NAD 83
Soil Map Unit Name: Fremont 5: 11 low 3 to	
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	es No (If no, explain in Remarks.)
Are Vegetation 10, Soil 10, or Hydrology 10 significantly disturt	,
Are Vegetation 120, Soil 120, or Hydrology 120 naturally problems	
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc
Hydrophytic Vegetation Present?	Is the Sampled Area
Hydric Soil Present? Yes <u>⊀</u> No	within a Wetland? Yes No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland 月596
Remarks: (Explain alternative procedures here or in a separate report.)	
Perioheral Portion of large a	A ROW all the
Peripheral Portion of large of Complexe.	total adjacont wellers
complex.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) X Water-Stained Leave	
X High Water Table (A2) Aquatic Fauna (B13)	
X Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Od	
Sediment Deposits (B2) Oxidized Rhizospher	
Drift Deposits (B3) Presence of Reduced	4
Algai Mat or Crust (B4) Recent Iron Reduction	
Iron Deposits (B5) Thin Muck Surface (0	•
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rel	marks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)	► FAC-Nedular Test (D5)
Field Observations: Surface Water Present? Yes No _X Depth (inches):	
	, n
	· · · · · · · · · · · · · · · · · · ·
(includes capillary fringe)	· ·
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Nottidiks.	

3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 1067 (A/B)
6	• • • • • • • • • • • • • • • • • • • •			Prevalence Index worksheet:
7	型1			Total % Cover of: Multiply by:
- 1	30	_ = Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. HINUS Secrulata	_5'_	<u> </u>	OBL	FAC species x 3 =
2. Fagus Frayinus Dennsylvanica	5	Y	FACW	FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
5				Prevalence index = B/A =
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7			·	Z 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')	10	_ = Total Cov	er	3 - Prevalence Index is ≤3.0¹
TIOID Ollatolli (Flot olzo:	30	Y	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	15	Ÿ	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Egnisetum palustre		N	FACW	11-directors of bridgle only and well-ond bridge in
				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				Woody vines – All woody vines greater than 3.28 ft in
12				height.
	<u>50</u>	_ = Total Co	/er	
Woody Vine Stratum (Plot size: 30')				
1. POT BARDICALLE				
2			-	Hydrophytic
2				Vegetation Present? Yes No
3		· ····		resent res_/- NO
4		. 	,	
	<u> </u>	_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Desc	ription: (Describe	to the dep	oth needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	<u>Matrix</u>			x Feature:	<u>s</u> 1	1 2	T	Domortes
(inches)	Color (moist)	- <u>%</u> 95	Syrul6	_ <u>%_</u> 5	Type¹ C	Loc²	Texture ST	Remarks
8"-16"	_						<u> </u>	
0-16	loge 516	90	7.5yr516	10		$\frac{\sim}{\sim}$		
								
								
		-						
								
								
		oletion, RM	=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.		n: PL=Pore Lining, M=Matrix. for Problematic Hydric Solis³:
Hydric Soil			Polyvalue Belov	v Surface	(S8) (I RI	R.		Muck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		MLRA 149B		(00) (=: 1.	,		Prairie Redox (A16) (LRR K, L, R)
	stic (A3)		Thin Dark Surfa					Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4) d Layers (A5)		Loamy Mucky M			., L)		Surface (S7) (LRR K, L, M) alue Below Surface (S8) (LRR K, L)
	d Below Dark Surfac	ce (A11)	Depleted Matrix		-,			Park Surface (S9) (LRR K, L)
	ark Surface (A12)		Kedox Dark Su					langanese Masses (F12) (LRR K, L, R)
1	fucky Mineral (S1) Bleyed Matrix (S4)		Depleted Dark					ont Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)			()			Red P	arent Material (F21)
	Matrix (S6)		D)					Shallow Dark Surface (TF12) (Explain in Remarks)
Dark Su	rface (S7) (LRR R,	MLKA 149	в)				Other	(Explain in Remarks)
			etland hydrology mus	st be pres	ent, unles	s disturbed	or problemati	С.
	Layer (if observed)):						
Type: Depth (inc	ahaa):		•				Hydric Soi	I Present? Yes X No
Remarks:	Cites)		-				Tiyane ooi	17 163 CM 163 NO
(Nomano.								
,								
1								

WETLAND DETERMINATION D	ATA FORM – Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 5/20 1 6
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-'662
Investigator(s): Ben Vist, Nicole Dutcher	Section, Township, Range: Town of VINEROVA
	Local relief (concave, convex, none):COCAVE Slope (%): 2-52
Subregion (LRR or MLRA): LRR-R Lat: 4	2.399033 Long: -79,103600 Datum: NAD 83
Soil Man Unit Name: Valois accelly 5:	1+ 10am, 15+025% STOPUS NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes No (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N signif	,
Are Vegetation N, Soil N, or Hydrology N nature	
SUMMARY OF FINDINGS – Attach site map sho	owing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate	If yes, optional Wetland Site ID:
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	
	tained Leaves (B9) Drainage Patterns (B10)
1 	Fauna (B13) Moss Trim Lines (B16)
Saturation (A3) Marl De	
	en Sulfide Odor (C1) Crayfish Burrows (C8)
1	d Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	te of Reduced Iron (C4) Stunted or Stressed Plants (D1) Commonwhite Resisting (P2)
	Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ck Surface (C7) Shallow Aquitard (D3)
<u> </u>	ck Surface (C7) Shallow Aquitard (D3) Explain in Remarks) Microtopographic Relief (D4)
Inundation Visible on Aerial Imagery (B7) Other (B Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X _ Depth	(inches):
1	(inches):
1	(inches): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aeri	al photos, previous inspections), if available:
Demode	
Remarks:	
·	
1	

	•		<u></u>	Gamping Forti.
Tree Stratum (Plot size: 30'	Absolute	Dominant		Dominance Test worksheet:
1. Carpinus Carolinia	25	Species?	FAC	Number of Dominant Species
			· ——	That Are OBL, FACW, or FAC:(A)
2. ACET rublum	60		FAC	Total Number of Dominant
3. Celtis occidentalis	<u> S </u>	<u>N</u>	FAC	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence Index worksheet:
7	90			Total % Cover of: Multiply by:
ici		= Total Cov	/er	OBL species x1=
Sapling/Shrub Stratum (Plot size: 15')	_	,	. سے	FACW species $\frac{1}{2}$ x 2 = $\frac{14}{2}$
1. Celtis Occidentalis	<u> 5 </u>	<u>M</u>	FAC	FACUS pecies 17 $x_4 = 198$
2. Fraxinus Dennsylvanica	<u>'7</u>	<u>Y</u>	FACW	17100 oposios x :
3. Carpinus Carollina	15	7	FAC	UPL species x 5 =
- 1	2	N	FACU	Column Totals: 134 (A) 412 (B)
4. Fagus grandifolia				Prevalence Index = B/A = 3.07
5,				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
·	29	= Total Cov	/er	₹ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 355')				3 - Prevalence Index is ≤3.0¹
1. Erythronium rostratum	10		NI	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Dryopteris intermedia	5	6) ()	FAC	Problematic Hydrophytic Vegetation¹ (Explain)
2. 0.70514613 11116 1460166	15			
3. Dryopteris marginalis		1+5	CHEM	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				
5				Definitions of Vegetation Strata:
6			- 	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8			-	Sapling/shrub - Woody plants less than 3 in, DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	<u> 30</u>	= Total Co	ver	
Woody Vine Stratum (Plot size:)				
1. Not Applicable	Ø			
-		/		Hydrophytic
2				Vegetation Present? Yes No X
3				Present? Yes _ No
4				
	φ	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
Location has a mix of veg	etation	, FAC	Specie	s dend to grow all over
				per not meet Rapid Test or Fac Nousa
test. Omirerze test has (Calcube	0 8	ioz bu	t do to false positives previouse
test was also done with	an inde	ex of j	urt a	bove 3, due to these factors and
morginal Calculations 4				

Profile Desc	ription: (Describe t	o the dept	h needed to docum	ent the i	ndicator	or confirm	the absence o	of Indicators.)		
Depth	Matrix			Features	i _ 1	. 2		5		
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹	_Loc-	<u>Texture</u>	Remarks		
0-2	2,5Y 7/3	1002					Silt			
2-4	2.5Y 3/3	80 %	104R 5/10	20%	<u>C</u>	M	<u>S11+</u>			
4-20	10YR 5/6	90?	2.5Y ³ /3	102	0	<u>M</u>	Siltloar	n		
		·								
										
		 -								
		-								
¹Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :		
Histosol			Polyvalue Belov	v Surface	(S8) (I RI	R.		luck (A10) (LRR K, L, MLRA 149B)		
	oipedon (A2)	•	MLRA 149B)		(00) (214	. 1.,		Prairie Redox (A16) (LRR K, L, R)		
Black Hi			Thin Dark Surfa					lucky Peat or Peat (S3) (LRR K, L, R)		
	n Sulfide (A4) I Layers (A5)		Loamy Mucky M Loamy Gleyed N			(, L)		urface (S7) (LRR K, L, M) lue Below Surface (S8) (LRR K, L)		
	i Layers (A5) I Below Dark Surface	(A11)	Loanly Gleyed I		,			ark Surface (S9) (LRR K, L)		
	ark Surface (A12)	, , ,	Redox Dark Sur				Iron-Ma	anganese Masses (F12) (LRR K, L, R)		
	lucky Mineral (S1)		Depleted Dark S	-	7)			Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ileyed Matrix (S4) ledox (S5)		Redox Depress	ions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)		
	Matrix (S6)							hallow Dark Surface (TF12)		
	rface (S7) (LRR R, N	ILRA 1498	3)				Other (Explain in Remarks)		
31 - 41 4	f h	:	tional budgetons mose			a diatushad	l ar problematic			
	f hydrophytic vegetat Layer (if observed):		liand hydrology mus	t be prese	ent, unies	s disturbed	Tor problematic			
Type:								_		
Depth (in	ches):						Hydric Soil	Present? Yes No X		
Remarks:							<u> </u>			
	·									
,								:		
Ī										
								·		

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Point: DP- 4 4 Applicant/Owner: Ball Hill Wind Energy, LLC town of Investigator(s): Bon Vitte Wich Section, Township, Range: Slope (%): 1-3 Local relief (concave, convex, none): ___ Landform (hillslope, terrace, etc.): _ 42.407826 Long: -79, 114228 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Lat: 5; 17 lour , 0 to 30/6 slopes NWI classification: Soil Map Unit Name: Fremont Are climatic / hydrologic conditions on the site typical for this time of year? Yes __ X No ____ (If no, explain in Remarks.) or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes (If needed, explain any answers in Remarks.) or Hydrology N naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) _ Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) X Saturation (A3) _ Marl Deposits (B15) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) ___ Water Marks (B1) X Saturation Visible on Aerial Imagery (C9) ✓ Oxidized Rhizospheres on Living Roots (C3) ___ Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) ___ Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) __ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No X Depth (inches): Surface Water Present? _ No 🔀 _ Depth (inches): ---Water Table Present? Wetland Hydrology Present? Yes X No _ ____ Depth (inches): 냭'' Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Tree Stratum (Plot size: 30')	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
1. Not Applicable				Number of Dominant Species
. ,				That Are OBL, FACW, or FAC:(A)
3				Total Number of Dominant Species Across All Strata: [B]
4				Paraget of Deminent Species
5				That Are OBL, FACW, or FAC: 807. (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
, ~ /		= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')		V		FACW species x 2 =
1. Rosa multiflora		<u> </u>	FACU	FAC species x 3 =
2. Salix bicolor	10	<u>Y</u>	FACW	FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7.				X 1 - Rapid Test for Hydrophytic Vegetation
	15	= Total Co	Vor	∠ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')		- rotar oo	101	3 - Prevalence Index is ≤3.0 ¹
1. Typha latifolia	_33_	<u>Y</u>	OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Euthamia glamnifolia	25	Y	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Impations Capensis		V	FACW	¹ Indicators of hydric soil and wetland hydrology must
4. Onoclea Sensibilis		N	FACW	be present, unless disturbed or problematic.
5. Rubus allegheniensis		N	FACU	Definitions of Vegetation Strata:
1 A ZW.	25	-		
6. Juncus effusus			OBi	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
				Sapling/shrub – Woody plants less than 3 in. DBH
8 9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
12				Woody vines - All woody vines greater than 3.28 ft in height.
,	100	= Total Co	ver	
Woody Vine Stratum (Plot size: 30')				
1. Not Applicable				
2	·			Hydrophytic
3	· 			Vegetation Present? Yes No
				100
4	8			
Daniel (Indied photography)		= Total Co	over	
Remarks: (Include photo numbers here or on a separate	sneet.)			
				·

Profile Desc	ription: (Describe t	o the dept	h needed to docum	nent the ir	ndicator	or confirm	the absence of	indicators.)	
Depth	Matrix			x Features		•			
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-4	1048 3/2	700y				, -	Sit-		 .
4-8	2.5Y 3/2	90?	54R 3/4	10%	<u>C</u>	PLIM	Silt Loan	`	
8-20	2.5Y3/1	95%	54R 3/4	57,	C	PUM	Silt Loan		
					1-		<u> </u>	<u> </u>	
		 .							
			, , , , , , , , , , , , , , , , , , , ,						
									
			 					wn	
									
1Type: C=C	oncentration, D=Depl	etion PM-	Reduced Metric M	S=Maskad	Sand C-	aine	21 ocation: I	PL=Pore Lining, M=Mate	
Hydric Soil		enon, KIVI=	reduced Matrix, Mi	J-IVIASKEQ	Janu Ul	aii 13.		or Problematic Hydric S	
Histosol			Polyvalue Belov	w Surface	(S8) (LR I	R R,		ck (A10) (LRR K, L, ML	1
	oipedon (A2)		MLRA 149B)			Coast Pra	airie Redox (A16) (LRR	K, L, R)
	stic (A3)		Thin Dark Surfa					cky Peat or Peat (S3) (L	
1	en Sulfide (A4) d Layers (A5)		Loamy Mucky I Loamy Gleyed	-		i, L)		face (S7) (LRR K, L, M) e Below Surface (S8) (L	
	d Below Dark Surface	(A11)	Depleted Matrix		,			k Surface (S9) (LRR K,	
	ark Surface (A12)		Redox Dark Su					ganese Masses (F12) (-
1	lucky Mineral (S1)		Depleted Dark		7)			t Floodplain Soils (F19)	
	Gleyed Matrix (S4) Redox (S5)		Redox Depress	sions (F8)				oodic (TA6) (MLRA 144 ent Material (F21)	A, 145, 149B)
	Matrix (S6)							allow Dark Surface (TF1	2)
	rface (S7) (LRR R, M	ILRA 149B	3)					xplain in Remarks)	,
a									
	f hydrophytic vegetat Layer (if observed):		tland hydrology mus	st be prese	ent, unles	s disturbed	or problematic.		
Type:	Layer (ii observed):								
Depth (in	ches).						Hydric Soil P	resent? Yes X	No
Remarks:							riganio com r		
TOMANO.									
				•					
,									

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 5/26 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC ____ State: NY ___ Sampling Point:_DP-(064 Investigator(s): Bon Virts, Nicole Outh Section, Township, Range: Town of Villenava terrace Local relief (concave, convex, none): None Slope (%): O Landform (hillslope, terrace, etc.): ___ Datum: NAD 83 Lat: ___ 42,407738 Long: -79,113954 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Fremont 5: 1+ loam, 0 to 3% 5 10025 NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes __X_ No____ Are Vegetation ____N_, Soil ___N_, or Hydrology ____N significantly disturbed? Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? Yes _____ No X Yes _____ No X within a Wetland? Yes _____ No X Yes ____ No X Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID:_ Remarks: (Explain alternative procedures here or in a separate report.) upland data point for wetland ASA7 **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) ___ Water-Stained Leaves (B9) ___ Drainage Patterns (B10) Surface Water (A1) ___ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) __ High Water Table (A2) ___ Dry-Season Water Table (C2) Saturation (A3) ___ Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) __ Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) ___ Presence of Reduced Iron (C4) ___ Drift Deposits (B3) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Geomorphic Position (D2) __ Algal Mat or Crust (B4) ___ Thin Muck Surface (C7) ___ Shallow Aquitard (D3) __ Iron Deposits (B5) ___ Microtopographic Relief (D4) ___ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes _____ No _X_ Depth (inches): Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _____ No X__ Yes ____ No _X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VE	GET/	ATION	- Use	scientific	names	of	plants.
----	------	-------	-------	------------	-------	----	---------

Absolute De-		
% Cover Spe	ninant Indicator	Dominance Test worksheet:
		Number of Dominant Species
		That Are OBL, FACW, or FAC: (A)
		Total Number of Dominant Species Across All Strate: (B)
		Species Across All Strata: (B)
		Percent of Dominant Species That Are OBL, FACW, or FAC:
		That Are OBL, FACW, or FAC:
		Prevalence Index worksheet:
		Total % Cover of: Multiply by:
G.	al Cover	OBL species x1 =
	u. 0010.	FACW species $\frac{77}{2}$ x2= $\frac{54}{3}$
		FAC species 7 x3 = 21
		FACU species 64 x4 = 256
		UPL species Z x5 = 10
		Column Totals: 100 (A) 344 (B)
		Prevalence Index = B/A = 3.41
		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
/X	al Cours	2 - Dominance Test is >50%
<u>_y_</u> = 100	ai Covei	3 - Prevalence Index is ≤3.0 ¹
21 1	J CANIL	4 - Morphological Adaptations ¹ (Provide supporting
		data in Remarks or on a separate sheet)
	<i>T</i>	Problematic Hydrophytic Vegetation¹ (Explain)
<u> </u>	,	¹ Indicators of hydric soil and wetland hydrology must
25	FACW	be present, unless disturbed or problematic.
2 ^	I UPL	Definitions of Vegetation Strata:
	1 FACW	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
	J FAC	at breast height (DBH), regardless of height,
	J FACU	Sapling/shrub - Woody plants less than 3 in. DBH
		and greater than or equal to 3.28 ft (1 m) tall.
	1	Herb - All herbaceous (non-woody) plants, regardless of
		size, and woody plants less than 3.28 ft tall.
		Woody vines – All woody vines greater than 3.28 ft in
		height.
100 = To	tal Cover	
		Hydrophytic Vegetation
		Present? Yes No
Ø - To	tal Cover	
	### Total ### Total ### Total ### Total ### ### ### ### ### #### #### ########	= Total Cover = Tota

Profile Desc	ription: (D	escribe 1	to the dep	th needed	to docu	ment the i	ndicator	or confirm	the absence	of Indicators.)
Depth		Matrix				ox Features	i ,			
(inches)	Color (n	311	%	Color (moist)	%	Type ¹	_Loc ²	<u>Texture</u>	Remarks
0-14	JOYR	4/6	100%						<u> </u>	
14-20	2.5 Y	4/2	90?	SYR	3/4	10?	\mathcal{C}	M	SIL	
-1	<u> </u>			<u> </u>						
				,						
		-								
						. 				
								•—		
										
				 						
¹ Type: C=Co	oncentration	, D=Depl	letion, RM	Reduced	Matrix, M	1S=Masked	Sand Gr	ains.		: PL≕Pore Lining, M=Matrix.
Hydric Soil	indicators:								Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)			Polyv	/alue Belo	ow Surface	(S8) (LR	R R,		Muck (A10) (LRR K, L, MLRA 149B)
, — ·	oipedon (A2))			_RA 149E	•				Prairie Redox (A16) (LRR K, L, R)
· —	stic (A3)					face (S9) (I				Mucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A					Mineral (F		(, L)		Surface (S7) (LRR K, L, M)
1	d Layers (A5		~ (A11)	-		l Matrix (F2	()			alue Below Surface (S8) (LRR K, L) Park Surface (S9) (LRR K, L)
	d Below Dar ark Surface		# (A 1 1)		eted Matr	เx (คอ) urface (F6)	ı			langanese Masses (F12) (LRR K, L, R)
1	lucky Miner					Surface (F				ont Floodplain Soils (F19) (MLRA 149B)
	eleyed Matri					sions (F8)	• ,			Spodic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)				•	. ,				arent Material (F21)
	Matrix (S6))							Very S	Shallow Dark Surface (TF12)
Dark Su	rface (S7) (I	LRR R, M	1LRA 1491	3)					Other	(Explain in Remarks)
2										
				etland hyd	rology mi	ust be pres	ent, unles	s disturbed	or problemation	С.
Restrictive I	Layer (if ob	served):								
Type:									1	I Present? Yes No X
Depth (in	ches):								Hydric Soil	I Present? Yes No
Remarks:										
1										
,										
										·

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 5/23/1
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-668
	Section, Township, Range: Town of Villenova
Landform (hillslope, terrace, etc.): Hillslope	Local relief (concave, convex, none): Concave Slope (%): 0%-1%
Subregion (LRR or MLRA): LRR-R Lat: 42	Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>0%-1%</u> 2 . 409 0 58 Long: <u>-79 . 110 855</u> Datum: NAD 83
	13 to 8% Slopes NWI classification: WP1 and
Are climatic / hydrologic conditions on the site typical for this time	
Are Vegetation $\underline{\mathcal{D}}$, Soil $\underline{\mathcal{N}}$, or Hydrology $\underline{\mathcal{D}}$ signific	antly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation <u>~ b</u> , Soil <u>~ b</u> , or Hydrology <u>~ b</u> natural	lly problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: wetland A598
Remarks: (Explain alternative procedures here or in a separate	
LIVEDOL COV	
HYDROLOGY Medical Middless Indicators	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that a	
	ained Leaves (B9) X Drainage Patterns (B10)
	rauna (B13) Moss Trim Lines (B16)
<u> </u>	osits (B15) Dry-Season Water Table (C2)
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	n Sulfide Odor (C1) Crayfish Burrows (C8)
	Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
, , , , , , , , , , , , , , , , , , ,	of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	on Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muc	k Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Ex	(plain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (in	
Water Table Present? Yes No _X Depth (ii	
Saturation Present? Yes No Depth (in	nches): Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial	I photos, previous inspections), if available:
, , ,	
Remarks:	

·	41	-	I - II - I	I
Tree Stratum (Plot size: 30)		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	,	Number of Dominant Species
1. Foer rubrum	leo	Y	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	25	V	FACW	That Ale OBE, I AOW, OI I AO(A)
2. Ulmus americana			PACW	Total Number of Dominant
				Species Across All Strata: (B)
3				opedies Adress All Chala.
4				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 83.33 (A/B)
5				(100)
6				
0,	• • • • • • • • • • • • • • • • • • • •			Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
	05	= Total Cov		
. 1	<u>80</u>	= 1 otal Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: \\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \				FACW species x 2 =
A contract of the contract of	1.5	V	-1-	FAC species x 3 =
1 Acer rubrum	10		FAC	
2. Ulmus americana	30	Υ	FACW	FACU species x 4 =
2. UTITING attendance				UPL species x 5 =
3. Rosa multiflora	5	И	FACU	
<u> </u>				Column Totals: (A) (B)
4				
_				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
				X 1 - Rapid Test for Hydrophytic Vegetation
7				Y - Napid Test for Flydrophytic Vegetation
	11.0	= Total Cov	ıor	_X 2 - Dominance Test is >50%
		- 10tal C0	v U I	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5')				<u> </u>
11100	15	Y	FACW	4 - Morphological Adaptations ¹ (Provide supporting
1. Ulmus americana				data in Remarks or on a separate sheet)
2. Rybres alleghenionsis	5	Y	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. 134063 20 0/10/10/13/3			11.00	(=-q
3				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4		*****		
5				Definitions of Vegetation Strata:
			-	
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				
8				Sapling/shrub - Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				
40				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	20	= Total Co	Vor	
_ 1		_ 10tai 00	¥खा	
Woody Vine Stratum (Plot size: 30')				
1. not Applicable				
2.				Hydrophytic
				Vegetation
3				Present? Yes No
			_	
4				
	0	= Total Co	ver	
Daniel Anti-de Library				
Remarks: (Include photo numbers here or on a separate	sneet.)			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix		Redox	<u> Features</u>				
(inches)	Color (moist)	_85	Color (moist) 5 y 2 4 1 5	<u>%</u>	_Type ¹	Loc²	Texture	Remarks
0'-5"	104R311	95 0%	54R413	15%		m/PL		
5"-12"	104R416	95%	7.5yz416	5%			<u> </u>	
			.					
								
			 				<u> </u>	
		-	A A A A A A A A A A A A A A A A A A A					
	oncentration, D=Deple	etion, RM=I	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		: PL=Pore Lining, M=Matrix.
Hydric Soil I								for Problematic Hydric Solls ³ :
Histosol	(A1) pipedon (A2)	-	Polyvalue Belov MLRA 149B)		(S8) (LR I	RR,		Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R)
Black Hi			Thin Dark Surfa		.RR R, M	LRA 149B)		Mucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)	_	Loamy Mucky N					Surface (S7) (LRR K, L, M)
	l Layers (A5)	-	Loamy Gleyed I)			alue Below Surface (S8) (LRR K, L)
	Below Dark Surface		Depleted Matrix					eark Surface (S9) (LRR K, L)
	ark Surface (A12)	-	✓ Redox Dark Sur Replaced					langanese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1) Bleyed Matrix (S4)	-	Depleted Dark S Redox Depress		7)			ont Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B)
	ledox (S5)	-	Redux Depless	ions (Fo)				arent Material (F21)
	Matrix (S6)							Shallow Dark Surface (TF12)
	rface (S7) (LRR R, M	LRA 149B)					(Explain in Remarks)
³ Indicators of	f hydrophytic vegetati	on and wet	land hydrology mus	t he nrese	ent unles	s disturbed :	or problemati	c.
	Layer (if observed):	on and not	and nyarology mad	7. 50 p. 000	,	0 4,014,004		
Type:								
Depth (inc	ches):						Hydric Soi	Present? Yes 🗴 No
Remarks:							J	J. 1941
:								
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 5 2 3 1 6 Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP- 669 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): B. V. RTS, N. Ditcher Section, Township, Range: Town of Villenous Landform (hillslope, terrace, etc.): H.11=100 Local relief (concave, convex, none): Co: Very Slope (%): 00/0-20/0 Subregion (LRR or MLRA): LRR-R Lat: 42,408968 Long: -79,110986 Datum: NAD 83 Soil Map Unit Name: FmB-Frement 5: 1+ Loam 3 to 80% Slopes NWI classification: Uplan Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes ______ No____ Are Vegetation $\frac{\sqrt{0}}{\sqrt{0}}$, Soil $\frac{\sqrt{0}}{\sqrt{0}}$, or Hydrology $\frac{\sqrt{0}}{\sqrt{0}}$ significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Yes ____ No X Hydrophytic Vegetation Present? within a Wetland? Yes ____ No X Hydric Soil Present? Wetland Hydrology Present? Yes _____ No X If yes, optional Wetland Site ID:____ Remarks: (Explain alternative procedures here or in a separate report.) upland data point for wellerd AS98. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) __ Surface Water (A1) ___ Moss Trim Lines (B16) High Water Table (A2) ___ Aquatic Fauna (B13) ___ Dry-Season Water Table (C2) Saturation (A3) Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Crayfish Burrows (C8) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) ___ Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) ___ Presence of Reduced Iron (C4) ___ Drift Deposits (B3) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Geomorphic Position (D2) ___ Algal Mat or Crust (B4) ___ Thin Muck Surface (C7) ___ Iron Deposits (B5) ___ Shallow Aquitard (D3) _ Microtopographic Relief (D4) ___ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No X Depth (inches): Surface Water Present? Yes ____ No ____ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes ____ No X Yes No Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30 /		Species?		Dominance Test worksheet:
1. Ulmus americana Fraxinus!	30	$\overline{}$	FACW	Number of Dominant Species 3
1		-\		That Are OBL, FACW, or FAC: (A)
2. Malus prunifolia	10	<u> </u>	UPL	Total Number of Dominant
3. Fraxinus pennsylvanica	<i>3</i> 0	Y	FACW	Species Across All Strata: (B)
3. 1 10x (110x) p C 11 3 9 1 1 1 1 1				(5)
4				Percent of Dominant Species 43.89 (A/B)
5				That Are OBL, FACW, or FAC: 15.89 (A/B)
	•			
6				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
	40	= Total Cov	or.	OBL species x1 =
(0)		- Total Cov	/ U I	
Sapling/Shrub Stratum (Plot size: 15')			_	
1. Malus prunifolia	15	Υ	UPL	FAC species x3 = x
		ÿ	<u> </u>	FACU species 45 x4 = 180
2. Hmus arresticana Fraxiones penn sybn	ica 10	_	FRW	UPL species 35 x5= 175
3. Multiflora ros Rosa multiflora	W	Υ	PACU	111000
		*****		Column Totals: 145 (A) 485 (B)
4				2 2/1
5				Prevalence Index = B/A = 3.34
				Hydrophytic Vegetation Indicators:
6				1 1
7				1 - Rapid Test for Hydrophytic Vegetation
	35	= Total Cov	105	2 - Dominance Test is >50%
		= Total Cov	/er	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:				4 - Morphological Adaptations (Provide supporting
1. Ulmus americana Fraximus pens	1/4 m 5	ĭ	FACW	data in Remarks or on a separate sheet)
O h 11 h	25	Ż	FACU	1
2. Rubus allegheniensis	25		FACO	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Onoclea Sensibilis	10	Ν	FACH	¹ Indicators of hydric soil and wetland hydrology must
4. Prunus Serotina	10	N	FACU	be present, unless disturbed or problematic.
l .		14		
5. Fragada Vesca	10	N	UPL	Definitions of Vegetation Strata:
				The Mandaghada Off (70 and assessed by the state
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				at breast neight (DDF1), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in, DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9,				
10				Herb – All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11		****	·	Woody vines - All woody vines greater than 3.28 ft in
12				height.
	70	= Total Co	ver.	
2.1		~ 10(a) C0	v G1	
Woody Vine Stratum (Plot size:ろひ /)				
1. Not Applicable	Ø			
				Hydrophytic
2		************		Vegetation
3.				Present? Yes NoX
_	-			,
4	<u> </u>			
	<u> </u>	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)		*****************************	
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Profile Desci	ription: (Describe t	to the dep	th needed to docum	ent the	indicator	or confirm	the absence o	of Indicators.)	
Depth	Matrix			CFeature	<u>s</u> .	_			
(inches)	Color (moist)		Color (moist)		Type ¹	Loc ²	Texture らエし	Remarks	
0"-2"	10yR413	98	54R416			<u>~</u>			
7"-20"	loyrulu	90	104R412	10	D	\overline{m}	SIL		
	•		-						
					-		-		
			***************************************	-					
									
	<u>, , , , , , , , , , , , , , , , , , , </u>								
							1		
									
		letion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :	
Hydric Soil I			Debarelya Pale	u Curfoo	. (CO\ (I D	D D		uck (A10) (LRR K, L, MLRA 149B)	
Histosol (ipedon (A2)		Polyvalue Belov MLRA 149B)		(30) (LK	ι κ,		Prairie Redox (A16) (LRR K, L, R)	
Black His			Thin Dark Surfa		LRR R, M	LRA 149B)		ucky Peat or Peat (S3) (LRR K, L, R)	
	n Sulfide (A4)		Loamy Mucky N				Dark Surface (S7) (LRR K, L, M)		
	Layers (A5)		Loamy Gleyed		2)		Polyvalue Below Surface (S8) (LRR K, L)		
	Below Dark Surface	e (A11)	Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)		
	rk Surface (A12)		Redox Dark Su	-	-		Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)		
	ucky Mineral (S1) leyed Matrix (S4)		Depleted Dark : Redox Depress				Pledmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	edox (S5)		Redox Depress	ilons (i o	,		Red Parent Material (F21)		
-	Matrix (S6)						Very Shallow Dark Surface (TF12)		
	face (S7) (LRR R, N	ILRA 149	B)				Other (Explain in Remarks)		
³ Indicators of	hydronhytic vegetat	ion and w	retland hydrology mus	st be pres	sent unles	s disturbed	or problematic		
	ayer (if observed):		oliana ilyarology mai	х во ріо					
Type:			_					,	
Depth (inc	hes):						Hydric Soil	Present? Yes No	
Remarks:							.l		
•									
,									
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								•	
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WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): B Vizis, N Detect Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): cerv Subregion (LRR or MLRA): LRR-R Lat: 42.409526 Long: 79.110832 Datum: NAD 83 Soil Map Unit Name: Fm/3 - Frequent S; 1+100m; 3+08% 5 20025 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology on naturally problematic? Hydrophytic Vegetation Present? Yes No Hydrologic Present? Yes No Is the Sampled Area within a Wetland? Yes No
Investigator(s): B V:275, N. Dutcher Section, Township, Range: Town of V: Newcord Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): Slope (%): O Subregion (LRR or MLRA): LRR-R Lat: 42.409526 Long: 79.110832 Datum: NAD 83 Soil Map Unit Name: Fm/3 - Fremont 5: 1+106m, 3+6865 5 2025 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology 20 significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation No, Soil No, or Hydrology 20 naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Westland? Yes X No Westland? Yes X No
Landform (hillslope, terrace, etc.):
Subregion (LRR or MLRA): LRR-R Lat: 42.409526 Long: 79.110832 Datum: NAD 83 Soil Map Unit Name: Fm3 - Fremont 5:1+10001, 3 to 8 % 5 longs Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology No naturally problematic? Are "Normal Circumstances" present? Yes No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No (Is the Sampled Area
Soil Map Unit Name: Fm3 - Fremont S; 1+ 100m; 3+ 58 % 510025 NWI classification: Pland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation No, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Westend? Yes No
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are "Normal Circumstances" present? Yes No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Westland? Yes No No No No No
Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes No (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Westland?
Are Vegetation No., Soil No., or Hydrology on naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No. Is the Sampled Area within a Westland? Yes X No.
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Westland? Yes No
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Westland? Yes No
mydrophytic vegetation Fresent: Fes No
within a Watland? Vac No
Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: wetland 1519
Remarks: (Explain alternative procedures here or in a separate report.)
PFO workens data point.
110 mortano outer point.
HYDROLOGY
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations:
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes NoX Depth (inches):
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) FILED CONTROL FOR THE Present? Yes No Depth (inches):
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Factorial Test (D5)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Factorial Test (D5) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Surface Water Present?
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Factorial Test (D5)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) FIeld Observations: Surface Water Present? Yes NoX Depth (inches): Water Table Present? Yes NoX Depth (inches): Saturation Present? Yes NoX Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Factorial Test (D5) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Surface Water Present?
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Factorial Test (D5) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Surface Water Present?
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Factorial Test (D5) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Surface Water Present?
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes NoX Depth (inches): Water Table Present? Yes NoX Depth (inches): Saturation Present? Yes NoX Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes NoX Depth (inches): Water Table Present? Yes NoX Depth (inches): Saturation Present? Yes NoX Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes NoX Depth (inches): Water Table Present? Yes NoX Depth (inches): Saturation Present? Yes NoX Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes NoX Depth (inches): Water Table Present? Yes NoX Depth (inches): Saturation Present? Yes NoX Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes NoX Depth (inches): Water Table Present? Yes NoX Depth (inches): Saturation Present? Yes NoX Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes NoX Depth (inches): Water Table Present? Yes NoX Depth (inches): Saturation Present? Yes NoX Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

	·			
Tree Stratum (Plot size: 3 o')	Absolute			Dominance Test worksheet:
		Species?	_	Number of Dominant Species 5
1. Fraxinus ponsylvanica	10	<u>Y</u>	FACW	That Are OBL, FACW, or FAC:(A)
2. Acc rubrum	15	Υ	FAC	ا ` ح ، ح ، ا
3. Makus prunifolia		N	UPL	Total Number of Dominant Species Across All Strata: (B)
3. 10 kg 17 (m) for a				Species Across All Strata: (B)
4	 			Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: <u>U2.5</u> (A/B)
				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	30	= Total Co	vor	OBL species x 1 =
		- 10tai 00	VOI	Į į
Sapling/Shrub Stratum (Plot size: 5')		V		FACW species x 2 =
1. Lonicera tatarica	15		FACU	FAC species x 3 =
2. Rosa multiflora	10	Υ	FACU	FACU species x 4 =
191.	10	7		UPL species x 5 =
3. Ulmus anericana			FACW	Column Totals: (A) (B)
4. Malus prunifolia	S	N	UPL	(5)
<i>I</i>				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
		= Total Co		X 2 - Dominance Test is >50%
- 4		= Total Co	ver	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5')				4 - Morphological Adaptations¹ (Provide supporting
1. Cornus amonum	10	Υ	FACW	data in Remarks or on a separate sheet)
	15	V	FACU	Problematic Hydrophytic Vegetation¹ (Explain)
2. Lonicera tatarica				Problematic Hydrophytic Vegetation (Explain)
3. V burnum dentatum		N	PAC	¹ Indicators of hydric soil and wetland hydrology must
4. Solicogo rugosa	S	N	FAC	be present, unless disturbed or problematic.
1	5			Definitions of Vegetation Strate:
5. Fraxinus pennsylvanica		<u>'N</u>	FACW	Definitions of Vegetation Strata:
6. Ulmus americana	10	Y	FACW	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
7		·		On the Manches Indiana the Company
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and greater than or equal to 5.25 K (111) tail.
10.				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				Woody vines – All woody vines greater than 3.28 ft in
12				height.
	50	_ = Total Co	War	
31	<u></u>	rotar oc	7401	
Woody Vine Stratum (Plot size: 30')				
1. NOT Applicable				
				Hydrophytic
2				Vegetation Present? Yes No
3				Present? Yes No
4.				
	//	= Total Co	wor	
		10tal CC	7461	<u> </u>
Remarks: (Include photo numbers here or on a separate	sneet.)			
1				

Profile Desc	ription: (Describe t	to the dep	th needed to docum	ent the i	ndicator	or confirm t	the absence	of Indicators.)	
Depth	Matrix	0/		Feature	<u>s</u>	Loc²	Tardura	Remarks	
(inches)	Color (moist)	<u>%</u> 90	Color (moist) 7.54R414	<u>%</u>	Type ¹	er -	Texture ろ士	Remarks	
0'-1"	1092311			10		PHm	21L		
1,-12,	1092415	78	<u>542416</u>				<u> </u>		
			7.542518	2	<u> </u>				
				-					
					·				
¹ Type: C=Co		letion, RM	=Reduced Matrix, MS	=Maske	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :	
Histosol			Polyvalue Below	v Surface	(S8) (LR	RR		Muck (A10) (LRR K, L, MLRA 149B)	
	oipedon (A2)		MLRA 149B)		, (00) (EII	12.12,		Prairie Redox (A16) (LRR K, L, R)	
Black Hi	stic (A3)		Thin Dark Surfa					Mucky Peat or Peat (S3) (LRR K, L, R)	
	n Sulfide (A4)		Loamy Mucky M	-		(, L)		Surface (S7) (LRR K, L, M) alue Below Surface (S8) (LRR K, L)	
	l Layers (A5) I Below Dark Surfac	e (A11)	Loamy Gleyed Matrix		2)			Dark Surface (S9) (LRR K, L)	
	rk Surface (A12)	- ()	Redox Dark Sur) .			langanese Masses (F12) (LRR K, L, R)	
	lucky Mineral (S1)		Depleted Dark S					iont Floodplain Soils (F19) (MLRA 149B)	
	leyed Matrix (S4) ledox (S5)		Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)		
	Matrix (S6)						Very Shallow Dark Surface (TF12)		
	rface (S7) (LRR R, N	MLRA 149	B)				Other (Explain in Remarks)		
31			- M	. h		أمم ماسيق ما أميم	ar problemati	•	
	_ayer (if observed):		etland hydrology mus	t be pres	ent, unies	s disturbed	OI Probleman	G.	
Type:									
Depth (inc	ches):						Hydric Soi	l Present? Yes No	
Remarks:							L		
1									
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 5) 23) 16 State: NY Sampling Point: DP- 671 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): B. Vizzs, N. Outche- Section, Township, Range: Town of Villeneva Landform (hillslope, terrace, etc.): Terca Local relief (concave, convex, none): ______ Slope (%): 💍 Subregion (LRR or MLRA): LRR-R Lat: 42.409 334 Long: -79.116 791 Datum: NAD 83 Soil Map Unit Name: Fm3 - Fremont Silt Loam, 3 to 8% Slopes NWI classification: UPland Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes __X__ No____ Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are Vegetation 100, Soil 100, or Hydrology 100 naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Yes _____ No 🗙 Hydrophytic Vegetation Present? Yes _____ No 🔀 within a Wetland? Yes _____ No X Hydric Soil Present? Wetland Hydrology Present? Yes _____ No X If yes, optional Wetland Site ID:___ Remarks: (Explain alternative procedures here or in a separate report.) upland Data Point for wetland ASGG. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) Surface Water (A1) ___ Moss Trim Lines (B16) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Dry-Season Water Table (C2) Saturation (A3) ___ Marl Deposits (B15) __ Hydrogen Sulfide Odor (C1) __ Crayfish Burrows (C8) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) __ Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) ___ Presence of Reduced Iron (C4) ___ Drift Deposits (B3) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Geomorphic Position (D2) ___ Algal Mat or Crust (B4) ___ Thin Muck Surface (C7) ___ Shallow Aquitard (D3) __ Iron Deposits (B5) ___ Microtopographic Relief (D4) ___ Other (Explain in Remarks) ___ Inundation Visible on Aerial Imagery (B7) ___ FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes ____ No X Depth (inches): Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _____ No ____ Saturation Present? Yes _____ No ____ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VEGETATION - 03c 3cichtino harnes or plants	•			Outhpling Folia:
Tree Stratum (Plot size: 30)	Absolute	Dominant		Dominance Test worksheet:
,, ,		Species?		Number of Dominant Species
1. Malus prunifolia	40	<u> </u>	UPL	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Acer Sacchanem	40	Y	FACU	
2.100			·	Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species 40 Cmg
5				That Are OBL, FACW, or FAC: 28. 57% (A/B)
	·			
6				Prevalence Index worksheet:
7,				Total % Cover of: Multiply by:
	80	= Total Cov	/Or	OBL species $\sqrt[4]{x}$ $1 = \sqrt[4]{x}$
Sapling/Shrub Stratum (Plot size: 15)		- 10tai 00t	701	1//
	_	V		
1. Matus Lonicera tatanica	<u>30</u>	<u> </u>	FACU	170 000000
2. Fraxious pennsylvanica	10	Υ	FACW	FACU species 120 x 4 = 480
	10	V	FACU	UPL species <u>50</u> x 5 = <u>2 50</u>
3. Rosa multifloa			THOU	Column Totals: 210 (A) 810 (B)
4				
				Prevalence Index = B/A = 3.86
5				
6				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
	50	= Total Cov		2 - Dominance Test is >50%
		= Total Cov	/er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size:5)		V		4 - Morphological Adaptations ¹ (Provide supporting
1. Fraxious penosulvanica	3 0	Y	FACW	data in Remarks or on a separate sheet)
2. Lonicera tatarica	20		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
				Problematic Hydrophytic Vegetation (Explain)
3. Acer Saccharum	_10_	<u>N</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Fragaria Vesca	10	N	UPL	be present, unless disturbed or problematic.
5. Ruber allegheniensis		N	FACU	Definitions of Vegetation Strata:
5. Rustas allegieritaisis	10	14	1100	Dominions of Vogotation Status.
6			<u> </u>	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
			• • • • • • • • • • • • • • • • • • • •	Sapling/shrub - Woody plants less than 3 in, DBH
8				and greater than or equal to 3.28 ft (1 m) tall.
9				
10.				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12		 		height.
	80	= Total Co	ver	
Woody Vine Stratum (Plot size: <u></u> ろひ')				
1. potapplicable				
2				Hydrophytic Vegetation
3				Present? Yes No _X
4				
	<u></u> <u> </u>	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
	•			
1				

Profile Desc	cription: (Describe	to the dep	th needed to docun	nent the ir	ndicator	or confirm	the absence	of Indicators.)
Depth	Matrix	0/		x Features	Type ¹	Loc ²	Texture	Remarks
(inches)	Color (moist)	<u></u> 100?	Color (moist)		Type	<u> </u>	SIC	Nemarks
		902	7.542416	101			2, r	
1-16				10 %	$\frac{\sim}{\sim}$	<u>M</u>		
16.20	2,54 5/4	90?	107R 5/8	10?	<u> </u>	<u>M</u>	<u>SL</u>	
								
								T. Carlo

	oncentration, D=Dep	letion, RM	Reduced Matrix, M	S=Masked	Sand G	rains.		: PL=Pore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils ³ :
Histosol	(A1) pipedon (A2)		Polyvalue Below		(S8) (LR	KK,		fluck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R)
Black Hi			Thin Dark Surfa		.RR R, M	ILRA 149B		Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Mucky !			(, L)		Surface (S7) (LRR K, L, M)
	d Layers (A5) d Below Dark Surfac	n (Δ11)	Loamy Gleyed Depleted Matrix)			ulue Below Surface (S8) (LRR K, L) eark Surface (S9) (LRR K, L)
	ark Surface (A12)	c (ATT)	Redox Dark Su					anganese Masses (F12) (LRR K, L, R)
1	lucky Mineral (S1)		Depleted Dark	Surface (F				ont Floodplain Soils (F19) (MLRA 149B)
	Gleyed Matrix (S4)		Redox Depress	sions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)
-	Redox (S5) I Matrix (S6)							Shallow Dark Surface (TF12)
	rface (S7) (LRR R, N	ALRA 149	B)					(Explain in Remarks)
3, ,,								_
	f hydrophytic vegeta Layer (if observed):		etiand hydrology mu	st be prese	ent, unies	ss disturbed	or problematic	c.
Type:	_a	'						
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								
,								
1								

WEILAND DETERMINATION DAT	A FORM - Mortificelitial and Mortifeast region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 5/23/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 67-2
Investigator(s): Ben With and Nicole Durch	_ Section, Township, Range: Town of Villenova
Landform (hillslope, terrace, etc.): +oe slope	Local relief (concave, convex, none): Concave Slope (%): 5/
Subregion (LRR or MLRA): LRR-R Lat: 42.4	106459 Long: -79,119304 Datum: NAD 83
Soil Man Unit Name: Bust Silt Locum	3 to 8% slopes NWI classification: LPland
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation N, Soil N, or Hydrology N significan	•
Are Vegetation N, Soil N, or Hydrology N naturally	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area within a Wetland? Yes X
Hydric Soil Present? Yes No	
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: いとれるも A 6cco
Remarks: (Explain alternative procedures here or in a separate re	port.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	oly) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stain	ned Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fau	= 11 (00)
✓ Saturation (A3) Marl Depos	
	Sulfide Odor (C1) Crayfish Burrows (C8) hizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	· · · · · · · · · · · · · · · · · · ·
\ 	f Reduced Iron (C4) Stunted or Stressed Plants (D1) Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	Surface (C7) Shallow Aquitard (D3)
	lain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inc	hes):
Water Table Present? Yes X No Depth (inc	hast 110"
Saturation Present? Yes X No Depth (inc	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p	
Describe Necolded Data (stream gauge, montaining work desiral p	,
Remarks:	
§	

VEGETATION – Use scientific names of plants.

2.01	Absolute	Dominant Indicato	Dominance Test worksheet:
Tree Stratum (Plot size: 30)		Species? Status	
1. Not Applicable			That Are OBL, FACW, or FAC:(A)
2			1
3			Total Number of Dominant Species Across All Strata: (B)
			- '
4			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5			- (A/B)
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
	Ø	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: \\)			FACW species x 2 =
Sapinig/Situd Stratum (Flot size			FAC species x 3 =
1. Not Applicable			FACU species x 4 =
2	 .		UPL species x5 =
3			Column Totals: (A) (B)
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
	d	= Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size: 51)	T	_ Total Gover	3 - Prevalence Index is ≤3.0 ¹
1. Salix discolor	15	Y FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Fragada vesca	5	N UPL	=
3. Golium boreale	-21	Y FAC	
			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Equisatum arrente		Y FAC	
5. Onoclea sensibilis	10	N FACE	Definitions of Vegetation Strata:
6. Viburnum dentatum	S	N FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Solidago rugosa Canadensis	5	N FACI	at breast height (DBH), regardless of height.
8. Ambrosia artemisii folia		N FACE	Sapling/shrub – Woody plants less than 3 in, DBH
			and greater than or equal to 3.28 ft (1 m) tall
9. Muhlenbergia Schrebert		T FAC	Herb – All herbaceous (non-woody) plants, regardless of
40			size, and woody plants less than 3.28 ft tall.
11			Woody vines - All woody vines greater than 3.28 ft in
12			height.
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30')			
1. Not Applicable			Hydrophytic
2	u		- Vegetation
3			Present? Yes No
4.			
	Ø	= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)	-	
·	•		

Profile Desc	ription: (Describe t	o the dep	th needed to docum	ent the in	ndicator	or confirm (the absence	of indicators.)
Depth	Matrix Color (moint)	0/		Features	Type ¹	Loc ²	Texture	Remarks
(inches)	2 SY 2.5/1	<u>%</u>	7.5YR46	_% 2 <i>7</i> .			Si	Nemana
0-6	2.01	987			<u> </u>	<u>M</u>		
6-10	1048 412	80%	10YR 5/8	152	<u></u>	<u>M</u>	SCL	
			2.54 2.5/1	<u>57.</u>	<u> </u>	<u>M</u>	SCL	
								
	oncentration, D=Dep	etion, RM:	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		: PL=Pore Lining, M=Matrix.
Hydric Soil					/06\ ==			for Problematic Hydric Soils ³ :
Histosol	(A1) pipedon (A2)		Polyvalue Belov		(S8) (LR	R R,		Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R)
1	istic (A3)		Thin Dark Surfa	•	.RR R, M	LRA 149B)	5 cm M	Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky N			(, L)		Surface (S7) (LRR K, L, M) alue Below Surface (S8) (LRR K, L)
	d Layers (A5) d Below Dark Surfac	e (A11)	Loamy Gleyed Depleted Matrix		()			Dark Surface (S9) (LRR K, L)
	ark Surface (A12)	- (/ /	X Redox Dark Su	rface (F6)			Iron-M	langanese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1)		Depleted Dark	-	7)			ont Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B)
1	Gleyed Matrix (S4) Redox (S5)		Redox Depress	sions (F8)				earent Material (F21)
Stripped	Matrix (S6)						Very S	Shallow Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, M	/ILRA 1491	B)				Other	(Explain in Remarks)
3Indicators o	of hydrophytic vegeta	tion and w	etland hydrology mus	st be pres	ent, unles	s disturbed	or problemati	с.
	Layer (if observed):			· · · · · · · · · · · · · · · · · · ·				
Type:								
Depth (in	ches):	······································					Hydric Soi	Present? Yes X No
Remarks:								
,								

	FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 5 23 16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-L@73
Investigator(s): Ben Virts and Nicole Dutch	Section, Township, Range: Town of Villenova
Landform (hillslope, terrace, etc.):	cal relief (concave, convex, none): Canvex Slope (%): 5
Subregion (LRR or MLRA): LRR-R Lat: 42.40	10287 Long: -79.119349 Datum: NAD 83
Subjection (Little of Marroy).	SUG Stopes NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of ye	
	`
Are Vegetation N , Soil N , or Hydrology N significantly Are Vegetation N , Soil N , or Hydrology N naturally properties N	
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
V	is the Sampled Area
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No Yes X No	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate repo	
Upland soil pit of Wetland) A 595.
HYDROLOGY	
	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Water-Stained High Water Table (A2) Aquatic Fauna	
Saturation (A3) Marl Deposits	11 (00)
Gatalation (vo) Hydrogen Sulf	
	cospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of R	
	teduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Su	
Inundation Visible on Aerial Imagery (B7) Other (Explain	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inche	s):
Water Table Present? Yes NoX Depth (inche	ss):
Saturation Present? Yes NoX_ Depth (inche	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	
Describe Necolded Data (stream gadge, monitoring won, dental prior	
Remarks:	

Tree Stratum (Plot size: 30/	Absolute		Dominance Test worksheet:
		Species? Status	Number of Dominant Species
1. Not Applicable			That Are OBL, FACW, or FAC:(A)
2			Total Number of Dominant Species Across All Strata: (B)
3			Species Across All Strata: (B)
4			Percent of Dominant Species That Are ORL FACW or FAC:
			That Are OBL, FACW, or FAC: (A/B)
6			
			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
	Ø	= Total Cover	OBL species x1 =
101		, , , , , , , , , , , , , , , , , , , ,	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 151			
1. Not Applicable			FAC species <u>69</u> x 3 = <u>267</u>
, ·			FACU species 1 6 x4 = 64
2	 .		UPL species 15 x 5 = 75
3			01 2 openios x o
			Column Totals: 100 (A) 346 (B)
4			246
5			Prevalence Index = B/A = 3.46
			Hydrophytic Vegetation Indicators:
6			
7			1 - Rapid Test for Hydrophytic Vegetation
	$\overline{\varphi}$	- Tatal Cause	∠ 2 - Dominance Test is >50%
C I		= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5')			<u> </u>
1. Solidoso rugosa	35	Y FAC	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Taraxacum Officinale	<u> </u>	N FACU	Problematic Hydrophytic Vegetation¹ (Explain)
3. Fragaria Vesca	15	N UPL	1 Indicators of hydric call and watened hydroless, worth
			¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Muhlenbergin Schrebert	<u> </u>	I FAC	be present, unless disturbed of problematic.
5. Ranunculus acris	Z	N FAC	Definitions of Vegetation Strata:
	2		
6. Galium boreale		N FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Ambrosia artemisiifolia	2	N FACU	at breast height (DBH), regardless of height.
	2		Souther/should Mandy starts loss than 2 to DDI
8. Change Crista Pasciculata			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9. Dactylis glomerata	10	N FACU	and greater than or equal to 3.20 ft (1 m) tail.
1 0			Herb – All herbaceous (non-woody) plants, regardless of
10			size, and woody plants less than 3.28 ft tall.
11			
			Woody vines – All woody vines greater than 3.28 ft in
12			height.
	100	= Total Cover	
Woody Vine Stratum (Plot size: 301)			
l t .a.			
1. No+ Applicable.			.
2			Hydrophytic
			Vegetation
3			Present? Yes / No
1			
**	- - 		•
	<u> </u>	_ = Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		
			,
Arms meets diminonce	test	- , but labor	considering the non-dominants
Tired . To contain and	••	1 000. 0-1-27	2013100.1
C. 0=1111 113 11 5	بالجنيمي	2005-10 = 1 la	id or Ohite was oto their
For prevalence test it is	2 lnest (unovered h	Lorohalic reference!

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix			x Features		2	Tasdona	Pomorko		
(inches)	$\frac{\text{Color (moist)}}{2.543/2}$	<u>~~~</u>	Color (moist)	%	Type ¹	_Loc ² _	Si_L	Remarks		
6-16	2.5 × 3/2	95	5YR 416		\overline{C} .	M	SIL			
16-20	2.5Y 5/4	70	DYR SIG	10	$\frac{c}{c}$	M	51			
10 20	21.01	15	2.SY 5/1	20	$\frac{\sim}{\sim}$	M	<u> </u>			
			2,31 /1		<u>U</u>			100.0000		
	<u></u>									
										
										
							· · · · · · · · · · · · · · · · · · ·			
		letion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :		
Hydric Soil I			Poharduo Polo	w Curfoco	/99\ /I DI	. D		luck (A10) (LRR K, L, MLRA 149B)		
Histosol Histic Er	oipedon (A2)		Polyvalue Below		(50) (LK	Χ К,		Prairie Redox (A16) (LRR K, L, R)		
Black Hi			Thin Dark Surfa		RR R, M	LRA 149B) 5 cm N	lucky Peat or Peat (S3) (LRR K, L, R)		
	en Sulfide (A4)		Loamy Mucky N			(, L)		urface (S7) (LRR K, L, M)		
	d Layers (A5)	~ (844)	Loamy Gleyed		:)			lue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L)		
	d Below Dark Surfac ark Surface (A12)	e (A11)	Depleted Matrix Redox Dark Su					anganese Masses (F12) (LRR K, L, R)		
	fucky Mineral (S1)		Depleted Dark					ont Floodplain Soils (F19) (MLRA 149B)		
	Bleyed Matrix (S4)		Redox Depress		.,			Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy R	Redox (S5)							Red Parent Material (F21)		
	l Matrix (S6)							Very Shallow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R, N	/ILRA 149	B)				Other	(Explain in Remarks)		
			etland hydrology mus	st be prese	ent, unles	s disturbed	or problemation).		
	Layer (if observed):									
Type: Depth (inc	ches).		•				Hydric Soil	Present? Yes X No		
Remarks:	0.1100)						, ., ,			
,										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 5 23 10 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 67 Investigator(s): Ben U'irts and Nicole Outher Section, Township, Range: Town of Villenova Landform (hillslope, terrace, etc.): + toe slage Local relief (concave, convex, none): Corcave Slope (%): 25-30 ? Subregion (LRR or MLRA): LRR-R Lat: 42.400072 Long: -79.119017 Datum: NAD 83 Soil Map Unit Name: Busti 5: 1+ Loam, 3 to 840510pcs NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No____ Are Vegetation ___N_, Soil __N_, or Hydrology __N__ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Welland Site ID: Wetland A GO Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) X Water-Stained Leaves (B9) __ Surface Water (A1) ___ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) ___ Marl Deposits (B15) ___ Saturation (A3) Hydrogen Sulfide Odor (C1) ___ Crayfish Burrows (C8) Water Marks (B1) ___ Saturation Visible on Aerial Imagery (C9) X Oxidized Rhizospheres on Living Roots (C3) _ Sediment Deposits (B2) Stunted or Stressed Plants (D1) ___ Presence of Reduced iron (C4) ___ Drift Deposits (B3) ___ Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) ___ Algal Mat or Crust (B4) ___ Thin Muck Surface (C7) Shallow Aquitard (D3) ___ Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes _____ No X Depth (inches): Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes X No ____ Yes ____ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Tree Stratum (Plot size: 30')		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Not Applicable				That Are OBL, FACW, or FAC: (A)
2				, ,
				Total Number of Dominant 5
.3				Species Across All Strata: (B)
4				Percent of Dominant Species
,				That Are OBL, FACW, or FAC: (A/B)
5	 			(700)
6				Prevalence Index worksheet:
7	75			Total % Cover of: Multiply by:
4.	$\underline{\psi}$	= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 151				FACW species x 2 =
Committee of a land	10	V	درريريس	FAC species x 3 =
1. Cornus alba	12		FACW	
2. Salix discolor	55	Υ	FACW	FACU species x 4 =
				UPL species x 5 =
3		*******		Column Totals: (A) (B)
4				(-)
				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
	70	= Total Cov	/er	i —
Herb Stratum (Plot size: 36')				3 - Prevalence Index is ≤3.0 ¹
1 .	5	N	<u>_</u>	4 - Morphological Adaptations ¹ (Provide supporting
1. Ranaculus acris		10	FAC	data in Remarks or on a separate sheet)
2. Muhlenbergia Schrebert	20	Υ	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Euthamia graminifolia	20	Y	FAC	
			· 	¹ Indicators of hydric soil and wetland hydrology must
4. Galium boreale	6	N	FAC	be present, unless disturbed or problematic.
5. Ambrosia artemisii folia	5	N	FACU	Definitions of Vegetation Strata:
	7	V	-	
6. Solidogo rugosa	<u> </u>		FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Viburnum dentatum	10	Ν	FAC	at breast height (DBH), regardless of height.
		-,	· ······	Sapling/shrub – Woody plants less than 3 in. DBH
8,				and greater than or equal to 3.28 ft (1 m) tall.
9				and grouter than or equal to 0.20 it (1 iii) tail.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
12.				Woody vines - All woody vines greater than 3.28 ft in
. 12,	Qia			height.
f	70	= Total Co	ver	
Woody Vine Stratum (Plot size: 51)				
Alia A and				
1. NOT APPILABLE				<i></i>
2				Hydrophytic Vegetation
3				Present? Yes Y
3		•		100
4				
	ð	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	about)	. 1010100		
Remarks: (include photo numbers here or on a separate	sneet.)			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix		Redox	x Features	1	•					
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc²	<u>Texture</u>		Remarks		
0-6	10YR 3/1	80	7.54R 4/6	<u>20</u>		PUM	<u>Si</u>				
6-15	2.54 6/3	100	2,5Y 5/6	40	<u> </u>	<u>M</u>	SL				
	-					-	 ·				
			· · · · · · · · · · · · · · · · · · ·				•				
											
											
											
1						 -	2				
	oncentration, D=Depl	etion, RM	=Reduced Matrix, MS	S=Masked	Sand Gr	ains.			Lining, M=Matri matic Hydric S		
Hydric Soil			Polyvalue Belov	., Curf	(CO) (I P	- D			(LRR K, L, MLF	1	
Histosol	pipedon (A2)		MLRA 149B		(56) (LK I	XΚ,				•	
	istic (A3)		Thin Dark Surfa		.RR R, M	LRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
	en Sulfide (A4)		Loamy Mucky N				Dark Surface (S7) (LRR K, L, M)				
. —	d Layers (A5)		Loamy Gleyed		Polyvalue Below Surface (S8) (LRR K, L)						
	d Below Dark Surface	e (A11)	Depleted Matrix		Thin Dark Surface (S9) (LRR K, L)						
	ark Surface (A12)		X Redox Dark Su		Iron-Manganese Masses (F12) (LRR K, L, R)						
	Mucky Mineral (S1) Bleyed Matrix (S4)		Depleted Dark		Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)						
	Redox (S5)		Redox Debiess	nons (Fo)			Mesic Spodic (1A6) (MLRA 144A, 145, 149B) Red Parent Material (F21)				
	I Matrix (S6)								k Surface (TF12	2)	
	rface (S7) (LRR R, N	ILRA 149	B)				Other	(Explain in I	Remarks)		
3Indicators o	f hydrophytic vegetat	ion and w	atland hydrology mus	at ha near	ant unloc	e dieturbed (or problematic				
	Layer (if observed):		edand hydrology mus	er ne hiezi	ent, unios	s distalbed (or problematic				
Type:	,										
Depth (in	ches):						Hydric Soil	Present?	Yes X	No	
Remarks:											
,											
I											

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ball Hill Wind Project City/C	county: Chautauqua County Sampling Date: 5/23/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-675
Investigator(s): B. V. 215, N. Dutcher Section	
	lef (concave, convex, none): Slope (%): Slope (%):
Subregion (LRR or MLRA): LRR-R Lat: 42.42.79	19 Languary 13 5 108 Deturn NAD 83
Soil Map Unit Name: BSA - Bush oilt Wam, O to 3 pe	, I
Are climatic / hydrologic conditions on the site typical for this time of year? Y	· ·
Are Vegetation NO, Soil NO, or Hydrology No significantly distur	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation <u>DD</u> , Soil <u>DD</u> , or Hydrology <u>DD</u> naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: we+land A602
Remarks: (Explain alternative procedures here or in a separate report.)	
wether is an old and shall	low in some donn't location in i
3.1	low impoundment located within onec.
a previously mapped NWI	orec.
	·
	·
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)Water-Stained Leave	es (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Oc	
Sediment Deposits (B2) Oxidized Rhizospher	
Drift Deposits (B3) Presence of Reduce	, .
★ Algal Mat or Crust (B4) Recent Iron Reduction	, ,
Iron Deposits (B5) Thin Muck Surface (
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	Z 17/0 (100/101 (00/ (00))
Surface Water Present? Yes No Depth (inches):	· ·
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	

VEGETATION – Use scientific names of plants.

	·		····	
Tree Stratum (Plot size: 30	Absolute			Dominance Test worksheet:
1100 Gratarii (1 fet Gizo:		Species?		Number of Dominant Species
1. not Applicable				That Are OBL, FACW, or FAC: (A)
2				
			1	Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
•				That Are OBL, FACW, or FAC: (A/B)
5		***************************************		
6				Prevalence Index worksheet:
7				
	7			Total % Cover of: Multiply by:
·	<u>Ø</u>	= Total Co	ver	OBL species
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 = 80
1. Salix discolar	10	Y	FACW	FAC species 10 x3 = 30
1. Will 0.368.81			170000	FACU species x4 = 5
2				<i>A</i>
3				
<u> </u>				Column Totals: <u>(65</u> (A) <u>125</u> (B)
4				_
5				Prevalence Index = $B/A = 1 \cdot 9$
				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
	0	= Total Co	ver	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')			. •1	2 3 - Prevalence Index is ≤3.01
Herb Stratum (Plot size:)		V		4 - Morphological Adaptations ¹ (Provide supporting
1. Phalarit arundinocea	30	<u> </u>	FACW	data in Remarks or on a separate sheet)
2. Carex Diava	10	N	0BL	Problematic Hydrophytic Vegetation ¹ (Explain)
		. 1		resisting to project to getter (Explain)
3. Juncus ettusus		N	<u>0BL</u>	¹ Indicators of hydric soil and wetland hydrology must
4. Galium ouven's	10	N	FAL	be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
5				pointions of vogetation offata.
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
				On the state of th
8				Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and greater trian or equal to 3.20 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
12				Woody vines - All woody vines greater than 3.28 ft in
	<u> </u>			height.
	ر بـ 	= Total Co	ver	
Woody Vine Stratum (Plot size: 38/)				
1. notapplicable				
				Hydrophytic
2				Venetation
3				Present? Yes No
4				
4				
	Ø	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			<u> </u>
, , ,	•			

Profile Desc	rintion: (Describe t	o the der	th needed to docun	nent the i	ndicator	or confirm	the absence	of indicators.)		
Depth	Matrix	.ooop		x Feature			4			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0"-13"	1048 211	40	2.542416	10		PHM	<u>5I</u>			
13"-16"	logezII	85	7.54416	5	c	m	SI			
	4		1048 518	10		~				
			10 10							

17		-4 014	-D. A I Matrix M	2-141			21	: PL=Pore Lining, M=Matrix.		
Hydric Soil		etion, RM	=Reduced Matrix, MS	5=Masked	3 Sand Gr	ains.		for Problematic Hydric Soils ³ :		
Histosol			Polyvalue Belov	w Surface	(S8) (LR I	R R,		Muck (A10) (LRR K, L, MLRA 149B)		
	pipedon (A2)		MLRA 149B)			Coast	Prairie Redox (A16) (LRR K, L, R)		
Black Hi			Thin Dark Surfa	, , ,	-			Mucky Peat or Peat (S3) (LRR K, L, R)		
	n Sulfide (A4) I Layers (A5)		Loamy Mucky M			i, L)		Surface (S7) (LRR K, L, M) Ilue Below Surface (S8) (LRR K, L)		
	Below Dark Surface	(A11)	Depleted Matrix		-,		Thin Dark Surface (S9) (LRR K, L)			
	ark Surface (A12)	, ,	Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)			
	lucky Mineral (S1)		Depleted Dark		-		Piedmont Floodplain Soils (F19) (MLRA 149B)			
	leyed Matrix (S4) ledox (S5)		Redox Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)			
	Matrix (S6)						Very Shallow Dark Surface (TF12)			
	rface (S7) (LRR R, N	ILRA 149	B)				Other (Explain in Remarks)			
3						B' - t l				
	hydrophytic vegetat Layer (if observed):		etland hydrology mus	st be pres	ent, unles	s disturbed	or problemation	J.		
Type:	NIA									
Depth (inc			•				Hydric Soil	Present? Yes K No No		
Remarks:	7									
								:		
,										
1										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ball Hill Wind Project City/C	county: Chautauqua County Sampling Date: 5123 I
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 676
Investigator(s): B. V. 275 N. Dutcher Section	
Landform (hillslope, terrace, etc.): L: NSlope Local reli	
Subregion (LRR or MLRA): LRR-R Lat: 42,4279 S	160 Janes - 79 134963 Datum: NAD 83
Subregion (LRR of MLRA): Lat. 12.12	Long. Analysis Land
Soil Map Unit Name: BSA-Buth Silt loam, Oto 3p	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation $\begin{picture}(200,0) \put(0,0){\line(0,0){100}} \put(0,0)$	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation NO, Soil NO, or Hydrology NO naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No 💢	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No 🔾	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Wland Data Point for western Alex	52
In open field, currently being cultimate	ed to Sprice Dine tree fame.
P (100) Carra	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	
High Water Table (A2) Aquatic Fauna (B13)	` '
Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide Od	dor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospher	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	
	on in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches):	
· ·	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	
No hydrology indicators observed,	
100 rigarology morealos cosservos	

VEGETATION — Osc solemino names of plants	,			- Camping Form
Tree Stratum (Plot size: 30')		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Not Applicable				That Are OBL, FACW, or FAC:(A)
				///di/////
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species 50/2 (A/D)
5				That Are OBL, FACW, or FAC: (A/B)
l e				
6,				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	Ø	= Total Cov	/er	OBL species x1 =
15'			•	F 26 1
Sapling/Shrub Stratum (Plot size: \\ \(\sigma \)				36 000
1. Picea pungens	20	Y	FACU	FAC species $\frac{75}{}$ x3 = $\frac{225}{}$
				FACU species x4 = 1 (0)
2	 ,			UPL species x5=
3				Column Totals: 120 (A) 410 (B)
				Column Totals: 1 20 (A) 970 (B)
4			·	
5				Prevalence Index = B/A = 3, 42
				Hydrophytic Vegetation Indicators:
6,			·	1 1
7				1 - Rapid Test for Hydrophytic Vegetation
	20	= Total Cov	or.	2 - Dominance Test is >50%
ر ا		- Total Co	/ U I	3 - Prevalence Index is ≤3.01
Herb Stratum (Plot size: 5'				4 - Morphological Adaptations (Provide supporting
1. Solidado rugosa	1:5	N	FAC	data in Remarks or on a separate sheet)
	10	<u> </u>		1
2. Solidago Caracerisco		1/	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Fragario Virginiana	S	\mathcal{N}_i	7)(-	¹ Indicators of hydric soil and wetland hydrology must
		<u> </u>	FAC	be present, unless disturbed or problematic.
4. Muhlenbergia Schreberi				
5. Ambrosia artemisi tolla	_5_		FACU	Definitions of Vegetation Strata:
				—
6		_		Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb - All herbaceous (non-woody) plants, regardless of
	·····			size, and woody plants less than 3.28 ft tall.
11				Was de vines All mande vines protes than 2.20 A in
12.				Woody vines – All woody vines greater than 3.28 ft in height.
	LOD		"	noight.
	100	= Total Co	ver	
Woody Vine Stratum (Plot size: 30')				
1. Not Applicable				District to the
•				Hydrophytic Vegetation
2				Present? Yes No
3				·
	<u></u>	= Total Co		
34	<u>Ø</u>		ver	
	sheet.)	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	-			
Remarks: (Include photo numbers here or on a separate	-			
Remarks: (Include photo numbers here or on a separate Property Owner actively using	-			
Remarks: (Include photo numbers here or on a separate Property Owner actively using	-			
Remarks: (Include photo numbers here or on a separate	-			
Remarks: (Include photo numbers here or on a separate Property Owner actively using	-			
Remarks: (Include photo numbers here or on a separate Property Owner actively using	-			
Remarks: (Include photo numbers here or on a separate Property Owner actively using	-			

Profile Desc	ription: (Describe	to the dep	h needed to docur	ment the i	ndicator o	or confirm	the absence o	of indicators.)		
Depth	Matrix		Redo	x Features	3					
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks		
0-6	2.54 3/3	1005					SIL			
6-20	2.5443	85?	54R314	_5_	<u></u>	<u> M</u>	SL			
<u> </u>			10YR 4/2	10	\overline{O}	M	SL			
<u> </u>			10118 1-							
				<u></u> .						
				. 						
¹Type: C=C	oncentration, D=De	oletion. RM	=Reduced Matrix. M	S=Maske	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix.		
Hydric Soil							Indicators	for Problematic Hydric Soils³:		
Histosol	I (A1)		Polyvalue Beld		(S8) (LR I	R R,		Muck (A10) (LRR K, L, MLRA 149B)		
	pipedon (A2)		MLRA 149E	•		I DA 440D		Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R)		
	istic (A3) en Sulfide (A4)		Thin Dark Surf					Surface (S7) (LRR K, L, M)		
	d Layers (A5)		Loamy Gleyed			-,/		lue Below Surface (S8) (LRR K, L)		
	d Below Dark Surfa	ce (A11)	Depleted Matr	ix (F3) Thin Dark Surface (S9) (LRR K, L)						
	ark Surface (A12)		Redox Dark S					anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B)		
1	Mucky Mineral (S1)		Depleted Dark					Spodic (TA6) (MLRA 144A, 145, 149B)		
	Gleyed Matrix (S4) Redox (S5)		Redox Depres	saluria (i o	,			arent Material (F21)		
	d Matrix (S6)						Very Shallow Dark Surface (TF12)			
Dark Su	urface (S7) (LRR R,	MLRA 149	B)				Other	(Explain in Remarks)		
31	of hydrophytic veget	ation and w	atland hydrology mi	uet ha nres	ent unles	s disturbed	t or problemation	c.		
	Layer (if observed		eliana nyarology nii	ust be pre	John, amoc		1			
Type:								<u>~</u>		
Depth (in	•		-				Hydric Soil	I Present? Yes No X		
Remarks:										
1 5	soils do nos	W.	- hudric	Lizea	401	durk der				
	CO No	1 11 60	* ngor~	2011	10,010	37021				
1										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 9/23/16 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-Investigator(s): Ban With and Mich Onthe Section, Township, Range:_____ Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): Concave Slope (%): 10 Subregion (LRR or MLRA): LRR-R Lat: 42,426381 Long: 79,133742 Datum: NAD 83 Soil Map Unit Name: Busti Sit luam, O to 3 percent slopes NWI classification: Uplan Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.) Are Vegetation N., Soil N., or Hydrology N. significantly disturbed? Are "Normal Circumstances" present? Yes _____ No___ Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Nο If yes, optional Wetland Site ID: Wetland ALOUS Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) FEM wetland. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Water-Stained Leaves (B9) .___ Drainage Patterns (B10) Surface Water (A1) ___ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) ___ Saturation (A3) Marl Deposits (B15) ___ Crayfish Burrows (C8) ___ Hydrogen Sulfide Odor (C1) __ Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) __ Sediment Deposits (B2) ___ Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Drift Deposits (B3) Geomorphic Position (D2) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) __ Thin Muck Surface (C7) ___ Shallow Aquitard (D3) __ Iron Deposits (B5) Microtopographic Relief (D4) __ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) K FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) **Field Observations:** Yes ____ No X Depth (inches): Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes X No ___ Yes ____ No _X_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Geomorphic position indicator met because heland is located in a depression. Remarks:

VEGETATION – Use scientific names of plants	•			Sampling Point: Dr - 0 + /
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Not Applicable				Number of Dominant Species That Are OBL, FACW, or FAC:
2				Total Number of Dominant 2
3				Total Number of Dominant Species Across All Strata:
4				Percent of Dominant Species That Are ORL FACW or FAC: (A/R)
5				That Are OBL, FACW, or FAC:/ CO /. (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by: ,
1	φ	= Total Co	ver	OBL species x1 =
Sapling/Shrub Stratum (Plot size: \S')	_	vŽ		FACW species $\frac{90}{40}$ x2 = $\frac{180}{400}$
1. Salix discolor	<u>30</u>	<u> </u>	FROM	FAC species
2	 .			UPL species x5 =
3				Column Totals: 130 (A) 300 (B)
4				Prevalence Index = B/A = 2.31
5				Hydrophytic Vegetation Indicators:
6			 	1 - Rapid Test for Hydrophytic Vegetation
7	30	= Total Co		Z 2 - Dominance Test is >50%
Herb Stratum (Plot size:5/	<u> </u>	= Total Co	ver	3 - Prevalence Index is ≤3.0¹
1. Salve Giscolor	5	Ň	TROM	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Phalaris orundinosca	<u> </u>	Y	FACW	Problematic Hydrophytic Vegetation¹ (Explain)
3. Muhlenbergia Schreberi	30	Y	FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Solicago gigantea		<i>V</i> 1	FACW	be present, unless disturbed or problematic.
5. Galium boreaie	10	N	FAC	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11	,			Woody vines – All woody vines greater than 3.28 ft in height.
	100	= Total Co	ver	a contract of the contract of
Woody Vine Stratum (Plot size: 30')				
1. Not Applicable				
2				Hydrophytic Vegetation
3				Present? Yes No
4				
		= Total Co	over	
Remarks: (Include photo numbers here or on a separate	sheet.)			1
•				

SOIL									Sampling Form	
Profile Desc	ription: (Describe	to the dep	th needed to docun	nent the i	ndicator	or confirm	the absence o	of indicator	s.)	
Depth	Matrix	%	Color (moist)	k Feature: %	∑ _Type¹	Loc²	Texture		Remarks_	
(inches)	Color (moist)	95	7. SYR 4/6			<u> </u>	SiL		TOTAL TOTAL	
<u> </u>	2000 10 YR3		10YR4/6	5		<u>M</u>	SiL		.,	
4-14	TOO IN IN	1182		•	<u></u>		316			
			5YR 4/6	<u>TO</u>	<u>C</u>	<u>M</u>				
14-20	2.54 4/3	40	2.5Y 4/1	30	D	<u>_M</u>	SIL			
			1048 2/8	36	<u> </u>	<u>M</u>	<u>5.L</u>			

									·····	
<u> </u>							2		, , , , , , , , , , , , , , , , , , , ,	
¹Type: C=Ce Hydric Soil		letion, RM	=Reduced Matrix, MS	S=Masked	Sand Gr	ains.			ining, M=Matrix natic Hydric Sc	
Histosol			Polyvalue Belov	w Surface	(S8) (LR	R.			LRR K, L, MLR	
	pipedon (A2)		MLRA 149B		(/(Coast I	Prairie Redo	x (A16) (LRR F	(, L, R)
	istic (A3)		Thin Dark Surfa					-	or Peat (S3) (LF	RR K, L, R)
	en Sulfide (A4) d Layers (A5)		Loamy Mucky N	-		., L .)	Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L)			
	d Below Dark Surfac	e (A11)	Depleted Matrix		-,		Thin Dark Surface (S9) (LRR K, L)			
	ark Surface (A12)		X Redox Dark Su				Iron-Manganese Masses (F12) (LRR K, L, R)			
	Mucky Mineral (S1) Gleyed Matrix (S4)		Depleted Dark Redox Depress				Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	Redox (S5)		Nedox Depress	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Red Parent Material (F21)			
Stripped	d Matrix (S6)						Very Shallow Dark Surface (TF12)			
Dark Su	ırface (S7) (LRR R, I	MLRA 149	B)				Other	(Explain in R	Remarks)	
l ³ Indicators o	of hydrophytic vegeta	ition and w	etland hydrology mus	st be pres	ent, unles	s disturbed	or problematic	.		
Restrictive	Layer (if observed)									
Type:f			-						vac X	
Depth (in	iches):		•				Hydric Soil	Present?	Yes	No
Remarks:										
,										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

	County: Chautauqua County Sampling Date: 5 23
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-678
Investigator(s): B. Virts and M. Duth Sect	tion, Township, Range: Towner Milenova
Landform (hillstone terrace etc.): hillstope. Local re	elief (concave, convex, none):
Subregion (LRR or MLRA): LRR-R Lat: 42.4264	20 Long: -79, 133754 Datum; NAD 83
Soil Map Unit Name: Busti Sit Wam, O to 3 pe	event Time: NWI classification: 11 0/m
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation N, Soil N, or Hydrology N significantly distu	urbed? Are "Normal Circumstances" present? Yes X No
Are VegetationN, SoilN, or HydrologyN naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?	Is the Sampled Area
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	II yes, optional violand one to.
Upans pit of Wetland A 1603.	
HYDROLOGY	Occupation the diseases (minimum of two required)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	
High Water Table (A2) Aquatic Fauna (B1	
Saturation (A3) Marl Deposits (B15	
Water Marks (B1) Hydrogen Sulfide C	, ,
. , ,	. ,
Drift Deposits (B3) Presence of Reduc	· · ·
Iron Deposits (B5) Thin Muck Surface Inundation Visible on Aerial Imagery (B7) Other (Explain in R	<u> </u>
	FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)	17.0 11001101 1001 (50)
Field Observations: Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes NoX Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Y Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Tes 110
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	,
No hydrologic indicators found.	
	•

VEGETATION –	Use	scientific	names	of	plants
AFOR IVIIOIA -	030	30161111110	Hames	VI.	pianto.

VEGETATION — Ose selectano names el plants				Sampling Fourt,
201		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Benjame Openin
1. Not Applicable				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:
٥				opecies Across Air Otrata.
4				Percent of Dominant Species
,				That Are OBL, FACW, or FAC: (A/B)
5			·	(102)
6				Para III d
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	α	= Total Co	/Or	OBL species x 1 =
101		- Total Oo	VO:	EACW species Ø x2 =
Sapling/Shrub Stratum (Plot size: 15 /				1 ACV species X2
1. Not Applicaide				FAC species
1				FACU species 30 x4 = 120
2				
•				UPL species x 5 =
3				Column Totals: 100 (A) 330 (B)
4				(b)
5				Prevalence Index = B/A = 3, 3
6				Hydrophytic Vegetation Indicators:
		*****	•	1 1
7				1 - Rapid Test for Hydrophytic Vegetation
	Ø	= Total Co	vor	2 - Dominance Test is >50%
ا م		- Total Co	vei	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)	65	V		4 - Morphological Adaptations ¹ (Provide supporting
1. Muhlenbergia schreberi	- <u>U</u>S		FAC	data in Remarks or on a separate sheet)
2. Kanunculus acris		K!	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Taraxacum officinaie	10	N	FACU	The disease of booking and southered by the second
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Ambrosia artemisintàlia	10	N.	FACU	be present, unless disturbed or problematic.
5. Trifolium recent	S	N	FACU	Definitions of Vegetation Strata:
				bollimion of vogotation office.
6. Plantago lancesiata	. 5	\overline{M}	FACU	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
l _				at breast height (DBH), regardless of height.
7				, , , , , , , , , , , , , ,
8				Sapling/shrub - Woody plants less than 3 in, DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				1
12.				Woody vines - All woody vines greater than 3.28 ft in
12	1 .			height.
	100	= Total Co	ver	
March No. 18 and Contract Cont				
Woody Vine Stratum (Plot size:)				
1.				
				Hydrophytic
2				Venetetian
3				Present? Yes No
				· · · · · · · · · · · · · · · · · · ·
4			-	
		= Total Co	ver	
		_ 10tal CO		
Remarks: (Include photo numbers here or on a separate	sheet.)			
1,				
I Vegetation does not me	h	at a roat		
D = 100 D OC 1 1 Mg Mg	as my	CAMO - 1447	- DIAI	noters,
	*	٧.,٠	•	
				•
1				

Dueffle Dees	wintiam: /Dannik - 4	o the de	th needed to docum	ant the	ndicator	r confirm	the absence	of Indicators.)
		o uie deț		Features		, wantiill	. 410 Anggilog (
Depth (inches)	Matrix Color (moist)	%	Color (moist)	%	Type ¹	_Loc²	Texture	Remarks
0-14	2,5x 3/2	100%					SiL_	
14-16	2.5Y 3/2	95	7. SYR 4/6	5	<u></u>	M	S', L	
16-20	2.57 5 4	85	104R 3/1	5	<u>D</u>	M	SL	
			7.5YR46	10	<u> </u>	M	_SL_	

							· 	
							21	: PL=Pore Lining, M=Matrix.
¹Type: C=C Hydric Soil		letion, RM	=Reduced Matrix, MS	S=Masked	Sand Gr	ains.	Indicators	for Problematic Hydric Soils ³ :
Histosol			Polyvalue Belov	v Surface	(S8) (LR	R R,		Muck (A10) (LRR K, L, MLRA 149B)
Histic E	pipedon (A2)		MLRA 149B)			I DA 440B		Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R)
	istic (A3) en Sulfide (A4)		Thin Dark Surfa				, —	Surface (S7) (LRR K, L, M)
Stratifie	d Layers (A5)		Loamy Gleyed I	Matrix (F2				alue Below Surface (S8) (LRR K, L)
	d Below Dark Surfact ark Surface (A12)	e (A11)	Depleted Matrix Redox Dark Su)			ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R)
Sandy N	Mucky Mineral (S1)		Depleted Dark				Piedm	ont Floodplain Soils (F19) (MLRA 149B)
1	Gleyed Matrix (S4)		Redox Depress	ions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)
	Redox (S5) d Matrix (S6)						Very S	Shallow Dark Surface (TF12)
	urface (S7) (LRR R, I	VILRA 149	B)				Other	(Explain in Remarks)
3Indicators of	of hydrophytic vegeta	tion and v	vetland hydrology mus	st be pres	ent, unles	s disturbe	d or problemati	с.
	Layer (if observed):							
Type:	N/A		-					I Present? Yes No
Depth (in	nches):						Hydric Soi	I Present? Yes No /\
Remarks:								
							•	
,								

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Ball Hill Wind Pr	oject City/C			
Applicant/Owner: Ball Hill Win				Sampling Point: DP-680
Investigator(s): B. V. RTS	Section	on, Township, Range:	Town of	V: 11 erour
Landform (hillslope terrace, etc.):	hill Sloge Local rel	ief (concave, convex, non	e): Conver	Slope (%): \- \- \%
Subragion (I BB or MI BA): LRR	L-R Lat: 42,4310	62 Inna -	79.133887	Datum: NAD 83
		cong.	NIMI alassificat	ion: Lelc I
	ille Silt Loan			
Are climatic / hydrologic condition	s on the site typical for this time of year?			
Are Vegetation No., Soil No.	, or Hydrology <u>~ o</u> significantly distu	rbed? Are "Normal	Circumstances" pre	esent? Yes X No
Are Vegetation $^{{\cal O} {\cal O}}$, Soil $^{{\cal O} {\cal O}}$	or Hydrology <u>NO</u> naturally problem	atic? (If needed, e	xplain any answers	in Remarks.)
SUMMARY OF FINDINGS	S – Attach site map showing san	npling point locatio	ns, transects,	important features, etc.
Hydrophytic Vegetation Present	? Yes <u> </u>	is the Sampled Area	3.4	
Hydric Soil Present?	Yes X No	within a Wetland?	YesX	_ No
Wetland Hydrology Present?		If yes, optional Wetland	Site ID:_ ಟರ್_T	Tand 19605
	procedures here or in a separate report.)	<u> </u>		
	portion of wotland	A605		
HYDROLOGY				
Wetland Hydrology Indicators			Secondary Indicate	ors (minimum of two required)
	one is required; check all that apply)		Surface Soil C	Cracks (B6)
Surface Water (A1)	Water-Stained Leav	es (B9)	X Drainage Patt	erns (B10)
High Water Table (A2)	Aquatic Fauna (B13		Moss Trim Lin	ies (B16)
Saturation (A3)	Marl Deposits (B15)	l .	Dry-Season V	Vater Table (C2)
Water Marks (B1)	Hydrogen Sulfide O	dor (C1)	Crayfish Burro	*
Sediment Deposits (B2)	🔀 Oxidized Rhizosphe	eres on Living Roots (C3)		sible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduce		·	ressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduct		Geomorphic F	
Iron Deposits (B5)	Thin Muck Surface		Shallow Aquit	
Inundation Visible on Aeria		emarks)		phic Relief (D4)
Sparsely Vegetated Conca	ve Surface (B8)		FAC-Neutral	t est (D5)
Field Observations:	V 5 ((())	İ		
	Yes No X Depth (inches):			
	Yes No _X Depth (inches):	"		40 Van X Na
(includes capillary fringe)	Yes X No Depth (inches): I			1? Yes <u>X</u> No
Describe Necorded Data (stream	in gauge, montoling won, actial photos, p	,,		
Remarks:				
, tomano				
ļ				
	,			

VEGETATION – Use scientific names of plants.

Sampling Point: DP- 680 Absolute Dominant Indicator Tree Stratum (Plot size: 30' **Dominance Test worksheet:** % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species 100 That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species _____ x 1 = ____ Sapling/Shrub Stratum (Plot size: 15' FACW species x 2 = ___ FAC species ____ ____ x3 = ____ 1. DOT Applicable FACU species _____ x 4 = ____ UPL species _____ x 5 = ____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% _______ = Total Cover 3 - Prevalence Index is ≤3.0¹ Herb Stratum (Plot size: _____5') 4 - Morphological Adaptations (Provide supporting Puckern auren 15 yes FACH data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 15 Yes OBL ¹Indicators of hydric soil and wetland hydrology must Galium Boreale 15 Yes FAC be present, unless disturbed or problematic. Cornus amount 10 NO FACE **Definitions of Vegetation Strata:** Cornus alba 10 NO FACW Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Orocley Sensibilis 10 NO FACE Rosa multiflora 5 NO FAC Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Raphoculus acris 5 NO FAC Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in 100 = Total Cover 301 Woody Vine Stratum (Plot size: 1. not Applicable **Hydrophytic** Vegetation Yes No ____ Present? C = Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			x Feature	<u>s</u>	•		
(inches)	Color (moist)		Color (moist)	%	Type ¹	_Loc ² _	<u>Texture</u>	Remarks
0"-14"	2.542,511	90	7.592414	10	<u> </u>	PLIM	ろエレ	
								
	*							
								
								
							3	
	oncentration, D=Depl	etion, RM=	Reduced Matrix, M	S=Maske	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Solls ³ :
Histosol			Polyvalue Belo		(S8) (LR	RR,		fuck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		MLRA 149B			I D A 440D\		Prairie Redox (A16) (LRR K, L, R)
	stic (A3)		Thin Dark Surfa					Mucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Mucky I			(, L)		turface (S7) (LRR K, L, M) lue Below Surface (S8) (LRR K, L)
	d Layers (A5)	(644)	Loamy Gleyed		2)			ark Surface (S9) (LRR K, L)
,	d Below Dark Surface ark Surface (A12)		Depleted Matri: ★ Redox Dark Su		`			anganese Masses (F12) (LRR K, L, R)
	fucky Mineral (S1)		Depleted Dark					ont Floodplain Soils (F19) (MLRA 149B)
1	Bleyed Matrix (S4)		Redox Depress	•	•			Spodic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)		Nodox Boproo	3,0,10 (1 0)				arent Material (F21)
	Matrix (S6)							shallow Dark Surface (TF12)
	rface (S7) (LRR R, M	ILRA 149E	3)					(Explain in Remarks)
			•					
³ Indicators o	f hydrophytic vegetat	ion and we	tland hydrology mu	st be pres	ent, unles	s disturbed	or problemation	3.
Restrictive	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes 🗶 No
Remarks:								
4								
,								
1								
1								

Project/Site: Ball Hill Wind Project City/C	county: Chautauqua County Sampling Date: 5/24/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-68(
Investigator(s): B. V. 275 Section	
	ief (concave, convex, none): Convex Slope (%): Z-416/6
Subregion (LRR or MLRA): LRR-R Lat: 42.4308	72 Janes - 79,133864 Datum NAD 83
Soil Map Unit Name: Bust S. 1+ Louis , 3 to 8%	STORGE NIMI electification: Lt PL c - 1
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation No., Soil No., or Hydrology NO. significantly distur	
Are Vegetation NO, Soil NO, or Hydrology NO naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area within a Wetland? Yes No 🔀
Hydric Soil Present? Yes No 🗶	
Wetland Hydrology Present? Yes No X Remarks: (Explain alternative procedures here or in a separate report.)	If yes, optional Wetland Site ID:
upland pase Point For Wat	1cmd A605.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	
High Water Table (A2) Aquatic Fauna (B13)	
Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide Oc	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Sediment Deposits (B2) Oxidized Rhizospher Drift Deposits (B3) Presence of Reduce	
	on in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No _X' Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	

	Absoluto	Dominant	Indicator	<u> </u>
Tree Stratum (Plot size: 30')	% Cover	Species?		Dominance Test worksheet:
1. not Applicable				Number of Dominant Species That Are OBL FACW or FAC:
•				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
	-			
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	_ 0	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. DOT POPLICABLE				FAC species x 3 =
				FACU species x 4 =
2	 .			UPL species x 5 =
3				Column Totals: (A) (B)
4				(b)
5.				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	_	= Total Cov		<u></u> ✓2 - Dominance Test is >50%
ا سے		_ Total Cov	.ei	3 - Prevalence Index is ≤3.01
Herb Stratum (Plot size: 5')	~ 2 .	Vice	EV.	4 - Morphological Adaptations (Provide supporting
1. Galina Doreale				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)
2. Muhlenbergia Schrebert				1 Toblematic Hydrophytic Vegetation (Explain)
3. Dactylis glomerata				¹ Indicators of hydric soil and wetland hydrology must
4. Ambrosia artemisiidi	c <u>. 10</u>	No	FACL	be present, unless disturbed or problematic.
5. Plantago lanceolata	10	_ MO	FACL	Definitions of Vegetation Strata:
6. Taraxacum officinale				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Enthamia graminifolia	- 20	10.4	-640	Could not book Manda de plante lace they C. C. DDI.
8. Solidayo Raigosa		<u> N5</u>	FAC	Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12		, , , , , , , , , , , , , , , , , , , 		height.
· ·	100	_ = Total Cov	/er	
Woody Vine Stratum (Plot size:)				
1. no T Applicable				
2				Hydrophytic Vegetation
				Present? Yes X No
3				,
3				
4	0	= Total Co		

301L	1 /1	. 41	U		dia -4		the sheepes of	of indicators	1	
	cription: (Describe to	o the dept				or contirm	rue spseüce c	ว เกษเผสเบาร	1	
Depth (inches)	Matrix Color (moist)	%	Redo Color (moist)	x Features	Type ¹	Loc ²	Texture		Remarks	
0"12"	2.5 4 7.5(1						SIL			
12"-18"	2,542,511	95%	1042416	5%	C	<u>~</u>	SIL			
	254412		7 lu	100/0	0	<u>~</u>	SIL			
			1092416	5%	<u> </u>	<u></u>				
										
¹Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.			ining, M=Matrix.	
Hydric Soil									atic Hydric Soils ³ :	
Histosol			Polyvalue Belo		(S8) (LR	R R,			.RR K, L, MLRA 149B) x (A16) (LRR K, L, R)	
	pipedon (A2) istic (A3)		MLRA 149B Thin Dark Surf		.RR R. M	LRA 149B			r Peat (S3) (LRR K, L, R)	
	en Sulfide (A4)		Loamy Mucky				Dark S	urface (S7) ((LRR K, L, M)	
Stratifie	d Layers (A5)	/A 4 4 5 1	Loamy Gleyed		2)				urface (S8) (LRR K, L) (S9) (LRR K, L)	
	d Below Dark Surface ark Surface (A12)	e (A11)	Depleted Matri		l ,				asses (F12) (LRR K, L, R)	
1 —	Mucky Mineral (S1)		Depleted Dark				Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy (Gleyed Matrix (S4)		Redox Depres	sions (F8)) (MLRA 144A, 145, 149B)	
1	Redox (S5)							arent Materia Shallow Dark	ai (F21) Surface (TF12)	
	d Matrix (S6) µrface (S7) (LRR R, N	ILRA 1491	B)					(Explain in R		
3Indicators	of hydrophytic vegetat	ion and w	etland hydrology mi	ist be nres	ent, unles	ss disturbe	d or problemati	c.		
	Layer (if observed):		onana nyarology me	or po bigg	one, armo					
Type:	•								v	
Depth (in	nches):		· · · · · · · · · · · · · · · · · · ·				Hydric Soi	Present?	Yes No	
Remarks:										
,										
:										
1										

Project/Site: Ball Hill Wind Project City/Co	punty: Chautauqua County Sampling Date:5) Հերի է բ
	State: NY Sampling Point; DP-68-2
Investigator(s): B. V. 255 Section	
Landform (hillslope, terrace, etc.): TOL of Slope Local relie	
Subregion (LRR or MLRA): LRR-R Lat: 42.43 illia	1 Jane: -79,133883 Datum: NAD 83
	NWI classification: じりゅっぴ
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	
Are Vegetation $\begin{array}{c} \sim c$, Soil $\begin{array}{c} \sim c \\ \sim c $	· ·
•	
Are Vegetation <u>~</u> , Soil <u>N. O</u> , or Hydrology <u>N. O</u> naturally problema	tic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes 😾 No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: Watter 1 13605
Remarks: (Explain alternative procedures here or in a separate report.)	
PSS Deta Station for we	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave:	
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16) Dry-Season Water Table (C2)
✓ Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odd	
Sediment Deposits (B2) Yater Marks (B1) Sediment Deposits (B2) Y Oxidized Rhizosphere	
Drift Deposits (B3) Presence of Reduced	, ,
Algal Mat or Crust (B4) Recent Iron Reductio	n in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Ren	
Sparsely Vegetated Concave Surface (B8) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes X No Depth (inches): 5"	
Saturation Present? Yes X No Depth (inches): O	1
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

	Absoluto	Dominant	Indicator	
<u>Tree Stratum</u> (Plot size: <u> ろ</u> 。/		Species?		Dominance Test worksheet:
1. POT Applicable				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	0	= Total Cov	/or	OBL species x1 =
15'		- Total Co	V G1	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15')	•			FAC species x3 =
1. Corons alba				FACU species x4 =
2. Corons amomum	20	Yes	EDEM	UPL species x 5 =
3. Rosa multiflora	10	20	FAC	Column Totals: (A) (B)
4				Column Totals (A) (B)
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6			·	
7		-		1 - Rapid Test for Hydrophytic Vegetation
	60	= Total Co	ver	
Herb Stratum (Plot size: 5')				3 - Prevalence Index is ≤3.0¹
1. Oroclea Sepsibilis	45	Ves	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	15	yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
				. , ,
3. Viola spp.		Yes		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Cornus amamum		20	EACH	
5. Mentions copensis		<u>~~</u>	FACW	Definitions of Vegetation Strata:
6. Rannaculus acris	5	NO	FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in, DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10		***************************************		size, and woody plants less than 3.28 ft tall.
11				Woody vines – All woody vines greater than 3.28 ft in
12				height.
	100	= Total Co	ver	
Woody Vine Stratum (Plot size: 30')				
1. NOT OPPLICABLE				
, ,	,			Hydrophytic
2				Vegetation Present? Yes K No
3				Present? Yes X No
4				
	<u></u>	_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)	ć.		<u> </u>
1				

Profile Desc	ription: (Describe t	to the dept	h needed to docui	ment the ir	ndicator	or confirm	the absence	of indicator	rs.)	
Depth	Matrix			x Features		•			_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ² _	<u>Texture</u>		Remarks	
0"-14"	2.572.51	90%	7.542414	10%	<u> </u>	ALIM	SIL			
			•							
										
										
										
										
										
									·	
¹Type: C=Cc	oncentration, D=Depl	letion RM=	Reduced Matrix M	S=Masked	Sand Gr	ains	² l ocation	: PL=Pore	Lining, M=Matr	ix
Hydric Soil I			TOUGOUG MAINA, IM	- masked	Juliu Ol	will 101			natic Hydric S	
Histosol			Polyvalue Belo	w Surface	(S8) (LR	R R,	2 cm N	luck (A10) (LRR K, L, ML	RA 149B)
	nipedon (A2)		MLRA 1498						ox (A16) (LRR	
Black His			Thin Dark Surf						or Peat (S3) (L	
	n Sulfide (A4)		Loamy Mucky			(, L)			(LRR K, L, M) Surface (S8) (L .	
	l Layers (A5) I Below Dark Surface	a (Δ11)	Loamy Gleyed Depleted Matri		,				(S9) (LRR K,	
	ark Surface (A12)	5 (ATT)	Redox Dark St						Aasses (F12) (I	
	lucky Mineral (S1)		Depleted Dark						ain Soils (F19)	
	ileyed Matrix (S4)		Redox Depres	sions (F8)					6) (MLRA 144 <i>)</i>	A, 145, 149B)
	ledox (S5)							arent Mater		2)
	Matrix (S6) rface (S7) (LRR R, N	AI DA 4400) \					nallow Dari (Explain in I	k Surface (TF1)	2)
Dark Sur	nace (S7) (EINIX IX, II	ILIVA 1430	•)				00101	(Explain in i	tomanto	
³ Indicators of	f hydrophytic vegetat	ion and we	tland hydrology mu	st be prese	ent, unles	s disturbed	or problemation	э.		
Restrictive I	_ayer (if observed):			·						
Type:									C a	
Depth (inc	ches):						Hydric Soil	Present?	Yes 🔀	No
Remarks:							<u></u>			
Ì										
,										

	City/County: Chautauqua County Sampling Date: 512416
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-683
Investigator(s): B. Vizas	Section, Township, Range: TOwn of Villency
Landform (hillslope, terrace, etc.): toe of slope Loc	cal relief (concave, convex, none): Concave Slope (%): 0 - 1 %
Subregion (LRR or MLRA): LRR-R Lat: 42.43	51973 Long: -79.133913 Datum: NAD 83
Soil Man Unit Name: Chantanana Silt Loan 3 to 8	NWI classification: LP1a-J
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes × No (If no. explain in Remarks.)
Are Vegetation 20 , Soil 20 , or Hydrology 20 significantly	1 .
Are Vegetation <u>~ O</u> , Soil <u>~ O</u> , or Hydrology <u>~ O O</u> naturally pro	polematic? (If needed, explain any answers in Nemarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: wetland 14606
Remarks: (Explain alternative procedures here or in a separate repo	rt.)
PSS Data Station for	Also
P33 1) W. S. W. (10)	W541142 1100E
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Water-Stained	
X High Water Table (A2) Aquatic Fauna	
Saturation (A3) Marl Deposits	
Water Marks (B1) Hydrogen Sulf	ide Odor (C1) Crayfish Burrows (C8)
	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of R	
	eduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Sur	
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks) Microtopographic Relief (D4) ✓ FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)	Z PAO-Medital Test (DO)
Field Observations: Surface Water Present? Yes No Depth (inches	٥)،
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	tos, previous inspections), if available:
Remarks:	
Tomano.	

	Absolute	Dominant	Indicator	Danilla van Taat was kahaati
<u>Tree Stratum</u> (Plot size: <u>30</u>)	% Cover	Species?	<u>Status</u>	Dominance Test worksheet:
1. not Applicable				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
				That Are OBL, FACW, OF FAC.
2				Total Number of Dominant
3				Species Across All Strata: (B)
4.				Percent of Dominant Species
-				That Are OBL, FACW, or FAC: (A/B)
5	*			
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		
Sapling/Shrub Stratum (Plot size: 15')		= Total Cov	/ei	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species x 2 =
1. Cocous amonum	40	405	FACU	FAC species x 3 =
2. Froxinus pennsylvanica				FACU species x 4 =
2. The penal vance			PHC w	UPL species x 5 =
3				Column Totals: (A) (B)
4				(5)
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				
	45	= Total Cov	/er	★ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5)				3 - Prevalence Index is ≤3.0¹
1. opoclea Sensibilis	40_	Yes	FACN	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Equisetum palustre				Problematic Hydrophytic Vegetation ¹ (Explain)
3. Corrus amomum			FACW	'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Solidago Rugosa	10		<u>Enc</u>	be present, unless disturbed of problematic.
5. Tox: codendron radicans	10	40	FAC	Definitions of Vegetation Strata:
a Suither is an in the	10	NO		W
6. Enthania graminitalia		100	Inc	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				at breast height (bbit), regulation of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				W. 1
12.				Woody vines - All woody vines greater than 3.28 ft in height.
	100	= Total Cov		INIGH.
/		= Total Cov	ver	
Woody Vine Stratum (Plot size:)				
1. NOT APPLICABLE				
				Hydrophytic
2				Vegetation Present? Yes X No
3				Present? Yes No
4				
	0	= Total Cov	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			<u> </u>
The manual priority manual trains of the department	,			

Profile Desc	ription: (Describe to	o the dept	h needed to docum	ent the ir	ndicator	or confirm 1	the absence o	of indicators	s.)	
Depth	Matrix			C Features	T 1	12	Texture_		Remarks	
(inches)	Color (moist)	%	Color (moist)		Type ¹	_Loc²			Remarks	
0'- 14"	2.542.51	8006	7.54R416	10%	<u> </u>	PL/m	SEL			
										
										-
							_			
										
	 									
1Tuno: C=0:	oncentration, D=Depl	etion PM		S=Masker	Sand G	ains.	2Location	PL=Pore L	ining, M=Matr	ix.
Hydric Soil		enon, Mivi-	- Neduced Manix, Mi	- IMAGNOC	, Junio Gi	WIIIO.			natic Hydric S	
Histosol			Polyvalue Belov	w Surface	(S8) (LR	R R,			LRR K, L, ML	
	oipedon (A2)		MLRA 149B		, ., ,	•	Coast	Prairie Redo	x (A16) (LRR	K, L, R)
	stic (A3)		Thin Dark Surfa	ace (S9) (I					or Peat (S3) (L	
	en Sulfide (A4)		Loamy Mucky			(, L)			(LRR K, L, M)	
	d Layers (A5)	- /4445	Loamy Gleyed		2)				iurface (S8) (L (S9) (LRR K,	
	d Below Dark Surface ark Surface (A12)	e (A11)	Depleted Matrix <u>→</u> Redox Dark Su		1				(33) (LIKK K, fasses (F12) (I	
	Aucky Mineral (S1)		Depleted Dark							(MLRA 149B)
_	Sleyed Matrix (S4)		Redox Depress				Mesic	Spodic (TA6	6) (MLRA 144	
	Redox (S5)		•					arent Materi		-1
	l Matrix (S6)								Surface (TF1	2)
Dark Su	rface (S7) (LRR R, N	/ILRA 149	B)				Other	(Explain in F	temarks)	
3Indicators o	f hydrophytic vegetat	tion and w	etland hydrology mu	st be pres	ent, unles	ss disturbed	or problematic	э.		
	Layer (if observed):			- 1.55	,					
Type:	<u> </u>									
Depth (in	ches):						Hydric Soil	Present?	YesX	No
Remarks:	,						<u> </u>			
,										

Project/Site: Ball Hill Wind Project City/C	County: Chautaugua Co	ounty	Sampling Date: 5/24/16
Applicant/Owner: Ball Hill Wind Energy, LLC	Journey.	State: NY	Sampling Point: DP-681
Investigator(s): B. V. 275 Section			
Landform (hillslope, terrace, etc.): H. N. Stope Local re			
Subregion (LRR or MLRA): LRR-R Lat: 42.4317	74	79.13390) Datum: NAD 83
Subregion (LRR or MLRA): Lat: 42.431,	Long:	11100 10	Datum, 10 L
Soil Map Unit Name: Bust. S. 1+ Loam, 3+08%			
Are climatic / hydrologic conditions on the site typical for this time of year? $^{\backprime}$			
Are Vegetation <u>VC</u> , Soil <u>~O</u> , or Hydrology <u>NO</u> significantly distu	rbed? Are "Normal (Circumstances" p	resent? Yes X No
Are Vegetation <u>roo</u> , Soil <u>roo</u> , or Hydrology <u>roo</u> naturally problem	atic? (If needed, ex	oplain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sar	npling point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No X	Is the Sampled Area		
Hydric Soil Present? Yes No 🔀	within a Wetland?	Yes	No ≠
Wetland Hydrology Present? Yes No X	If yes, optional Wetland	Site ID:	
Remarks: (Explain alternative procedures here or in a separate report.)			
Mand Deta point Fre	vetard 1460E	?	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1) Water-Stained Leav	res (B9)	Drainage Pa	itterns (B10)
High Water Table (A2) Aquatic Fauna (B13		Moss Trim L	ines (B16)
Saturation (A3) Marl Deposits (B15)	· .	Dry-Season	Water Table (C2)
Water Marks (B1) Hydrogen Sulfide O		Crayfish Bur	
	• , ,		/isible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	* *		Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduct			Position (D2)
Iron Deposits (B5) Thin Muck Surface		Shallow Aqu	aphic Relief (D4)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re		FAC-Neutra	
Sparsely Vegetated Concave Surface (B8)		TAO-Neutra	1 1031 (20)
Field Observations: Surface Water Present? Yes No Depth (inches):			
Water Table Present? Yes No _X Depth (inches):			
	'' Wetland H	lydrology Prese	nt? Yes No <u>×</u>
Saturation Present? Yes X No Depth (inches): judiculdes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	'		
Remarks:			

	Absoluto	Dominant	Indicator	
Tree Stratum (Plot size: 30')	Absolute % Cover	Species?		Dominance Test worksheet:
				Number of Dominant Species
1. Princes seration	···		EDCW	That Are OBL, FACW, or FAC: (A)
2. Acer Saccharum	<u> 20</u>	<u> Yes</u>	FACL	Total Number of Dominant
3. Fagus granditolia	20	Yes	FACL	Species Across All Strata: (B)
4.				Parant of Dominant Species
				Percent of Dominant Species That Are OBL, FACW, or FAC: 12.5 (A/B)
5				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	75	= Total Cov	/er	OBL species x1 = c
Sapling/Shrub Stratum (Plot size: \\S'			. •.	FACW species 10 x2= Zc
	وفدر		•	FAC species 10 x3 = 30
1. Fagus grandifolia	70	<u>yes</u>	FACH	FACU species 160 x4= 640
2. Acer Saccharum	20	Yes	FAGU	
3				UPL species x 5 =
				Column Totals: (A)(G (B)
4				Prevalence Index = B/A = 3.83
5			-	Frevalence Index - BIA - 3 : 6.3
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Cov		2 - Dominance Test is >50%
ا ہے		- 10tai Co	/ U I	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:5 /)				4 - Morphological Adaptations ¹ (Provide supporting
1. Podophyllum peltatum	<u>25</u>	Yes	FACH	data in Remarks or on a separate sheet)
2. Erythronium rostratum	10	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Acer Cubrum		Yes	FAL	No disease of bonding only and continued bonding
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Ace- Sacchann		<u> </u>	FACU	
5. Cornus arroman		170	FACL	Definitions of Vegetation Strata:
6. Frations pennsylvanica	5_	20	FACH	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7. Rubus allegheniensis	5	No	FACE	at breast height (DBH), regardless of height.
,		100	1 1300	Carling/about 16/andy plants less than 2 to EDU
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb - All herbaceous (non-woody) plants, regardless of
11				size, and woody plants less than 3.28 ft tall.
		*****		Woody vines - All woody vines greater than 3.28 ft in
12				height.
	<u>65</u>	= Total Co	ver	
Woody Vine Stratum (Plot size: 38')				
1. not Applicable				
				Hydrophytic
2				Vegetation
3				Present? Yes No
4				
	D	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate				
Transaction (installed princip manufactor) of an a departure	01100117			

Profile Desc	ription: (Describe	to the dep	th needed to docu	nent the ir	dicator	or confirm	the absence	of indicators.)	
Depth	Matrix Color (moist)	0/	Redo Color (moist)	x Features	Type ¹	L 00 ²	Texture	Rema	rke
(inches)		<u>%</u>	Color (moist)		_ i ybe	LUC	SEL	<u> </u>	INS
4"-14"	1042313		324041				5IL		
14"20"			104RU16			<u>~~</u>	<u> </u>		
14760	2.5y 413	40	7.542416	10%		\sim			
									
		· 							
									·
			<u> </u>						
¹Type: C=C	oncentration, D=Dep	letion RM:		S=Masked	Sand Gr	ains	² l ocation	: PL=Pore Lining, M	=Matrix
Hydric Soil		ionori, i divi-	-reduced Mainx, W	<u>O-Masked</u>	Ourid Or	шпо.		for Problematic Hy	
Histosol	` '		Polyvalue Belo		(S8) (LR	RR,		luck (A10) (LRR K,	·
Histic Ep	oipedon (A2)		MLRA 149B Thin Dark Surf		DD D M	I DA 1/10R)		Prairie Redox (A16) Iucky Peat or Peat (
	n Sulfide (A4)		Loamy Mucky					surface (S7) (LRR K	
	Layers (A5)		Loamy Gleyed)			lue Below Surface (
	l Below Dark Surface ark Surface (A12)	e (A11)	Depleted Matri Redox Dark St					ark Surface (S9) (LF anganese Masses (• •
	lucky Mineral (S1)		Depleted Dark		7)				(F19) (MLRA 149B)
	ileyed Matrix (S4)		Redox Depres	sions (F8)				Spodic (TA6) (MLR	A 144A, 145, 149B)
1	edox (S5) Matrix (S6)							arent Material (F21) Shallow Dark Surface	(TF12)
	rface (S7) (LRR R, N	ALRA 149E	3)					(Explain in Remarks	
31414				-4 h		المصطفر بقطامه	or problematic		
	f hydrophytic vegetal -ayer (if observed):		etiano nyorology mu	st be prese	ent, unies	s disturbed	or problematic	3.	
Type:		·							
Depth (inc	ches):						Hydric Soil	Present? Yes _	No <u>X</u>
Remarks:									
,									

Project/Site: Ball Hill Wind Project City/C	County: Chautauqua County Sampling Date: 5/24/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 687
	on, Township, Range: Town of V. News
Landform (hillslope, terrace, etc.): terrace floodplood Local rel	
Subregion (LRR or MLRA): LRR-R Lat: 42.433	959 - 79 130 884 patricipinal NAD 83
•	
Soil Map Unit Name: Valo, 5 grandly 5, 17 loam, 3	NWI classification: Unand
Are climatic / hydrologic conditions on the site typical for this time of year?	'es ∑ No (If no, explain in Remarks.)
Are Vegetation NO, Soil NO, or Hydrology CO significantly distur	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation <u>ND</u> , Soil <u>ND</u> , or Hydrology <u>ND</u> naturally problem	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?	is the Sampled Area
Hydric Soil Present? Yes Y	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: Wetland AGOS
Remarks: (Explain alternative procedures here or in a separate report.)	
Figgal alord we though asset	ecited with the confluence earns (Streams AS31 and A532)
THOSE PIECE	(, , , , , , , , , , , , , , , , , , ,
of two power of str	eams (Streams ADDI and 1932)
•	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	• •
High Water Table (A2) Aquatic Fauna (B13)	
Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide Oc	
Sediment Deposits (B2) Oxidized Rhizosphe	
Drift Deposits (B3) Presence of Reduce	. at
Algal Mat or Crust (B4) Recent Iron Reducti	
Iron Deposits (B5) Thin Muck Surface (
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	¥ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	н
Water Table Present? Yes ★ No Depth (inches): (-	
Saturation Present? Yes <u>'</u> No Depth (inches): C	wettand hydrology Present? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
Tomano.	

2.1	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Deminant Species
1. not Applicable		That Are OBL, FACW, or FAC:(A)
2.		
		Total Number of Dominant Species Across All Strata: (B)
3		Species Across Air Strata.
4		Percent of Dominant Species
		That Are OBL, FACW, or FAC:(A/B)
6.	•	
		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
	= Total Cover	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15')		FACW species x 2 =
1. pcT Applicable		FAC species x 3 =
•		FACU species x 4 =
2		UPL species x 5 =
3		Column Totals: (A) (B)
4		Column Totals (A) (B)
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
7		∠ 2 - Dominance Test is >50%
- /	= Total Cover	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5') 1. Grocles Sensibilis	45 Yes FACE	4 - Morphological Adaptations ¹ (Provide supporting
l		data in Remarks or on a separate sheet)
2. Galium boreale	To YES FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Carex gynardra	15 NO OBL	¹ Indicators of hydric soil and wetland hydrology must
4. Froxinus pennsylvanica		be present, unless disturbed or problematic.
5. Rosa meltistera		Definitions of Vegetation Strata:
• • • • • • • • • • • • • • • • • • •		
6,		Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7		at breast height (DBH), regardless of height.
8		Sapling/shrub – Woody plants less than 3 in. DBH
		and greater than or equal to 3.28 ft (1 m) tail.
9		Herb – All herbaceous (non-woody) plants, regardless of
10		size, and woody plants less than 3.28 ft tall.
11		W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
12.		Woody vines – All woody vines greater than 3.28 ft in height.
	loc = Total Cover	norga.
3-1	- TOTAL COVE	
Woody Vine Stratum (Plot size: 30)		
1. not Applicable		
2		Hydrophytic
		Vegetation Present? Yes No
3		
4		
	= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)	
<u> </u>		
I .		

Profile Desc	cription: (Describe t	to the dep	th needed to docun	nent the i	ndicator	or confirm	the absence of	findicators.)
Depth	Matrix		Redo	x Features	<u>.</u>	•		
(inches)	Color (moist)	%	Color (moist)	%		_Loc ²	Texture	
0-16	2,542,5/1	85	2.545/1		0	<u>m</u>	<u>SL</u> _	
			1042412	_5_	0	<u></u>		
								
								
·								
	oncentration, D=Depl	letion, RM	=Reduced Matrix, M	S=Masked	Sand G	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil			51		(00) (LD	- n		or Problematic Hydric Soils ³ :
Histosol	(A1) pipedon (A2)		Polyvalue Below		(S8) (LR	KK,		ıck (A10) (LRR K, L, MLRA 149B) rairie Redox (A16) (LRR K, L, R)
	istic (A3)		Thin Dark Surfa	•	LRR R, M	LRA 149B		ucky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Mucky			(, L)		rface (S7) (LRR K, L, M)
	d Layers (A5)	- (844)	Loamy Gleyed		?)			ue Below Surface (S8) (LRR K, L)
	d Below Dark Surface ark Surface (A12)	e (A11)	Depleted Matrix Redox Dark Su		ı			rk Surface (S9) (LRR K, L) nganese Masses (F12) (LRR K, L, R)
l .	Mucky Mineral (S1)		Depleted Dark					nt Floodplain Soils (F19) (MLRA 149B)
	Gleyed Matrix (S4)		Redox Depress	sions (F8)				podic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)							rent Material (F21) allow Dark Surface (TF12)
	l Matrix (S6) ırface (S7) (LRR R, N	ILRA 149	B)				-	Explain in Remarks)
	f hydrophytic vegetat		etland hydrology mu	st be pres	ent, unles	s disturbed	l or problematic.	
	Layer (if observed):							
Type:	ahaa):		•				Hydric Soil F	Present? Yes K No No
Depth (in-	cnes)				·····		riyuric 30ii r	resoluti res X No
ixemans.								
,								
		-						

Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 5) 24) (
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 68.6			
	Section, Township, Range: TOWN OF VINEROUM			
Investigator(s): (S, V, RT)	Section, Township, Range:			
Landform (hillslope, terrace, etc.): + Cocopic, N Loc	cal relief (concave, convex, none): F1c Slope (%): 6%			
Subregion (LRR or MLRA): LRR-R Lat: 42. 73	33860 Long: -79.130922 Datum: NAD 83			
Soil Map Unit Name: Yalois gravelly Silt lower	NWI classification: LPIAnd			
Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes No (If no, explain in Remarks.)			
Are Vegetation No, Soil 20, or Hydrology No significantly				
Are Vegetation ~ C, Soil ~ C, or Hydrology ~ naturally pro				
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.			
Hydrophytic Vegetation Present? Yes No ⊀	Is the Sampled Area			
Hydric Soil Present? Yes No >>	within a Wetland? Yes No 🗡			
Wetland Hydrology Present? Yes No 'x	If yes, optional Wetland Site ID:			
Remarks: (Explain alternative procedures here or in a separate repor				
	1			
ipland Data point for u	Detical A608			
	·			
4				
HYDROLOGY				
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1) Water-Stained	Leaves (B9) Drainage Patterns (B10)			
High Water Table (A2) Aquatic Fauna				
Saturation (A3) Marl Deposits (
Water Marks (B1) Hydrogen Sulfi				
	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3) Presence of Re				
1 • · ·	eduction in Tilled Soils (C6) Geomorphic Position (D2)			
Iron Deposits (B5) Thin Muck Sur				
Inundation Visible on Aerial Imagery (B7) Other (Explain				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)			
Field Observations:				
Surface Water Present? Yes No Depth (inches	s):			
Water Table Present? Yes No Depth (inches				
Saturation Present? Yes No _< Depth (inches	s): Wetland Hydrology Present? Yes No X			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:			
Bosonibo (1000.100 p.m.)				
Remarks:				

Tree Stratum (Plot size:ろ)	Absolute		Indicator	Dominance Test worksheet:
,		Species?		Number of Dominant Species Z_
1. Tsuga Canadensis	_55_	yes	FALL	That Are OBL, FACW, or FAC: (A)
2. Betala alleghanicosis		Yes	FAC	Total Number of Dominant
3. Acer Saccharum	15	<u> </u>	FACL	Species Across All Strata: (B)
4.				Percent of Dominant Species
5			-	Percent of Dominant Species That Are OBL, FACW, or FAC: 28.6% (A/B)
5				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
,	90	= Total Co	ver	OBL species O x1 = O
Sapling/Shrub Stratum (Plot size: 15)				FACW species x 2 =O
1. OStrya Visginiana	20	Yes	FACH	FAC species 30 x3= 70
2. Tsuga considersis			FACH	FACU species 120 x4 = 4180
· · · · · · · · · · · · · · · · · · ·		No		UPL species <u> </u>
3. Aper Saucherum			FACH	Column Totals: 170 (A) 676 (B)
4				
5				Prevalence Index = B/A = 3,94
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7	~ c			2 - Dominance Test is >50%
· · · · · · · · · · · · · · · · · · ·	22	= Total Co	ver	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5')				4 - Morphological Adaptations¹ (Provide supporting
1. Erythronium rostratum	20	Y.05	LPL	data in Remarks or on a separate sheet)
2. TSuga Canadansis			FACH	Problematic Hydrophytic Vegetation¹ (Explain)
3. Acer negundo			FAL	¹ Indicators of hydric soil and wetland hydrology must
4. Polystichum acrostiched				be present, unless disturbed or problematic.
· · · · · · · · · · · · · · · · · · ·			FACH	
5			PACA	Definitions of Vegetation Strata:
-				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter
56				Definitions of Vegetation Strata:
5				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter
5				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
5				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
5				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH
5				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
5				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of
5				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in
5				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in
5	45	= Total Co	vver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in
5		= Total Co	vver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	vver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	vver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	vver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5	<u>45</u>	= Total Co	ver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	ver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	ver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	ver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	ver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	ver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	ver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	ver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
5		= Total Co	ver	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)	
Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type ¹ Loc ² Texture Remarks	
10"-20" 7.54414 100 SL	
	 '
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains. Indicators for Problematic Hydric Science Sci	
Tyund den malatate.	
Histosol (A1)	-
Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LF	RR K, L, R)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Dark Surface (S7) (LRR K, L, M)	יו אמני
Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LR L. Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L.	
Depicted Below Bank Odnace (A17) Depicted Matrix (1-6) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (L	
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A Sandy Redox (S5) Red Parent Material (F21)	, 145, 149B)
Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)	,
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):	
Type:	
Depth (inches): Hydric Soil Present? Yes	No <u> </u>
Remarks:	

Project/Site: Ball Hill Wind Project Cit	y/County: Chautauqua County Sampling Date: 5)なり。
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point; DP-689
Investigator(s): B. V.275 Se	
	relief (concave, convex, none): Concave Slope (%): 6%
Landform (milistope, terrace, etc.). Using the Local	S15 Long: -79.136629 Datum: NAD 83
Subregion (LRR or MLRA): Ltd. 42,400	Datum: 10 10 10 10 10 10 10 10 10 10 10 10 10
Soil Map Unit Name: Chantangen 5:14 lown	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation $N_{\mathcal{C}}$, Soil $N_{\mathcal{C}}$, or Hydrology $N_{\mathcal{C}}$ significantly dis	sturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation (120), Soil (120), or Hydrology (120) naturally proble	ematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesX No	is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X	If yes, optional Wetland Site ID: Wetland Abog
Remarks: (Explain alternative procedures here or in a separate report.)	
Hernlock Depressioned wetl	and
Hermi Ocase Assistant of the	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	eaves (B9) Drainage Patterns (B10)
─────────────────────────────────────	Moss Trim Lines (B16)
X Saturation (A3) Marl Deposits (B1	15) Dry-Season Water Table (C2)
Water Marks (B1) — Hydrogen Sulfide	
	oheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Redu	
	uction in Tilled Soils (C6)
Iron Deposits (B5) Thin Muck Surfac	• •
Inundation Visible on Aerial Imagery (B7) Other (Explain in Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	1A01toutur rost (50)
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes X No Depth (inches):	7"
Saturation Present? Yes X No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Remarks:	

VEGETATION - Ose scientific fiames of plants.	·			Sampling Forms
Tree Stratum (Plot size:'3 0 ')	Absolute	Dominant		Dominance Test worksheet:
!		Species?	_Status	Number of Dominant Species >
1. Tsuga Canadensis		105	FACH	That Are OBL, FACW, or FAC: (A)
2. Fraxinus Penasylvanica	5_	h0	PACW	Total Number of Dominant
3				Species Across All Strata:(B)
				Described Described
4				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5			·	
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	45	= Total Cov	er Ì	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15)				FACW species x 2 =
	20	V.c	<i>-</i>	FAC species x 3 =
1. tilmus americana			FIACH	FACU species x 4 =
2. TShga Canadensis	10	Yes	FACH	UPL species x 5 =
3				
4.				Column Totals: (A) (B)
		•		Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	30	= Total Cov	/er	× 2 - Dominance Test is >50%
Herb Stratum (Plot size:5 ')				3 - Prevalence Index is ≤3.0¹
	7 7 -	Yes	Cocu	4 - Morphological Adaptations¹ (Provide supporting
1. Impatiens copensis				data in Remarks or on a separate sheet)
2. Onoclea Sersibilis		425	FACW	Problematic Hydrophytic Vegetation¹ (Explain)
3. himns americana	<u>S</u>	No	FACH	¹ Indicators of hydric soil and wetland hydrology must
4. Arisaerra triphyllim	5	120	FAC	be present, unless disturbed or problematic.
5. Osmunda Cimmimonea		No	FACIL	Definitions of Vegetation Strata:
l		•		
6. Thelypteris palustris		NO.	FACW	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				at breast neight (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10.				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	50	= Total Co	veг	
Woody Vine Stratum (Plot size: 30)				
1. not Applicable				
				Hydrophytic
2				Vegetation
3				Present? Yes No
4				
	\circ	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
	•			
Hemlack Damite	+. 0 6	Co		
France Demine	Vical V	10		
1				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth Matrix		k Features						
(inches) Color (moist) %	Color (moist)		Loc ²	Texture	Remarks			
0"-12" mucky Pect								
<u> </u>								
	· · · · · · · · · · · · · · · · · · ·							
¹ Type: C=Concentration, D=Depletion, RM	I=Reduced Matrix M	S=Masked Sand G	rains.	²Location: PL=Po	ore Lining, M=Matrix.			
Hydric Soil Indicators:	I-1 TOUROGU MARIA, IM	C Madica Cana C		Indicators for Pro	blematic Hydric Soils ³ :			
─────────────────────────────────────	Polyvalue Belo	w Surface (S8) (Li	RR R.	2 cm Muck (A1	10) (LRR K, L, MLRA 149B)			
Histic Epipedon (A2)	MLRA 149B		·	Coast Prairie F	Redox (A16) (LRR K, L, R)			
Black Histic (A3)		ace (S9) (LRR R, I	ILRA 149B)		eat or Peat (S3) (LRR K, L, R)			
Hydrogen Sulfide (A4)		Mineral (F1) (LRR	K, L)		(S7) (LRR K, L, M)			
Stratified Layers (A5)	Loamy Gleyed				ow Surface (S8) (LRR K, L)			
Depleted Below Dark Surface (A11)	Depleted Matri				face (S9) (LRR K, L) se Masses (F12) (LRR K, L, R)			
Thick Dark Surface (A12)	Redox Dark Su Depleted Dark				odplain Soils (F19) (MLRA 149B)			
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Depleted Dark				(TA6) (MLRA 144A, 145, 149B)			
Sandy Redox (S5)	Redox Bepree	515115 (1. 5)		Red Parent M				
Stripped Matrix (S6)					Dark Surface (TF12)			
Dark Surface (S7) (LRR R, MLRA 149	9B)			Other (Explain	n in Remarks)			
³ Indicators of hydrophytic vegetation and v	vetland hydrology mu	st be present, unle	ess disturbed	or problematic.				
Restrictive Layer (if observed):								
Type:	-				nt? Yes 🗡 No			
Depth (inches):	_			Hydric Soil Prese	nt? Yes <u></u> No			
Remarks:								
	•							
,								

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 5/24/16 Project/Site: Ball Hill Wind Project ___ State: NY ___ Sampling Point; DP- 690 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): B. Viris Section, Township, Range: Town of Villenova Landform (hillslope, terrace, etc.): H. 11 S lo Re Flood Pla ~ Local relief (concave, convex, none): Convex/Flot Slope (%): 0% (%) Subregion (LRR or MLRA): LRR-R Lat: 42. 434393 Long: -79.130735 Datum: NAD 83 Soil Map Unit Name: Chautageur 5: 1+ loam, 3+6800510200 NWI classification: 101000 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation NO, Soil PO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Yes ____ No X Yes ___ No X is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID:_ Remarks: (Explain alternative procedures here or in a separate report.) Wland Date Station for Wetland Abog **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) .___ Drainage Patterns (B10) ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ Aquatic Fauna (B13) Moss Trim Lines (B16) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) __ Marl Deposits (B15) __ Saturation (A3) ___ Crayfish Burrows (C8) ___ Hydrogen Sulfide Odor (C1) Water Marks (B1) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) _ Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ___ Algal Mat or Crust (B4) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) Shallow Aguitard (D3) ___ Microtopographic Relief (D4) ___ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No > Depth (inches): Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _____ No ____ Yes ____ No ___ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30/		Species?		Dominance Test worksheet:
1. TSuga Concidensis				Number of Dominant Species
,				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6				B
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
/	45	= Total Cov	er	OBL species <u>o</u> x1 = <u>0</u>
Sapling/Shrub Stratum (Plot size: 15'				FACW species C x 2 = C
1 TS400 A. L. Dan	16	Vac	Saci	FAC species x 3 = O
1. TSuga Canadensis		<u> 46.2</u>	PACCI	FACU species 120 x4= 480
2. Fagus grandifolia	10	Yes	EACIN	1
3.	•			UPL species
				Column Totals: 120 (A) 180 (B)
4				m.,
5				Prevalence Index = B/A = ¹¹ , 당 O
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				1
· •	20	= Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ')				3 - Prevalence Index is ≤3.0 ¹
(lot size.	_	Mar	C =	4 - Morphological Adaptations (Provide supporting
1. Fogus grandifolia		162	MACH	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				population and a production of productions.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				at Disastribigiti (DD17), regulated of Melgiti.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
12				Woody vines – All woody vines greater than 3.28 ft in height.
	-5			neight.
0 - /		= Total Cov	/ег	
Woody Vine Stratum (Plot size: SO')				
1. NOT Applicable				
• • •				Hydrophytic
2				Vegetation
3				Present? Yes No
4.				
	0	T-1-1-0		
		_ = Total Cov	/er	
Remarks: (Include photo numbers here or on a separate	sneet.)			
				ı

Profile Description: (Describe to the de	pth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	Tandura Bomorko
(inches) Color (moist) %	Color (moist) % Type¹ Loc²	Texture Remarks
	Moreelle 1. Her Present	
0"-8" 10gr 314 100		SI
8"-70" 1098 413 95	2.59514 5% c m	SI
	3	
	M=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Hydric Soil Indicators: Histosol (A1)	Polyvalue Below Surface (S8) (LRR R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)	MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
Black Histic (A3)	Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Hydrogen Sulfide (A4) Stratified Layers (A5)	Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2)	Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L)
Stratified Layers (A5) Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Thin Dark Surface (S9) (LRR K, L)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1)	Depleted Dark Surface (F7)	Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Redox Depressions (F8)	Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)
Sandy Nedox (55) Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA 149	9B) .	Other (Explain in Remarks)
31. di - sta un of ha donn ha dia a constation and a	welland hydrology must be present upless disturbed	or problematic
Restrictive Layer (if observed):	vetland hydrology must be present, unless disturbed	or problematic.
Type:		
Depth (inches):		Hydric Soil Present? Yes No <u>X</u>
Remarks:		
		•
,		
	,	

Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 5\2¬ \cdot
Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-
Investigator(s): B. V.,275 Section, Township, Range: Town of Villeneys
Landform (hillslope, terrace, etc.): Degression Local relief (concave, convex, none): Concave Slope (%): 400
Subregion (LRR or MLRA): LRR-R Lat: 42.434892 Long: -79.131436 Datum: NAD 83
Soil Map Unit Name: Chantougha S: 1+ Loan 3to 800 510005 NWI classification: 471and
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation $\frac{\mathcal{V} \circ}{\mathcal{V}}$, Soil $\frac{\mathcal{V} \circ}{\mathcal{V}}$, or Hydrology $\frac{\mathcal{V} \circ}{\mathcal{V}}$ significantly disturbed? Are "Normal Circumstances" present? Yes $\frac{\mathcal{V}}{\mathcal{V}}$ No
Are Vegetation 70, Soil 10, or Hydrology 10 naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area
Hydric Soil Present? Yes No Within a Wetland? Yes No
Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: Wetland F610
Remarks: (Explain alternative procedures here or in a separate report.)
Isolated Per Wetland near I writin an open field area.
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes NoX Depth (inches): Water Table Present? Yes NoX Depth (inches):
Saturation Present? Yes Y No Depth (inches): j Wetland Hydrology Present? Yes No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
1

VEGETATION -	· Use	scientific	names	of	plants.
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VEGETATION COO COLOTIANO HARMOO OF PIANTA				
Tree Stratum (Plot size: 30')		Dominant Species?		Dominance Test worksheet:
1. DOT APPICALINE				Number of Dominant Species
•				That Are OBL, FACW, or FAC: (A)
2,			·	Total Number of Dominant
3				Species Across All Strata: Z (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
•		= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. not Applicable				FAC species x 3 =
• • • • • • • • • • • • • • • • • • • •				FACU species x 4 =
2	·	+		UPL species x 5 =
3				Column Totals: (A) (B)
4				(5)
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1
7				1 - Rapid Test for Hydrophytic Vegetation
,	_ 0	= Total Co	ver	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5)				3 - Prevalence Index is ≤3.0 ¹
1. Onocles Seasibilis	30	Yes	AACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation¹ (Explain)
2. Carex Flava		Yes	OBL	Problematic Hydrophytic Vegetation (Explain)
3. Impatiens copensis	15	NO	FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Enthania granditalia	15	100	FAC	be present, unless disturbed or problematic.
5. Solidago rugosa	10	NO	FAC	Definitions of Vegetation Strata:
	10	N3	OBL	T M
6. Threes effusing				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7	. 			at a react resignity (2 2 m), regulations of merging
8				Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and greater than or equal to 3.20 ft (1 m) tail.
10				Herb - All herbaceous (non-woody) plants, regardless of
	• •			size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	100	= Total Co	ver	
Woody Vine Stratum (Plot size: ろん)				
1. not Applicable				
		·		Hydrophytic
2				Vegetation 🗸
3				Present? Yes No
4.				
	<u> </u>	= Total Co	vor	
Remarks: (Include photo numbers here or on a separate		10tai 00		
Remarks: (include photo numbers here or on a separate	s Sheet.)			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			x Feature	es ,		_	
(inches)	2.5732	<u> %</u>	Color (moist)	<u></u> 5	Type ¹	_ Loc²	Texture _	Remarks
		45	104R516		<u> </u>		SIL	
9"-16"	<u>byrsiz</u>	60%	1092411	10	<u>D</u>	<u>_ m</u>	SIL _	
			7.542416	10		$\overline{}$		
								The state of the s
					. 			
				-	-			
		-						100 T T T T T T T T T T T T T T T T T T
1Type: C=Cc	ncentration D=Den	letion RM:	-Reduced Matrix, M	S=Masks	d Sand G	rains	² l ocation:	PL=Pore Lining, M=Matrix.
Hydric Soil I		OHOH, IXIVI	TOUGOU MALIA, M	- Iviaskt	Ja Jana G	allio.		or Problematic Hydric Solls ³ :
Histosol			Polyvalue Belov		e (S8) (LR	RR,		ick (A10) (LRR K, L, MLRA 149B)
Histic Ep	ipedon (A2) stic (A3)		MLRA 149B Thin Dark Surfa	•	(LRR R. N	ILRA 149B)		rairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky I	Mineral (I	F1) (LRR I		Dark Su	rface (S7) (LRR K, L, M)
	Layers (A5)	~ (A44)	Loamy Gleyed		⁻ 2)			ie Below Surface (S8) (LRR K, L) rk Surface (S9) (LRR K, L)
	l Below Dark Surfac Irk Surface (A12)	5 (A11)	Depleted Matrix ★ Redox Dark Su		3)			nganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Depleted Dark					nt Floodplain Soils (F19) (MLRA 149B)
3	leyed Matrix (S4) edox (S5)		Redox Depress	sions (F8)			podic (TA6) (MLRA 144A, 145, 149B) rent Material (F21)
1	Matrix (S6)							allow Dark Surface (TF12)
Dark Sui	face (S7) (LRR R, N	ILRA 1491	3)				Other (E	Explain in Remarks)
3Indicators of	hydrophytic vegetal	tion and we	etland hydrology mu	st be pre	sent, unle:	ss disturbed	or problematic.	
	ayer (if observed):			· · · · ·				
Type:		 						Y
Depth (inc	ches):						Hydric Soil F	Present? Yes X No
Remarks:								
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County ___ Sampling Date:_ 5\24\16 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY _ Sampling Point: DP-692 Investigator(s): B. V.,255 Section, Township, Range: TOWN of Villenova Landform (hillslope, terrace, etc.): H:115100e Local relief (concave, convex, none): Concave Slope (%): O-1°/ Subregion (LRR or MLRA): LRR-R Lat: 42.434810 Long: -79.131451 Datum: NAD 83 Soil Map Unit Name: Chartengua S. 1+ 1600 3708% Slopes NWI classification: UnDland Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No Are Vegetation $\frac{\dot{\mathcal{N}}\dot{\mathcal{D}}}{\dot{\mathcal{N}}}$, Soil $\frac{\dot{\mathcal{N}}\dot{\mathcal{D}}}{\dot{\mathcal{N}}}$, or Hydrology $\frac{\dot{\mathcal{N}}\dot{\mathcal{D}}}{\dot{\mathcal{N}}}$ significantly disturbed? Are Vegetation ~ 0 , Soil ~ 0, or Hydrology ~ 0 naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Yes X No Hydrophytic Vegetation Present? Yes _____ No × within a Wetland? Hydric Soil Present? Wetland Hydrology Present? No 🗶 If yes, optional Wetland Site ID:_ Remarks: (Explain alternative procedures here or in a separate report.) upland Data Point for Wetland A610 - This upland Data Point was collected immediately downgradient OF the Wetland Boundary to demonstrate a last of jurisdictional Connection to another Feature **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) Surface Water (A1) __ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) __ High Water Table (A2) ___ Dry-Season Water Table (C2) ___ Marl Deposits (B15) ___ Saturation (A3) __ Crayfish Burrows (C8) ___ Hydrogen Sulfide Odor (C1) __ Water Marks (B1) __ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) __ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) ___ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Thin Muck Surface (C7) ___ Iron Deposits (B5) ___ Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) __ Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No X Depth (inches): Surface Water Present? Yes No X Depth (inches): Water Table Present? No Depth (inches): Wetland Hydrology Present? Yes ____ No 🗶_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

2.1	Absolute	Dominant Indicator	Dominance Test worksheet;
Tree Stratum (Plot size:		Species? Status	
1. Betala alleghaniensis	<u>30</u>	Yes FAC	That Are OBL, FACW, or FAC: (A)
2. Acer Saccharum	20	YES EACH	Total Number of Dominant
3			Total Number of Dominant Species Across All Strata: (B)
4			Descrit of Description Consider
			Percent of Dominant Species That Are OBL, FACW, or FAC:
5			(10)
6			Prevalence Index worksheet:
7			Total % Cover of:Multiply by:
,	కం	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: \5')			FACW species x 2 =
1. Almas Seculata	15	Yes OBL	FAC species x 3 =
1		· · · · · · · · · · · · · · · · · · ·	FACU species x 4 =
2. Priors Serstina	10	Yes FACH	UPL species x 5 =
3			Column Totals:(A)(B)
4			(5)
5			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
7			∠ 2 - Dominance Test is >50%
ا سر	75	= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)			4 - Morphological Adaptations¹ (Provide supporting
1. Alpus Serrulata	5_	YOS GBL	data in Remarks or on a separate sheet)
2. Enthania grandifolia	5	Yes FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Arisaerra triphyllum	<u> </u>	Yes FAC	
			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4			
5			Definitions of Vegetation Strata:
6			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7			at breast height (DBH), regardless of height.
8			Sapling/shrub - Woody plants less than 3 in. DBH
9			and greater than or equal to 3.28 ft (1 m) tall.
			Herb - All herbaceous (non-woody) plants, regardless of
10			size, and woody plants less than 3.28 ft tall.
11			Woody vines - All woody vines greater than 3.28 ft in
12			height.
	15	= Total Cover	
Woody Vine Stratum (Plot size: うみ)			
1. DOT APPLICABLE			
			Hydrophytic
2		· · · · · · · · · · · · · · · · · · ·	Vegetation
3			Present? Yes No
4			
	0_	= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

Profile Desc	ription: (Describe t	to the dept	th needed to docun	nent the i	ndicator	or confirm t	he absence o	f indicators.)	
Depth	Matrix			x Feature	<u>s</u>				
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture	Remarks	
0"-6"	2.54312	100					SIL.		
6"-20"	10y2416	95	2.54312	5_	<u>a</u>	<u>m</u>	SIL		
									
									
									
							· · · · · · · · · · · · · · · · · · ·		
						 -			
									
¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :	
Histosol			Polyvalue Belo	w Surface	(S8) (LR	R R.		uck (A10) (LRR K, L, MLRA 149B)	
	oipedon (A2)		MLRA 149B		/(00) (2 /(,	Coast F	Prairie Redox (A16) (LRR K, L, R)	
	stic (A3)		Thin Dark Surfa					ucky Peat or Peat (S3) (LRR K, L, R)	
	en Sulfide (A4) d Layers (A5)		Loamy Mucky I			(, L)		urface (S7) (LRR K, L, M) ue Below Surface (S8) (LRR K, L)	
1	d Below Dark Surfac	e (A11)	Depleted Matri		-,		Thin Dark Surface (S9) (LRR K, L)		
	ark Surface (A12)		Redox Dark Su					anganese Masses (F12) (LRR K, L, R)	
	Mucky Mineral (S1)		Depleted Dark Redox Depress					ont Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B)	
	Bleyed Matrix (S4) Redox (S5)		Redux Depress	SIUTIS (FO)	'		Red Parent Material (F21)		
	Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R,	MLRA 149	B)				Other (Explain in Remarks)	
3Indicators o	f hydrophytic vegeta	tion and w	etland hydrology mu	st be pres	sent, unles	s disturbed	or problematic		
Restrictive	Layer (if observed)								
Type: Depth (in	ches).						Hydric Soil	Present? Yes No X	
Remarks:	cries)						1.3 4.1.0		
,									

Project/Site: Ball Hill Wind Project City/0	County: Chautauqua County Sampling Date: 5/25/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-693
Investigator(s): B. V. (CTS Section 2)	
Landform (hillslone terrace etc.): H: 1151.0.e.c. Local re	lief (concave, convex, none); Concave/Flat Slope (%); 0-1%
2 Later (I BB as MI BA), LRR-R Late 42, 44 (X	lief (concave, convex, none): Concave / Flat Slope (%): 0-1%, 528 Long: -79.134284 Datum: NAD 83
Soil Map Unit Name: Chantaugue S: It Lean ,3 to 8%	Sleage NIMI classification: (Place)
Are climatic / hydrologic conditions on the site typical for this time of year?	· · · · · · · · · · · · · · · · · · ·
Are Vegetation No., Soil No., or Hydrology PO significantly distu	
Are Vegetation <u>wo</u> , Soil <u>wo</u> , or Hydrology <u>wo</u> naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sar	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland A611
Remarks: (Explain alternative procedures here or in a separate report.)	
PFO wetland data point.	
The Market State Park	•
	·
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Y Water-Stained Leav	
High Water Table (A2) Aquatic Fauna (B13	·
Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide O	
1	eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduc	ed Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduct	
Iron Deposits (B5) Thin Muck Surface	
Inundation Visible on Aerial Imagery (B7) Other (Explain in R	emarks) Microtopographic Relief (D4)
✓ Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No _X Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Doosing 110001002 2 and (entering garage) in a menting and a series of the series of t	, , , , , , , , , , , , , , , , , , ,
Remarks:	

			·	· · · · · · · · · · · · · · · · · · ·	
Tree Stratum (Plot size: "30")		Dominant		Dominance Test worksheet:	
		Species?		Number of Dominant Species	
1. Ulmus Americana	25	Yes	FACIN	That Are OBL, FACW, or FAC:	(A)
					()
2				Total Number of Dominant	1
3				Species Across All Strata:	(B)
					-
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC:	(A/B)
	•				
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
		= Total Cov		OBL species x1 =	
,	<u> </u>	= Total Cov	θſ		
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =	
1. Ulmas americana	35	Nec	COC.	FAC species x 3 =	
1. almas anencana		16.2	KI-X-1-7	FACU species x 4 =	
2					1
	•			UPL species x 5 =	
3,				Column Totals: (A)	_ (B)
4					
5.				Prevalence Index = B/A =	
				Hydrophytic Vegetation Indicators:	
6				'. ' '	
7				1 - Rapid Test for Hydrophytic Vegetation	
		= Total Cov		2 - Dominance Test is >50%	
٬ سر		- Total Cov	GI	3 - Prevalence Index is ≤3.0 ¹	
Herb Stratum (Plot size: 5 ')				4 - Morphological Adaptations ¹ (Provide sup	portina
1. Ulmus americana				data in Remarks or on a separate sheet)	
2. Cornus amomum		Y25	FALW	Problematic Hydrophytic Vegetation¹ (Explai	in)
3. Fraxions Penasylvanian	" 5	425	FACE	¹ Indicators of hydric soil and wetland hydrology r	nust
				be present, unless disturbed or problematic.	
4				Definitions of Vegetation Strata:	
5				Dominions of Vogotation Strata.	
6				Tree - Woody plants 3 in. (7.6 cm) or more in dia	ameter
7				at breast height (DBH), regardless of height.	
8.				Sapling/shrub - Woody plants less than 3 in. D	вн
				and greater than or equal to 3.28 ft (1 m) tall.	
9					
10				Herb - All herbaceous (non-woody) plants, regardles	sof
				size, and woody plants less than 3.28 ft tall.	
11				Woody vines - All woody vines greater than 3.28 ft	in
12.				height.	**
	70	= Total Co			
		= Total Co	ver		
Woody Vine Stratum (Plot size: 30')					
1. NOT APPLICABLE					
				Hydrophytic	
2				Vegetation	
3				Present? Yes X No	
				·	
4		 			
	_0	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate	sheet.)				
Trees present oxh	.h:+ 0	moreh	alon c	al adjectations	
			-		
Shallow Root Su	15tem	s and	FILT	ry of boxe	
	J			ن	
1					

Profile Desc	ription: (C	escribe 1	to the dept	h needed t	o docur	nent the ir	ndicator	or confirm	the absence o	f indicator	s.)	
Depth		Matrix				x Features		. 2			Damada	
<u>(inches)</u> ୯-ୁସ ''	Color (<u>%</u>	Color (m		15%	Type ¹	_Loc²	Texture		Remarks	
	1042			7.5 yr				<u> </u>	<u></u>			
9"-15"	10yr	516	70%	IUGR	uli	20%		<u>~</u>	CL			
				7.548	518	106		<u>~</u>				
			-	. 1. 2 100								
	 		-								. <u></u>	
			·									
											· · · · · · · · · · · · · · · · · · ·	
			. 									
¹Type: C=Co	oncentratio	n, D=Dep	letion, RM=	Reduced M	latrix, M	S=Masked	Sand G	ains.			ining, M=Matri	
Hydric Soil											natic Hydric S	1
Histosol	. ,					w Surface	(S8) (LR	R R,			LRR K, L, MLF	
	pipedon (A2 istic (A3)	2)			A 149B	•	BB B N	LRA 149B			ox (A16) (LRR l or Peat (S3) (Ll	
	en Sulfide (/	A 4)				Mineral (F			,	-	(LRR K, L, M)	, , ,
	d Layers (A					Matrix (F2		•			urface (S8) (Lf	
	d Below Da		e (A11)		ed Matri						(S9) (LRR K, I	
Thick Da				<u></u> ≺ Redox						-	lasses (F12) (L	
	Aucky Mine					Surface (F sions (F8)	-7)				ain Soils (F19) (3) (MIRA 1444	
	Bleyed Matr Redox (S5)	IX (34)		Redox	Debles	sions (FO)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21)			
	Matrix (S6	5)							Very Shallow Dark Surface (TF12)			
Dark Su	ırface (S7)	(LRR R, I	MLRA 1496	3)					Other	(Explain in F	Remarks)	
3Indicators o	f hydrophyl	tic vegeta	tion and we	etland hydro	loav mu	st be pres	ent, unles	s disturbed	d or problematio	>.		
Restrictive												
Type:											J	
Depth (in	ches):								Hydric Soil	Present?	Yes	No
Remarks:												
,												
												•

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 5)25/16 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 694 Investigator(s): B. Vizis Section, Township, Range: Town of Hanover Landform (hillslope, terrace, etc.): H.1151002 Local relief (concave, convex, none): Convex Slope (%): 170 Subregion (LRR or MLRA): LRR-R Lat: 42,44039 Long: -79,134337 Datum: NAD 83 Soil Map Unit Name: Chantongua S: 1+ Laum 3 to 8% 5 lopes NWI classification: UPICIND Are climatic / hydrologic conditions on the site typical for this time of year? Yes ______ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No Are Vegetation $\overset{\sim}{\sim}\overset{\circ}{\circ}$, Soil $\overset{\sim}{\sim}\overset{\circ}{\circ}$, or Hydrology $\overset{\sim}{\sim}\overset{\circ}{\circ}$ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Yes X No Hydrophytic Vegetation Present? Yes No X within a Wetland? Hydric Soil Present? Yes _____ No ❤ Wetland Hydrology Present? Yes _____ No ❤ If yes, optional Wetland Site ID:_____ Remarks: (Explain alternative procedures here or in a separate report.) Upland Data Point for wetland HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) ___ Surface Water (A1) Moss Trim Lines (B16) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Dry-Season Water Table (C2) ___ Marl Deposits (B15) ___ Saturation (A3) ___ Hydrogen Sulfide Odor (C1) __ Crayfish Burrows (C8) __ Water Marks (B1) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) _ Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ___ Thin Muck Surface (C7) ___ Shallow Aquitard (D3) ___ Iron Deposits (B5) ___ Microtopographic Relief (D4) ___ Other (Explain in Remarks) __ Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes ____ No ____ Depth (inches): Surface Water Present? Yes ____ No x Depth (inches): Water Table Present? Yes ____ No _X Depth (inches): Wetland Hydrology Present? Yes _____ No 🔀 Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Prins septina			FACH	Number of Dominant Species
2. Acer Saccherum			FACL	That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant Species Across All Strata: (B)
3				
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)
5				marate obe, raow, or rao(AB)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	<u> 3</u> 0	= Total Cov	er	OBL species
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 = 3 &
1. Rosa multiflora	25	Yes	FAC.	FAC species
2. Corous amonum	10	Yes	FACW	FACU species x 4 = 12.6
3				UPL species
				Column Totals: <u>115</u> (A) <u>360</u> (B)
4				Prevalence Index = B/A = 3.13
5				1 Tovalerice Index — BIA —
6		*****	·	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	35	= Total Cov	rer	× 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')				3 - Prevalence Index is ≤3.0¹
1. Rosa multiflora	30	Yes	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Arisaerra triphyllum			FAC	Problematic Hydrophytic Vegetation¹ (Explain)
3. Comus amomum			FACW	
				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Vegetation Strata:
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and greater than or equal to 3.20 ft (1 fil) tall.
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11.				size, and woody plants less than 3.20 it tan.
12.				Woody vines - All woody vines greater than 3.28 ft in height.
12.	5 ₀	= Total Cov	/or	neight.
Woody Vine Stratum (Plot size: 3℃/)		- 10tal Co	7 0 1	
1. not opolicable				Hydrophytic
2				Vegetation
3				Present? Yes No
4				
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Desc	ription: (Describe	to the dept	th needed 1	o docun	nent the i	ndicator	or confirm	the absence of indicators.)
Depth	Matrix				x Features	§ 1	. 2	
(inches)	Color (moist)	<u> </u>	Color (m	ioist)	%	Type ¹	_Loc²	Texture Remarks
	7,54513	90		1.10				5EL
16-70"	2,59317	40	1642		5			310
			7.5yr	314				
								
	•			·				
								
								
	ncentration, D=Dep	letion, RM=	Reduced N	latrix, M	S=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I			_					Indicators for Problematic Hydric Solls ³ :
Histosol	(A1) ipedon (A2)		-	lue Belov RA 149B	w Surface \	(S8) (LR I	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)
Black His					•	RR R, M	LRA 149B)	
Hydroger	n Sulfide (A4)		Loamy	Mucky N	vineral (F	1) (LRR K		Dark Surface (S7) (LRR K, L, M)
	Layers (A5)	- (844)			Matrix (F2	!)		Polyvalue Below Surface (S8) (LRR K, L)
	l Below Dark Surface rk Surface (A12)	e (A11)		ed Matrix Dark Su	र (F3) rface (F6)			Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)
	ucky Mineral (S1)				Surface (F			Piedmont Floodplain Soils (F19) (MLRA 149B)
l .	leyed Matrix (S4)		Redox	Depress	ions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	edox (S5)							Red Parent Material (F21)
	Matrix (S6) face (S7) (LRR R, N	ILRA 149E	3)					Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
1								
	hydrophytic vegetat .ayer (if observed):		tland hydro	logy mu	st be pres	ent, unles	s disturbed	i or problematic.
Type:	.ayer (ii observeu).							
Depth (inc	:hes):							Hydric Soil Present? Yes No
Remarks:								
,								

Project/Site: Ball Hill Wind Project City/	County: Chautauqua County Sampling Date: 5)25/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 695
Investigator(s): S. V.215 Sect	
Landform (hillsland torrage ata): 14:1151c.a.s. Local re	slight (concave convex none): Casa Scale Slone (%): O =1 9/
Subregion (LRR or MLRA): LRR-R Lat: 42,438	854 tarri - 79 134610 Datum: NAD 83
Subregion (LRR or MLRA): Lat: 12115	Long: Datum.
Soil Map Unit Name: Valios grovelly Sitt loam,	Rolling NWI classification: UPICIN J
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology NO significantly distu	ırbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes ★ No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland A613
Remarks: (Explain alternative procedures here or in a separate report.)	
Isolated pemin a fores	+
1201CTTS LEW IN C. MIEZ	
HYDROLOGY	Consider Indicators (minimum of two required)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leav	
High Water Table (A2) Aquatic Fauna (B13	
Saturation (A3) Marl Deposits (B15	1
Water Marks (B1) Hydrogen Sulfide C	I .
	• —
Algal Mat or Crust (B4) Recent Iron Reduct Iron Deposits (B5) Thin Muck Surface	1
Indit Deposits (B5) Thirt Make Surface Inundation Visible on Aerial Imagery (B7) Other (Explain in R	· · · · · · · · · · · · · · · · · · ·
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _K Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes X No Depth (inches): 1	⊘" Wetland Hydrology Present? Yes <u>×</u> No
(includes capillary fringe)	7 Westund Hydrology Freedom 100 110
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Remarks:	
Tomano.	

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30')		Species?		Dominance Test worksheet:
				Number of Dominant Species That Are OBL FACW or FAC:
1. NoTopplicable				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
				(5)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6	•			Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	0	= Total Cov	or.	OBL species x1 =
		- Total Oot		
Sapling/Shrub Stratum (Plot size: \\5')				FACW species x 2 =
1. Fraxinus Penosulvanica	5	Yes	FACW	FAC species x 3 =
1. Fraxinus Penasylvanica 2. Lonicera tartarica	5	V	~~	FACU species x 4 =
2. Lonicora Tartarica	 ,	167	FMC	UPL species x 5 =
3			. <u></u>	
				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Prevalence maex - b/A -
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				
	10	= Total Cov	/er	≥ 2 - Dominance Test is >50%
Li Louis (Distriction Fred				3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5')	76	Mac	C0.	4 - Morphological Adaptations ¹ (Provide supporting
1. Toxicod endon Radicons		Yes		data in Remarks or on a separate sheet)
2. Francions pennsylvances	16	Y 05	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Rosa multidora	10	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Lonicera tartarica	10	405	FAC	be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
5. Arisaerra triphyllum		<u> </u>	FAL	Definitions of Vegetation Strata.
6. Onoclea Sersibilis	5	ND	FIXEN	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				
8				Sapling/shrub – Woody plants less than 3 in, DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11		****		
12.				Woody vines - All woody vines greater than 3.28 ft in
12			·	height.
	_5	= Total Co	ver	
Woody Vine Stratum (Plot size:3o')				
1. noT opplicable				Hydrophytic
2				Vanatation
3				Present? Yes No
0				•
4				
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
	,			

Profile Desc	ription: (Describe to	the dept	h needed to	docum	ent the in	dicator	or confirm	the absence	of indicators.)
Depth	Matrix				<u>c Features</u>				
(inches)	Color (moist)	<u>%</u>	Color (me			Type ¹	_Loc ²	Texture	Remarks
<u>e''- 5''</u>	7.54 312	45	10yr		<u> 5%</u>	<u> </u>	<u> </u>	ジドレ	
5°-16"	2.54312	୧୬	loge	416	1040	<u> </u>	<u>m</u>	SEL	
			syr	3/4	5%	يئي	\sim		
		 -							
		 -							
			·						

1			D-1 :::			0		21	DI =Doro Lining M=Mot-lin
Hydric Soil I	oncentration, D=Deple	etion, RM=	Reduced M	atrix, MS	=masked	Sand Gr	ains.		: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol			Polyval	ue Belov	w Surface	(S8) (LR	R R,		Muck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)	,	•	A 149B)		`	,	Coast	Prairie Redox (A16) (LRR K, L, R)
Black Hi							LRA 149B)		Mucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4) d Layers (A5)				/lineral (F1 Matrix (F2)		(, L)		Surface (S7) (LRR K, L, M) slue Below Surface (S8) (LRR K, L)
	d Below Dark Surface	(A11)		d Matrix		,			erk Surface (S9) (LRR K, L)
	ark Surface (A12)		X Redox						anganese Masses (F12) (LRR K, L, R)
	fucky Mineral (S1)				Surface (F	7)			ont Floodplain Soils (F19) (MLRA 149B)
	Bleyed Matrix (S4)		Redox	Depress	ions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)
	ledox (S5) Matrix (S6)								Shallow Dark Surface (TF12)
	rface (S7) (LRR R, M	LRA 149B	3)						(Explain in Remarks)
³ Indicators of	f hydrophytic vegetation	on and we	tland hydrol	ogy mus	st be prese	nt, unles	s disturbed	or problematic	c.
	Layer (if observed):			-0,	•	· · · · · · · · · · · · · · · · · · ·			
Type:	· · · · · · · · · · · · · · · · · · ·								V
Depth (inc	ches):							Hydric Soil	Present? Yes X No
Remarks:									
,									

Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 5125116
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point; DP- 696
••	Section, Township, Range: Tax of Harover
Landform (hillslope torrose etc.): Hills look	Level relief (concern convey none): Cavestagy Slone (9/): 7 - 20
Landom (missippe, terrace, etc.).	Local relief (concave, convex, none): Slope (%): ヹーるい 39公3
	olling NWI classification: MPI and
Are climatic / hydrologic conditions on the site typical for this time of	Y Company of the Comp
Are Vegetation No. Soil No. or Hydrology No. significant	ntly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation $\[\begin{array}{cccccccccccccccccccccccccccccccccccc$	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showi	ing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesX_ No	Is the Sampled Area
Hydric Soil Present? Yes No メ	within a Wetland? Yes No 🗡
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate re	eport.)
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	oly) Surface Soil Cracks (B6)
Surface Water (A1) Water-Stain	• • • • • • • • • • • • • • • • • • • •
High Water Table (A2) Aquatic Fau	
Saturation (A3) Marl Depos	
	Sulfide Odor (C1) Crayfish Burrows (C8)
	hizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	f Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Iron Deposits (B5) Thin Muck S	Reduction in Tilled Soils (C6) Geomorphic Position (D2) Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Expl	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	The reduction (50)
Surface Water Present? Yes NoX Depth (incl	hes);
Water Table Present? Yes No K Depth (incl	·
Saturation Present? Yes No Depth (incl	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pl	hotos, previous inspections), if available:
Remarks:	

* EGET THE CONTRACT OF PRINCE OF PRI				
Tree Stratum (Plot size:3o ³)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
			FACW	Number of Dominant Species That Are OBL FACW or FAC:
1. Fracions penesylvanica	50	Yes		That Are OBL, FACW, or FAC: (A)
2. Her Sauterum			PACL	Total Number of Dominant
3. Ulmus americana		no	EACH	Species Across All Strata: (B)
4. Mains Pranifolia		140	upc	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				That Are OBL, FACW, or FAC: 80 (A/B)
6			·	Prevalence Index worksheet:
7.				Total % Cover of: Multiply by:
	70	= Total Cov	/er	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15)		,		FACW species x 2 =
1. Rosa multiflora	7.0	Yus	Cor	FAC species x 3 =
				FACU species x 4 =
2. Lonicera tertorica	10	4-67	. <u>- FAC</u>	UPL species x 5 =
3. Francious pennsylvanica		100	EKW	Column Totals: (A) (B)
4				
5			<u> </u>	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
/·		= Total Co		× 2 - Dominance Test is >50%
<i>c</i> '		= Total Co	ver	3 - Prevalence Index is ≤3.01
Herb Stratum (Plot size:5')	****			4 - Morphological Adaptations ¹ (Provide supporting
1. toxicodurdon radicans				data in Remarks or on a separate sheet)
2. Fraince Penesylvanica	10	Yes_	PACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Fragaria Virginiana	_5_	70	FACH	¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5.				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				Sapling/shrub – Woody plants less than 3 in. DBH
8				and greater than or equal to 3.28 ft (1 m) tall.
9	•			Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11,				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	40	_ = Total Co	ver	
Woody Vine Stratum (Plot size:3o')		-		
1. notoppicable				Hydrophytic
2				Vegetation
3				Present? Yes No
4				
	_ 0	_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)		<u> </u>	
				,

Profile Desc	ription: (Describe	to the dep	th needed to docur	ment the ir	idicator (or confirm t	he absence o	of indicator	·s.)		
Depth	Matrix		Redo	x Features	;						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	Texture ≤∵		Remarks		
0 1-13"	104R313	100					<u> </u>				
13"-20"	1040313	95	lograle			<u>~</u>	<u> </u>				
											
¹Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	IS=Masked	Sand Gr	ains.	² Location	PL=Pore	Lining, M=Mat	rix.	
Hydric Soil I									matic Hydric S		
Histosol	• •		Polyvalue Beld		(S8) (LR	R R,			LRR K, L, ML		
Histic Er	oipedon (A2)		MLRA 1498 Thin Dark Surf	•	PRR M	I RA 149R\			ox (A16) (LRR or Peat (S3) (L		
	en Sulfide (A4)		Loamy Mucky					•	(LRR K, L, M		, ,
	Layers (A5)		Loamy Gleyed	-					Surface (S8) (L		-)
	d Below Dark Surfac	e (A11)	Depleted Matr						· (S9) (LRR K, //asses (F12) (I D)
	ark Surface (A12)		Redox Dark S								
	flucky Mineral (S1) Bleyed Matrix (S4)		Redox Depres		''		Piedmont Floodplain Soils (F19) (MLRA 149B)Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
· ·	Redox (S5)			. ,				arent Mater			
	Matrix (S6)						Very Shallow Dark Surface (TF12) Other (Explain in Remarks)				
Dark Su	rface (S7) (LRR R, I	MLRA 149	B)				Other	(Explain in	Kemarks)		
³ Indicators o	f hydrophytic vegeta	ition and w	etland hydrology mu	ust be pres	ent, unles	s disturbed	or problemation	э.			
	Layer (if observed)										
Type:											¥
Depth (in	ches):						Hydric Soil	Present?	Yes	No_	
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											
Remarks:											

Project/Site: Ball Hill Wind Project City/C	ounty: Chautauqua County Sampling Date: 5/25/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 647
	on, Township, Range: Town of Hanaver
Landform (hillslope, terrace, etc.): 14.1151ce Local reli	
Subregion (LRR or MLRA): LRR-R Lat: 42.437.5	581 - 79,134121 Patrim NAD 83
Subregion (LRR or MLRA): Little Lat: 421 314	Long: Datum: U.S. Co.
Soil Map Unit Name: Valo: > Gravelly S: 1+ loam, Etal	NWI classification: NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation <u>N</u> C, Soil <u>N</u> C, or Hydrology <u></u> C significantly distur	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesX No	is the Sampled Area
Hydric Soil Present? Yes 🔀 No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland SE14
Remarks: (Explain alternative procedures here or in a separate report.)	
Pro wetland data point.	
LAD Meters Grand loon	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Y Water-Stained Leave	
High Water Table (A2) Aquatic Fauna (B13)	
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Od	
Sediment Deposits (B2) Oxidized Rhizospher	
Drift Deposits (B3) Presence of Reduce	·
Algal Mat or Crust (B4) Recent Iron Reduction	
Iron Deposits (B5) Thin Muck Surface (
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):	
	Wetland Hydrology Present? Yes X No
Saturation Present? Yes <u>x</u> No Depth (inches): Solution (includes capillary fringe)	wettalid hydrology Fresent? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	
Tomano.	

Tree Stratum (Plot size: 30')	Absolute	Dominant		Dominance Test worksheet:
,		Species?		Number of Dominant Species
1. Wimns americana				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC:
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
,	<u> 3a</u>	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size:) 55'				FACW species x 2 =
1. Ulmus americana	20	405	focus	FAC species x 3 =
2. Frozinhs pennsylvenica	10	YES	PACW	FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence index = B/A =
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7	_	= Total Cov		∠ 2 - Dominance Test is >50%
Mark Otahum (District		- Jotal Cov	өг	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)		Vice	C0.41	4 - Morphological Adaptations ¹ (Provide supporting
1. Fraziones penosylvanica	25	<u>445</u> 445		data in Remarks or on a separate sheet)
2. Enthania graminifolia		145		Problematic Hydrophytic Vegetation ¹ (Explain)
3. Comex gynandra		NO_	OBL	¹Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
11				size, and woody plants less than 3.28 ft tall.
12				Woody vines - All woody vines greater than 3.28 ft in height.
	40	= Total Cov	/er	nvignt.
Woody Vine Stratum (Plot size:)	<u>: </u>	15(0)		
1. NOT APPLICABLE				
_			·	Hydrophytic
2				Vegetation
3				Present? Yes No
4				
	0	= Total Co	/er	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features (Inches) Color (moist) % Type¹ Loc² Texture Remarks O'-7" 7.5 / 312 95 5 / 2 16 5 C m SFL 7"-15" 7.5 / 312 85 2 5 10 D m SFL 7 5/12 5/8 5 C m
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks 0''-7" 2.5 y 312 95 5 y 2 116 5 C m SFL 7"-15" 2.5 y 312 85 2.5 10 D m SFL
7"-15" 7.54312 85 2311 \$10 D m SEC
7 500 518 5
4:3/10-3/10
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)
Histic Epipedon (A2) MERA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)
Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R)
Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)
Stripped Matrix (S6) Very Shallow Dark Surface (TF12)
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if observed):
Type:
Depth (inches): No
Remarks:
, ,
·

Project/Site: Ball Hill Wind Project City/C	county: Chautauqua County Sampling Date: 5175116
	State: NY Sampling Point: DP- 698
Investigator(s): B. V.275 Section	
	ef (concave, convex, none): Convex Slope (%): 3 5%
Subregion (LRR or MLRA): LRR-R Lat: 42.4375	VK\ Long: -79,134121 Datum: NAD 83
Soil Map Unit Name: Valios gravelly S: It Loam &	7 210062 NWI classification: (1)1600
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation $\frac{\mathcal{V}c}{\mathcal{V}}$, Soil $\frac{\mathcal{V}v}{\mathcal{V}}$, or Hydrology $\frac{\mathcal{V}v}{\mathcal{V}}$ significantly distur	
Are Vegetation , Soil roo, or Hydrology raturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS Attach site map showing san	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No 📉	Is the Sampled Area within a Wetland? Yes No
Hydric Soil Present? Yes No X	within a Wetland? Yes No 🗡
Wetland Hydrology Present? Yes No 🟃	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
woland Data point for wester	vd A614.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	
High Water Table (A2) Aquatic Fauna (B13)	•
Saturation (A3) Marl Deposits (B15)	=
Water Marks (B1) Hydrogen Sulfide Oc	
Sediment Deposits (B2) Oxidized Rhizospher	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	d Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduction	
Iron Deposits (B5) Thin Muck Surface (
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes NoX Depth (inches):	W. d. Liu & Liu Burando Mar.
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	
Remarks.	

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30')		Species?		Dominance Test worksheet:
		Yes		Number of Dominant Species
1. Acer Saccharum	+0			That Are OBL, FACW, or FAC:(A)
2. Malus Pranifolia	10	<u> 70</u>	MPL	Total Number of Dominant
				Species Across All Strata: (B)
3				Species Acioss All Otlata. (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: (A/B)
0.				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		OBL species x1 =
,	<u>C)C</u>	= rotal Cov	er	
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Acer Sarcherum	20	Yes	Earn	FAC species 5 x3 = 1 S
				FACU species 130 x4= 52c
2. Fugus grandifolia	<u> </u>	<u> 462</u>	FACL	UPL species 20 x5= 100
3. Acer platanoides	10	Yes	LIPL	
•				Column Totals: <u>18</u> 6 (A) <u>69</u> 5 (B)
4				
5				Prevalence Index = B/A = 3.8
				Hydrophytic Vegetation Indicators:
6				' ' '
7				1 - Rapid Test for Hydrophytic Vegetation
	40	= Total Cov	er	2 - Dominance Test is >50%
ן נית		- Total Cov	GI	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:5 ')				4 - Morphological Adaptations¹ (Provide supporting
1. Fraxinis pennsylvanica	25	Yes	EAU	data in Remarks or on a separate sheet)
- On (<u> </u>	11.06		Problematic Hydrophytic Vegetation ¹ (Explain)
2. Acer Saccharin				Floblematic Hydrophytic vegetation (Explain)
3. Fugns grandifolia	10	100	FACH	¹ Indicators of hydric soil and wetland hydrology must
4. Enthania granini folia	5	ΔΕ.λ	En	be present, unless disturbed or problematic.
4. Zh Thansa Grans n. Torra		140	PHC	
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
-				at breast height (DBH), regardless of height.
7				
8				Sapling/shrub – Woody plants less than 3 in, DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				Herb – All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	60	= Total Cov	/er	
Woody Vine Stratum (Plot size: 36')				
1. not opplicable		,		
2				Hydrophytic
				Vegetation Present? Yes No
3				Fresentr res NO
4				į
	•	= Total Co	/OF	
		TOTAL CO		
Remarks: (include photo numbers here or on a separate	sneet.)			
1				

Profile Desc	ription: (Describe	to the dep	th needed to document the	indicator or confir	m the absence of ir	ndicators.)
Depth	Matrix		Redox Feature	<u>s</u> _ , ,		. .
(inches)	Color (moist)	<u>%</u>	Color (moist) %	Type ¹ Loc ²	Texture	Remarks
0".8"	loge314	100			<u>3±</u> _	
8"20"	2.54516	100			SFL _	
		*				
			 	. <u></u>		
¹ Type: C=Co	oncentration, D=Dec	eletion, RM=	Reduced Matrix, MS=Maske	d Sand Grains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil I					Indicators for	Problematic Hydric Solls ³ :
Histosol			Polyvalue Below Surface	e (S8) (LRR R,		(A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		MLRA 149B)			rie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3) in Sulfide (A4)		Thin Dark Surface (S9) (Loamy Mucky Mineral (F			y Peat or Peat (S3) (LRR K, L, R) ce (S7) (LRR K, L, M)
l .	i Layers (A5)		Loamy Gleyed Matrix (F			Below Surface (S8) (LRR K, L)
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix (F3)	•		Surface (S9) (LRR K, L)
1	ark Surface (A12)		Redox Dark Surface (F6			anese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1) Bleyed Matrix (S4)		Depleted Dark Surface (Redox Depressions (F8)			Floodplain Soils (F19) (MLRA 149B) dic (TA6) (MLRA 144A, 145, 149B)
	ledox (S5)		redux Depressions (i o)			t Material (F21)
Stripped	Matrix (S6)				Very Shallo	ow Dark Surface (TF12)
Dark Sui	rface (S7) (LRR R, I	MLRA 149E	3)		Other (Exp	olain in Remarks)
³ Indicators of	f hydronhytic vegeta	tion and we	etland hydrology must be pres	ent unless disturb	ed or problematic	
	Layer (if observed)		nana nyarology maat bo proc	ion, amoss distans	l problemane.	
Type:						
Depth (inc	ches):				Hydric Soil Pre	esent? Yes No
Remarks:						· · · · · · · · · · · · · · · · · · ·
,						

Project/Site: Ball Hill Wind Project	City/County: Chauta	ugua County	Sampling Date: 5/25/16
Applicant/Owner: Ball Hill Wind Energy, LLC	City/County		Sampling Point: DP- 699
Investigator(s): B. Viets	Section Township Ra		Harever
Landform (hillslope, terrace, etc.): H. 11 Slope	Local relief (concave, con	wey none) Com Com	e Slone (%): 1-2 %
Subregion (LRR or MLRA): LRR-R Lat: 4	2.437031	-79 1336	2.2 Datum: NAD 83
Subregion (LRR or MLRA): Lat: 1	21.10,001 Lor	19:1 7:10	Datum.
Soil Map Unit Name: Valois gravelly Silt L	ount kelling	NVVI classific	ation: Ottotal
Are climatic / hydrologic conditions on the site typical for this ti			
Are Vegetation <u>No</u> , Soil <u>no</u> , or Hydrology <u>no</u> sign	ificantly disturbed? Are	"Normal Circumstances" p	present? Yes X No
Are Vegetation NO, Soil NO, or Hydrology NO nate	rally problematic? (If n	eeded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point	locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No	is the Sample	d Area	
Hydric Soil Present? Yes No	within a Wetla	nd? Yes <u>×</u>	No
Wetland Hydrology Present? Yes X	If ves. optional	Wetland Site ID: <u>we・</u> †	1and 19615
Remarks: (Explain alternative procedures here or in a separ			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	et anniv)		Cracks (B6)
	Stained Leaves (B9)		
1	c Fauna (B13)	Moss Trim I	
, , ,	eposits (B15)		Water Table (C2)
· ·	gen Sulfide Odor (C1)	Crayfish Bu	rrows (C8)
Sediment Deposits (B2) Oxidiz	ed Rhizospheres on Living Roo	,	/isible on Aerial Imagery (C9)
	nce of Reduced Iron (C4)		Stressed Plants (D1)
	t Iron Reduction in Tilled Soils		Position (D2)
, , ,	luck Surface (C7)	Shallow Aq	l l
	(Explain in Remarks)	Microtopogi	raphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			ir rest (D3)
Field Observations: Surface Water Present? Yes No _X Depti	(inches):		
Water Table Present? Yes X No Depti			
Saturation Present? Yes X No Depti	· · · · · · · · · · · · · · · · · · ·	Vetland Hydrology Prese	ent? Yes_X_ No
(includes capillary fringe)	` ' "		
Describe Recorded Data (stream gauge, monitoring well, as	rial photos, previous inspection	ns), if available:	
Remarks:			

	A b = = 14=	Danisant	i	
Tree Stratum (Plot size: 3c')		Dominant Species?		Dominance Test worksheet:
				Number of Dominant Species
1. net Applicable				That Are OBL, FACW, or FAC:
2				
				Total Number of Dominant Species Across All Strata: (B)
3				Species Across All Strata: (B)
4	 			Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		
_		= 1 otal Cov	өг	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: \5')				FACW species x 2 =
1. not Applicable				FAC species x 3 =
				FACU species x 4 =
2	 ,			UPL species x 5 =
3				
				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
				∕2 - Dominance Test is >50%
. •		= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)				4 - Morphological Adaptations ¹ (Provide supporting
1. Opoclea Sensibilis	65	Yes	FACH	data in Remarks or on a separate sheet)
2. Enthamia graminifolia	10	100	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Carex Flara	5	NO	OBL	Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4				D. C. W
5				Definitions of Vegetation Strata:
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
				Sanling/should Weady plants less than 2 in DBU
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and ground man or oqual to oze it (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
			· 	size, and woody plants less than 3.28 ft tall.
11			·	Woody vines All woody vines greater than 3.28 ft in
12				height.
	80	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30)				
1. <u>Pat applicable</u>				
2				Hydrophytic
				Vegetation Present? Yes No
3				Flesenti les No
4				
	0	= Total Cov	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)		*********	
,	,			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix		Redo	x Feature	<u>s</u> _ 1	. 2			Damaska	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture		Remarks	
0" 16"	2.59311	96	54R416	10	<u> </u>	<u> </u>	5FL -			
			· · · · · · · · · · · · · · · · · · ·							
										
				-	·					
			 							
										
					-					
								1		
¹ Type: C=Co	oncentration, D=Depl	etion, RM	=Reduced Matrix, M	IS=Maske	d Sand Gr	ains.	² Location:	PL=Pore Li	ining, M=Matri	x
Hydric Soil I							Indicators fo	or Problem	atic Hydric S	oils³:
Histosol	(A1)		Polyvalue Beld	w Surface	e (S8) (LR	R R,			.RR K, L, MLR	
Histic Ep	oipedon (A2)		MLRA 149E						x (A16) (LRR F	
Black Hi			Thin Dark Surf		•				r Peat (S3) (LF	RR K, L, R)
	n Sulfide (A4)		Loamy Mucky			(, L)			LRR K, L, M)	DK ()
	l Layers (A5)	- (844)	Loamy Gleyed		2)				ırface (S8) (LF (S9) (LRR K, L	
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Matr		:1				asses (F12) (L	
	lucky Mineral (S1)		Depleted Dark	-	-				n Soils (F19) (1
	Bleyed Matrix (S4)		Redox Depres) (MLRA 144A	
	Redox (S5)			•	,			ent Materia		·
	Matrix (S6)								Surface (TF12)
Dark Su	rface (S7) (LRR R, N	ILRA 149	3)				Other (E	explain in R	emarks)	İ
2										
	f hydrophytic vegetat		etland hydrology mu	ist be pre	sent, unies	s disturbed	or problematic.			
	Layer (if observed):									
Type:							Hydric Soil F	?raaant?	Yes _K	No
Depth (inc	ches):						Hydric Soil F	resent	162	<u> </u>
Remarks:										İ
İ										
,										
1										

Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: S 2 st 1/2 State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY Sampling Point: DP-7 county: State: NY State: NY State: NY State: NA State: NY State: NA State: NY State: NA State: NY State: NA State: NY State:
Section, Township, Range: TXxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Landform (hillslope, terrace, etc.): 1.1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Subregion (LRR or MLRA): LRR-R Lat: 42.43695 Long: -79.133425 Datum; NAD 83 Soil Map Unit Name: 10.035 (10.04) S. 1 + 10.00 Record of State
No Compare No No Compare No No No Compare No No No No No No No N
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation NC, Soil NC, or Hydrology NC, and significantly disturbed? Are "Normal Circumstances" present? Yes No. Are Vegetation NC, Soil NC, or Hydrology NC, and a significantly disturbed? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No X Is the Sampled Area within a Wetland? Yes No X Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) ### Approach Primary Indicators (minimum of two required) #### Approach Primary Indic
Are Vegetation NC, Soil NC, or Hydrology NC, a significantly disturbed? Are "Normal Circumstances" present? Yes No. Are Vegetation NC, Soil NC, or Hydrology NC, naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Secondary Indicators (Indingual Site ID) Remarks: (Explain alternative procedures here or in a separate report.) Wettand Hydrology Present? Yes No Secondary Indicators (Indingual Office Science Science) HYDROLOGY Wettand Hydrology Indicators: Primary Indicators (Indingual Office Science) Surface Water (A1) Water Fable (A2) Aquatic Fauna (B13) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Saturation Leposits (B3) Presence of Reduced Iron (C4) Sturted or Stressed Plaints (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) In nudeation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) FAC-Neutral Test (D5) FAC-Neutral Test (D5)
Summary OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.
Summary Of Findings - Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No
Wetland Hydrology Present? Yes No X Within a Wetland? Yes No X Westland Site D: W
Wetland Hydrology Present? Yes No メ
Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Portain Present Presented
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) High Water Table (A2) Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Inundation Visible on Aerial Imagery (B7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
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Wetland Hydrology Indicators:Secondary Indicators (minimum of two required)Primary Indicators (minimum of one is required; check all that apply)Surface Soil Cracks (B6)Surface Water (A1)Water-Stained Leaves (B9)Drainage Patterns (B10)High Water Table (A2)Aquatic Fauna (B13)Moss Trim Lines (B16)Saturation (A3)Marl Deposits (B15)Dry-Season Water Table (C2)Water Marks (B1)Hydrogen Sulfide Odor (C1)Crayfish Burrows (C8)Sediment Deposits (B2)Oxidized Rhizospheres on Living Roots (C3)Saturation Visible on Aerial Imagery (C9)Drift Deposits (B3)Presence of Reduced Iron (C4)Stunted or Stressed Plants (D1)Algal Mat or Crust (B4)Recent Iron Reduction in Tilled Soils (C6)Geomorphic Position (D2)Iron Deposits (B5)Thin Muck Surface (C7)Shallow Aquitard (D3)Inundation Visible on Aerial Imagery (B7)Other (Explain in Remarks)Microtopographic Relief (D4)Sparsely Vegetated Concave Surface (B8)FAC-Neutral Test (D5)
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Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
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High Water Table (A2) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Aquatic Fauna (B13) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Water Marks (B1)
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5)

Surface Water Present? Yes No _X_ Depth (inches):
Water Table Present? Ves No X Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

Tree Stratum (Plot size: '3()'	Absolute	Dominant		Dominance Test worksheet:
		Species?	Status	Number of Dominant Species
1. Painis Serotina	<u>55</u>	<u> Yes</u>	FACH	That Are OBL, FACW, or FAC: (A)
2. Acr Saccherum	45	405	FIREL	
2. Der seecher			1 1 3-01	Total Number of Dominant
3				Species Across All Strata: (B)
A .				Barrel of Barrel and Barrel
,				Percent of Dominant Species That Are OBL FACW or FAC: (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6				
		·		Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	100	= Total Cov	er	OBL species
ر ہے ،		- 10(4) 007	01	
Sapling/Shrub Stratum (Plot size:)5'				FACW species O x 2 = O
1. Acer Platanoides	20	Yes	UPL	FAC species x 3 = O
•				FACU species 140 x4= 560
2. FAGUS grandifolia	15	Yes	FACH	
3. Acer Saccherum		405	EHCU	UPL species 30 x5= 150
o. neer seerer			₩ 13-C	Column Totals: 170 (A) 710 (B)
4				
5				Prevalence Index = B/A = 1,17
5				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	50	= Total Cov	er	
Herb Stratum (Plot size:5')				3 - Prevalence Index is ≤3.0 ¹
		3.4	. .	4 - Morphological Adaptations ¹ (Provide supporting
1. Frazions Americana	10	Yes		data in Remarks or on a separate sheet)
2. Ace platanoides	10	Yes	hPL	Problematic Hydrophytic Vegetation ¹ (Explain)
·			711	
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
				Definitions of Variation Strate.
5				Definitions of Vegetation Strata:
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				
8				Sapling/shrub – Woody plants less than 3 in. DBH
_			***************************************	and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	7.5	= Total Cov		
- 1		. = Total Cov	er	
Woody Vine Stratum (Plot size:)				
1. NOT opplicable				
2				Hydrophytic Vegetation
				Present? Yes No
3		-		165 NO
4				
		= Total Cov		,
		_ = 10tar Co\	/er	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Depth	Matrix	_	th needed to docum	x Features			
(inches)	Color (moist)	%	Color (moist)		_Loc ² _	Texture	Remarks
0"15"	10yn 3/4	100				SI	38.
5"-20"	7.5424/6	100				SIL	Çin
						this is a second of the second	
							
					- A-11		
			_	·.			
						*	
						· .	
							Section 1
							<u></u>
		letion, RM	=Reduced Matrix, M	S=Masked Sand G	rains.		=Pore Lining, M=Matrix.
lydric Soil I							Problematic Hydric Soils ³ :
Histosol	· ·			w Surface (S8) (LF	RR R,		(A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		MLRA 149B		#I DA 440D		rie Redox (A16) (LRR K, L, R) xy Peat or Peat (S3) (LRR K, L, R)
Black His	stic (A3) n Sulfide (A4)			ace (S9) (LRR R, f Mineral (F1) (LRR			ice (S7) (LRR K, L, M)
	l Layers (A5)		Loamy Gleyed		rk, -)		Below Surface (S8) (LRR K, L)
	d Below Dark Surfac	e (A11)	Depleted Matrix				Surface (S9) (LRR K, L)
	ark Surface (A12)		Redox Dark Su	rface (F6)			anese Masses (F12) (LRR K, L, R)
			Depleted Dark	Surface (F7)		Piedmont	Floodplain Soils (F19) (MLRA 149 E
	lucky Mineral (S1)						
Sandy G	leyed Matrix (S4)		Redox Depress			Mesic Spo	dic (TA6) (MLRA 144A, 145, 149B
Sandy G Sandy R	Bleyed Matrix (S4) Redox (S5)					Mesic Spo Red Parer	dic (TA6) (MLRA 144A, 145, 149B nt Material (F21)
Sandy G Sandy R Stripped	eleyed Matrix (S4) Redox (S5) Matrix (S6)	VILRA 149	Redox Depress			Mesic Spo Red Parer Very Shall	dic (TA6) (MLRA 144A, 145, 149B
Sandy G Sandy R Stripped Dark Sur	Sleyed Matrix (S4) Sedox (S5) Matrix (S6) rface (S7) (LRR R, I		Redox Depress	sions (F8)		Mesic Spo Red Parer Very Shall Other (Exp	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12)
Sandy G Sandy R Stripped Dark Sur	sleyed Matrix (S4) tedox (S5) Matrix (S6) rface (S7) (LRR R, I f hydrophytic vegeta	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12)
Sandy G Sandy R Stripped Dark Sur	Sleyed Matrix (S4) Sedox (S5) Matrix (S6) rface (S7) (LRR R, I	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12)
Sandy G Sandy R Stripped Dark Sur	sleyed Matrix (S4) tedox (S5) Matrix (S6) rface (S7) (LRR R, I f hydrophytic vegeta	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur Indicators of Restrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur Indicators of Restrictive L	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur Indicators of Restrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur Indicators of Restrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur Indicators of Restrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	odic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)
Sandy G Sandy R Stripped Dark Sur ndicators of estrictive L Type: Depth (inc	Gleyed Matrix (S4) Stedox (S5) Matrix (S6) Inface (S7) (LRR R, Inface (S7) (LRR R, Inface) Inface (If observed)	tion and w	Redox Depress	sions (F8)	ss disturbed	Mesic Spo Red Parer Very Shall Other (Exp d or problematic.	edic (TA6) (MLRA 144A, 145, 149B nt Material (F21) low Dark Surface (TF12) plain in Remarks)

Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 5 25/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 701
	Section, Township, Range: Town of Harover
	pocal relief (concave, convex, none): Concave Slope (%):
Landroff (missiope, terrace, etc.).	435955 Long: -79.132330 Datum: NAD 83
Soil Map Unit Name: Valo, 5 gravelly 3:17 to	oxim, Reiling NWI classification: UD (and
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation No, Soil No, or Hydrology No significant	
Are Vegetation <u>~o</u> , Soil <u>~o</u> , or Hydrology <u>~o</u> naturally p	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes Ye No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? Yes <u>★</u> No	If yes, optional Wetland Site ID: Wetland Pole
Remarks: (Explain alternative procedures here or in a separate rep	
account fail (m	nuck) wetland (PEM).
organic sort	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	y Surface Soil Cracks (B6)
Surface Water (A1)	1 .
High Water Table (A2) Aquatic Faun	a (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposits	s (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Su	
	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) Zegomorphic Position (D2)
Iron Deposits (B5) Thin Muck St	•
	in in Remarks) Microtopographic Relief (D4) **State
Sparsely Vegetated Concave Surface (B8) Field Observations:	
Surface Water Present? Yes No Depth (inche	20).
· · · · · · · · · · · · · · · · · · ·	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	
Noniano.	
·	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30°)	% Cover	Dominant Indicator Species? Status	Dominance Test worksheet: Number of Dominant Species	
1. not applicable			That Are OBL, FACW, or FAC:(A	A)
3			Total Number of Dominant Species Across All Strata: (E	В)
4			Percent of Dominant Species That Are OBL, FACW, or FAC: (A	A/B\
6			,	
7			Prevalence Index worksheet:	
		= Total Cover	OBL species x 1 =	:
Sapling/Shrub Stratum (Plot size: 157)			FACW species x 2 =	
1. not applicable			FAC species x 3 =	
2			FACU species x 4 =	
3			UPL species x 5 =	
4			Column Totals: (A) ((B)
5			Prevalence Index = B/A =	
6			Hydrophytic Vegetation Indicators:	
7			★ 1 - Rapid Test for Hydrophytic Vegetation	
	_0	= Total Cover	2 - Dominance Test is >50%	
Herb Stratum (Plot size:5')			3 - Prevalence Index is ≤3.0¹	
1. Onoclea Sersibilis		Yes FACH	4 - Morphological Adaptations ¹ (Provide suppor data in Remarks or on a separate sheet)	rting
2. Impatiens coponsis		Yes FACIL	Problematic Hydrophytic Vegetation ¹ (Explain)	
3. Thelyptois palustris			¹ Indicators of hydric soil and wetland hydrology mus be present, unless disturbed or problematic.	st
5			Definitions of Vegetation Strata:	
6			Tree – Woody plants 3 in. (7.6 cm) or more in diame	eter
7			at breast height (DBH), regardless of height.	
9			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.	
10			Herb - All herbaceous (non-woody) plants, regardless of	f
11			size, and woody plants less than 3.28 ft tall.	
12			Woody vines - All woody vines greater than 3.28 ft in height.	ŀ
	100	= Total Cover		
Woody Vine Stratum (Plot size: 3c')				
1. not applicable				
2			Hydrophytic Vegetation	
3			Present? Yes No	
4				
Pomorko: (Include abate numbers here or on a consiste	<u>O</u>	= Total Cover		
Remarks: (include photo numbers here or on a separate	sneet.)			
				ļ

Depth	Matrix		th needed to docui	x Feature	s			of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc2	<u>Texture</u>	Remarks
0-207	7,542.511	100						Muck-organic Soil
								77.6.
								
								
¹ Type: C=Co	ncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ins.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil Ir	ndicators:						Indicators	for Problematic Hydric Soils ³ :
🔀 Histosol (•		Polyvalue Belov	v Surface	(S8) (LRR	R,		luck (A10) (LRR K, L, MLRA 149B)
	pedon (A2)		MLRA 149B)					Prairie Redox (A16) (LRR K, L, R)
Black His		,	Thin Dark Surfa	ce (S9) (L	.RR R, ML	.RA 149B)	5 cm M	ucky Peat or Peat (S3) (LRR K, L, R)
	Sulfide (A4) Layers (A5)		Loamy Mucky M	lineral (F1) (LRR K,	L)	Dark S	urface (S7) (LRR K, L, M)
	Below Dark Surface	. (Δ11)	Loamy Gleyed N)		Polyval	ue Below Surface (S8) (LRR K, L)
	k Surface (A12)	((())	Depleted Matrix Redox Dark Sur					ark Surface (S9) (LRR K, L)
	icky Mineral (S1)	•	Depleted Dark S		7)		Iron-Ma	anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B)
	eyed Matrix (S4)		Redox Depressi		• •			Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Re			·	` ,			Red Pa	rent Material (F21)
	Matrix (S6)							nallow Dark Surface (TF12)
Dark Surfa	ace (S7) (LRR R, M i	LRA 149B)					Explain in Remarks)
Indicators of h	ovdrophytic vegetation	on and wel	land hydrology must		m4	-1!-4		
Restrictive La	yer (if observed):	on and we	nand nydrology musi	be prese	nt, unless	disturbed (or problematic.	
Type:	NA							
Depth (inch							Hardet A. H.	Present? Yes X No
Remarks:							Hydric Soil I	Present? Yes No
torrarito,								
,								
								•

Dell Hill Wind Project	Chautaugus County 5)75)11
Project/Site: Ball Hill Wind Project City/C	County: Chautauqua County Sampling Date: 5)25)16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 70 2
Investigator(s): B.V.RTS Section	
Landform (hillslope, terrace, etc.): h: 11510PC Local rel	ief (concave, convex, none): Convex Slope (%): 7-3%
Subregion (LRR or MLRA): LRR-R Lat: 42.4358	47 Long: -79.132347 Datum: NAD 83
Soil Map Unit Name: Valois grovelly 5: It loam,	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	/es ★ No (If no, explain in Remarks.)
Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>SO</u> significantly distur	`
Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> naturally problem:	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X	is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No 🗡
Wetland Hydrology Present? Yes No 🗶	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
upland poth point	for wetland AGIB
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	
High Water Table (A2) Aquatic Fauna (B13)	
Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide Oc	
	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	
Algal Mat or Crust (B4) Recent Iron Reducti	
Iron Deposits (B5) Thin Muck Surface (
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8) Field Observations:	TAO TOURIST TOUR (DO)
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No 🔀
(includes capillary fringe)	the least the sellenger
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	Account to the second s

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:ろ。')	Absolute	Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Tshqa curadensis				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species That Are ORL FACW or FAC:
5				That Are OBL, FACW, or FAC: (A/B)
6			<u> </u>	Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
,	100	= Total Cove	er	OBL species <u>o</u> x1 = <u>o</u>
Sapling/Shrub Stratum (Plot size: 15')				FACW species
1. Acer succharum	10	Yes	FIXL	FAC species C x 3 = O
2. TSuga Canadensis	10	Yes_	FACL	FACU species 120 x4= 48c
3				UPL species O x 5 = O
4				Column Totals: 120 (A) (B)
5				Prevalence Index = B/A = 4.0
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7	70			2 - Dominance Test is >50%
ez./		= Total Cove	ər	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)				4 - Morphological Adaptations ¹ (Provide supporting
1. NOT applicable				data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3				¹Indicators of hydric soil and wetland hydrology must
4	***/			be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7	***************************************	···		at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless of
11				size, and woody plants less than 3.28 ft tall.
12				Woody vines - All woody vines greater than 3.28 ft in height.
	0	= Total Cov		noight.
Woody Vine Stratum (Plot size: 30')		_ TOTAL OUT	51	
1				
				Hydrophytic
2				Vegetation Present? Yes No
3				Fleseitt fes No
4		·····		
	<u>e</u>	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Description: (Describe to the de	pth needed to document the indicator or confirm t	the absence of indicators.)
Depth Matrix	Redox Features	Tr. (Daniela
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
1 . 3	caff needle litter	
6"-2" 1048314 100		ST
2"-70" 2.54516 100		SIL
¹Type: C=Concentration, D=Depletion, RM	M=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Solls ³ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Histic Epipedon (A2)	MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surface (S7) (LRR K, L, M)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Polyvalue Below Surface (S8) (LRR K, L)
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Thin Dark Surface (S9) (LRR K, L)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Redox Dark Surface (F6) Depleted Dark Surface (F7)	Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)		Red Parent Material (F21)
Stripped Matrix (S6)	ne)	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
Dark Surface (S7) (LRR R, MLRA 149	90)	Other (Explain in Nemarks)
	vetland hydrology must be present, unless disturbed	or problematic.
Restrictive Layer (if observed):		
Type:	_	Hydric Soil Present? Yes No
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
,		

Project/Site: Ball Hill Wind Project City/	County: Chautauqua County Sampling Date: 5/25/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 703
Applicant/Owner: Ball Fill Wild Energy, 225 Investigator(s): B. V.275 Section 5.	the of Hanging
Investigator(s): Sec	ion, Township, Range: Town 8 Town 8 Town 6 T
Landform (hillslope, terrace, etc.): Desression Local re	Slope (%): 6-1%
Subregion (LRR or MLRA): LRR-R Lat: 42.437	03C0 Long: 249,132018 Datum: 14AD 00
Soil Map Unit Name: Bust, S. 1+ Loam, 3 to 8%	Slapes NWI classification: UP(and)
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)
Are Vegetation $\frac{ND}{ND}$, Soil \underline{ND} , or Hydrology \underline{ND} significantly distributions	urbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation ND, Soil ND, or Hydrology ND naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes Yes No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? Yes _ ** No	If yes, optional Wetland Site ID: Wetland A615
Remarks: (Explain alternative procedures here or in a separate report.)	
PSS Dota Point for u	octland 19615
HYDROLOGY	Control to the design of the required
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Water-Stained Lea X High Water Table (A2) Aquatic Fauna (B1	` '
High Water Table (A2) Saturation (A3) Aquatic Fauna (B1) Marl Deposits (B1)	, , , , , , , , , , , , , , , , , , , ,
Water Marks (B1) — Hydrogen Sulfide	
	neres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Redu	ced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron Reduc	ction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	
Inundation Visible on Aerial Imagery (B7) Other (Explain in I	Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No Depth (inches):	e"
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches):	Z" Wetland Hydrology Present? Yes ★ No
Saturation Present? Yes No Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	
Remarks:	

3 1	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	
1. noTAPPI.cable		-		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				, ,
				Total Number of Dominant Species Across All Strata: (B)
3				Species Across Air Strata, (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC:
5			. 	That Are OBL, FACW, or FAC: 1/2 (A/B)
6				Prevalence Index worksheet:
7				
	_	7.10		Total % Cover of: Multiply by:
)		= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Cornus amonum	<u> 30 </u>	Yes.	FACW	FAC species x 3 =
2. Cornus alba	10	Yes	FACH	FACU species x 4 =
3. Rubus allegheniensis				UPL species x 5 =
,			risca	Column Totals: (A) (B)
4				Developes Index or B/A
5	 			Prevalence index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
, ' <u></u>		= Total Cov		× 2 - Dominance Test is >50%
<i>~</i> /		= Total Cov	/er	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:5')				4 - Morphological Adaptations (Provide supporting
1. Loinus amomum	<u>55</u>	Yes	FREW	data in Remarks or on a separate sheet)
2. Alous Seconlata	15	n0	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Onoclea Sensibilis		20	FACH	Undicators of hydric soil and watland hydrology source
				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Solidago rugosa			FAC	
5. Rubus alleghaniensis	10		FACH	Definitions of Vegetation Strata:
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11,				W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
12				Woody vines – All woody vines greater than 3.28 ft in height.
	100	= Total Cov	/or	
Woody Vine Stratum (Plot size: 35')		- Total Co	701	
1. not opplicable				Hardwarf and Co.
2			<u> </u>	Hydrophytic Vegetation
3				Present? Yes No
4				·
		T		
Damada, (ladada abata mashara bar		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sneet.)			

Profile Desc	ription: (Describe t	o the depth	needed to docum	nent the i	ndicator	or confirm	the absence o	of indicators.)
Depth	Matrix			x Feature	<u>s</u>	1 2	Taster	Remarks
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0"-12"	7,54311	95	542416	_5_	<u> </u>	<u>m</u> .	SEL	
								
				<u> </u>				
¹Type: C=Ce	oncentration, D=Depl	etion, RM=F	Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil					-,	,		for Problematic Hydric Soils ³ :
Histosol	(A1)	***	Polyvalue Belo		(S8) (LR	R R,		luck (A10) (LRR K, L, MLRA 149B)
,	oipedon (A2)		MLRA 149B	•				Prairie Redox (A16) (LRR K, L, R)
	stic (A3)	-	Thin Dark Surfa					flucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M)
1	n Sulfide (A4) d Layers (A5)	-	Loamy Mucky I Loamy Gleyed	-		L, L)		lue Below Surface (S8) (LRR K, L)
	d Below Dark Surface	- (A11)	Depleted Matri		-)			ark Surface (S9) (LRR K, L)
	ark Surface (A12)		∠ Redox Dark Su)		Iron-M	anganese Masses (F12) (LRR K, L, R)
Sandy N	lucky Mineral (S1)	_	Depleted Dark					ont Floodplain Soils (F19) (MLRA 149B)
	Bleyed Matrix (S4)	_	Redox Depress	sions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)							arent Material (F21) hallow Dark Surface (TF12)
	Matrix (S6) rface (S7) (LRR R, N	II RA 149R)						(Explain in Remarks)
Dank ou	11400 (07) (=1411)							,
	f hydrophytic vegetat		and hydrology mu	st be pres	ent, unles	s disturbed	or problemation	D
Restrictive	Layer (if observed):							
Type:								· *
Depth (in	ches):						Hydric Soil	Present? Yes X No No
Remarks:					•			
}								
,								

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 5126116 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY __ Sampling Point: DP- 704 Investigator(s): B. VIRTS, S. Buckermayer Section, Township, Range: Town of Honorer Landform (hillslope, terrace, etc.): Departs on Local relief (concave, convex, none): Concave Slope (%): 40% Subregion (LRR or MLRA): LRR-R Lat: 42, 447164 Long: -79.102326 Datum: NAD 83 Soil Map Unit Name: Chautangua Silt loam, 8 to 15% Slopes NWI classification: UPland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes ______ No_____ Are Vegetation No., Soil 100, or Hydrology NO. significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation <u>~°</u>, Soil <u>~°</u>, or Hydrology <u>~°</u> naturally problematic? SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes _____ No within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: westend A618 Remarks: (Explain alternative procedures here or in a separate report.) PFO Desta Point For Isolated westernd System HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ✓ Drainage Patterns (B10) ✓ Water-Stained Leaves (B9) __ Surface Water (A1) ___ Aquatic Fauna (B13) ___ Moss Trim Lines (B16) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) ___ Marl Deposits (B15) ___ Saturation (A3) __ Hydrogen Sulfide Odor (C1) ___ Crayfish Burrows (C8) ___ Water Marks (B1) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) ___ Presence of Reduced Iron (C4) ___ Drift Deposits (B3) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Geomorphic Position (D2) ___ Algal Mat or Crust (B4) ___ Thin Muck Surface (C7) Shallow Aquitard (D3) ___ Iron Deposits (B5) ★ Microtopographic Relief (D4) ___ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) X Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes No Depth (inches): Surface Water Present? Yes No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _____ No __ __ Depth (inches): 16" Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Absolute Special Absolute Special Absolute Special Absolute Special Absolute Special Absolute Special Absolute Special Absolute Special Absolute Special Absolute Special Absolute Special Absolute Special Absolute Special Absolute	VEGETATION - Use scientific frames of plants	•			Sampling Point
Acc Section So Yes Free Number of Dominant Species 7 (A) Total Auro GEL, FACW, or FAC 10 (B) Species Across All Stratus 14 (B) Species Across All Stratus 14 (B) Species Across All Stratus 15 (B) Species Across All Stratus 15 (B) Species Across All Stratus 16 (B) Species All Stratus 16 (B) Species All Stratus	301				Dominance Test worksheet:
2 Lilians Canacian Signature (Plot size: 15') 3. Sapiling/Shrub Stratum (Plot size: 15') 1. Acc Social Court 10 VES THAT Species Across All Strata: 41 (B) 4. Separate (Plot size: 15') 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBL FACW, or FAC: 50 (AVB) 1. Acc Social Court 10 VES THAT (A) OBLIF (A					Number of Dominant Species 5
Species Across All Strates. 94 (B) Parcent of Dominant Species That Are OBL, FACW, or FAC: 50 (AVB) Prevalence Index worksheet: Total % Cover of: Mulliphy by: OBL, packing \$35 xt = 35 FACW species \$35 xt = 35 FACW species \$35 xt = 35 FACW species \$35 xt = 35 FACW species \$10 xt = 20 FAC species \$40 xt = 100 FACU species \$40 xt =	1. Acer Sarchan	30			That Are OBL, FACW, or FAC: (A)
Percent of Dominant Spacies So	2. Ulmus americana	_5	<u> </u>	FACE	Total Number of Dominant
5	3				Species Across All Strata: (B)
5	4.				Percent of Dominant Species
Prevalence Index worksheet: Total Scover Multiply by: Total Scover Multiply by: OBL species 35 x1 = 35 FACW species 35 x1 = 35 FACW species 35 x1 = 35 FACW species 35 x1 = 35 FACW species 10 x2 = 20 FACU species 10 x4 = 100 VES FACW species 10 x4 = 100 VES FACW species 10 x4 = 100 VES FACU species 10 x4 = 100 VES FACU species 10 x4 = 100 VES FACU species 10 x4 = 100 VES FACU species 10 x4 = 100 VES TACU species 10 x4 = 100	,				
Total % Cover of					
Sapiling/Shrub Stratum (Plot size: 15") 10 VES FACW species D x2 = 20					
Sapilino/Shrub Stratum (Plot size: 16 10 YES FACW species 10 X2 = 120		35			
Acc Secoles	(= Total Cov	er	
FACU species Yo X4 = Yo Y5 Y5 X5 = X5 X5 = X5 X5 X5 X5					FACW species x 2 =
2 3.	1. Acer Saccharum	10	YES	TACH	
OF Especies No. Section Sec	2				,
Prevalence Index = B/A = Z, \$3					UPL species x5 =
5					Column Totals: (A) (B)
Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is \$3.0¹ 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) 2 - Carex Flance 10 Yes OGL 3 - Sunces of flases 5 No CGL 4 - Oracles Sensibilis 5 No CGL 5 No CGL 6 Oracles Sensibilis 5 No CGL 8 Total Cover Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater har or equal to 3.28 ft in height. Woody Vine Stratum (Plot size: 30') 1 - Net Applicable 2 - Total Cover Remarks: (Include photo numbers here or on a separate sheet.)					Prevalence Index = B/A = 2.53
10 = Total Cover 10 = Total Cover					
Traces are primarily limited. Traces are primarily limited	6				1
Herb Stratum (Plot size: 5) 1. Glyce: a acut flora 20 Yes OBL 2. Carx flora 10 Yes OBL 2. Carx flora 50 No CBL 3. Tuncus elfusus 5 No CBL 4. Oraclea 50 No CBL 5. No	7				
Herb Stratum (Plot size:) Concept		10	= Total Cov	er er	1 .
1. Glyceric accust flora 70 Yes OBL atalian Remarks or on a separate sheet) 2. Carex Flowa 10 Yes OBL Problematic Hydrophytic Vegetation (Explain) 3. Juncus elfusas 5 No OBL Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree - Woody plants 3 in, (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tail. Herb - All herbaceous (non-woody) plants, regardless of size, and woody vines greater than 3.28 ft in height. Woody Vines Stratum (Plot size: 30') The end of the problematic Hydrophytic Vegetation Strata: Tree - Woody plants less than 3 in, DBH and greater than 0 equal to 3.28 ft in height. Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes K No Trees on Primarity limited to growth on	Herb Stratum (Plot size:)				1
2. Carex Flavo 3. Juncus effusos 5. NO CBL 4. Oracles Sersibilis 5. NO CBC 4. Oracles Sersibilis 6. Definitions of Vegetation Strata: 7. Selection September of the service		20	Yes	OBL	data in Remarks or on a separate sheet)
3. Tuncus et lusus 5 NO C3L 4. Oracles Sers. b. 1:s 5 NO EACH 5. Definitions of Vegetation Strata: 6. Definitions of Vegetation Strata: 7. Sapling/shrub – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. 8. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. 9. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 11. Woody Vine Stratum (Plot size: 30') 1. Not Applicable 2. Hydrophytic Vegetation Present? Yes K No Remarks: (Include photo numbers here or on a separate sheet.)	1 . 7				· · · · · · · · · · · · · · · · · · ·
Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft in height. Woody Vine Stratum (Plot size: 3c') Not Aept. ab) a Hydrophytic Vegetation Hydrophytic Vegetation Present? Yes K No Trees on Primarity limited to growth an	2 Giestian	5			
Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tail. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tail. Woody Vine Stratum (Plot size: 30') Not Applicable Hydrophytic Vegetation	3. Juncus effusus				
Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody Vine Stratum (Plot size: 36') Tree – Woody vines – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation Present? Yes K No Remarks: (Include photo numbers here or on a separate sheet.)	4. Oroclea Sorsibilis	<u> </u>	70	CACW	
at breast height (DBH), regardless of height. 8	5				Definitions of Vegetation Strata:
8. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. 9. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 11. Woody vines - All woody vines greater than 3.28 ft in height. Woody Vine Stratum (Plot size: 30') 1. NOT REPLICABLE 2. Hydrophytic Vegetation Present? Yes K No Remarks: (Include photo numbers here or on a separate sheet.)	6		,		
8	7.				at breast height (DBH), regardless of height.
and greater than or equal to 3.28 ft (1 m) ftall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Woody Vine Stratum (Plot size: 30') Not Applicable Hydrophytic Vegetation Present? Yes K No G = Total Cover Remarks: (Include photo numbers here or on a separate sheet.)					Sapling/shrub Woody plants less than 3 in, DBH
Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height. Woody Vine Stratum (Plot size: 30') 1. ~~T Appleable 2					and greater than or equal to 3.28 ft (1 m) tall.
Woody Vine Stratum (Plot size: 30') 1. SOT POP! LLD E 2. Hydrophytic Vegetation Present? Yes K No Remarks: (Include photo numbers here or on a separate sheet.)					Herb - All herbaceous (non-woody) plants, regardless of
Woody Vine Stratum (Plot size: 30') 1. NOT APPLUADE 4	10				size, and woody plants less than 3.28 ft tall.
12	11			·	Woody vines - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30') 1. NOT APPLUBLE 2. Hydrophytic Vegetation Present? Yes X No 4	12		***************************************	·	1 . •
1. NOT Applicable 2		40	= Total Co	ver	
2	Woody Vine Stratum (Plot size: 30')				
2	1 not Applicable				
3					
4					1
Remarks: (Include photo numbers here or on a separate sheet.) Trees are primarity limited to growth on	3				163
Remarks: (Include photo numbers here or on a separate sheet.) Trees one primarity limited to growth on	4				
Trees one primarily limited to growth on			_ = Total Co	ver	
· · · · · · · · · · · · · · · · · · ·	Remarks: (include photo numbers here or on a separate	sheet.)			
· · · · · · · · · · · · · · · · · · ·					
· · · · · · · · · · · · · · · · · · ·	Trees ou prin	س دین ار	l lim	: ted	to growth on
time to to the tradition to the tradition			•		
5 ·	the control of the	- 1-51			
·					

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix			x Features	· 1	. 2	Tankan		
(inches)	Color (moist)	%	Color (moist)		Type ¹	_Loc*_	Texture Remarks	— I	
	uf 11 Her								
<u>0'-2"</u>	104×211	100%					SIL		
5,-3,	1092311	85%	iogralz	15%	<u>a</u>	<u>~</u>	516		
7"-18"	10y26/2	90%	wyr wlb	10%	<u> </u>		510		
							· ·		
						-			
	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand G	ains.	² Location: PL=Pore Lining, M=Matrix.		
Hydric Soil							Indicators for Problematic Hydric Soils ³ :		
Histosol			Polyvalue Belo		(S8) (LR	R R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)		
1	pipedon (A2) istic (A3)		MLRA 1498 Thin Dark Surf	•	DD D M	I PA 149R	 Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, I) 	R)	
1 —	en Sulfide (A4)		Loamy Mucky				Dark Surface (S7) (LRR K, L, M)	٠,	
Į.	d Layers (A5)		Loamy Gleyed			-,,	Polyvalue Below Surface (S8) (LRR K, L)		
	d Below Dark Surface	e (A11)	Depleted Matri		•		Thin Dark Surface (S9) (LRR K, L)		
	ark Surface (A12)	` ,	🔀 Redox Dark St				Iron-Manganese Masses (F12) (LRR K, L,		
Sandy N	Mucky Mineral (S1)		Depleted Dark	Surface (F	7)		Piedmont Floodplain Soils (F19) (MLRA 14		
	Gleyed Matrix (S4)		Redox Depres	sions (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 14	9B)	
	Redox (S5)						Red Parent Material (F21)		
	d Matrix (S6) urface (S7) (LRR R, N	AI DA 1406	2)				Very Shallow Dark Surface (TF12) Other (Explain in Remarks)		
	of hydrophytic vegetat		etland hydrology mu	ist be presi	ent, unles	s disturbed	d or problematic.		
	Layer (if observed):								
Type:	-1V	<u> </u>					Hydric Soil Present? Yes X No		
Depth (in	cnes):						nydric son Flesentr Tes No		
Remarks:									
1									
. ,									

- N. 1441.14	Objectovenia County
	Chautauqua County Sampling Date: 5)2616
Applicant e when	State: NY Sampling Point: DP-7c5
Investigator(s): B. Vints S. Buchanger Section, Town	nship, Range: Town of I-kinover
Landform (hillslope, terrace, etc.): Depression Local relief (cond	cave, convex, none): Slope (%):
Subregion (LRR or MLRA): LRR-R Lat: 42.447097	Long: -79, 102548 Datum: NAD 83
Soil Map Unit Name: Chantaugua S: 11 loan Etc150651	NOORS NIMI classification: WPland
Are climatic / hydrologic conditions on the site typical for this time of year? Yes 🔀	
Are Vegetation 100, Soil 100, or Hydrology 190 significantly disturbed?	Are "Normal Circumstances" present? Yes X No
Are Vegetation <u>~~</u> , Soil <u>~~</u> , or Hydrology <u>~~</u> naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling	point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the	Sampled Area
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No within	n a Wetland? Yes X No
Wetland Hydrology Present? Yes X No If yes,	optional Wetland Site ID: Welland 17618
Remarks: (Explain alternative procedures here or in a separate report.)	Sphorial Products on 151
, ,	
PEM Dote Stellen For W	etland AG18,
	·
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	∠ Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on L	
Drift Deposits (B3) Presence of Reduced Iron (
★ Algal Mat or Crust (B4)	lled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)	
Sparsely Vegetated Concave Surface (B8)	★ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes X No Depth (inches): 15"	
Saturation Present? Yes 🔀 No Depth (inches): 😊 "	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	inspections), if available:
Describe Recorded Data (Stream gadge, monitoring well, acrial proces, provided	mopositorio), il avallation
Remarks:	
,	
·	

Tree Stratum (Plot size:)		Dominant Species?		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. not applicable			·	That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
				(-)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
				Total % Cover of:Multiply by:
<i>(</i>	 	= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. not applicable				FAC species x 3 =
• •				FACU species x 4 =
2			·	UPL species x 5 =
3				Column Totals: (A) (B)
4				(5)
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				
7				
,		= Total Co	ver	2 - Dominance Test is >50%
Herb Stratum (Plot size:5'				3 - Prevalence Index is ≤3.0 ¹
1. Covex Flava	1.5	\	,esc.	4 - Morphological Adaptations¹ (Provide supporting
		•		data in Remarks or on a separate sheet)
2. Scirpus experiors	10	no	<u>೧</u> ೪೬	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Thelypteris palustris	_)0	100	FACW	¹ Indicators of hydric soil and wetland hydrology must
4. Typha latifolia	5	no	OBL	be present, unless disturbed or problematic.
5. Threas effusis	67	200	OBL	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				at breast height (DDH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
10			 	size, and woody plants less than 3.28 ft tall.
11				William All man having a sector than 2 00 0 °
12,				Woody vines - All woody vines greater than 3.28 ft in height.
	95	= Total Co	vor	
Woody Vine Stratum (Plot size: 36')		10tal CO	V G1	
/				
1. NOT Applicable				
2.				Hydrophytic
				Vegetation Present? Yes X No
3				763 <u>77</u> 110
4				
	<u> </u>	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
1				

Profile Desci	ription: (Describe	to the dep	th needed to docun	ent the i	ndicator	or confirm	the absence	of indicators.)		
Depth	Matrix			K Features	§ _ 1	, 2	T	Damanto		
(inches)	Color (moist)		Color (moist)	%	Type ¹	_Loc*	<u>Texture</u>	Remarks		
1 inch	- Ley 1. H	<u>er</u>								
0"-2"	mucky	Pect	Layer							
2"-10"	2.542.511	80%	10y23/2	70%	<u>D</u>	<u>~</u>	SIL			
		·								
			14-70-17-17-17							
						·				
										
1Typo: C=C=	ncentration D-D-	letion PA	=Reduced Matrix, MS		Sand G		² l ocation	: PL=Pore Lining, M=Matrix.		
Hydric Soil I		netion, RM	-rveduced iviatrix, Mi	J-IVIASKEC	oanu U	allio.		for Problematic Hydric Soils ³ :		
Histosol			Polyvalue Belov	w Surface	(S8) (LR	R R,	2 cm M	fuck (A10) (LRR K, L, MLRA 149B)		
	ipedon (A2)		MLRA 149B					Prairie Redox (A16) (LRR K, L, R)		
Black His			Thin Dark Surfa					Mucky Peat or Peat (S3) (LRR K, L, R)		
	n Sulfide (A4)		Loamy Mucky N			(, L)	-	Surface (S7) (LRR K, L, M) slue Below Surface (S8) (LRR K, L)		
✓ Stratified Depleted	Layers (A5) Below Dark Surfac	o (A11)	Loamy Gleyed Depleted Matrix		()			ark Surface (S9) (LRR K, L)		
	rk Surface (A12)	e (ATT)	Redox Dark Su		L			anganese Masses (F12) (LRR K, L, R)		
	ucky Mineral (S1)		Depleted Dark					Piedmont Floodplain Soils (F19) (MLRA 149B)		
	leyed Matrix (S4)		Redox Depress		.,			Spodic (TA6) (MLRA 144A, 145, 149B)		
	edox (S5)			` ,				arent Material (F21)		
	Matrix (S6)						Very S	Shallow Dark Surface (TF12)		
Dark Sur	face (S7) (LRR R, I	MLRA 1491	3)				Other	(Explain in Remarks)		
			etland hydrology mus	st be pres	ent, unles	s disturbed	d or problemation	o.		
Restrictive L	.ayer (if observed)	:								
Type:								v		
Depth (inc	:hes):						Hydric Soil	Present? Yes X No		
Remarks:										
,										

Project/Site: Ball Hill Wind Project City/C	county: Chautauqua County Sampling Date: 5)26/16
	State: NY Sampling Point: DP- 706
Investigator(s): 3. Vizzs, 5. Buduneur Section	
Landform (hillslope, terrace, etc.): 1977-ce Local reli	ief (concave, convex, none): F1c+ Slope (%): O-1 %
Subregion (LRR or MLRA): LRR-R Lat: 42, 447 4	
Soil Map Unit Name: CHARUTALONA S: 1+ Lona, 8 to15	Cio Slipes NWI classification: UPI and
Are climatic / hydrologic conditions on the site typical for this time of year? Y	es No (If no, explain in Remarks.)
Are Vegetation No, Soil No, or Hydrology No significantly distur	bed? Are "Normal Circumstances" present? Yes 🔀 No
Are Vegetation $\frac{NO}{NO}$, Soil $\frac{NO}{NO}$, or Hydrology $\frac{NO}{NO}$ naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No ➤	Is the Sampled Area
Hydrophytic Vegetation Present? Yes No ★ Hydric Soil Present? Yes No ★	within a Wetland? Yes No ×
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	n you, optional violatic one in
upland Deta Point For w	vetic 1 Acro
UPTARE DEAL POINT	11018.
	· · · · · · · · · · · · · · · · · · ·
HYDROLOGY	•
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	es (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	
Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide Oc	
	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	, ,
. ,	on in Tilled Soils (C6) Geomorphic Position (D2) C7) Shallow Aquitard (D3)
Iron Deposits (B5) Thin Muck Surface (Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	1710 Hodilar 1881 (20)
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No 🚣
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro-	evious inspections), if available:
Remarks:	
No hydrology indicators meets	
The high resign motions in	
	1

٧	ΈC	ET	ΆT	ION	_	Use	scientific	names	of	plants.
---	----	----	----	-----	---	-----	------------	-------	----	---------

VEGETATION - Ose scientific flattles of plattis	•			Sampling Form
Tree Stratum (Plot size: 30')	Absolute			Dominance Test worksheet:
		Species?		Number of Dominant Species
1. TShga canadensis		yes_	FACL	That Are OBL, FACW, or FAC: (A)
2. Acer Sarcherum		190	FACL	Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6	•			
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	100	= Total Cov	er	OBL species <u>()</u> x 1 = <u>(*)</u>
Sapling/Shrub Stratum (Plot size: 15 ⁷)				FACW speciesO x 2 =O
1 Pot coplicable				FAC species x3 = O
2				FACU species 120 x4 = 480
				UPL species <u>O</u> x 5 = <u>O</u>
3,				Column Totals: 120 (A) 430 (B)
4				D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5				Prevalence Index = B/A = C1.0
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	0	= Total Cov		2 - Dominance Test is >50%
		Total Cov	eı	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5')				4 - Morphological Adaptations (Provide supporting
1. TSuga considentis	10	<u>Yes</u>	EACH	data in Remarks or on a separate sheet)
2. Ace Saccharum	_5	Y25		Problematic Hydrophytic Vegetation ¹ (Explain)
3. Fogus gandifolia	5	Yes	FACH	Indicators of hydric soil and wetland hydrology must
• •				be present, unless disturbed or problematic.
4				Definitions of Vegetation Strata:
5				Deminitions of Vegetation Strata.
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	20	_ = Total Cov	er/er	· · · · · · · · · · · · · · · · · · ·
Woody Vine Stratum (Plot size: 30')				
1. pot ipplicable				
• '				Hydrophytic
2				Vegetation Present? Yes No
3				Present? Yes No
4				
	0	_ = Total Cov	/er	
Remarks: (Include photo numbers here or on a separate	sheet.)			
No hydrophytic vegetation				

Profile Desc	ription: (Describe t	to the dep	th needed to docun	nent the ir	ndicator	or confirm	the absence of	findicators.)
Depth	Matrix			k Features	<u>.</u> 1	2	T 4	Domerko
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc	<u>Texture</u> _	Remarks
0"15"	1042416	100					<u> </u>	
15"-17"	1048-518	100					<u> </u>	
								
							 -	
							2, ,,,,	Di Dani Linian MaMarin
Type: C=Co		letion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	Location:	PL=Pore Lining, M=Matrix. or Problematic Hydric Soils ³ :
Histosol			Polyvalue Belo	w Surface	(S8) (I R	R R		uck (A10) (LRR K, L, MLRA 149B)
i —-	pipedon (A2)		MLRA 149B		(00) (21)	,		rairie Redox (A16) (LRR K, L, R)
Black Hi			Thin Dark Surfa	•	RR R, M	LRA 149B)		ucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky I			(, L)		Irface (S7) (LRR K, L, M)
,	l Layers (A5)	o (A11)	Loamy Gleyed Depleted Matrix		!)			ue Below Surface (S8) (LRR K, L) rk Surface (S9) (LRR K, L)
	i Below Dark Surfac ark Surface (A12)	e (A11)	Redox Dark Su					nganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Depleted Dark				Piedmo	nt Floodplain Soils (F19) (MLRA 149B)
	leyed Matrix (S4)		Redox Depress	sions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B)
	ledox (S5)							rent Material (F21)
	Matrix (S6)	MI DA 440	D\					nallow Dark Surface (TF12) Explain in Remarks)
Dark Su	rface (S7) (LRR R, I	VILICA 145	D)				Outer (Explain in Foliatio)
3Indicators o	f hydrophytic vegeta	tion and w	etland hydrology mu	st be pres	ent, unles	s disturbed	or problematic.	
Restrictive	Layer (if observed)				_			
Type:								~
Depth (in	ches):						Hydric Soil	Present? Yes No X
Remarks:		,						
	Anger	Refus	ce 0 17"					
	•	,						
				,				
,								
								_

Project/Site: Ball Hill Wind Project City/Co	ounty: Chautauqua County Sampling Date: 5) 26) 16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 708
Investigator(s): B. Virts S. Buckenmus Section	n. Township, Range: Town of Harriver
Investigator(s): B.V.RTS S. Buckennya Section Landform (hillslope, terrace, etc.): H.NSIo pe Local relia Subregion (LRR or MLRA): LRR-R Lat: 42.4514 Soil Map Unit Name: Chencus governy Score, 8to 15 Are climatic / hydrologic conditions on the site typical for this time of year? You have Vegetation O, Soil or Hydrology o naturally problems SUMMARY OF FINDINGS – Attach site map showing same Hydrophytic Vegetation Present? Yes X No Hydrology results No Yes No	Slope (%): 5 % Slope (%): 5 % Slope (%): 5 % Datum: NAD 83 SWOS Long: -79,103368 Datum: NAD 83 SWOS Long: -79,10368 Datum: NAD 83 SWOS Lo
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: we + 1 and A619
Hillside gw seep dis	etrge wettered PEM
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Water-Stained Leave X High Water Table (A2) Aquatic Fauna (B13)	
	Dry-Season Water Table (C2)
Sediment Deposits (B2) Oxidized Rhizospher Drift Deposits (B3) Presence of Reduce	· , —
Algal Mat or Crust (B4) Recent Iron Reduction	
Algal Mat of Crust (B4) Recent Not Needed.	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	➤ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _K Depth (inches):	
Water Table Present? Yes No Depth (inches): 5	<i>'</i> 1
Saturation Present? Yes \(\sigma \) No Depth (inches):	Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	
Remarks:	

Tree Stratum (Plot size: 30')	Absolute			Dominance Test worksheet:
Troo statum (Frot size:		Species?		Number of Dominant Species
1. not applicable				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Total Number of Dominant Species Across All Strata: (B)
				(D)
4				Percent of Dominant Species That Are OBL FACW or FAC:
5				That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence index worksheet:
7				Total % Cover of:Multiply by:
		= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. POT Applicable				FAC species x 3 =
1. No I ISPI, CAPIE				FACU species x 4 =
2		***************************************		
3				UPL species x 5 =
				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6]
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Cov	er	∠ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')				3 - Prevalence Index is ≤3.0 ¹
l		V	Ca .	4 - Morphological Adaptations (Provide supporting
1. Equisetum palustre	40	Yes		data in Remarks or on a separate sheet)
2. Onoclea Sensibilis	25	Yes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Corex gynandra	10	20	OBL	¹ Indicators of hydric soil and wetland hydrology must
4. Mentha X piper: ta	10	100	OBL	be present, unless disturbed or problematic.
5. Ranunculus acris	5	NO	FAC	Definitions of Vegetation Strata:
6. Supotosium perfoliatum	5	NO	FACW	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
		100		at breast height (DBH), regardless of height.
7. Parker aurea			<u>PACW</u>	•
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				Woody vines – All woody vines greater than 3.28 ft in
12				height.
	100	= Total Cov	'Ar	
Woody Vine Stratum (Plot size:ろり)		1014,001	0.	
1. Not applicable				
2.				Hydrophytic
3				Vegetation Present? Yes No
3				11030HC1 103_H NO
4			·	
	_0	= Total Cov	er er	
Remarks: (Include photo numbers here or on a separate	sheet.)			······································
	•			
				·
				·

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth	Matrix			x Feature	<u>s</u>	•				
(inches) 0'44''	Color (moist)	%	Pect	%	Type ¹	_Loc ²	<u>Texture</u>		Remarks	
						 •				
4"-8"	Z.5y 311	<u>98</u>	109R614		_ <u> </u>	<u>~</u>	<u> </u>	····		
			J				•			
									·······	
									· · · · · · · · · · · · · · · · · · ·	
										
	 								····	

	oncentration, D=Depl	etion, RM	=Reduced Matrix, MS	S=Masked	Sand Gr	ains.			ning, M=Matr	
Hydric Soil I							Indicators for		-	ľ
Histosol	• •		Polyvalue Belov		(S8) (LR i	RR,			RR K, L, MLF	
Histic Ep	oipedon (A2)		MLRA 149B; Thin Dark Surfa		RRR MI	RA 149R)			: (A16) (LRR I : Peat (S3) (L I	
	n Sulfide (A4)		Loamy Mucky M			-		•	LRR K, L, M)	
	Layers (A5)		Loamy Gleyed						rface (S8) (LI	
	l Below Dark Surface	(A11)	Depleted Matrix					Thin Dark Surface (S9) (LRR K, L)		
	ark Surface (A12)		✓ Redox Dark Su				Iron-Manganese Masses (F12) (LRR K, L, R)			
	lucky Mineral (S1) ileyed Matrix (S4)		Depleted Dark				Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
	ledox (S5)		Nedox Depress	510115 (1 0 <i>)</i>			Red Parent Material (F21)			
	Matrix (S6)							y Shallow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R, M	ILRA 149	B)				Other (Ex	plain in Re	emarks)	
³ Indicators of	f hydrophytic vegetati	ion and w	etland hydrology mus	st be pres	ent, unles	s disturbed	or problematic.			
Restrictive L	_ayer (if observed):									
Type:									1.4	
Depth (inc	ches):						Hydric Soil Pr	esent?	Yes	No
Remarks:	•									
,										
										Ì

Project/Site: Ball Hill Wind Project City/C	County Chautaugua County Sampling Date: 5)2616
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 709
Investigator(s): B. Vizts S. Buchenne yer Section	
- · · · · · · · · · · · · · · · · · · ·	
Landform (hillslope, terrace, etc.): H: 115 1c 2c Local reli Subregion (LRR or MLRA): LRR-R Lat: 42. 45 2c	271 Long: -79, 143683 Datum: NAD 83
Subregion (ERR of MERA)	Datum, Da
Soil Map Unit Name: Cherango gravelly loam 8	TO 15% 5105% 5 NWI classification: CF1868
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation No, Soil NO, or Hydrology NO significantly distur	
Are Vegetation <u>\mathcal{N} 3</u> , Soil \mathcal{N} or Hydrology \mathcal{N} naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No メ	Is the Sampled Area
Hydric Soil Present? Yes No ×	within a Wetland? Yes No 🗡
Wetland Hydrology Present? Yes No 🗴	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
upland Duta poin	+ for wethered A619.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	es (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Od	
Sediment Deposits (B2) Oxidized Rhizospher	
Drift Deposits (B3) Presence of Reduced Algal Mat or Crust (B4) Recent Iron Reduction	. ,
Iron Deposits (B5) Thin Muck Surface (6	, , , .
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rel	,
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No _X Depth (inches):	· ·
Saturation Present? Yes No _> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No _X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
No hydrology Indicator found / 06:	served.

VEGETATION - Ose scientific flames of plants	•			
Tree Stratum (Plot size: 30;	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u> 5	Species?		Number of Dominant Species
1. Malus Princifolia		Y&S	LAL	That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant 5
3				Species Across All Strata: (B)
4.				Percent of Dominant Species
•				That Are OBL, FACW, or FAC: 46 (A/B)
5		·		
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	5	= Total Cov	er er	OBL species
Sapling/Shrub Stratum (Plot size: 15')				FACW speciesO x 2 =O
1. Rosa multiflora	15	Y-es	POC	FAC species 80 x3 = 240
<u> </u>				FACU species 35 x4= 148
2				UPL species
3				Column Totals: 120 (A) 405 (B)
4				77 77
5				Prevalence Index = B/A = 3,37
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
~ /	15	= Total Co	/er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5')				4 - Morphological Adaptations¹ (Provide supporting
1. Entrania gramini Folia	40	Yes	FAC	data in Remarks or on a separate sheet)
2. Solidago Canadensis	15	Yes	FACL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Ipomoea carrica	15	Yes	FACL	¹ Indicators of hydric soil and wetland hydrology must
_ •		No		be present, unless disturbed or problematic.
4. Ranunculus acris		NO NO	FAC	Definitions of Variation Streets
5. Galium Doreale.	10		FAC	Definitions of Vegetation Strata:
6. Alliaria petiolata	5_	40	FACH	Tree Woody plants 3 in. (7.6 cm) or more in diameter
7. Fragaria Virginiana	5_	20	FAL	at breast height (DBH), regardless of height.
8.				Sapling/shrub – Woody plants less than 3 in. DBH
9.				and greater than or equal to 3.28 ft (1 m) tall.
		-	<u> </u>	Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12			-	height.
	100	= Total Co	ver	
Woody Vine Stratum (Plot size: 30')				
1. not spoticable				Hydrophytic
2				Vegetation
3	. 			Present? Yes No
4				
	0	_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

	ription: (Describe to	o the dep				or confirm	the absence of	of Indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Features	Type ¹	Loc ²	Texture	Remarks
0"-20"	104R3/6	100					SI	
0 00	11-310							

						-		
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil !								for Problematic Hydric Solls ³ :
Histosol	• •		Polyvalue Belov		(S8) (LRI	R,		uck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		MLRA 149B)		DD D 14	DA 440D)		Prairie Redox (A16) (LRR K, L, R)
Black His	stic (A3) in Sulfide (A4)		Thin Dark Surfa					ucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M)
	Layers (A5)		Loamy Gleyed			, - ,		ue Below Surface (S8) (LRR K, L)
-	Below Dark Surface	(A11)	Depleted Matrix		,		-	ark Surface (S9) (LRR K, L)
	ark Surface (A12)		Redox Dark Su	rface (F6)				anganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Depleted Dark		7)			ent Floodplain Soils (F19) (MLRA 149B)
	Bleyed Matrix (S4)		Redox Depress	ions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B)
	ledox (S5) Matrix (S6)							rent Material (F21) nallow Dark Surface (TF12)
	rface (S7) (LRR R, M	LRA 149E	3)					Explain in Remarks)
	(0./) (======,		-,					
	f hydrophytic vegetati	on and we	tland hydrology mus	st be prese	nt, unles	s disturbed	or problematic.	
Restrictive I	Layer (if observed):							
Type:								×
Depth (inc	ches):						Hydric Soil	Present? Yes No _X
Remarks:								
	. / i							
	Nota h	dre	Soil.					

Project/Site: Ball Hill Wind Project	City/County: Ch	nautauqua County	Sampling Date: 5) ZEIL
Applicant/Owner: Ball Hill Wind Energy, LLC			Sampling Point: DP-710
Investigator(s): B. Virts S. Bicken			
Landform (hillslope, terrace, etc.): H.() > \(\rangle	Local relief (concav	e, convex, none):Conc	Slope (%): 0 -19
Soil Map Unit Name: Colla me Siltia			
Are climatic / hydrologic conditions on the site typical for the	is time of year? Yes 		
Are Vegetation \nearrow C, Soil \nearrow C, or Hydrology \nearrow C	significantly disturbed?	Are "Normal Circumstances	" present? Yes No
Are Vegetation $\stackrel{\triangleright O}{-}$, Soil $\stackrel{\triangleright}{\sim}$ or Hydrology $\stackrel{\triangleright}{\sim}$ $\stackrel{\triangleright}{\sim}$	naturally problematic?	(If needed, explain any answ	wers in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling p	oint locations, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Yes X	No is the Sa	ımpled Area	,
	No within a	Wetland? Yes	No No
Wetland Hydrology Present? Yes !	No If yes, or	otional Wetland Site ID:しこ	etland Ablo
Remarks: (Explain alternative procedures here or in a se	parate report.)		
Per wetu	and forms f	rom the out	Free for
1 41.	icel toral Po	0000	Non
ar ago	icel toral Po	rd.	
LIVEROLOGY			
HYDROLOGY		Secondary Ind	licators (minimum of two required)
Wetland Hydrology Indicators:	that apply		oil Cracks (B6)
Primary Indicators (minimum of one is required; check all			Patterns (B10)
1—	iter-Stained Leaves (B9)		n Lines (B16)
	uatic Fauna (B13) rl Deposits (B15)	<u>- </u>	on Water Table (C2)
Water Marks (B1) Hy	drogen Sulfide Odor (C1)	Crayfish E	
			n Visible on Aerial Imagery (C9)
1	esence of Reduced Iron (C4		r Stressed Plants (D1)
1	cent Iron Reduction in Tilled		hic Position (D2)
* ,	in Muck Surface (C7)	Shallow A	4
· · · ·	her (Explain in Remarks)	Microtopo	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		<u></u> FAC-Neu	tral Test (D5)
Field Observations:			
Surface Water Present? Yes No D			
Water Table Present? Yes No D			
Saturation Present? Yes X No D	epth (inches): O"	Wetland Hydrology Pre	sent? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well	, aerial photos, previous ins	pections), if available:	
3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -	, , , , , , , , , , , , , , , , , , , ,	,	
Remarks:			
·			
			· ·

Tree Stratum (Plot size: 3 c ')	Absolute Dominant In % Cover Species?	Dominance lest worksheet:
1. DUT APPICABLE		Number of Dominant Species
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		1
5		That Are OBL, FACW, or FAC: 'OG (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: \\$')		FACW species x 2 =
1. not poplicable		FAC species x 3 =
2		FACU species x 4 =
	•	UPL species x 5 =
3		Column rotals (A) (B)
4		Prevalence Index = R/A =
5		
6		Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
•	C = Total Cover	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5') 1. Crocles Sessibilis	35 Yes	4 - Morphological Adaptations ¹ (Provide supporting
2. Equise tum palustre		
3. Impations appensis		Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Typha latifolia		
5. Carex gynandia	10 NO 6	Definitions of Vegetation Strata:
6. Solidago rugosa	5 100	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7. Rubus allegheniensis	<u> </u>	at breast height (DBH), regardless of height.
8. Rannaculus acris	5 NO	Sapling/shrub - Woody plants less than 3 in. DBH
9		and greater than or equal to 3.28 ft (1 m) tall.
10		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11		size, and woody plants less than 3.28 it tail.
12		Woody vines – All woody vines greater than 3.28 ft in height.
	100 = Total Cover	-
Woody Vine Stratum (Plot size: 30')	- 10tai 0010t	
4		
		Hydrophytic
2		Vegetation
3		Present? Yes No
4		
	= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)	
		,

Profile Desc	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of Indicators.)							
Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0"-8"	2.54311	90	107R518	10%	C	\sim	SIL	
l ———								
	-							
	-							
					·····			
								
		,						
1							2	
	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.		n: PL=Pore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils ³ :
Histosol			Polyvalue Belov		(S8) (LR	RR,		Muck (A10) (LRR K, L, MLRA 149B)
1	oipedon (A2) istic (A3)		MLRA 149B Thin Dark Surfa		DD D 14	I DA 140D\		Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R)
1	en Sulfide (A4)		Loamy Mucky N					Surface (S7) (LRR K, L, M)
	d Layers (A5)		Loamy Gleyed	-		·, ·/		alue Below Surface (S8) (LRR K, L)
	d Below Dark Surface	e (A11)	Depleted Matrix		•			Dark Surface (S9) (LRR K, L)
1	ark Surface (A12)	` '	Redox Dark Su					langanese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F	7)		Piedm	ont Floodplain Soils (F19) (MLRA 149B)
	Bleyed Matrix (S4)		Redox Depress	ions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B)
1	Redox (S5)							arent Material (F21)
	Matrix (S6)							Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	ILRA 149 E	3)				Other	(Explain in Remarks)
3indiantors o	f hydrophytic vegetat	lan and	والمسادية والمسائد		-41	استحاسينا مالم		_
	Layer (if observed):		maria nyarology ma	st be prese	nt, unies	s disturbed	or problemate	C.
1	•							
Type:								I Present? Yes X No
Depth (in	ches):						Hydric Soil	I Present? Yes _X_ No
Remarks:								
,								

Project/Site: Ball Hill Wind Project City	//County: Chautauqua County Sampling Date: ち)てらりら
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-741
	ction, Township, Range: Town of Hanever
	relief (concave, convex, none): Slope (%): Z - 4 %
	6 421 Long: -79, 104889 Datum: NAD 83
Soil Map Unit Name: Cullamer Silt loam, Bito	Solo Slopes NWI classification: UPICAD
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significantly dis	turbed? Are "Normal Circumstances" present? Yes 💥 No
Are Vegetation <u>ゃ</u> と, Soil <u>ゃと</u> , or Hydrology <u>v</u> anaturally proble	
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No 🗡
Wetland Hydrology Present? Yes No ×	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	if yes, optional violatid one is:
UPland Duta Point f	or Wetland 116Co.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Lea	
High Water Table (A2) Aquatic Fauna (B1	
Saturation (A3) Marl Deposits (B1	
Water Marks (B1) Hydrogen Sulfide	
1 — "	neres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) ced Iron (C4) Stunted or Stressed Plants (D1)
Drift Deposits (B3) Presence of Redu	ction in Tilled Soils (C6) Geomorphic Position (D2)
Algal Mat or Crust (B4) Recent Iron Reduction Iron Deposits (B5) Thin Muck Surface	-
Inundation Visible on Aerial Imagery (B7) Other (Explain in I	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes NoX Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	
Remarks.	
	·

	Absolute	Da!	Indiantas	T
Tree Stratum (Plot size: 30')		Dominant Species?		Dominance Test worksheet:
5				Number of Dominant Species
1. not applicable				That Are OBL, FACW, or FAC: (A)
2.				
				Total Number of Dominant Species Across All Strata: (B)
3				Species Across All Strata: (B)
4				Percent of Dominant Species
,				That Are OBL, FACW, or FAC: (A/B)
5				(10b)
6				Bl.
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
_	O	= Total Cov	er	OBL species x 1 =
5				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15)				I
1. not applicable				FAC species x 3 =
1				FACU species x 4 =
2				UPL species x 5 =
3				
				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
				Understation Indicators
6				Hydrophytic Vegetation Indicators:
7			-	1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
. ,		= Total Cov	ег	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5')				1
1. Euthania graminifolia	<i>5</i> 55	Yes	FAC.	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
				, , , , ,
2. Galium boreale	15	<u>~~~</u>	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Egnisetum palustre	10	SA 75	FACW	¹ Indicators of hydric soil and wetland hydrology must
		1-0		be present, unless disturbed or problematic.
4. Trifolium repens	(0	<u> </u>	FACK	bo produit, unloss distarsed of problematic.
5. Pananculus acris	5	NO	FAL	Definitions of Vegetation Strata:
	C:			
6. Posci multiflora	<u></u>	40	FAL	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
				Sapling/shrub – Woody plants less than 3 in. DBH
8				and greater than or equal to 3.28 ft (1 m) tall.
9				and greater than or equal to 5.20 it (1 iii) tail.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11,				
				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	100	= Total Cov	er	
Woody Vine Stratum (Plot size: 30')		-		
Woody Vine Stratum (Plot size: 50)				
1. not applicable				
				Hydrophytic
۷				Vegetation
3				Present? Yes No
4				
4				
	0	_ = Total Cov	/er	
Remarks: (Include photo numbers here or on a separate	sheet.)			
	,			

Profile Desc	ription: (Describe	to the dep	th needed to docu	nent the in	dicator	or confirm	the absence	of Indicato	rs.)	
Depth	Matrix		Redo	x Features		•				- 1
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	<u>Texture</u>		Remarks	
0%15"	1042413	98	104/25/6	2%			<u> 5工</u>			
15"-20"	1042616	100					SIL			
										
 										
						• • • • • • • • • • • • • • • • • • • •				
										
			. 4							
¹Type: C=Cc	ncentration, D=Depl	etion Dt4	-Daducad Matrix 14	C=Masksd	Sond C-		2l continu	DIDoro!	_ining, M=Matrix.	
Hydric Soil I		edon, RM	-ixeduced Matrix, M	J-IVIASKEQ	Sand Gr	anis.			ining, M=Matrix. natic Hydric Soils³:	
Histosol			Polyvalue Belo	w Surface ('S8) (I RE	R			LRR K, L, MLRA 149B)	
	ipedon (A2)		MLRA 149B		(50) (211	,			ox (A16) (LRR K, L, R)	
Black His			Thin Dark Surfa		RR R, MI	RA 149B)			or Peat (S3) (LRR K, L, I	R)
	n Sulfide (A4)		Loamy Mucky I	Mineral (F1) (LRR K			urface (S7)	(LRR K, L, M)	
	Layers (A5)		Loamy Gleyed						urface (S8) (LRR K, L)	
	Below Dark Surface	e (A11)	Depleted Matrix				Thin Dark Surface (S9) (LRR K, L)			_
	rk Surface (A12) lucky Mineral (S1)		Redox Dark Su Depleted Dark		7 \				lasses (F12) (LRR K, L, ıin Soils (F19) (MLRA 1 4	
	leyed Matrix (S4)		Redox Depress		()				6) (MLRA 144A, 145, 14	
	edox (S5)		redux Depress	310113 (1 U)				rent Materi		,
	Matrix (S6)								Surface (TF12)	
Dark Sur	face (S7) (LRR R, M	ILRA 1498	3)					Explain in F		
3										
	hydrophytic vegetat	ion and we	etland hydrology mu	st be prese	nt, unless	disturbed	or problematic	•		
	.ayer (if observed):									
Type:										/
Depth (inc	hes):			***			Hydric Soil	Present?	Yes No	<u>~</u>
Remarks:										
,										
										}
										1

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 5 7 Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP-714 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): B. VIRTS, S. Buckenmayer Section, Township, Range: Town of Honorer Landform (hillslope, terrace, etc.): H:11510Re Local relief (concave, convex, none): Concave Slope (%): O-70/6 42. 457291 Long: _-79.105223 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Lat: Soil Map Unit Name: Fremont S. It Joan 3+08 % Slopes NWI classification: UPland Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ____ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No. Are Vegetation <u>\(\lambda\delta\delta\)</u>, Soil <u>\(\lambda\delta\)</u>, or Hydrology <u>\(\lambda\delta\delta\)</u> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: We Hand Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ✓ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) Surface Water (A1) ___ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) ___ Marl Deposits (B15) ___ Saturation (A3) ___ Crayfish Burrows (C8) ___ Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) ___ Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) ___ Drift Deposits (B3) Recent fron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ___ Algal Mat or Crust (B4) Shallow Aquitard (D3) ___ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) ___ Inundation Visible on Aerial Imagery (B7) __ Other (Explain in Remarks) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes ____ No __X Depth (inches): Surface Water Present? Yes ____ No _ * Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _____ No _ Yes X No Depth (inches): 8" Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

				Sampling Point:
Tree Stratum (Plot size: 301)	Absolute			Dominance Test worksheet:
Not 0-015 11		Species?		Number of Dominant Species 2
1. Not Applicable				That Are OBL, FACW, or FAC:(A)
2			·	Total Number of Dominant
3				Species Across All Strata:(B)
4				Because of Borniages Canadian
•				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				(105)
6				Prevalence Index worksheet:
7			-	Total % Cover of: Multiply by:
	6	= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15'				FACW species x 2 =
				FAC species x 3 =
1. not applicable				FACU species x 4 =
2				UPL species x 5 =
3				
4				Column Totals: (A) (B)
				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7		****		1 - Rapid Test for Hydrophytic Vegetation
,	Ô	= Total Cov	/er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5)				3 - Prevalence Index is ≤3.0¹
	3.	Mac	5	4 - Morphological Adaptations ¹ (Provide supporting
1. Oroclea Sensibilis	30	Yes	FACW	data in Remarks or on a separate sheet)
2. Mentha Xpiperita	25	Y.45	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Threes offisas	10	No	0BL	¹ Indicators of hydric soil and wetland hydrology must
4. Euthamia graminifolia	10	Na	FAC	be present, unless disturbed or problematic.
The state of the s				Definitions of Vegetation Strata:
5. Eupatorium perfoliatum	10	<u>~~</u>	FRCW	Definitions of Vegetation Strata.
6. Corex Flava	_5_	<u> NO</u>	OBL	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Corners amoman	_5_	<u> 100</u>	FACH	at breast height (DBH), regardless of height.
8. Lythrum Salicaria	5	NO	OBL	Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
			·	Herb – All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11			-	We declared Allows by the second of the 2000 to
12				Woody vines - All woody vines greater than 3.28 ft in height.
	100	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30/)		- 10141 001	101	
10 . 1 0 - 0 1				
1. Not Applicable				
1. Not Applicable				Hydrophytic Vegetation
2				Vegetation Present? Yes No
				Vegetation 🗶
2				Vegetation 🗶
2		= Total Cov	/er	Vegetation 🗶

	cription: (Describe	to the dept	h needed to docur	nent the indicator	or confirm	the absence of i	ndicators.)
Depth	Matrix Color (moist)	 _	Redo	x Features % Type ¹	12	T-14	Demonstra
(inches)	2.543/2		Color (moist)		LOC		Remarks
2" 53				16'6	• • • • • • • • • • • • • • • • • • • •	<u> </u>	
2-8	2.5×311	82%	104R318	12% C	~	SIL -	
							,
		-					
			····				
				`			
							
'Type: C=Co	oncentration, D=Depl	etion, RM=I	Reduced Matrix, M	S=Masked Sand G	rains.		L=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Histosol			Polyvalue Belov	w Surface (S8) (LR	RR		k (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)	_	MLRA 149B		,		irie Redox (A16) (LRR K, L, R)
Black Hi		_		ice (S9) (LRR R, M			ky Peat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4) d Layers (A5)	-	Loamy Mucky N Loamy Gleyed	Mineral (F1) (LRR I Matrix (F2)	(, L)		ace (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L)
	d Below Dark Surface	(A11) _	Depleted Matrix				Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		Redox Dark Su			Iron-Mang	anese Masses (F12) (LRR K, L, R)
	fucky Mineral (S1)	-	Depleted Dark				Floodplain Soils (F19) (MLRA 149B)
	Bleyed Matrix (S4) Redox (S5)	-	Redox Depress	ions (F8)			odic (TA6) (MLRA 144A, 145, 149B) nt Material (F21)
	Matrix (S6)						low Dark Surface (TF12)
Dark Sui	rface (S7) (LRR R, M	ILRA 149B)	•			Other (Exp	plain in Remarks)
3Indicators of	f hydrophytic vegetati	ion and wet	land hydrology mus	et ha procent uplac	e disturbed	or problematic	
	Layer (if observed):	on and wet	and hydrology mus	or be present, unles		огрофенаце.	
Type:		· · · · · · · · · · · · · · · · · · ·					
Depth (inc	ches):					Hydric Soil Pre	esent? Yes No No
Remarks:			***************************************				
	•						
*							
	,						

Project/Site: Ball Hill Wind Project C	ity/County- Chauta	luqua County	Sampling Date: 6/26/16		
•			Sampling Point: DP-715		
Investigator(s): B. VIZTS S. Bi-chemoner s					
Landform (hillslope, terrace, etc.): Hillslope Loca					
Subregion (LRR or MLRA): LRR-R Lat: 42.45	7723	79 . 10508	2 Detum: NAD 83		
Soil Map Unit Name: Fremont S; It Loan 3+0					
Are climatic / hydrologic conditions on the site typical for this time of year		· ·			
Are Vegetation <u>いさ</u> , Soil <u>いさ</u> , or Hydrology <u>p さ</u> significantly d	isturbed? Are	"Normal Circumstances" p	present? Yes X No		
Are Vegetation <u>い</u> , Soil <u>ル</u> る, or Hydrology <u></u> 心 naturally prob	lematic? (If n	eeded, explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS – Attach site map showing	sampling point	locations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Yes X No	Is the Sample	d Area			
Hydric Soil Present? Yes No >>	within a Wetla	ınd? Yes	No >		
Wetland Hydrology Present? Yes No X	If yes, optional	Wetland Site ID:			
Remarks: (Explain alternative procedures here or in a separate report.					
upland Data point	for wether	-d A-621			
apraro Desa Poir	10. 00 € 1.2				
			·		
			•		
LIVEDOL COV					
HYDROLOGY			(
Wetland Hydrology Indicators:			ators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil			
Surface Water (A1) Water-Stained L		Drainage Patterns (B10)			
High Water Table (A2) Aquatic Fauna (I		Moss Trim Lines (B16)			
Saturation (A3) Marl Deposits (B	•	Dry-Season Water Table (C2) Crayfish Burrows (C8)			
Water Marks (B1) Hydrogen Sulfide			` '		
Sediment Deposits (B2) Drift Deposits (B2) Drift Deposits (B2) Drift Deposits (B2)		Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)			
Drift Deposits (B3) Presence of Red Algal Mat or Crust (B4) Recent Iron Red			· · ·		
Iron Deposits (B5) Thin Muck Surfa		Soils (C6) Geomorphic Position (D2) Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7) Other (Explain in					
Sparsely Vegetated Concave Surface (B8)	rromanoj	FAC-Neutra	1 1		
Field Observations:					
Surface Water Present? Yes No Depth (inches):					
Water Table Present? Yes No Depth (inches):					
Saturation Present? Yes No Depth (inches):	I	Vetland Hydrology Prese	nt? Yes No 🗡		
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspection	ns), if available:			
Remarks:					
·					
			•		
L					

VEGETATION — 656 deletime names of plants.			
Tree Stratum (Plot size: 30')		Dominant Indicate Species? Status	
			Number of Dominant Species
1. NOT Applicable			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			
4			Percent of Dominant Species
5			That Are OBL, FACW, or FAC: (A/B)
6			Prevalence Index worksheet:
			Trotalolio iliaox voltaliooli
7			Total % Cover of: Multiply by:
	<u> </u>	= Total Cover	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15')			FACW species x 2 =
1. not Applicable			FAC species x 3 =
			FACU species x 4 =
2	 .		UPL species x 5 =
3			Column Totals: (A) (B)
4			Column Totals (A) (B)
			Prevalence Index = B/A =
5			<u> </u>
6		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
		= Total Cover	2 - Dominance Test is >50%
c'		- Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5')			4 - Morphological Adaptations ¹ (Provide supporting
1. Muhlenbergia Schrebat	65	Yes FAC	data in Remarks or on a separate sheet)
2. Entrania gramini folia	15	NO FRO	Problematic Hydrophytic Vegetation¹ (Explain)
3. Solidago conodersis		No.	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Inners afterns		Da OB	L po present anices dictarbed of prepierratic,
5. Rainchlus acris		NO FAC	Definitions of Vegetation Strata:
6			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
			at breast height (DBH), regardless of height.
7			
8			Sapling/shrub – Woody plants less than 3 in. DBH
9			and greater than or equal to 3.28 ft (1 m) tall.
			Herb - All herbaceous (non-woody) plants, regardless of
10			size, and woody plants less than 3.28 ft tall.
11			Woody vines All woody vines greater than 2.39 A in
12.			Woody vines – All woody vines greater than 3.28 ft in height.
	100	= Total Cover	
Woody Vine Stratum (Plot size: 30')		_ 10tai 00v6i	
1. not Applicable			
2			Hydrophytic
			Vegetation Present? Yes No
3			_ Fresentr Tes No
4			
	0	= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		
Tremaine, (morado priote namboro noro or or a doparato	011001)		

Profile Desc	cription: (Describe	to the dep	th needed to docu	ment the i	ndicator	or confirm	the absence	of indicato	ors.)	
Depth	Matrix			x Features						
(inches)	Color (moist)	- <u>%</u>	Color (moist)	%	_Type ¹	_Loc ² _	Texture	0 11 1	Remarks	
0"-13"	10ye 313	1000	lugas18	50/0	<u></u>	<u>m</u>	SIL	120012	Auger Relu 1300	ou .
									· · · · · · · · · · · · · · · · · · ·	
<u> </u>								****		
			1							

<u></u>										
¹ Type: C=Co	oncentration, D=Depl	letion RM:	Reduced Matrix M	S=Macked	Sand Gr	nine	2l coation	DIDoro I	Lining, M=Matrix.	
Hydric Soil I	ndicators:	ionori, rair	- reduced Matrix, Mi	3-Iviaskeu	Sand Gr	31115.			natic Hydric Soi	ls³:
Histosol	(A1)		Polyvalue Belov	w Surface	(S8) (LRF	R.R.			LRR K, L, MLRA	ŀ
	ipedon (A2)		MLRA 149B		· / · ·	,			ox (A16) (LRR K,	
Black His			Thin Dark Surfa						or Peat (S3) (LRF	
	n Sulfide (A4)		Loamy Mucky N			, L)			(LRR K, L, M)	
	Layers (A5) Below Dark Surface	Δ (Δ11)	Loamy Gleyed Depleted Matrix		1				Surface (S8) (LRR	k K, L)
	rk Surface (A12)	7 (7.11)	Redox Dark Su						(S9) (LRR K, L) Masses (F12) (LR	BKI B/
	ucky Mineral (S1)		Depleted Dark		7)				ain Soils (F19) (M	
Sandy G	leyed Matrix (S4)		Redox Depress		•				6) (MLRA 144A, 1	
	edox (S5)						Red Pa	rent Materi	al (F21)	
	Matrix (S6)								Surface (TF12)	
Dark Sur	face (S7) (LRR R, M	ILKA 149E)				Other (Explain in F	Remarks)	
3Indicators of	hydrophytic vegetati	ion and we	tland hydrology mus	t be prese	nt. unless	disturbed	or problematic			
Restrictive L	ayer (if observed):			1 DO P1000	, amou	distarboa	or problematio	•		
Type:										
Depth (inc	hes):						Hydric Soil	Present?	Yes N	10 7
Remarks:										
,										

Dell Hill Wind Droingt	Chautauaua County
	ounty: Chautauqua County Sampling Date: 5127116
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- +1 C
Investigator(s): B. Vires, N. Dutcher Section	on, Township, Range: Town of Hancuer
Landform (hillslope, terrace, etc.): Hillslope Local reli	ef (concave, convex, none): Concave Slope (%): 20/6
	0// Long: -79,132622 Datum: NAD 83
,	
Soil Map Unit Name: Chantangua Silt loam, 3708	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	,
Are Vegetation No., Soil No., or Hydrology No. significantly disturb	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation <u>~0</u> , Soil <u>~0</u> , or Hydrology <u>~0</u> naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: Wetland A61子
Remarks: (Explain alternative procedures here or in a separate report.)	ir yes, optional wettand cite is:
/ Community (Linguistics of the Community of the Communit	
	•
n'	
	,
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	·
High Water Table (A2) Aquatic Fauna (B13)	
∑ Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Od	
1 	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	
Algal Mat or Crust (B4) Recent Iron Reduction	
Iron Deposits (B5) Thin Muck Surface (I	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rel Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
	ZETAO-redutal rest (20)
Field Observations:	
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):	,
Saturation Present? Yes _x No Depth (inches): O (includes capillary fringe)	Wetland Hydrology Present? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	
, volitainei	

VESTIATION - Ose scientific flatfies of platfies				
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
				Number of Dominant Species
1. not opplicable				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
5				That Ale Obl., FACW, OF FAC
6,				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Rosa multiflora	20	Y	FACU	FAC species x 3 =
2. Cornus alba		V	FACU	FACU species x 4 =
				UPL species x 5 =
3. Alnus incara			FACU	Column Totals: (A) (B)
4				Burnelin and Indian a P/A
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
	1115	= Total Cov		∑ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')		- 10101 001		3 - Prevalence Index is ≤3.0 ¹
1. Onoclea Sensibilis	45	1	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
		7	FAC	Problematic Hydrophytic Vegetation¹ (Explain)
2. Salldogo rugusa		<u></u>		
3. CACEY COLLYA		_N	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Cornus alba	10-	<u> N</u>	FACW	be present, unless disturbed of problematic.
5. Eupotorium perfoliatum		N	FACW	Definitions of Vegetation Strata:
6. Galium borea's	5	N	FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Carex flava	5	M	OBL	at breast height (DBH), regardless of height.
8		••		Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12	100			height.
	100	= Total Cov	/er	
Woody Vine Stratum (Plot size: 3c')				
1. not opplicable				
2				Hydrophytic Vegetation
3.				Present? Yes No
4				,
	0	= Total Co		
Remarks: (Include photo numbers here or on a separate		_ Total Co	VOI	
Remarks. (include proto numbers here of on a separate	311001.)			

Profile Description: (Describe to the de	pth needed to docum	nent the i	ndicator	or confirm	the absence	of Indicators.)		
Depth Matrix (inches) Color (moist) %		x Features	Type ¹	Loo ²	Texture	Remarks		
	Color (moist)		•		CL	Kemaro		
01-5" 1092311 95	10y25/8	_5_	<u>c</u>	$\frac{\infty}{}$				
5"-20" 10yes11 90	10g2518	<u> </u>	<u>_</u>	<u>m</u>	<u> </u>	mixed w graves		
								
·								
								
	·							
¹ Type: C=Concentration, D=Depletion, RM	/=Reduced Matrix, M	S=Masked	d Sand Gr	ains.	² Location	n: PL=Pore Lining, M=Matrix.		
Hydric Soil Indicators:						s for Problematic Hydric Soils ³ :		
Histosol (A1)	Polyvalue Belo		(S8) (LR	R R,		Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R)		
Histic Epipedon (A2) Black Histic (A3)	MLRA 149B Thin Dark Surfa	•	LRR R. M	LRA 149B	_	Mucky Peat or Peat (S3) (LRR K, L, R)		
Hydrogen Sulfide (A4)	Loamy Mucky				Dark	Surface (S7) (LRR K, L, M)		
Stratified Layers (A5)	Loamy Gleyed		2)			alue Below Surface (S8) (LRR K, L)		
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Matri		١			Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)		
Sandy Mucky Mineral (S1)	Depleted Dark	-			Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy Gleyed Matrix (S4)	Redox Depress					Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Redox (S5)						Red Parent Material (F21)		
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14)	9B)				Very Shallow Dark Surface (TF12) Other (Explain in Remarks)			
					 -			
³ Indicators of hydrophytic vegetation and v	vetland hydrology mu	st be pres	ent, unles	s disturbed	l or problemat	ic.		
Restrictive Layer (if observed):								
Type: Depth (inches):	-				Hydric So	il Present? Yes <u> </u>		
Remarks:				····	1.3			
Tromano.								
,								

Project/Site: Ball Hill Wind Project City/0	County: Chautauqua County Sampling Date: 5/27/16				
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 717				
Investigator(s): B. VIRTS, N. Dutcher Sect					
H-115100 + 10001	lief (concave, convex, none): Slope (%): 1-2 %				
Subregion (LRR or MLRA): LRR-R Lat: 42.4392	GO 12 7 492 DI NAD 83				
Subregion (LRR or MLRA): LRR-R Lat: 42, 43 12	87 Long: -17,132712 Datum: 17AD 63				
Soil Map Unit Name: Chautaugua Silt Lam , 3 to	8 0/0 Slopes NWI classification: LPI and				
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)				
Are Vegetation NO, Soil NO, or Hydrology Co significantly distu	rbed? Are "Normal Circumstances" present? Yes X No				
Are Vegetation NO, Soil NO, or Hydrology NO naturally problem					
•	mpling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes No 🗡	Is the Sampled Area within a Wetland? Yes No				
Hydric Soil Present? Yes No X	within a Wetland? Yes No ``				
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:				
Remarks: (Explain alternative procedures here or in a separate report.)					
upland path point for	wetland A617				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
	Surface Soil Cracks (B6)				
Primary Indicators (minimum of one is required; check all that apply)					
Surface Water (A1) Water-Stained Leav					
High Water Table (A2) Aquatic Fauna (B13)					
Saturation (A3) Mari Deposits (B15					
Water Marks (B1) Hydrogen Sulfide O					
	· · · · · · · · · · · · · · · · · · ·				
Drift Deposits (B3) Presence of Reduc Algal Mat or Crust (B4) Recent Iron Reduct					
Algal Mat or Crust (B4) Recent Iron Reduct Iron Deposits (B5) Thin Muck Surface					
Inin Deposits (B3) Thin Mack Surface Inundation Visible on Aerial Imagery (B7) Other (Explain in R.	·				
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
	170-Hodital 103(150)				
Field Observations: Surface Water Present? Yes No Depth (inches):					
	Wetland Hydrology Present? Yes No 🗡				
Saturation Present? Yes No X Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No 🗡				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:				
Remarks:					
·					
·					

VEGETATION - Use scientific flames of plants	•			Sampling Forte
3.	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30')		Species?		Number of Dominant Species
1. Prunus Serotina	80	<u> </u>	FACU	That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant Species Across All Strata: (B)
3	.,,			Species Across All Strata: (B)
4				
4		×		Percent of Dominant Species That Are OBL FACW or FAC:
5				That Are OBL, FACW, or FAC: (A/B)
•				1.74.4
6		***************************************		Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	80	= Total Cov	er	OBL species x1 =
اسمن			.	·
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Prunus Seratina	.30	Υ	FACU	FAC species x 3 =
lifeti	10	Y	FACU	FACU species 180 x4 = 720
2. Fagus grandifolia	10		FF.C	UPL species LO x5 = 56
3				
				Column Totals: <u>(90</u> (A) <u>770</u> (B)
4				
5				Prevalence Index = B/A = 4,05
				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
	40			2 - Dominance Test is >50%
<i>I</i>		= Total Cov	er/er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size:5')				ļ. ——
1. Frayinus Omericana	40	Y	TAKE	4 - Morphological Adaptations (Provide supporting
1. Fraying Otterlians				data in Remarks or on a separate sheet)
2. Fragaria Virginiana	10	N	OPL	Problematic Hydrophytic Vegetation¹ (Explain)
3. Acer sacchaium	15	Y	FACU	And the description of the data and an advantage of the data.
3. FILLY Jak MIDIT				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Tsuga Canadensis	5	H	FACU	be present, unless disturbed of problematic.
- - - - - - - - - -				Definitions of Vegetation Strata:
5				
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				
8				Sapling/shrub – Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tail.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				5120, and wordy pressure to the same of th
		····		Woody vines - All woody vines greater than 3.28 ft in
12				height.
	70	_ = Total Co	ver	
~ <i>(</i>		_ /ota/ 00	701	
Woody Vine Stratum (Plot size: 30')				
1. Not Applicable				
				Hydrophytic
2				
3				Present? Yes No
				· ·
4				
	Ø	_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate				
Remarks: (Include photo numbers here or on a separate	sheet.)			
1				

Profile Desc	cription: (Describe	to the dept	h needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Redo Color (moist)	x Features %	Type ¹	Loc²	Texture	Remarks	
U'~5"			COIOI (MOIOI)				SIL		
5"-14"								mixed wil ground	
101"+									
<u> </u>		· <u>····</u> .							
		·	 						
									
		· ·	,				•		
· <u></u>		· ·							

		· .							
17	anantection D-D	letie - Dar	Dodgood Martin Ad				21 000410-	: PL=Pore Lining, M=Matrix.	
Hydric Soil	oncentration, D=Dep Indicators:	letion, RM=	Reduced Matrix, M	5=Masked	Sand Gr	ains.		for Problematic Hydric Soils ³ :	
Histosol	• •		Polyvalue Belo		(S8) (LR 1	R,		Muck (A10) (LRR K, L, MLRA 149B)	
Histic Er	pipedon (A2) istic (A3)		MLRA 149B Thin Dark Surfa	,	RR R. M	LRA 149B)		Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R)	
Hydroge	en Sulfide (A4)	,	Loamy Mucky I	dineral (F	1) (LRR K		Dark S	Surface (S7) (LRR K, L, M)	
	d Layers (A5) d Below Dark Surfac	e (A11)	Loamy Gleyed Depleted Matrix		2)		Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)		
Thick Da	ark Surface (A12)		Redox Dark Su	rface (F6)			Iron-Manganese Masses (F12) (LRR K, L, R)		
	Mucky Mineral (S1) Bleyed Matrix (S4)	,	Depleted Dark Redox Depress	•	- 7)		Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy F	Redox (S5)		reduce property				Red Parent Material (F21)		
	l Matrix (S6) rface (S7) (LRR R, I	ЛІ RA 149R	N				Very Shallow Dark Surface (TF12) Other (Explain in Remarks)		
	f hydrophytic vegeta Layer (if observed):		tland hydrology mu	st be prese	ent, unles	s disturbed	or problemation	C	
Type:	Layer (ii observeu).								
Depth (in	ches):						Hydric Soil	Present? Yes No	
Remarks:									
,									

WEILAND DETERMINATION DATA FOR	in Hornicollina and recitive and resident
Project/Site: Ball Hill Wind Project City/C	ounty: Chautauqua County Sampling Date: 5\27\16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 718
Investigator(s): B. Vizzs, N. Dutche- Section	on Township Range: Town of Hanoxer
	ief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): LRR-R Lat: 42. 4399	41 Long: -79.132081 Datum: NAD 83
Soil Map Unit Name: Bust Silt Icam 3 to 8%	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	` · · · · · · · · · · · · · · · · · · ·
Are Vegetation N° , Soil N° , or Hydrology N° significantly distur	•
Are Vegetation <u>~~~</u> , Soil <u>~~~</u> , or Hydrology <u>~~~</u> naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: Wetland A622
Remarks: (Explain alternative procedures here or in a separate report.)	
	·
	·
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	es (B9) <u>×</u> Drainage Patterns (B10)
X High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
X Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Oc	dor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospher	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	• •
Algal Mat or Crust (B4) Recent Iron Reduction	on in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	× FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes X No Depth (inches): 11	" X X X
Saturation Present? Yes X No Depth (inches): 9 (includes capillary fringe)	" Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
1	

Tree Stratum (Plot size: 3c')	Absolute	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Ulmus amencorra		Y	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. Fraxinus pennsylvania	20	<u> </u>	FACW	,
3. Populus tremuloides		N	FACU	Total Number of Dominant Species Across All Strata: () (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100% (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	55	= Total Cov	er	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Ulmus americans	20	Y	FACW	FAC species x 3 =
2. Cornus amonum		Y	FACIN	FACU species x 4 =
3	·			UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	1.0	= Total Cov		Z 2 - Dominance Test is >50%
Herb Stratum (Plot size:5)		- Total Cov	0 1	3 - Prevalence Index is ≤3.0 ¹
1. Onclea Sensicity	25	Υ	FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Fraxinus pennsylvanica	10	N	FACH	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Colous amondum		Y.	FACW	¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
11				size, and woody plants less than 3.28 ft tall.
12.				Woody vines - All woody vines greater than 3.28 ft in height.
	50	= Total Cov	ег	
Woody Vine Stratum (Plot size: 3c')				
1. Not Applicable				
2.				Hydrophytic
3.				Vegetation Yes No
4				
	Ø	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate	sheet.)			
				·

Profile Desci	ription: (Describe	to the der	oth needed to docum	ent the in	ndicator	or confirm	the absence o	of indicators.)	
Depth	Matrix		Redox	Features	;				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0"-4"	10423/1	45	542416	_5_	_ <u>C</u> _	~	CL		
4"-13"	10yr514	45	10yR518	<u> </u>	<u> </u>	<u>~~</u>			
13"+ 12	ock Refused	<u></u>							
		· ——							
									
						_			
		· · · · · · · · · · · · · · · · · · ·							
1 _{Tupo:} 0=0	noentration D-Dan	letion Da	I=Reduced Matrix, MS	=Macker	Sand Gr	ains	² I ocation:	: PL=Pore Lining, M=Matrix.	
Hydric Soil I		neuon, KIV	i-rieduped Matrix, Mc	- IVIASNOC	, Janu Gl	un IV.		for Problematic Hydric Solls ³ :	
Histosol			Polyvalue Belov	w Surface	(S8) (LR	RR,		fuck (A10) (LRR K, L, MLRA 149B)	
	oipedon (A2)		MLRA 149B)					Prairie Redox (A16) (LRR K, L, R)	
Black Hi	stic (A3) n Sulfide (A4)		Thin Dark Surfa					flucky Peat or Peat (S3) (LRR K, L, R) surface (S7) (LRR K, L, M)	
	Layers (A5)		Loamy Gleyed			., -)		lue Below Surface (S8) (LRR K, L)	
1	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)				ark Surface (S9) (LRR K, L)	
	ark Surface (A12)		Kedox Dark Su					anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B)	
	Mucky Mineral (S1) Bleyed Matrix (S4)		Depleted Dark : Redox Depress					Spodic (TA6) (MLRA 144A, 145, 149B)	
	Redox (S5)			• •			Red Parent Material (F21)		
	Matrix (S6)						Very Shallow Dark Surface (TF12)		
Dark Su	rface (S7) (LRR R, l	MLRA 149	9B)				Other	(Explain in Remarks)	
³ Indicators o	f hydrophytic vegeta	ation and v	vetland hydrology mus	st be pres	ent, unles	s disturbed	or problemation	э.	
Restrictive	Layer (if observed)):							
Type:			_						
Depth (in	ches):						Hydric Soil	Present? Yes X No	
Remarks:									
1									
}									
1									

Project/Site: Ball Hill Wind Project City/C	county: Chautauqua County Sampling Date: 5127116					
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-721					
Investigator(s): B.V.RTS. P. Dutcher Section						
Landform (hillslope, terrace, etc.): H:115/cpe Local relief (concave, convex, none): Concave Slope (%): O - Z o						
Subregion (LRR or MLRA): LRR-R Lat: 42.439575 Long: ~79.130044 Datum: NAD 83						
Soil Map Unit Name: Bust 5:11 Lom, 3:10 80/6 Sleppe NWI classification: Wolfed						
Are climatic / hydrologic conditions on the site typical for this time of year? Y						
Are Vegetation No, Soil No, or Hydrology No significantly distur						
Are Vegetation <u>MO</u> , Soil <u>MO</u> , or Hydrology <u>NO</u> naturally problems	atic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sam	ppling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area					
Hydric Soil Present? Yes No	within a Wetland? Yes No					
Wetland Hydrology Present? Yes No	If yes, optional Wetland Site ID: wetland 19624					
Remarks: (Explain alternative procedures here or in a separate report.)						
Per Octo point for	1428 Aland 6 (22)					
,	Me coll					
·						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) X Water-Stained Leave	es (B9) X Drainage Patterns (B10)					
High Water Table (A2) Aquatic Fauna (B13)						
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1) Hydrogen Sulfide Od	• • • • • • • • • • • • • • • • • • • •					
Sediment Deposits (B2) Oxidized Rhizospher Drift Deposits (B3) Presence of Reduced	The state of the s					
Algal Mat or Crust (B4) Recent Iron Reduction	· · · · · · · · · · · · · · · · · · ·					
Iron Deposits (B5) Thin Muck Surface (0	· ` `					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rel	marks) <u>×</u> Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)						
Field Observations:						
Surface Water Present? Yes NoX Depth (inches):						
Water Table Present? Yes No _X Depth (inches):						
Saturation Present? Yes No X Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:					
Remarks:						
·						
8						
·						

Tree Stratum (Plot size: 30')		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. not Applicable				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: / ひゅ (A/B)
5			·	Mat Ale OBL, FACW, OF FAC. [A/B]
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		OBL species x1 =
· c: /		_ 10ta1 C01	V O I	
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. NOT APPLICABLE				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
4	·			
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
<u></u> /		= Total Co	ver	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5)	_		•	4 - Morphological Adaptations¹ (Provide supporting
1. Ranunculus acris	2	γď	FAC	data in Remarks or on a separate sheet)
2. Onoclea Sensibilis	38	Y	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
		K.		,
3. Phalaris arundinacco		1	FACW	'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Cornus amornum	1.5	<u>n'</u>	FACW	be present, unless disturbed of problematic.
5. Carex Flava	20	<u> </u>	OBL	Definitions of Vegetation Strata:
6. Alnus Serrulata		1	OBL	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
		<u> </u>		at breast height (DBH), regardless of height.
7. Scirpus Cuperinas		1/1	206	
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and greater than or equal to 3.20 it (1 m) tail.
10				Herb - All herbaceous (non-woody) plants, regardless of
		-		size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	100	= Total Co	ver	
Woody Vine Stratum (Plot size: 30')				
1 POT APPLICABLE				
" " " " " " " (CAD) &	-		-	Hydrophytic
2				Vegetation
3				Present? Yes No No
4.				
	0	= Total Co		
Damada, (Include abote numbers bere as an a consect		_ = Total Co		
Remarks: (Include photo numbers here or on a separate	sneet.)			
				49
· ·				
·				

Profile Desc	ription: (Describe	to the dep	th needed to docun	nent the i	ndicator	or confirm	the absence	of Indicators.)
Depth	Matrix		Redo	x Feature	<u>s</u>			
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹	_Loc ²	<u>Texture</u>	Remarks
0"-8"	10 YR 3/1	95	7.542416					
9"-17"	2.5y 5/3	_ଚତ_	2.54516	10	<u> </u>	<u>m</u>	SCL	
			104R411	10	<u>D</u>	<u></u>		
17"20"	1042516	100					SCL	
	U							
								
		·					·	
	····	·						
	-	·						

¹ Type: C=Co	oncentration, D=Dep	letion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	² Location	PL=Pore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils ³ :
Histosol			Polyvalue Belov		(S8) (LR	R R,		luck (A10) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		MLRA 149B) Thin Dark Surfa	•	IRRR M	I RA 149R		Prairie Redox (A16) (LRR K, L, R) lucky Peat or Peat (S3) (LRR K, L, R)
l —	n Sulfide (A4)		Loamy Mucky N					urface (S7) (LRR K, L, M)
	l Layers (A5)		Loamy Gleyed	Matrix (F				lue Below Surface (S8) (LRR K, L)
	d Below Dark Surfac	e (A11)	Depleted Matrix					ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R)
	ark Surface (A12) lucky Mineral (S1)		_X Redox Dark Su Depleted Dark					ont Floodplain Soils (F19) (MLRA 149B)
	Bleyed Matrix (S4)		Redox Depress					Spodic (TA6) (MLRA 144A, 145, 149B)
I	Redox (S5)							arent Material (F21)
	Matrix (S6) rface (S7) (LRR R, I	MLRA 149	B)					hallow Dark Surface (TF12) (Explain in Remarks)
³ Indicators of	f hydronhytic vegeta	tion and w	etland hydrology mus	st he nres	ent unles	s disturbed	d or problematic	.
	Layer (if observed):		onana nyarology ma				1	
Type:			•					
Depth (inc	ches):		-				Hydric Soil	Present? Yes No
Remarks:								
,								
1								

Project/Site: Ball Hill Wind Project	City/County: Chautau	uqua County	Sampling Date: 5/27/16
Applicant/Owner: Ball Hill Wind Energy, LLC			Sampling Point: DP- アンス
Investigator(s): B. Viets, N. Dutcher	Section Township Ra		
Landform (hillslope, terrace, etc.): 14:11510 pe Loc			
Subregion (LRR or MLRA): LRR-R Lat: 42.4			
Subregion (LRR or MLRA): Lat: 72.9	5 1 1 10 Lon	g: 77,7500 9	Datum: 1772 00
Soil Map Unit Name: Bust Silt Loca, 3th			
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes <u>×</u> No _	(If no, explain in	Remarks.)
Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> significantly	disturbed? Are	'Normal Circumstances"	present? Yes X No
Are Vegetation <u>NO</u> , Soil <u>ND</u> , or Hydrology <u>NO</u> naturally pro		eded, explain any answ	
SUMMARY OF FINDINGS – Attach site map showing	sampling point l	ocations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes X No	is the Sampled		
Hydric Soil Present? Yes X No	within a Wetlar	nd? Yes	No
Wetland Hydrology Present? Yes X No	If ves. optional \	Wetland Site ID: <u> </u>	tand A624
Remarks: (Explain alternative procedures here or in a separate repo		Trodata oto ibi	
PSS Data Point for	Wetlers	130 24	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indi	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface So	il Cracks (B6)
Surface Water (A1) Water-Stained	Leaves (B9)	Drainage F	atterns (B10)
High Water Table (A2) Aquatic Fauna	(B13)	Moss Trim	Lines (B16)
Saturation (A3) Marl Deposits	B15)	Dry-Seaso	n Water Table (C2)
Water Marks (B1) Hydrogen Sulfi			urrows (C8)
	spheres on Living Roo	• •	Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Re			Stressed Plants (D1)
1 •	duction in Tilled Soils (ic Position (D2)
✓ Iron Deposits (B5)			quitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain	in Remarks)	 · · ·	graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		<u>≭</u> FAC-Neutr	ai rest (D3)
Field Observations: Surface Water Present? Yes No Depth (inches			
	·	otland Hydrology Pres	ent? Yes X No
Saturation Present? Yes No Depth (inches (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	·		ent 163 <u>7</u> 110 <u> </u>
Remarks:			
		0	
			•

Tree Stratum (Plot size: 30')	Absolute	Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. not Applicable				That Are OBL, FACW, or FAC: (A)
2				
4·				Total Number of Dominant '3
3				Species Across All Strata: (B)
4.				Percent of Dominant Species
,				That Are OBL, FACW, or FAC: (A/B)
5	-			(100)
6				Prevalence Index worksheet:
7				
7				Total % Cover of: Multiply by:
. 1	<u> </u>	= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 155')				FACW species x 2 =
Carrier of a control of a contr		V	Come	FAC species x 3 =
1. Comus anomum		7 42	PACU	-
2. Ulmus Americana	15	20	FACH	FACU species x 4 =
•		70		UPL species x 5 =
3. Populus tremulaides			FACH	Column Totals: (A) (B)
4. Fraxing penosylvanica-	5	NO	FACIL	
,				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
,	65	= Total Cov	ver	
Herb Stratum (Plot size: 5')				3 - Prevalence Index is ≤3.0 ¹
		vi .		4 - Morphological Adaptations ¹ (Provide supporting
1. Eguistan palmire	40	yes	PACW	data in Remarks or on a separate sheet)
2. Onoclen Sensibilis	ro	Yes	PACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	7.44	70		1
3. Comus amainum			PACU	¹Indicators of hydric soil and wetland hydrology must
4. Importions copensis	10	70	PACUL	be present, unless disturbed or problematic.
	5	N 6	PITC	Definitions of Vegetation Strata:
5. Luthania graninifolia				201111111111111111111111111111111111111
6. Francis penasylvenia	5	100	PACU	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Ranunculus acris	5	64	FAC	at breast height (DBH), regardless of height.
7. 100476/1005				Cardinalahash Maada alaata laas than Cir. DDII
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and greater than or equal to 5.20 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
40				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	100	= Total Co	ver	
Woody Vine Stratum (Plot size: 3 o')				
1. not applicable				
2.				Hydrophytic
				Vegetation Present? Yes No
3	· ——			Liegairt 182 NO TO
4				
	0			
		= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)					
Depth Matrix (inches) Color (moist) %	Redox Feature Color (moist) %		Texture	Remarks	
				IVEIIIdINS	
	7.5yzu16 5	· 	<u> </u>		
4-12" loge411 90	5y23/4 5	<u> </u>	· <i>C</i>		
	7.542516 5	<u> </u>			
12"-20" 7.5y511 60	10/125/6 25	C m	CL Sm	all grown component	
	2.59311 15	0 0			
	, , , , , , , , , , , , , , , , , , , 				
¹ Type: C=Concentration, D=Depletion, RI	M=Reduced Matrix, MS=Maske	d Sand Grains.		Pore Lining, M=Matrix.	
Hydric Soil Indicators:				oblematic Hydric Soils ³ :	
Histosol (A1) Histic Epipedon (A2)	Polyvalue Below Surface MLRA 149B)	e (S8) (LRR R,		.10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R)	
Black Histic (A3)	Thin Dark Surface (S9) (LRR R, MLRA 149B)		Peat or Peat (S3) (LRR K, L, R)	
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F			(S7) (LRR K, L, M)	
Stratified Layers (A5)	Loamy Gleyed Matrix (F	2)		ow Surface (S8) (LRR K, L)	
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	`		rface (S9) (LRR K, L) ese Masses (F12) (LRR K, L, R)	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	_'X Redox Dark Surface (F6 _ Depleted Dark Surface (•		odplain Soils (F19) (MLRA 149B)	
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)	•	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
Sandy Redox (S5)			Red Parent Material (F21)		
Stripped Matrix (S6)			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)		
Dark Surface (S7) (LRR R, MLRA 14	9B)		Other (Explai	n in Remarks)	
³ Indicators of hydrophytic vegetation and	wetland hydrology must be pres	sent, unless disturbed	or problematic.		
Restrictive Layer (if observed):					
Type:	_				
Depth (inches):			Hydric Soil Prese	nt? Yes <u>×</u> No	
Remarks:					
,					

Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: ろ)いい
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-723
	Section, Township, Range: Town of Handur
Landform (hillslone terrace etc.): 11:1151000 100	cal relief (concave, convex, none): Convex Slope (%): Z-5 %
School for (IRR and IRR) LRR-R Late 42 43	9724 Long: -79, 129271 Datum: NAD 83
Subregion (LRR of MLRA).	to EUO STOPER NWI classification: UP) and
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation 20, Soil 20, or Hydrology 20 significantly	
Are Vegetation <u>NO</u> , Soil <u>No</u> , or Hydrology <u>Ao</u> naturally pro	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No ×	is the Sampled Area
Hydric Soil Present? Yes No ×	within a Wetland? Yes No ×
Wetland Hydrology Present? Yes No ⊀	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate repo	rt.)
Woland Data Point	For westland A624
12000	,
	·
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Water-Stained	
High Water Table (A2) Aquatic Fauna	
Saturation (A3) Mari Deposits	
Water Marks (B1) Hydrogen Sulf	
	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of R	
	eduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Sur	
Inundation Visible on Aerial Imagery (B7) Other (Explain	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes No Depth (inches	2).
V	
(includes capillary fringe)	o).
Describe Recorded Data (stream gauge, monitoring well, aerial photos	tos, previous inspections), if available:
Remarks:	
	doradal
No wetland hydrology indicators	Objeves.
	·

	A L 1. 4 -	Dania ant	la dia atau	, , ,
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Prince Septime		V	FACE	Number of Dominant Species
		<u> </u>		That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:(B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
,	70	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =
1. Fraxinus americana	20	Y	FACU	FAC species x 3 =
2. Prinus Serottna	25	Y	FACU	FACU species x 4 =
2. Francis Seronnes	<u>~</u>		PACO	UPL species x 5 =
3,	·	 		Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7	-115			2 - Dominance Test is >50%
,	45	= Total Cov	er/	 **
Herb Stratum (Plot size:)				3 - Prevalence Index is ≤3.0¹
1. Rubus pensilvanicus	25	Y	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	10		FACU	Problematic Hydrophytic Vegetation¹ (Explain)
2. Fraxinus americana		- 1		I Toblematic Hydrophytic vegetation (Explain)
3. Prunus Serotina	<u>20</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
6				at breast height (DBH), regardless of height.
7				
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tail.
9				and ground than or equal to 0.20 ft (1 ff) tail.
10				Herb – All herbaceous (non-woody) plants, regardless of
11.			- 	size, and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in
12	سے نے		•	height.
<i>I</i>	55	_= Total Cov	ver	
Woody Vine Stratum (Plot size: 36')				
1. NOT Applicable				
				Hydrophytic
2				Vegetation Present? Yes No
3				Present? Yes No
4				
	9	_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
11 1 linds 11 is a sing well	1	. 11.00	FACI)
No hydrophytic vagetation ~ al	Specie	y are	1160	,
,				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)						
Depth <u>Matrix</u>	. Redox Features					
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks SI				
31	o					
8"+ Auger refusel	· 					
		·				
	//=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.				
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :				
Histosol (A1)	Polyvalue Below Surface (S8) (LRR R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)				
Histic Epipedon (A2) Black Histic (A3)	MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)				
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surface (S7) (LRR K, L, M)				
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Polyvalue Below Surface (S8) (LRR K, L)				
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Thin Dark Surface (S9) (LRR K, L)				
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Iron-Manganese Masses (F12) (LRR K, L, R)				
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Depleted Dark Surface (F7) Redox Depressions (F8)	Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)				
Sandy Redox (S5)	Redux Depressions (Fo)	Red Parent Material (F21)				
Stripped Matrix (S6)		Very Shallow Dark Surface (TF12)				
Dark Surface (S7) (LRR R, MLRA 149	9B)	Other (Explain in Remarks)				
31mdiantona of hardronkatia annotatian and a		an much la maskin				
Restrictive Layer (if observed):	vetland hydrology must be present, unless disturbed	or problematic.				
Type: NA						
Depth (inches):	···	Hydric Soil Present? Yes No 🗡				
Remarks:						
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
,						
		;				

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 5127116 Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP-72 U Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): B. V. 275, N. Dutcher Section, Township, Range: Town of Hanover Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): Local Subregion (LRR or MLRA): LRR-R Lat: 42,440930 Long: -79.11 4057 Datum: NAD 83 Soil Map Unit Name: Bust. 5: 1+ Loam 0 to 30/6 510000 NWI classification: Upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes ______ No _____ (If no, explain in Remarks.) Are Vegetation 20, Soil 20, or Hydrology 10 significantly disturbed? Are "Normal Circumstances" present? Yes 10 No Are Vegetation (), Soil (), or Hydrology () naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes K No within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Watland 1625 Yes ≯ No Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) PEM wetland in depression. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) Water-Stained Leaves (B9) ___ Surface Water (A1) ___ Aquatic Fauna (B13) ___ Moss Trim Lines (B16) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) ___ Marl Deposits (B15) ___ Saturation (A3) ___ Hydrogen Sulfide Odor (C1) ___ Crayfish Burrows (C8) Water Marks (B1) ___ Saturation Visible on Aerial Imagery (C9) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Sediment Deposits (B2) __ Presence of Reduced Iron (C4) __ Stunted or Stressed Plants (D1) ___ Drift Deposits (B3) Geomorphic Position (D2) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Algal Mat or Crust (B4) ➤ Shallow Aquitard (D3) ___ Thin Muck Surface (C7) ___ Iron Deposits (B5) Microtopographic Relief (D4) ___ Inundation Visible on Aerial Imagery (B7) __ Other (Explain in Remarks) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No Depth (inches): Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes 🔀 No ____ Yes ____ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VEGETATION – Use scientific names of plants.

	Absoluts	Dandana	1-4:		
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksheet:	
,				Number of Dominant Species	:
1. not Applicable				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant	
3					В)
					-/
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: (A/B)
6	•				-
				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
		= Total Cov	er	OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =	
				FAC species x3 =	
1. not copt cable				FACU species x 4 =	1
2				I	
3				UPL species x 5 =	
				Column Totals: (A)	(B)
4					
5				Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indicators:	
7				∠ 1 - Rapid Test for Hydrophytic Vegetation	
,				2 - Dominance Test is >50%	
6 '		= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹	
Herb Stratum (Plot size: 5) 1. Onoclec Sensibilis	25	Υ	FACW	4 - Morphological Adaptations¹ (Provide suppo	orting
		. 1		data in Remarks or on a separate sheet)	
2. Carex flava	76	<u>N</u>	OBL	Problematic Hydrophytic Vegetation¹ (Explain))
3. Glyceria acutiflora	25	Y	OBL	¹ Indicators of hydric soil and wetland hydrology mu	ıst
4. Fraxinus pennsylvanica	ँड	N	FACW	be present, unless disturbed or problematic.	
4. Traditions			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Definitions of Vegetation Strata:	
5				Definitions of Vegetation Strata.	İ
6				Tree - Woody plants 3 in. (7.6 cm) or more in dian	neter
7				at breast height (DBH), regardless of height.	
				Sapling/shrub – Woody plants less than 3 in. DBi	,
8				and greater than or equal to 3.28 ft (1 m) tall.	'
9					ŀ
10				Herb – All herbaceous (non-woody) plants, regardless	of
11				size, and woody plants less than 3.28 ft tall.	İ
				Woody vines - All woody vines greater than 3.28 ft in	
12	1		•	height.	
	<u>65</u>	= Total Cov	/er		
Woody Vine Stratum (Plot size:)					
1. not applicable			·	Hydrophytic	
2				Vegetation	
3				Present? Yes X No	
4.					
	0	= Total Co	ver		
Remarks: (Include photo numbers here or on a separate		. 1010100		<u> </u>	
Temano. (mondo prioto namboro noro di en a coparato	011001.7				
					ļ

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the in	ndicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix			ox Features	- 1	1 2	***		Damania	
(inches)	Color (moist)	<u>_%_</u> >∞%	Color (moist)			_Loc²	Texture S ()		Remarks	- 6:
7"12"	10925/1							arden	ics with	· piotile
13"十篇"	2137611	7346	z.syele	1200						
13 TER	Aug - Keli	vscL.	within Cla	o coct	<u></u>	leyer				
									·	
										
¹Type: C=Cc	ncentration D=Den	letion RM:	=Reduced Matrix, M	S=Masked	Sand Gr	aine	2i ocation	· PI =Pore	Lining, M=Matr	
Hydric Soil I		iodoti, i tivi	Treduced Matrix, IV	IO-IVIASKOU	Oand Oi	ино.			natic Hydric S	
Histosol	• •		Polyvalue Beld		(S8) (LR I	R,			LRR K, L, MLF	
Histic Ep	ipedon (A2) stic (A3)		MLRA 1498 Thin Dark Surf	•	RR R. M	RA 149R)			ox (A16) (LRR or Peat (S3) (L l	
Hydroge	n Sulfide (A4)		Loamy Mucky				Dark S	urface (S7)	(LRR K, L, M)	
	Layers (A5)	~ (811)	Loamy Gleyed)				Surface (S8) (Ll (S9) (LRR K, I	
	Below Dark Surfac rk Surface (A12)	e (A11)	∠ Depleted Matri _ Redox Dark St						/(39) (LKK K, I //asses (F12) (L	
Sandy M	ucky Mineral (S1)		Depleted Dark		7)		Piedm	ont Floodpla	ain Soils (F19)	(MLRA 149B)
	leyed Matrix (S4) edox (S5)		Redox Depres	sions (F8)				Spodic (TA) arent Mater	6) (MLRA 144<i>A</i> ial (F21)	A, 145, 149B)
1	Matrix (S6)								Surface (TF12	2)
Dark Sur	face (S7) (LRR R, I	VLRA 1491	B)				Other	(Explain in I	Remarks)	
Indicators of	hvdrophytic vegeta	tion and w	etland hydrology mu	st be prese	ent. unles	s disturbed	or problematic	o.		
	ayer (if observed)									
Type:	CIAY									
Depth (inc	hes):						Hydric Soil	Present?	Yes _X_	No
Remarks:										
,										
									•	
1								_		

Project/Site: Ball Hill Wind Project	City/County: Chai	utauqua County	Sampling Date: 5127116
Applicant/Owner: Ball Hill Wind Energy, LLC			Sampling Point: DP- 725
Investigator(s): B. Visos, N. Outcher	Section, Township.	Range: Town of	Hanover
Landform (hillslope, terrace, etc.): H:1151cg2			
Subregion (LRR or MLRA): LRR-R Lat: 42.	440859	Long: -79,11376	Datum: NAD 83
Soil Map Unit Name: Bush S. 1+ Loam, C			
Are climatic / hydrologic conditions on the site typical for this tim		,	
Are Vegetation <u>D</u> , Soil <u>D</u> , or Hydrology <u>D</u> signif	-	Are "Normal Circumstances"	present? Yes X No
Are Vegetation ~O, Soil NO, or Hydrology NO natura	ally problematic? (If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling poi	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Samp	pled Area	
Hydric Soil Present? Yes No	within a We	etland? Yes	No ×
Wetland Hydrology Present? Yes No)		nal Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separat		==-	
upland Octo po	~ 187 W	etions HOSS	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indi	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	apply)	Surface So	
· · · · —	tained Leaves (B9)	Drainage P	
High Water Table (A2) Aquatic		Moss Trim	
Saturation (A3) Marl De			n Water Table (C2)
	en Sulfide Odor (C1)	Crayfish Bo	' '
, <u> </u>	l Rhizospheres on Living l e of Reduced Iron (C4)	· · —	Visible on Aerial Imagery (C9) Stressed Plants (D1)
1	ron Reduction in Tilled Sc		ic Position (D2)
	ck Surface (C7)	Shallow Ac	
	xplain in Remarks)		graphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	,	FAC-Neutr	3
Field Observations:			
Surface Water Present? Yes No _X Depth (inches):		
Water Table Present? Yes No X Depth (inches):		
Saturation Present? Yes No _X Depth ((inches):	Wetland Hydrology Pres	ent? Yes No <u>X</u>
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aeria	al photos, previous inspec	l tions), if available:	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
Remarks:	,		
No hydrology indicators me	et observed.		
, 9)	,		
·			
	٠		
T. Control of the con			

Tree Stratum (Plot size: 3c')	Absolute	Dominant		Dominance Test worksheet:
iree Stratum (Plot size:)		Species?		Number of Dominant Species
1. 15uga Canadensis	<u> 65</u>	<u> </u>	FACU	That Are OBL, FACW, or FAC:(A)
2. Acer Saccharum	<i>3</i> 0	Υ	FIACU	
				Total Number of Dominant Species Across All Strata: (B)
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
	95	= Total Co	ver	OBL species x 1 =
		- Total Co	10,	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15')	1 ~~	v		
1. tagus granditolia	15	1	FACU	FAC species x 3 =
2. Tsuga Canadensis	5	N	FACU	FACU species x 4 =
Acad Care h	10	V	FACU	UPL species x 5 =
3. Acer Saccharum	10		PACO	Column Totals: (A) (B)
4				()
				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
Type: Market and the second of	30	T-1-1-0		2 - Dominance Test is >50%
<i>~</i> '	<u> </u>	= Total Co	ver	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5)				4 - Morphological Adaptations¹ (Provide supporting
1. Prunus Serotina	S	N	FACU	data in Remarks or on a separate sheet)
2. Rubus pensilvanious	5	N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
		10		Problematic Hydrophytic vegetation (Explain)
3. Fagus grandiplia	15	<u> </u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Acer Saccharum	S	N	FACU	be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
5				Definitions of Vegetation Strata.
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
				On the state of the Control of the C
8			-	Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and grouter than or equal to 0.20 ft (1 m) tail.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12.				height.
	30	= Total Co		
2.1		_= Total Co	ver	
Woody Vine Stratum (Plot size:)				
1. not Applicable				
				Hydrophytic
2				Vegetation
3				Present? Yes No
Δ				
	1	=		
	<u> </u>	_ = Total Co	over	
Remarks: (Include photo numbers here or on a separate	-			
Vegetation is not hydroph	n. Hz.	all sa	מאו מש	and FACI
Vegetation is not require	1911.	all Spe	Circs	are Tradi
		•		

Profile Description: (Describe to the dep	th needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type ¹ Loc ²	Technic
0'-Z' 1092 Z 1 100	Color (moist) % Type ¹ Loc ²	Texture Remarks
2"-7" Syr416 100		SIL
7'-14" loge 4/6 100		SEL
14"-18" 10y2416 100		Sec mixed with grand
Rock Refuse @18"		
1Type: C=Concentration, D=Depletion, RM=	Reduced Matrix MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	Tradesa mains, mo madica sana shana.	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2)	Polyvalue Below Surface (S8) (LRR R, MLRA 149B)	2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)
Black Histic (A3)	Thin Dark Surface (S9) (LRR R, MLRA 149B)	
Hydrogen Sulfide (A4) Stratified Layers (A5)	Loamy Mucky Mineral (F1) (LRR K, L)	Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L)
Depleted Below Dark Surface (A11)	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)	Polyvaide Below Surface (S6) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)
Thick Dark Surface (A12)	Redox Dark Surface (F6)	Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Depleted Dark Surface (F7) Redox Depressions (F8)	Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S5)	(Caba Doprosolito (Co)	Red Parent Material (F21)
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 1498	3)	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
³ Indicators of hydrophytic vegetation and we	tland hydrology must be present, unless disturbed	or problematic.
Restrictive Layer (if observed):		
Type: NA		Hydric Soil Present? Yes No
Remarks:		Hydric Soil Present? Yes No _X
, , , , , , , , , , , , , , , , , , , ,	for auger starting at 18" &	out does not act as a
restrictive layer for	<u> </u>	
is the layer 10	valie perano	
,		

Project/Site: Ball Hill Wind Project City/C	County: Chautauqua County Sampling Date: 5 27 16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 776
Investigator(s): B. V. ars, N. D. tch- Section	
	lief (concave, convex, none): Concave Slope (%): COC/
Landform (nillslope, terrace, etc.): Utates in the Local re	13 - 19 111659 Stope (%). — 17
Subregion (LRR or MLRA): LRR-R Lat: 42,4405	291 Long: 77.111001 Datum: NAD 00
Soil Map Unit Name: Cris-Chautaugua Sitt loam,	5-8 16 Stopes NWI classification: UPICIAL
Are climatic / hydrologic conditions on the site typical for this time of year?	res No (If no, explain in Remarks.)
Are Vegetation	
Are Vegetation $n = 0$, Soil $n = 0$, or Hydrology $n = 0$ naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sar	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland A626
Remarks: (Explain alternative procedures here or in a separate report.)	ii yoo, opilonia riolland olo iib
Isolated perm in a	. Forest.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soll Cracks (B6)
Surface Water (A1) Water-Stained Leav	• •
High Water Table (A2) Aquatic Fauna (B13	·
Saturation (A3) Marl Deposits (B15)	i i
Water Marks (B1) Hydrogen Sulfide O	· · ·
<u> </u>	eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) and Iron (C4) Stunted or Stressed Plants (D1)
Drift Deposits (B3) Presence of Reduce Algal Mat or Crust (B4) Recent Iron Reducti	
Iron Deposits (B5) Thin Muck Surface	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes NoX Depth (inches):	
Saturation Present? Yes No X Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, principle in the control of	revious inspections), if available:
Remarks:	
Tomato,	· ·

	A b = = 14 a	Dania and Indianta	T	
Tree Stratum (Plot size: 30')	% Cover	Dominant Indicator Species? Status	Dominance Test worksheet:	
			Number of Dominant Species	
1. not Applicable			That Are OBL, FACW, or FAC:	(A)
2			Total Number of Dominant	
3				(B)
				,
4			Percent of Dominant Species	(a (m)
5			That Are OBL, FACW, or FAC:	(A/B)
6			Barrel and a land a section of	
			Prevalence Index worksheet:	
7			Total % Cover of: Multiply by:	
		= Total Cover	OBL species x 1 =	
Sapling/Shrub Stratum (Plot size: i5')			FACW species x 2 =	
1. not Applicable			FAC species x 3 =	_
• •			FACU species x 4 =	
2	 .		UPL species x 5 =	
3			Column Totals: (A)	
4			Column Totals (A)	(D)
			Prevalence Index = B/A =	
5			Undroubido Vocatation Indicatana	
6			Hydrophytic Vegetation Indicators:	
7				
	0	= Total Cover	2 - Dominance Test is >50%	
Herb Stratum (Plot size:5 /)			3 - Prevalence Index is ≤3.0 ¹	
	20	V 001	4 - Morphological Adaptations ¹ (Provide suppo	orting
1. Carex gynandra	$\frac{\alpha b}{\alpha b}$	Y OBL	data in Remarks or on a separate sheet)	
2. Onoclea Sensibilis	10	N FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Luncus effusus	10	N OBL	¹ Indicators of hydric soil and wetland hydrology mu	ıet
	<u> </u>	N FACW	be present, unless disturbed or problematic.	JOI
4. Fraxinus pennsylvanica		1710-		
5. Glyceria acutiflora	13	Y OBL	Definitions of Vegetation Strata:	
6			Tree ~ Woody plants 3 in. (7.6 cm) or more in diar	neter
7			at breast height (DBH), regardless of height.	
			Sapling/shrub - Woody plants less than 3 in. DBI	Н
8			and greater than or equal to 3.28 ft (1 m) tall.	
9				•
10			Herb – All herbaceous (non-woody) plants, regardless size, and woody plants less than 3.28 ft tall.	of
11				
			Woody vines - All woody vines greater than 3.28 ft in	
12	100		height.	
,	<u> </u>	= Total Cover		
Woody Vine Stratum (Plot size: 30')				
1. not Applicable				
			Hydrophytic	
2			Vegetation	
3			Present? Yes X No	
4.				
	0	= Total Cover		
Remarks: (Include photo numbers here or on a separate	about \	Total Cover		
Remarks: (include photo numbers here of on a separate	sneet.)		had and Product	
Vegetation is hydric, meeting	both	the Fac-N	entral TEST and Rapid KST.	
vigencia. 13 rigories, in the				

Profile Desc	ription: (Describe	to the depti	h needed to docur	nent the ir	ndicator	or confirm	n the absence	of Indicators.)
Depth	Matrix (maint)			x Features	_ 1	. 2	 .	.
(inches) の"てん"	Color (moist)	95%	Color (moist) ちりたりし	- % = b/0	Type ¹	_Loc²	Texture SCL	<u>Remarks</u>
2"-11"	7.54613		104R 5/8			m	SCL	
11"-16"	7.54613		1042518					with grownel
								
							· · · · · · · · · · · · · · · · · · ·	
								
¹ Type: C=Co	oncentration, D=Depi	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.		n: PL=Pore Lining, M=Matrix.
Histosol			Polyvalue Belo	w Surface	(S8) (I RE	R		Muck (A10) (LRR K, L, MLRA 149B)
Histic Ep	oipedon (A2)		MLRA 149B)			Coast	Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3) n Sulfide (A4)	-	Thin Dark Surfa				-	Mucky Peat or Peat (S3) (LRR K, L, R)
	Layers (A5)	_	Loamy Mucky I Loamy Gleyed			, L)		Surface (S7) (LRR K, L, M) alue Below Surface (S8) (LRR K, L)
	Below Dark Surface	∍ (A11) _	Depleted Matrix		•			Dark Surface (S9) (LRR K, L)
	ark Surface (A12)	-	左 Redox Dark Su					langanese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1) ileyed Matrix (S4)	-	Depleted Dark Redox Depress		7)			nont Floodplain Soils (F19) (MLRA 149B)
	edox (S5)	-	Redox Depless	sions (Fo)				Spodic (TA6) (MLRA 144A, 145, 149B) Parent Material (F21)
1	Matrix (S6)							Shallow Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, N	ILRA 149B))				Other	(Explain in Remarks)
	hydrophytic vegetat		land hydrology mus	st be prese	nt, unless	disturbed	d or problemati	C.
Type:	NA							
Depth (inc	ches):		***				Hydric Soi	I Present? Yes <u>X</u> No
Remarks:								
,								

Project/Site: Ball Hill Wind Project City/C	county: Chautauqua County Sampling Date: 5)27116					
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point; DP- 72.7-					
Investigator(s): B. Vints, N. Dutcher Section						
Landform (hillslope, terrace, etc.):						
Subregion (LRR or MLRA): LRR-R Lat: 42.440486 Long: -79.111822 Datum: NAD 83						
Subregion (LRR or MLRA): LRR-R Lat: 72.970786 Long: 177,111822 Datum: 1700 05 Soil Map Unit Name: Ck3 - Chautauqua SiH loam , 3-82 slopes NWI classification: Pland						
Are climatic / hydrologic conditions on the site typical for this time of year? Y	esX_ No (If no, explain in Remarks.)					
Are Vegetation 🔼 , Soil 📈 , or Hydrology 🕰 significantly distur	bed? Are "Normal Circumstances" present? Yes X No					
Are Vegetation NO, Soil NO, or Hydrology NO naturally problems	atic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sam	ppling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No X	is the Sampled Area					
Hydric Soil Present? Yes No X	within a Wetland? Yes No X					
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:					
Remarks: (Explain alternative procedures here or in a separate report.)						
While Deta Point for N	settled A626.					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) Water-Stained Leave						
High Water Table (A2) Aquatic Fauna (B13)						
Saturation (A3) Marl Deposits (B15)						
Water Marks (B1) Hydrogen Sulfide Od						
Sediment Deposits (B2) Oxidized Rhizospher						
Drift Deposits (B3) Presence of Reduce						
Algal Mat or Crust (B4) Recent Iron Reduction Iron Deposits (B5) Thin Muck Surface (in the control of the	·					
Iron Deposits (B5) Thin Muck Surface (Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	,					
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)					
Field Observations:						
Surface Water Present? Yes No _X Depth (inches):						
Water Table Present? Yes No Depth (inches):						
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No 🗴					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:					
Remarks:						
No hydrology indicators found.						
, , , , , , , , , , , , , , , , , , , ,						
	·					

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 36 ²)		Species?		Dominance Test worksheet:
Parassississis	***************************************	<u> </u>	FACU	Number of Dominant Species
1. Knings Seroting				That Are OBL, FACW, or FAC:(A)
2. Acer Saccharum	40		FACU	Total Number of Dominant
3				Species Across All Strata:
0				(-)
4				Percent of Dominant Species That Are OBL FACW or FAC: (A/B)
5				That Are OBL, FACW, or FAC:(A/B)
	•			
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov	or	OBL species x 1 =
ال مني		- 10tai 00v	OI .	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)5 ¹	~	v		1
1. Prinus Serotina	S	Y	FAKU	FAC species x 3 =
				FACU species x 4 =
2	 .			UPL species x 5 =
3				Column Totals: (A) (B)
				Column rotals (A) (B)
4				Prevalence Index = B/A =
5				Prevalence index = b/A =
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
	5	= Total Cov	/er	1 —
Herb Stratum (Plot size:)				3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)	فيم	.	20.	4 - Morphological Adaptations ¹ (Provide supporting
1. Acer pensylvanicum			FACU	data in Remarks or on a separate sheet)
2. Rubus pensilvanicus	S	√.	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Acar Coul o		7		4
3. Acer Sauharum			FACU	¹Indicators of hydric soil and wetland hydrology must
4. Prunius Serotina		<u> </u>	FACU	be present, unless disturbed or problematic.
5.				Definitions of Vegetation Strata:
0			· ··	
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
				Sapling/shrub - Woody plants less than 3 in. DBH
8				and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb - All herbaceous (non-woody) plants, regardless of
10,				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	20	= Total Co		
2 (= Total Co	ver	
Woody Vine Stratum (Plot size: 30')				
1. not Applicable				
i				Hydrophytic
2				Vometation
3.				Present? Yes No X
4				·
		_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
, , , ,	-		•	
No hydro vegetation obse	(vec) 1	ill soe	cies h	ove on indicator of FACU.
100 Mario Vegetario 3350	. , , ,	in Spec		, · · ·
1				

Profile Desc	ription: (Describe	to the dep	th needed to docun	ent the indic	ator or co	nfirm t	the absence of indica	tors.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	<u>Features</u>	no ¹ for	o ²	Texture	Remarks	
0"-2"	- 1				pe Lo		SIL	Remarks	
2"-9"	1042416	100					SIL		
9"-20"		100					SCL		
	10912516	100				 -	<u> </u>		
		·							
			<u></u>						
									
									
			***					**************************************	
		letion, RM	Reduced Matrix, MS	=Masked San	d Grains.		² Location: PL=Por	e Lining, M=Matrix.	
Hydric Soil I	ndicators:						Indicators for Prob	lematic Hydric Soils³:	
Histosol	(A1) ipedon (A2)		Polyvalue Below MLRA 149B)		(LRR R,) (LRR K, L, MLRA 149B) edox (A16) (LRR K, L, R)	
Black His			Thin Dark Surfa		R, MLRA	149B)		at or Peat (S3) (LRR K, L, R)	
	n Sulfide (A4)		Loamy Mucky M	lineral (F1) (L l			Dark Surface (S	7) (LRR K, L, M)	
	l Layers (A5) I Below Dark Surfac	- (Δ11)	Loamy Gleyed Matrix					v Surface (S8) (LRR K, L) ce (S9) (LRR K, L)	
	rk Surface (A12)	C (A11)	Redox Dark Sur					Masses (F12) (LRR K, L, R)	
	ucky Mineral (S1)		Depleted Dark S	Surface (F7)			Piedmont Floodplain Soils (F19) (MLRA 149B)		
	leyed Matrix (S4) edox (S5)		Redox Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	Matrix (S6)						Red Parent Mat	eriai (F21) ark Surface (TF12)	
	face (S7) (LRR R, M	ILRA 1498	3)				Other (Explain in		
³ Indicators of	hydrophytic vegetat	ion and we	etland hydrology mus	t be present, u	ınless distı	urbed c	or problematic.		
Restrictive L	ayer (if observed):				 		····		
Type:	N/A	-							
Depth (inc	nes):						Hydric Soil Present	7 Yes No _ X	
M	ut a hydric	Soil.							
,									
								,	

Project/Site: Ball Hill Wind Project City/C	County: Chautauqua County Sampling Date: 5/27/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-728
• •	
Investigator(s): B. V.273, N. Distribut Section	
Landform (hillslope, terrace, etc.): 1020+51000 Local reli	ief (concave, convex, none): Loncone Slope (%): 0 -1%
Subregion (LRR or MLRA): LRR-R Lat: 42.44140	
Soil Map Unit Name: Valois grovelly S. 1+ loam,	2011- NWI classification: Pland
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation No., Soil No., or Hydrology No. significantly distur	•
Are Vegetation 1990, Soil 1990, or Hydrology 1990, naturally problems	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area ·√
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present?	If yes, optional Wetland Site ID: Wortland REZ7
Remarks: (Explain alternative procedures here or in a separate report.)	ir yes, optional frontand one to.
PFO wetland duta point.	·
LIVEROLOGY	
HYDROLOGY	Occupation to displace (window) of the area tired)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Number of the state of t	, .
∠ High Water Table (A2) Aquatic Fauna (B13) Advance Fauna (B13)	
✓ Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide Oc	dor (C1) Crayfish Burrows (C8) res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce Algal Mat or Crust (B4) Recent Iron Reduction	, ,
Iron Deposits (B5) Thin Muck Surface (!
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	<u> </u>
Sparsely Vegetated Concave Surface (B8)	✓ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes X No Depth (inches): 4	υ
Saturation Present? Yes X No Depth (inches): O	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
·	·
·	

Tree Stratum (Plot size: 30')		Dominant Species?		Dominance Test worksheet:
				Number of Dominant Species
1. Betula alleghaniensis	6000	A67	FAL	That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant .
3				Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)
5,				mar Ale OBE, I AGW, GIT AG (A/B)
6			· ————	Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Co		
) e: '	-00	= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15)				FACW species x 2 =
1. Betwee alleghaniersis	50	125	FAC	FAC species x 3 =
2. Tsinga Coraderas		Yes	PACH	FACU species x 4 =
•				UPL species x 5 =
3		 	•	Column Totals: (A) (B)
4				.,
5				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6,		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
7				1 - Rapid Test for Hydrophytic Vegetation
	30	= Total Co	ver	∠ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')		•		3 - Prevalence Index is ≤3.0 ¹
	7.	V 1	C \	4 - Morphological Adaptations ¹ (Provide supporting
	70	yes	FALL	data in Remarks or on a separate sheet)
2. Onoclea Sensibilis	10	70	FACIN	Problematic Hydrophytic Vegetation ¹ (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4,				
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
			-	at breast height (DBH), regardless of height.
7				
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and greater than or equal to 0.20 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				Woody vines – All woody vines greater than 3.28 ft in
12				height.
	<u>80</u>	= Total Co	ver	
Woody Vine Stratum (Plot size: 36')		=		
1. hot opplicable	·	•		Harden what do
2				Hydrophytic Vegetation
3				Present? Yes X No
4				,
4				
		_ = Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			-
Trees he rooted on	~ :((T) (T) (O)	arcon.	e Lighs
11 - 13 (Ne TOOKE EN	11 - 10-		1,-1-1	- J

Depth Matrix Color (most) % Color (most) % Type Loc ² Texture Remarks	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soll Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Black Histic (A3) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S5) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Sandy Gleyed Matrix (S6) Dark Surface (S7) Thin Dark Surface (T12) Cherrical Mucky Mineral (S1) Sandy Gleyed Matrix (S6) Dark Surface (S7) Thin Dark Surface (T12) Other (Explain in Remarks) No Hydric Soil Present? Yes No			Redox F	<u>eatures</u>				
*Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Hydric Soil Indicators: Histosol (A1) Histosol (A2) Black Histic (A3) Histo (A3) Hydrogen Sulfide (A4) Straffied Layers (A5) Depleted Below Dark Surface (S9) (LRR R, L) Depleted Below Dark Surface (S9) (LRR K, L) Thin Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (A56) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (A56) Sandy Redox (A56) Sandy Redox (A56) Sandy Redox (A56) Sandy Redox (A56) Sandy Redox (A56) Sandy Redox (A56) Sandy Redox (A56) Sandy Gleyed Matrix (S4) Sandy Redox (A56) Sandy Redox (A56) Sandy Gleyed Matrix (S4) Sandy Redox (A56) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (A56) Sandy Gleyed Matrix (S6) Sandy Redox (A56) Sandy Redox (A56) Sandy Gleyed Matrix (A4) Sandy R		Color (moist) %	Color (moist)	%	Type ¹	Loc2	Texture	Remarks
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soll Indicators: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils (Fig. Hydric Soil LRR K, L, M;	<u>ల ''- జ ''</u>	Pea+		 .				
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soll Indicators: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils¹: Indicators for Problematic Hydric Soils (Fig. Hydric Soil LRR K, L, M;	m'120"	1000 211 mucky	Pacit					
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No					•			
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No								
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No								
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No				 _				
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No								
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No								· · · · · · · · · · · · · · · · · · ·
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No								
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No								
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No								
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No	ļ							
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No								•
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No								
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No				,				
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No						·····		
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed): Type: N/A Depth (inches): MRA 149B) **Indicators Soil Irresent? Yes No	¹ Type: C=Co	ncentration, D=Depletion, RM	=Reduced Matrix, MS=	Masked S	Sand Gra	ins.	² Location:	PL=Pore Lining, M=Matrix.
Histic Epipedon (A2) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Endown Mucky Mineral (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR K, L, M) MERA 149B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S9) (LRR K, L, R) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Redox (S7) (LRR R, MLRA 149B) Surface (S7) (LRR R, MLRA 149B) Surface (S7) (LRR R, MLRA 149B) Sandy Redox (S7) (LRR R, MLRA 149B) Surface (S7) (LRR R, MLRA 149B) Surface (S7) (LRR R, MLRA 149B) Hydric Soil Present? Yes No						······ - ········		
Black Histic (A3)	Histosol	(A1)	Polyvalue Below 8	Surface (S8) (LRR	R,	2 cm Mu	ck (A10) (LRR K, L, MLRA 149B)
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Pepleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Pepleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. *Restrictive Layer (if observed): Type: N/A Depth (inches): Hydric Soil Present? Yes No	Histic Ep	ipedon (A2)	MLRA 149B)					
Stratified Layers (A5)								
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: N/A Depth (inches): Hydric Soil Present? Yes No					(LRR K,	L)		
Thick Dark Surface (A12)	L							
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. *Restrictive Layer (if observed): Type: N/A Depth (inches): Hydric Soil Present? Yes No								
Sandy Gleyed Matrix (S4)Redox Depressions (F8)Red Parent Material (F21)Stripped Matrix (S6)Stripped Matrix (S6)Dark Surface (S7) (LRR R, MLRA 149B)Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:NA Depth (inches):					' \			
Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed):					,			
Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: N/A Depth (inches): Hydric Soil Present? Yes No				(,				
³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:NA Depth (inches): Hydric Soil Present? YesNo								
Restrictive Layer (if observed): Type:NA Depth (inches): Hydric Soil Present? YesNo	Dark Sur	face (S7) (LRR R, MLRA 149 I	3)				Other (E	xplain in Remarks)
Restrictive Layer (if observed): Type:NA Depth (inches): Hydric Soil Present? YesNo	3							
Type: N/A Depth (inches): Hydric Soil Present? Yes No			etland hydrology must b	e preser	nt, unless	disturbed	or problematic.	
Depth (inches): Hydric Soil Present? Yes No		- ',						
								✓
Remarks:	Depth (inc	hes):					Hydric Soil P	resent? Yes No
	Remarks:							
	,							

Project/Site: Ball Hill Wind Project City/C	County: Chautauqua County Sampling Date: 5)27116 State: NY Sampling Point: DP-724
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 724
Investigator(s): 3. (225, N. Out a) Section Landform (hillslope, terrace, etc.): 11.115 CR2 Local rel Subregion (LRR or MLRA): LRR-R Lat: 42, 4412 Soll Map Unit Name: Value Soll Name: Value Soll Nam	on, Township, Range: Town of Hemouse lief (concave, convex, none): Convex Slope (%): 3.59 17 Long: -79.111394 Datum: NAD 83 18 No NWI classification: VPlance (es X No (If no, explain in Remarks.) The Remarks Slope (%): 3.59 No No No No No No No No No No No No No N
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1)	Moss Trim Lines (B16) Dry-Season Water Table (C2) dor (C1) Crayfish Burrows (C8) res on Living Roots (C3) defined fron (C4) on in Tilled Soils (C6) Shallow Aquitard (D3)
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No X Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	Wetland Hydrology Present? Yes No revious inspections), if available:
Remarks: No hydro indicators observed.	

		<u> </u>	,
Tree Stratum (Plot size:)	Absolute	Dominant Indica Species? Statu	
			Number of Dominant Species
1. TShya canadensis	<i>'</i> >0	Yes FAC	That Are OBL, FACW, or FAC: (A)
2. Acer Saccharum	30	YES FAC	h
			Total Number of Dominant Species Across All Strata: (B)
3			Species Across Air Strata.
4			Percent of Dominant Species That Are OBL, FACW, or FAC:
5			That Are OBL, FACW, or FAC: (A/B)
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
	A.A.	= Total Cover	OBL species C x1 = C
	00	- Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			PACVV species XZ =
1. Fages gardiblia	20	YES FAL	FAC species 15 x3 = 45
1 _			FACU species 120 x4 = (180
2	 .		UPL species5 x5 =25
3			— Column Totals: 14c (A) 55c (B)
4.			Column Totals: 1912 (A) 335 (B)
			Prevalence Index = B/A = 3, 9 3
5			Hydrophytic Vegetation Indicators:
6			
7			1 - Rapid Test for Hydrophytic Vegetation
	20	= Total Cover	2 - Dominance Test is >50%
		, rotal covol	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size:)	سيرر	V	4 - Morphological Adaptations ¹ (Provide supporting
1. Parathelypteris noveborner			
2. Frys grand. Folice	16	YES FAL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Beer Saccharum	5	170 FM	
4. Acer platancides	5	NO 4P	be present, unless disturbed or problematic.
5. Rubus allegheniersis	5	NO FAC	
6			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
			at breast height (DBH), regardless of height.
7			O W the state to the state of the s
8			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9			and greater than or equal to 5.26 it (1 iii) tail.
			Herb - All herbaceous (non-woody) plants, regardless of
10			size, and woody plants less than 3.28 ft tall.
11			
12.			Woody vines – All woody vines greater than 3.28 ft in height.
,	1/2		neight.
	40	= Total Cover	
Woody Vine Stratum (Plot size: う ン)			
1. DOT Applicable			
1. TOT TIPPITELISTE			Hydrophytic
2			── Vegetation
3			Present? Yes No
4			
	<u> </u>	_ = Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		
1			

Profile Desc	ription: (Describe t	o the dept	h needed to docume	ent the indicator o	or confirm t	he absence of i	ndicators.)	
Depth	Matrix	 .		Features _	. 2		~ '	
(inches)	Color (moist)		Color (moist)			Texture	Remarks	
0'20'	7,5424/1					ラエレ Sエレ		
7"-20"	loge 516	100						
								
								:
								
								
								
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS=	=Masked Sand Gra	ains.		PL=Pore Lining, M=Ma r Problematic Hydric	
Hydric Soil			Polygoluo Polog	Surface (SR) (LDE	D D		k (A10) (LRR K, L, M	
Histosol	oipedon (A2)	•	MLRA 149B)	Surface (S8) (LRF	、Γ .,		airie Redox (A16) (LR	-
	stic (A3)			e (S9) (LRR R, M I	RA 149B)	5 cm Muc	ky Peat or Peat (S3)	(LRR K, L, R)
	n Sulfide (A4)			neral (F1) (LRR K	, L)		ace (S7) (LRR K, L, I	
	Layers (A5)		Loamy Gleyed M			Polyvalue Below Surface (S8) (LRR K, L)		
	d Below Dark Surface ark Surface (A12)	(A11) .	Depleted Matrix (Redox Dark Surf			Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)		
	fucky Mineral (S1)	•	Depleted Dark S			Piedmont Floodplain Soils (F19) (MLRA 149B)		
	Bleyed Matrix (S4)		Redox Depression			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
	Redox (S5)						ent Material (F21)	
	Matrix (S6)					•	llow Dark Surface (TF	12)
Dark Su	rface (S7) (LRR R, M	LKA 149B)			Other (Ex	rplain in Remarks)	-
3Indicators o	f hydrophytic vegetati	on and we	tland hydrology must	be present, unless	s disturbed	or problematic.		
Restrictive	Layer (if observed):							
Туре:	N/A							
Depth (in	ches):					Hydric Soil Pr	resent? Yes	No <u> </u>
Remarks:								
٨	lot a hydric	Soil						
	10, 01 1190 12	O. 7,						
								•
,				*				
i								

	City/County: Chautauqua County Sampling Date: 6/6/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-730
Investigator(s): B. Vints/N. Dutche :	Section, Township, Range: TOWN OF HOUSE
Landform (hillslope, terrace, etc.): Depression Daingur Loc	al relief (concave, convex, none): Concave Slope (%): Oo/o
Subregion (LRR or MLRA): LRR-R Lat: 42.14396	55 Long: <u>-79.128 139</u> Datum: NAD 83
Soil Map Unit Name: Chantaugus Silt Loam,	3 to 8% Sloom NWI classification: UPland
Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes No (If no, explain in Remarks.)
Are Vegetation NO, Soil NO, or Hydrology NO significantly	
Are Vegetation NO, Soil NO, or Hydrology NO naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesX No	is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland A628
Remarks: (Explain alternative procedures here or in a separate repor	
lines DEM westland	vittin a Pasture Field
Lipeti (Constitution)	01 1 Fin to 103 inoc 1 1 2 10 -
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained I	Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna	
Saturation (A3) Mari Deposits (I	
Water Marks (B1) Hydrogen Sulfice	
	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Re	
	· · · · · · · · · · · · · · · · · · ·
Iron Deposits (B5) Thin Muck Surf Inundation Visible on Aerial Imagery (B7) Other (Explain	
Sparsely Vegetated Concave Surface (B8)	K FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches));
Water Table Present? Yes No _X Depth (inches)):
Saturation Present? Yes No _X Depth (inches)): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	ns previous inspections), if available:
Describe Recorded Data (stream gauge, monitoring won, donar priore	, pre-19-00-11-11-11-11-11-11-11-11-11-11-11-11-
Remarks:	. 1.0
Geomorphic positioning used because area	is in a low/linear area between two
Lugh Cur	
Tolong trelds,	
e e e e e e e e e e e e e e e e e e e	
·	
*	

VEGETATION — Ose scientino names of plants	•			Outsipusing Found
72.0	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size: 30')	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. not Applicable				That Are OBL, FACW, or FAC:(A)
				That Ale OBE, I NOW, of I No.
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
			·	
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
1	<u>#</u> _	= Total Cov	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')	e i e i			FACW species x 2 =
				FAC species x 3 =
1. not Applicable				FACU species x 4 =
2				
3				UPL species x 5 =
3				Column Totals: (A) (B)
4				
				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
		= Total Cov	/er	
Herb Stratum (Plot size:5')				3 - Prevalence Index is ≤3.0 ¹
	2 -	W	α.A.:	4 - Morphological Adaptations ¹ (Provide supporting
1. Jurus effusus	20	<u>J</u>	OBL	data in Remarks or on a separate sheet)
2. Carex Iupulina	S S	Y	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
		N		
3. Carex Hava	10		<u>OBC</u>	¹ Indicators of hydric soil and wetland hydrology must
4. Eupaterium perfoliatum	5	Ν	FACW	be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
5,			·	Definitions of Vegetation offata.
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
·				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
				Woody vines – All woody vines greater than 3.28 ft in
12				height.
	100	= Total Cov	/er	
	-			·
Woody Vine Stratum (Plot size: 30)				
1. not Apolicable				
				Hydrophytic
Z				Vegetation \(\)
3				Present? Yes No
4				
	_ <i></i>	= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	sheet.)	-		
1/2 2 12	- 4 - 1	C. N	1 1	drived.
Vegetation meets both Rapid To	ert and	rac /u	euru	ies F.
•				,
				•
• •				

Profile Desc	cription: (Describe	to the dept	th needed to docum	nent the i	ndicator	or confirm	the absence of	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Redo:	x Features	Type ¹	Loc ²	Texture	Remark	
O'Lq"	1048211	95	2.54611	<u>-%</u> 5		LOC	SIL	Remark	<u>s</u>
9"-1"	7.546/1	100					SIL		
	<u> </u>				•••••				
								~ 0	
		· ·							

									······································
		·		· · · · · · · · · · · · · · · · · · ·			* ****		
		·							
		· ——— -							
¹ Type: C=C	oncentration, D=Dep	letion DM-	Paduand Matrix A40		Cond C		2 _{1 000}	Di - Doro I ining 34-4	Antriv
Hydric Soil I	ndicators:	ierion, VM=	печисео машх, Мо	-wasked	Sand Gr	anis,	Indicators f	PL=Pore Lining, M=N or Problematic Hydr	ic Soils ³ :
Histosol		•	Polyvalue Below		(S8) (LR F	R,		uck (A10) (LRR K, L,	
Histic Ep	oipedon (A2) stic (A3)	_	MLRA 149B) Thin Dark Surfa		RR R. MI	RA 149B)		rairie Redox (A16) (L ucky Peat or Peat (S3	
	n Sulfide (A4)		Loamy Mucky M	lineral (F1) (LRR K		Dark Su	ırface (S7) (LRR K, L,	M)
	l Layers (A5) I Below Dark Surfac	e (A11)	Loamy Gleyed Matrix		1			ie Below Surface (S8) rk Surface (S9) (LRR	
Thick Da	ırk Surface (A12)		🔀 Redox Dark Sur	face (F6)			Iron-Mai	nganese Masses (F12	2) (LRR K, L, R)
	lucky Mineral (S1) leyed Matrix (S4)	-	Depleted Dark S Redox Depression		7)			nt Floodplain Soils (F [.] podic (TA6) (MLRA 1	
	edox (S5)			, ,			Red Par	rent Material (F21)	
	Matrix (S6) face (S7) (LRR R, N	ILRA 149B)					allow Dark Surface (T Explain in Remarks)	F12)
3Indicators of	hydrophytic vegetat	tion and wat	land hydrology muo	l ha nraaa	nt unloca	distruksel.	ar problematic		
Restrictive L	ayer (if observed):	ion and wel	land nydrology mus	r ne hiese	m, umess	disturbed	or problematic.		
Type:	N/A							ij	
Depth (inc	ches):		· · · · · · · · · · · · · · · · · · ·				Hydric Soil P	'resent? Yes <u> </u>	No
Remarks:									
			•						
			•						
,									*
									:

Project/Site: Ball Hill Wind Project City/Co	ounty: Chautauqua County Sampling Date: كالمادة كالماد
Mar. 24 (2011 2 A 21) 1 Mar	State: NY Sampling Point; DP- 731
Investigator(s): Ben Viris and Nicole Dutcher section	n, Township, Range: TOWN OF Harover
Landform (hillslope, terrace, etc.): hillslope Local relie	
Subregion (LRR or MLRA): LRR-R Lat: 42.443984	Lang: -75, 128262 Patum: NAD 83
Soil Map Unit Name: Chantangua 5: 17 Loan, 3 to	
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	1
Are Vegetation $\underline{\mathcal{N}_{\mathcal{O}}}$, Soil $\underline{\mathcal{N}_{\mathcal{O}}}$, or Hydrology $\underline{\mathcal{N}_{\mathcal{O}}}$ significantly disturb	
Are Vegetation ~ Soil ~ or Hydrology ~ naturally problema	tic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No 😾	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	
Upland data point to Wetland A 628.	
Opiano Clara point 18 location 1100	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves	s (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfide Odd	or (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizosphere	es on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduced	
Algal Mat or Crust (B4) Recent Iron Reduction	· · · · · · · · · · · · · · · · · · ·
Iron Deposits (B5) Thin Muck Surface (C	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rem	
Sparsely Vegetated Concave Surface (B8) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre-	vious inspections), if available:
Remarks:	
No hydrology indreators observed, none -	the second to the second
The same bosonies, more	In the expected in open tield that is
Flat.	No.

VECETATION — Ose scientific flames of plants.	•		Oamping Folia
20/0		Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' R)		Species? Status	Number of Dominant Species
1. Not Applicable		· · · · · · · · · · · · · · · · · · ·	That Are OBL, FACW, or FAC:(A)
2			
			Total Number of Dominant Species Across All Strate: (B)
3			Species Across All Strata: (B)
4			Barrant of Barriagnt Casalas
4			Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
5			mat Ale OBL, FACW, of FAC (AVB)
6			
			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
	Ø	= Total Cover	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15 'R)			FACW species x 2 =
Sapling/Snrub Stratum (Plot size: 13 K			11(1) (20)
1. Not Applicable		***************************************	· · · · · · · · · · · · · · · · · · ·
2		Taken	FACU species <u>49</u> x4 = <u>196</u>
			UPL species
3		<u> </u>	Column Totals: 100 (A) 363 (B)
4		,	Column Totals (A) (B)
			Prevalence Index = B/A = 3,43
5		· · · · · · · · · · · · · · · · · · ·	Frevalence Index - D/A - 37 - 3
6			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
7			1
	Ø	= Total Cover	2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5 R)		1	4 - Morphological Adaptations ¹ (Provide supporting
1. Ranunculus acris		N FAC	data in Remarks or on a separate sheet)
2. Dactylis glomerata	34	Y FACU	Problematic Hydrophytic Vegetation¹ (Explain)
			robinitationiyatopiiyato rogotation (Explain)
3. Infolium repens	<u> </u>	1770	¹ Indicators of hydric soil and wetland hydrology must
4. Daucus Carota	2	N UPL	be present, unless disturbed or problematic.
	5	N UPL	Definitions of Variation Strate.
5. Trifolium medium			Definitions of Vegetation Strata:
6. Plantago lanceulata	5 /	N FACU	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7. Archim minus	5	N FACU	at breast height (DBH), regardless of height.
8. Muhlenbergia Schreberia	34	Y PAC	Sapling/shrub - Woody plants less than 3 in. DBH
0			and greater than or equal to 3.28 ft (1 m) tall.
<u> </u>		F	Herb – All herbaceous (non-woody) plants, regardless of
10			size, and woody plants less than 3.28 ft tall.
11			
			Woody vines - All woody vines greater than 3.28 ft in
12			height.
	100	= Total Cover	<u> </u>
Washing Status (Distains 201 P)			
Woody Vine Stratum (Plot size: 30' R)			
1. Not Applicable			
2			Hydrophytic
			Vegetation X
3			Present? Yes No
4.			·
		= Total Cover	
Remarks: (Include photo numbers here or on a separate s	heet.)		
			·
		•	

Profile Des	cription: (Describe	to the dep	th needed to docu	ment the i	ndicator o	or confirm	the absence of in	dicators.)	
Depth (inches)	Matrix Color (moist)	%	Redo	x Feature	<u>Type¹</u>	Loc²	Texture	Domori	.
()-12	2.5Y 3/3	1005	Color (moist)		Type	LOC	SiL	Remarl	(8
12-14	2,5Y 3/2	95	IUYR B/6	5	\overline{C}	<u>M</u>	SiL		
14-20	2,57 4/4	8 5	254 5/1	-5	$\frac{1}{2}$				
1120	2,51 74				-	<u></u>	51L	**************************************	· · · · · · · · · · · · · · · · · · ·
 -			54R3/3	10		<u>M</u>			

									·

			·····						·
¹Type: C=C	oncontroller D-Deni	ation DM	Dadward Market NA				21 4	Dana Lining Mai	Market .
Hydric Soil	oncentration, D=Depl Indicators:	cuon, KM=	-кеспсес матлх, М	o≕iMasked	sand Gra	IIIS,	Indicators for P	Pore Lining, M=I roblematic Hydi	
Histosol	, ,		Polyvalue Belo	w Surface	(S8) (LRR	R,		A10) (LRR K, L,	
	oipedon (A2)		MLRA 149B		DD D 441	DA 440D)		Redox (A16) (L	
	stic (A3) n Sulfide (A4)		Thin Dark Surfa					Peat or Peat (S3 e (S7) (LRR K, L	
Stratified	Layers (A5)		Loamy Gleyed	Matrix (F2		-,	Polyvalue Be	elow Surface (S8) (LRR K, L)
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Matrix Redox Dark Su					urface (S9) (LRR iese Masses (F1	
	lucky Mineral (S1)		Depleted Dark						19) (MLRA 149B)
	Bleyed Matrix (S4)		Redox Depress	ions (F8)					144A, 145, 149B)
	ledox (S5) Matrix (S6)							Material (F21) v Dark Surface (1	TF12)
• •	rface (S7) (LRR R, M	ILRA 1498	3)					in in Remarks)	
3Indicators of	f hydrophytic vegetati	ion and wa	tland budgalagu mud	t ha neas	nt unlass	المصطعر بالمطألم	or problemette		
	_ayer (if observed):	on and we	uand nydrology mus	st be prese	ent, unless	aisturbea	or problematic.		
Type:	JA.								S. 4
Depth (inc	ches):						Hydric Soil Pres	ent? Yes	No <u>X</u>
Remarks:	1								
Not a	hydric soil.								
	75 05 1		•						
								,	
			•						
,		•							
				÷ "					
			•						

WEILAND DETERMINATION DATA FOR	KM – Northcentral and Northeast Region
	County: Chautauqua County Sampling Date: UIG
Applicant/Owner: Ball Hill Wind Energy, LLC	State; NY Sampling Point: DP- 732
Investigator(s): Ben Vitt and Nice Outher Section	on, Township, Range: Town of Hanover
	ief (concave, convex, none): Slope (%): 1 - 57.
Subregion (LRR or MLRA): LRR-R Lat: 42.449316	
Soil Map Unit Name: Fremont 5: 1+ loams, 3-82 51	
Are climatic / hydrologic conditions on the site typical for this time of year?	1
Are Vegetation No., Soil No., or Hydrology No. significantly distur	
Are Vegetation No , Soil No , or Hydrology No naturally problem	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydrophytic Vegetation Present? Yes X No Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Duetland A 629
Remarks: (Explain alternative procedures here or in a separate report.)	
Large PFO wetton along transitional ed	ge between Geld and Upkar brown
9	γ
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) X Water-Stained Leave	es (B9) X Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (B13)	
Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide Oc	
	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	
Algal Mat or Crust (B4) Recent Iron Reduction	on in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	marks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	→ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes NoX Depth (inches):	
Water Table Present? Yes NoX Depth (inches):	
Saturation Present? Yes No _X Depth (inches):	Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Proceedings of the second of t	
Remarks:	half the half of Dai
vere statues were found into	ghout the wetland. Drainage patterns
run through thee Center of the wetlar	d. Exidence of All I I I
of the well	the chick of Higal maticust in
eastern edge of wetland not where dat	in point was taken
141.06.6	

Tree Stratum (Plot size: 15'R) 1. Fraxings pennsylvanica	Absolute % Cover	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
2. Acer rubrum 3.		Υ	FAC	Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 83, 33 (A/B)
5				
7.				Prevalence Index worksheet:
	80	= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' R)		. :		FACW species x 2 =
1. Ostrya Virginiana		Y	FACU	FAC species x 3 =
2. Fizixinus pennsylvanica	20	<u>Y</u>	FACW	FACU species x 4 =
3. Acer nibrum		N	FAC	UPL species x 5 =
4. Lonicera japonioa		N	FACU	Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	77	= Total Cov	er er	× 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5'R)	1 .		1	3 - Prevalence Index is ≤3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting
	30	<u> Y</u>	FACU	data in Remarks or on a separate sheet)
2. Toti codendron radicans	<u> S</u>	<u>Y</u>	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Symphystrichum prenanthoides		N	FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Equisetum palustre		<u>N</u>	FACW	be present, unless disturbed or problematic.
5. Podophyllum pelatum	5	<u>N</u>	FACU	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				Sapling/shrub Woody plants less than 3 in. DBH
8				and greater than or equal to 3.28 ft (1 m) tall.
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
12				Woody vines - All woody vines greater than 3.28 ft in height.
	54	= Total Cov	er .	
Woody Vine Stratum (Plot size: 15'R)				
1. Not Applicable			· ————	
2				Hydrophytic Vegetation
3.				Present? Yes No
4.				
	<u>Ø</u>	= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	sheet.)		.,	<u> </u>
Tree vegetation plot was adj	usted	to acc	unar co	late size of wetland
,	•			
				·

Profile Desc	cription: (Describe t	o the dept	h needed to docun	nent the i	ndicator	or confirm	the absence	of Indicators.)
Depth (inches)	Matrix Color (moist)		Redo: Color (moist)	k Features %	<u>Type</u> 1	Loc2	Texture	Remarks
0-7	0.54 2.5/1	95	7.5 YR 3/4	5	-13.ba	M	SiL	
7-15	104R 41,	90	7.5 YR 4/6	10	$\frac{\circ}{\circ}$	M.	Sil.	
15-20	2.544/2	85	10484)6	15	<u> </u>	M.	CI	
<u></u>	•			1				
		<u></u> .						

· · · · · · · · · · · · · · · · · · ·							-	

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			· · · · · · · · · · · · · · · · · · ·			 .		
		 .			***************************************			
1Type: C=C	oncentration, D=Deple		Reduced Matrix MC				21 ocation	: PL=Pore Lining, M=Matrix.
Hydric Soil		SHOTI, IXIVI	rteudceu Mairix, Mc	- IVIASKEU	TOAIIU OIG			for Problematic Hydric Soils ³ :
Histosol	• •		Polyvalue Below		(S8) (LRF	R,		Muck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2) stic (A3)		MLRA 149B) Thin Dark Surfa		.RR R, ML	.RA 149B)		Prairle Redox (A16) (LRR K, L, R) Nucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	en Sulfide (A4)	•	Loamy Mucky N			, L)		Surface (S7) (LRR K, L, M)
	d Layers (A5) d Below Dark Surface	(A11)	Loamy Gleyed I Depleted Matrix		·)			liue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L)
Thick Da	ark Surface (A12)		X Redox Dark Su	face (F6)				anganese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1) Bleyed Matrix (S4)	•	Depleted Dark S Redox Depress		·/)			ont Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	Redox (S5)		•	, ,				arent Material (F21)
	l Matrix (S6) rface (S7) (LRR R, M	LRA 149B)					hallow Dark Surface (TF12) (Explain in Remarks)
³ Indicators o	f hydrophytic vegetation	on and we	tland hydrology mus	t be prese	ent, unless	disturbed	or problematio	.
Restrictive I	Layer (if observed):			<u>·</u>				
Type:	ahaa)ı .	·					Hydric Soil	Present? Yes X No
Depth (inc	cnes)						Hydric 30ii	Fresenti 163 TT NO
							.*	
,								,
				•				

	ORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project Ci	ity/County: Chautauqua County Sampling Date: 6 16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 133
Investigator(s): Ben Virts and Nicole Outster s	ection, Township, Range: Town of Hanover
	I relief (concave, convex, none): Convex Slope (%): 5-10
Subregion (LRR or MLRA): LRR-R Lat: 47.4495	14 Long: -79.132352 Datum: NAD 83
Soil Map Unit Name: Fremont Silt Loan, 3-82 51	NWI classification: UDIAN
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation No., Soil No., or Hydrology No. significantly di	· · · · · · · · · · · · · · · · · · ·
Are Vegetation No, Soil No, or Hydrology No naturally problems	
Are vegetation, Soil, or right logy tractionly problem	(ii noddd, oxpiail di'y dieneid ii reallana)
SUMMARY OF FINDINGS - Attach site map showing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No No	Is the Sampled Area within a Wetland? Yes No X
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.	
Upland data point for wetlands 1	A629 and A632
Opinio Cara point for overtors i	(5 5 1 500 H 1000)
·	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Le	· · · · · · · · · · · · · · · · · · ·
High Water Table (A2) Aquatic Fauna (E	
Saturation (A3) Marl Deposits (B	
Water Marks (B1) Hydrogen Sulfide	
1 — , , , , — — — — — — — — — — — — — —	pheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Red	
	uction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	
Inundation Visible on Aerial Imagery (B7) Other (Explain in	· ·
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes NoX Depth (inches): Water Table Present? Yes NoX Depth (inches):	
Water Table Present? Yes NoX Depth (inches): Saturation Present? Yes NoX Depth (inches):	Wetland Hydrology Present? Yes No X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Remarks:	
No hydradogy indicators found. He	
1 90.	
	•
·	
I '	

VEGETATION — Ose scientific flames of plants				Camping Com
Tree Stratum (Plot size: 15' R)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Acer Sacharum		Y	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Maxinus pensylvanica		Ż	FACW	That Are OBL, FACW, or FAC:(A)
		<u></u>		Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species (202
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	100	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15/2)				FACW species x 2 =
1. Acer Saccharum	25	Υ	FALU	FAC species x 3 =
• •				FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Cov		2 - Dominance Test is >50%
~10		= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5'2)	1	~	FAC	4 - Morphological Adaptations ¹ (Provide supporting
1. Toxicodendron radicans	00			data in Remarks or on a separate sheet)
2. Rubrus pensilvanicus	10	<u>N</u>	FAW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Acer Saccharum	10	<u>N</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Fraxinus pennsylvanica	5_	<u>N</u>	MACW	be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9	***************************************			
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11,				
12.		,		Woody vines – All woody vines greater than 3.28 ft in height.
	85	= Total Cov	er	
Woody Vine Stratum (Plot size: 15'2)		10.0,001	.	
	~	γ	FAC	: .
1. Toxicodendron radicans			FAC	Hydrophytic
2				Vegetation
3	••••			Present? Yes X No
4				
	5	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
Vegetation is burderline but		- 10 10	ah Li	
regenerior is border inc our	West	Myore	pnync	regularements

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth (inches)	Matrix Color (moist)	%	Redo Color (moist)	x Features		Loc ²	Tardina	Remark	
(inches)	104K 3/2		Color (moist)	%		LOC		Remark	(8
		100	***************************************				<u>Si</u> _		<u></u>
6-20	2.54 4/4	<u> </u>					SL_		
									
									-
					*				
									<u> </u>
		letion, RM:	=Reduced Matrix, MS	S=Masked	Sand Gra	ins.	² Location: P	PL=Pore Lining, M=N	Matrix.
Hydric Soil			Balanda Bal		(00) // DD	_		r Problematic Hydr	i i
Histosol	(A1) pipedon (A2)		Polyvalue Belov MLRA 149B		(S8) (LRR	: к,		ck (A10) (LRR K, L, airie Redox (A16) (L	
Black Hi			Thin Dark Surfa		.RR R, ML	RA 149B)		ky Peat or Peat (S3	
	n Sulfide (A4)		Loamy Mucky N	lineral (F1) (LRR K,		Dark Surf	ace (S7) (LRR K, L	
	Layers (A5)		Loamy Gleyed)			Below Surface (S8	
	i Below Dark Surfac Irk Surface (A12)	e (A11)	Depleted Matrix Redox Dark Su					(Surface (S9) (LRR ganese Masses (F1)	
	lucky Mineral (S1)		Depleted Dark Su					ganese wasses (F1) : Floodplain Soils (F1	
	leyed Matrix (S4)		Redox Depress	•	',			odic (TA6) (MLRA 1	
	edox (S5)			` '				nt Material (F21)	
	Matrix (S6)							llow Dark Surface (1	F12)
Dark Su	face (S7) (LRR R, N	ILRA 149E	3)				Other (Ex	plain in Remarks)	
³ Indicators of	hydrophytic vegetat	ion and we	etland hydrology mus	t be prese	ent, unless	disturbed	or problematic.		
	ayer (if observed):			***************************************					
Type:	NA								
Depth (inc	hes):						Hydric Soil Pro	esent? Yes	No_ <u>X</u>
Remarks:								-	
N/at	a 1. 1.								
11001	a hydric :	Soll.							
,									

	RM - Northcentral and Northeast Region				
Project/Site: Ball Hill Wind Project City/C	County: Chautauqua County Sampling Date: 6/6/16				
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DF- 7 5				
Investigator(s): Ben Virts and Miche Ditcher Section	on, Township, Range: Town of Hanover				
Landform (hillslope, terrace, etc.): Acpression Local rel	ief (concave, convex, none): Concave Slope (%): 1-37.				
Subregion (LRR or MLRA): LRR-R Lat: 47.44974	11 Long: -79.132479 Datum: NAD 83				
Soil Map Unit Name: Fremont Silt Loam, 3-82 5lope					
Are climatic / hydrologic conditions on the site typical for this time of year? Y	·				
Are Vegetation No., Soil No., or Hydrology No. significantly distur					
Are Vegetation N., Soil No, or Hydrology No naturally problems					
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area				
Hydric Soil Present? Yes X No	within a Wetland? Yes No				
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Vetland A 630				
Remarks: (Explain alternative procedures here or in a separate report.)					
Pem wetland along along of waters and are	n field. Shiply to manals day it is				
Pem wetland along edge of upland and open Open area turns into upland field	The stight topographic depression before				
yen aren turnsinto upland field					
'	•				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)					
High Water Table (A2) Aquatic Fauna (B13)	· · · · · · · · · · · · · · · · · · ·				
Saturation (A3) Marl Deposits (B15)	· ·				
Water Marks (B1) Hydrogen Sulfide Od Sediment Deposits (B2) Oxidized Rhizospher					
Sediment Deposits (B2) Oxidized Rhizospher Drift Deposits (B3) Presence of Reducer	· · · · · · · · · · · · · · · · · · ·				
Algal Mat or Crust (B4) Recent Iron Reduction					
Iron Deposits (B5) Thin Muck Surface (0					
Inundation Visible on Aerial Imagery (B7) Other (Explain in Rel	marks) Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes No _X Depth (inches):					
Water Table Present? Yes No _X _ Depth (inches):	Wetland Hydrology Present? Yes X				
Saturation Present? Yes NoX_ Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:				
Remarks:					
Water Stained Leones found throughout	the wetland				
en transfer and					

VEGETATION - Use scientific flames of plants				Sampling Found
10 v 2 o	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 10 × 20		Species?		Number of Dominant Species 4
1. Not Applicable				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				
				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 1002 (A/B)
· ·				
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	Ø	= Total Co	ver	OBL species x 1 =
- 10 v2 - 10 v	- ·	10141 00	***	!
Sapling/Shrub Stratum (Plot size: \\ \times \times 20 \)	_		1	FACW species x 2 =
1. Salix purpurea	<u> 20</u>	<u> </u>	FACU	FAC species x 3 =
ı ·				FACU species x 4 =
2	 ,	************		UPL species x 5 =
3				Column Totals: (A) (B)
4				
				Prevalence Index = B/A =
5				I had a shade when the first the shade when the sha
6		***************************************		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	20	= Total Co	vor	2 - Dominance Test is >50%
ح و		- Total Co	A G1	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: S × S)		W		4 - Morphological Adaptations ¹ (Provide supporting
1. Juneur effusus	27	Y	081	data in Remarks or on a separate sheet)
2. Onodea Sensibilis	5	N	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
•	20	- 1		
3. Ranunculus acris			FAC	¹Indicators of hydric soil and wetland hydrology must
4. Symphystrichum Puniceum	10	<u> </u>	<u>08L</u>	be present, unless disturbed or problematic.
5. Solidago nigosa	10	N	FAC	Definitions of Vegetation Strata:
	28			
6. Carex Hava	20		<u>OBL</u>	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
			•	Sapling/shrub - Woody plants less than 3 in. DBH
8				and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11.				size, and woody plants less than 5.28 it tait.
* I				Woody vines - All woody vines greater than 3.28 ft in
12			·	height.
	100	= Total Co	ver	*
Woody Vine Stratum (Plot size: \(\sqrt{x} \ 2 \circ \)				
				•
1. Not Applicable				
2				Hydrophytic Vegetation
3			_	Present? Yes No
·				, , , , , , , , , , , , , , , , , , ,
4			·	
	_()	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
	•		0	
Vegetation plot sizes were	adjust	ed 10	Hit wi	thin the brindader of the
	-cojusii		•	
Metland,	`			
		•		•

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the in	ndicator	or confirm	the absence	of Indicators.)
Depth	Matrix		Redo	x Features	i		•	,
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ² _	<u>Texture</u>	Remarks
<u>o''6"</u>	10912418	<u>85</u>	iogr416	10	<u> </u>	<u>~</u>	SIL	
	-		Syr 4/6	_5_	<u></u>	<u>PL</u>		
6-12"	2.5 YR 4/6	<u>95</u>	104R4/6	5_	<u> </u>	_M_	SiL	
,								

			· · · · · · · · · · · · · · · · · · ·					
¹Type: C=Co	ncentration, D=Depi	etion, RM	Reduced Matrix, MS	======================================	Sand Gra	ins.	² Location:	: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:							for Problematic Hydric Soils ³ :
Histosol	• •		Polyvalue Belov		(S8) (LRR	R,		luck (A10) (LRR K, L, MLRA 149B)
Histic Ep	ipedon (A2)		MLRA 149B) Thin Dark Surfa		RRR MI	RA 149R)		Prairie Redox (A16) (LRR K, L, R) fucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky N					urface (S7) (LRR K, L, M)
	Layers (A5)		Loamy Gleyed I	Matrix (F2)		·	Polyva	lue Below Surface (S8) (LRR K, L)
	Below Dark Surface rk Surface (A12)	(A11)	Depleted Matrix X Redox Dark Suit					ark Surface (S9) (LRR K, L)
	ucky Mineral (S1)	•	Depleted Dark \$		7)			anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B)
Sandy G	leyed Matrix (S4)		Redox Depress		. ,			Spodic (TA6) (MLRA 144A, 145, 149B)
	edox (S5)							arent Material (F21)
	Matrix (S6) face (S7) (LRR R, M	II.RA 149F						hallow Dark Surface (TF12) Explain in Remarks)
		*						
		on and we	tland hydrology mus	t be prese	nt, unless	disturbed	or problematic	
	ayer (if observed): N/A							
Depth (inc							Hydric Soil	Present? Yes X No No
Remarks:			·				Tiyano con	
			bal.			. ,		
المحادث	13 hyone	QNO	has redo	k conc	entrat	4002 I	nthe t	op layer.
			,					·
			•				•	
			,					
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WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County sampling Date: 仮行作 Project/Site: Ball Hill Wind Project ____ Sampling Point: DP- 738 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): Ben Vits and Micole Dutcher Section, Township, Range: Town of Hancier Landform (hillslope, terrace, etc.): Acate Local relief (concave, convex, none): Concave Slope (%): 0-5% Subregion (LRR or MLRA): LRR-R Lat: 42.4545949 Long: -79.1475368 Datum: NAD 83 Soil Map Unit Name: Fremont Silt low Oto3 % Slopes Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No_ Are Vegetation 10 , Soil 10 , or Hydrology 11 significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation No Soil No or Hydrology No naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes X No 633 within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) PSS Wetland in law spot of scrub Shrub field. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) ___ Aquatic Fauna (B13) ___ High Water Table (A2) __ Dry-Season Water Table (C2) ___ Marl Deposits (B15) ___ Saturation (A3) Crayfish Burrows (C8) ___ Hydrogen Sulfide Odor (C1) Water Marks (B1) ___ Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) ★ Microtopographic Relief (D4) ___ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No X Depth (inches): Surface Water Present? Yes No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes X No ____ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Microtopagraphic releif due to small hummocks throughout. Oraning patterns throughout, low channels that any water cast to west of westland.

				Samping Folia.
Tree Stratum (Plot size: 301)		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Not Applicable				That Are OBL, FACW, or FAC:(A)
2				
				Total Number of Dominant Species Across All Strate: (B)
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 1007. (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	Ø	= Total Cov	or	OBL species x1 =
1 A		- Total Cov	91	
Sapling/Shrub Stratum (Plot size: 15 /				FACW species x 2 =
1. Cornus racemosa	20	Υ	FAC	FAC species x3 =
2. Cornus amonum	30	Y	FIACW	FACU species x 4 =
		!	MEW	UPL species x 5 =
3				
4			100	Column Totals: (A) (B)
				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
***************************************	50		•	2 - Dominance Test is >50%
	50	= Total Cov	er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: S1)				
1. Phalaris arundinacea	60	Υ	FACW	4 - Morphological Adaptations¹ (Provide supporting
^	2.0	V		data in Remarks or on a separate sheet)
2. Cornus amonum		<u> </u>	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Solidage nigosa	10	N	FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Fragaria Virginiana	2	N	UPL	be present, unless disturbed or problematic.
4. Tracycla VITA ITIATA				
5. Symphy otnichum prenanthoides	5	<u>N</u>	FAC	Definitions of Vegetation Strata:
6. Ranuralus acris	3	N	FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7				
8				Sapling/shrub - Woody plants less than 3 in. DBH
9			1	and greater than or equal to 3.28 ft (1 m) tall.
	······································			Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11	-			
12.				Woody vines – All woody vines greater than 3.28 ft in
	100			height.
	 :	= Total Cove	er ·	
Woody Vine Stratum (Plot size: 30')		٠.,		
1. Not Applicable				
. • •				Hydrophytic
2	· · · · · · · · · · · · · · · · · · ·			Vegetation
3				Present? Yes No No
4.				· ·
	N			
		= Total Cove	Э Г	
Remarks: (Include photo numbers here or on a separate sh	neet.)			
				•
				1

Depth	cription: (Describe Matrix	to the dep	th needed to docum	nent the i x Feature		or contirm	ı tue absence d	or indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-6	2.54 3/2	100					Si	
6-16	104R 3/2	85	7.5YR416	10	\overline{c}	M	SiL	
- 10			2.5Y 5/4	5	\overline{c}	M		
			2.01 17			101		
								
								
								
		-						
						·		
								
1Type: C=C	oncentration D=De	nletion PM	=Reduced Matrix, MS	S=Macker	Sand Gr	aine	² I ocation:	PL=Pore Lining, M=Matrix.
	Indicators:	DICTION, TXIV	- TOUGOCO Maura, MC	J Wasket	a Guna Gn	unio.		for Problematic Hydric Solls ³ :
Histoso	i (A1)		Polyvalue Belov	w Surface	(S8) (LRI	RR,		uck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		MLRA 149B)	,				Prairie Redox (A16) (LRR K, L, R)
	listic (A3)		Thin Dark Surfa				, —	lucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M)
	en Sulfide (A4) d Layers (A5)		Loamy Gleyed			., ∟)		ue Below Surface (S8) (LRR K, L)
	ed Below Dark Surface	ce (A11)	Depleted Matrix		,		Thin Da	ark Surface (S9) (LRR K, L)
	ark Surface (A12)		X Redox Dark Su					anganese Masses (F12) (LRR K, L, R)
	Mucky Mineral (S1) Gleyed Matrix (S4)		Depleted Dark					ont Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)		Nedox Depress	10113 (1 0)				arent Material (F21)
Stripped	d Matrix (S6)							hallow Dark Surface (TF12)
Dark St	urface (S7) (LRR R,	MLRA 149	B) _				Other (Explain in Remarks)
3Indicators of	of hydrophytic vegeta	ation and w	etland hydrology mus	st be pres	ent. unles	s disturbed	d or problematic	.
	Layer (if observed)						1	
Type:	N/A							.
Depth (in	nches):						Hydric Soil	Present? Yes X No
Remarks:								
12	2Huct Com	Latins	s in the mat	, ~	. \.		و با د و ا	inches of
				wx +	mg &	ener	1 4-10	incres of
Su	il profice of	Fa d	lard Matrix				,	
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	FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 6/7/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 151
Investigatorial Ben With and Nicole Duth	Section, Township, Range: Town of Hanover
Landform (hillstope, terrace, etc.): hillstope Lo	ocal relief (concave, convex, none): CONVEX Slope (%): 170%
Subregion (LRR or MLRA): LRR-R Lat: 42.45	13687 Long:79.1476433 Datum: NAD 83
Soil Man Unit Name: Francist Silt Locus (2+30/0 Slopes NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes X No (If no, explain in Remarks.)
Are Vegetation No , Soil No , or Hydrology No significantly	
Are Vegetation No, Soil No or Hydrology No naturally pr	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wes No X Wetland Hydrology Present? Yes No X	is the Sampled Area within a Wetland? If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate rep	
Upland data point for wetland AU	
spian dala point for socials	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Water-Staine	** mt . Hans (D40)
High Water Table (A2) Aquatic Faun	Total Control of Contr
Saturation (A3) Marl Deposite	ifide Odor (C1) Crayfish Burrows (C8)
	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Algal Mat 0 Clust (B4) Thin Muck St	at 11 A (50)
	in in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes NoX Depth (inch	
Water Table Present? Yes NoX Depth (inch	
Saturation Present? Yes No X Depth (inch (includes capillary fringe)	es).
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	
No wetland hydralogy indicators	- observed,
7 07	
	en de la companya de la companya de la companya de la companya de la companya de la companya de la companya de La companya de la companya de la companya de la companya de la companya de la companya de la companya de la co
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Tree Stratum (Plot eize: 5 ()' V	Absolute	Dominant	Indicator	Dominana Tanturakahasi
Tree Stratum (Plot size: 30' 2)		Species?		Dominance Test worksheet: Number of Dominant Species
1. Fraxious americana	<u> </u>	<u>Y</u>	FACU	That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3		· · · · · · · · · · · · · · · · · · ·		Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species 22 221
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33/.(A/B)
6				
				Prevalence Index worksheet:
7	36			Total % Cover of: Multiply by:
1510	<u> </u>	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 ' 2)	2.	V	٠.	FACW species x 2 =
1. Cornus racemosa	30	- \	FAC	FACULARISIS X 3 =
2. Kosa multiflora	15	<u> </u>	FACU	FACU species x 4 = UPL species x 5 =
3. Carpus amomum	S	<u>N</u>	FACUS	UPL species x 5 = Column Totals: (A) (B)
4				Column Totals. (A)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Cov		2 - Dominance Test is >50%
< 10		= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5'R)	9	V	<u>~</u> ^.	4 - Morphological Adaptations ¹ (Provide supporting
1. Solidago Canadensis	30		FACU	data in Remarks or on a separate sheet)
2. Cornus vacemosa	20	<u>Y</u>	FAC	Problematic Hydrophytic Vegetation¹ (Explain)
3. Toxicodendron radicans		<u>N</u>	FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Rubus pensilvanicus		. N	FACU	be present, unless disturbed or problematic.
5. Rosa multifloa	15	N	FACU	Definitions of Vegetation Strata:
6. Fragaria virginiana		<u> </u>	UPL	I de la companya del companya de la companya del companya de la c
7. Ranunculus acris	<u>-</u>	N	FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
		- 19	TFIO	
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
				woody vines - All woody vines greater than 3.28 ft in
12				height.
12	100 :	= Total Cove	er	
	100 :	= Total Cove	er	
Woody Vine Stratum (Plot size: 30 R)	100 :	= Total Cove	ər	
Woody Vine Stratum (Plot size: 30 R)	100 .	= Total Cove	er	height. Hydrophytic
Woody Vine Stratum (Plot size: 30 R)	100 :	= Total Cove	er	Hydrophytic Vegetation
Woody Vine Stratum (Plot size: 30 R)	100 :	= Total Cove	er er er er er er er er er er er er er e	height. Hydrophytic
Woody Vine Stratum (Plot size: 30 R)		= Total Cove		Hydrophytic Vegetation

Depth	ubuou. (pascina i	o the deb	th needed to docum	ent the ii	naicator	or consism	the absence of	indicator	- .,	
	Matrix (Matrix	 %		Features	Type ¹	Loc ²	Texture		Remarks	
(inches)	Color (moist) 107R 3/3	100	Color (moist)	%	Type	LOC	SiL		TOMARO	
							-312 - SiL			
4-14	104R 3/2	100								
14-20	2.54 96	<u>85</u>	2.5Y312	10	$\overline{\mathcal{Q}}$	<u>M</u>	<u>SL</u>			
			10YR 4/6	5	C	M				
					,	-				
										
										<u></u>
· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·								
,										
		-								·
							2		Indiana Admid daile	
Type: C=Co	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.			ining, M≃Matr natic Hydric S	
Histosol			Polyvalue Belov	v Surface	(S8) (LRI	R.R.			LRR K, L, ML	
	pipedon (A2)		MLRA 149B)		(00) (,	Coast Pr	airie Redo	x (A16) (LRR	K, L, R)
_	stic (A3)		Thin Dark Surfa					•	r Peat (S3) (L	
	n Sulfide (A4)		Loamy Mucky M Loamy Gleyed N			., L)			(LRR K, L, M) urface (S8) (L	
	i Layers (A5) i Below Dark Surface	(A11)	Depleted Matrix		.)				(S9) (LRR K,	
	ark Surface (A12)	· (; · · · ·)	Redox Dark Sur						asses (F12) (l	
	lucky Mineral (S1)		Depleted Dark S		7)	•				(MLRA 149B)
	eleyed Matrix (S4)		Redox Depress	ons (F8)				ent Materi	i) (MLRA 144 / al (F21)	4, 140, 149D)
	ledox (S5) Matrix (S6)								Surface (TF1:	2)
	rface (S7) (LRR R, N	ILRA 1498	3)					xplain in F		
3	el	•		4 h = =====	4	م مازمة، بعاد مط	or problematic			
	f hydrophytic vegetat Layer (if observed):		etland hydrology mus	t be prese	ent, unies	s disturbed	or problematic.			
!										
Tvne:	NIA									
Type: Depth (in	N/A ches):						Hydric Soil P	resent?	Yes	No <u>×</u>
Type: Depth (in Remarks:							Hydric Soil P	resent?	Yes	No <u>X</u>
Depth (in							Hydric Soil P	resent?	Yes	No <u>X</u>
Depth (in							Hydric Soil P	resent?	Yes	No <u>X</u>
Depth (in			•				Hydric Soil P	resent?	Yes	No <u>X</u>
Depth (in							Hydric Soil P	resent?	Yes	No <u>X</u>
Depth (in							Hydric Soil P	resent?	Yes	No <u>X</u>
Depth (in							Hydric Soil P	Present?	Yes	No <u>X</u>
Depth (in				· · · · · · · · · · · · · · · · · · ·			Hydric Soil P	resent?	Yes	No <u>X</u>
Depth (in							Hydric Soil P	resent?	Yes	No <u>X</u>
Depth (in				· · · · · · · · · · · · · · · · · · ·			Hydric Soil P	resent?	Yes	No X
Depth (in				· · · · · · · · · · · · · · · · · · ·			Hydric Soil P	resent?	Yes	No X
Depth (in							Hydric Soil P	resent?	Yes	No X
Depth (in				·			Hydric Soil P	resent?	Yes	No X
Depth (in							Hydric Soil P	resent?	Yes	No X
Depth (in							Hydric Soil P	resent?	Yes	No X
Depth (in							Hydric Soil P	resent?	Yes	No X

WEILAND DETERMINATION DATA FOR	
Project/Site: Ball Hill Wind Project City/C	County: Chautauqua County Sampling Date: 6716
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-740
Investigator(s): Ben Virty and Nicole Duther Section	
	lief (concave, convex, none): Concave Slope (%): 15-15
Subregion (LRR or MLRA): LRR-R Lat: 42.45561	
Soil Map Unit Name: Fremont 5: 1+ lours 3 to 8 %	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation No., Soil No., or Hydrology No significantly distur	
Are Vegetation No, Soil No, or Hydrology No naturally problem	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	is the Sampled Area
Hydric Soil Present? Yes X No	within a Wetland? Yes X No
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland 634
Remarks: (Explain alternative procedures here or in a separate report.)	
PFO portun of PFO/PEM wette	ns A634.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leave	
High Water Table (A2) Aquatic Fauna (B13)	• • • • • • • • • • • • • • • • • • • •
Saturation (A3) Marl Deposits (B15)	
Water Marks (B1) Hydrogen Sulfide Oc	
	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of Reduce	
<u> </u>	on in Tilled Soils (C6) Seomorphic Position (D2) (C7) Shallow Aguitard (D3)
Iron Deposits (B5) Thin Muck Surface (Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes No _X Depth (inches):	
Saturation Present? Yes X No Depth (inches):	Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Joseph Jo	
Remarks:	
- t	
- Sept.	and the second s
N.	

VEGETATION - Ose scientific flames of plants.				
2	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30' l)		Species?		
1. Fraxinus Pennsylvanica	80	Y	FACW	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Fagus grandifolia	15	$\overline{}$	FACU	Illat Ale ODE, I AOW, OF AO.
2. ragui granaitolia		l	17100	Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species 807.
5				That Are OBL, FACW, or FAC:O7 (A/B)
· · ·	•			
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cov		
	13	= lotal Cov	er/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 / 2)				FACW species x 2 =
1. Rosa multiflora	10	N	FACU	FAC species x 3 =
		Y		FACU species x 4 =
2. Fravious pennsylvanica	70	Υ	FACW	l · · · · · · · · · · · · · · · · · · ·
3. Amelanchier Canadensis	20	Υ	FAC	UPL species x 5 =
3. Mirelancher Canadensia			1,,0	Column Totals: (A) (B)
4				
pm				Prevalence Index = B/A =
5				<u> </u>
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7	1	-		X 2 - Dominance Test is >50%
	100	= Total Cov	er	ı —
Herb Stratum (Plot size: 512)				3 - Prevalence Index is ≤3.0 ¹
l	60	V	٠	4 - Morphological Adaptations ¹ (Provide supporting
1. Impatient Capensis	<u> </u>		FACW	data in Remarks or on a separate sheet)
2. Persicana Virginiana	10	N	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3		 		¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
5		-		
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
				Capling/abruh Woody plants loss than 2 in DBU
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and grouter than or equal to electric in tall
*				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
12.				Woody vines – All woody vines greater than 3.28 ft in
14	3.			height.
	70_	= Total Cov	er	
Woody Vine Stratum (Plot size: _ ろつ' ピー)				
				· · · · · ·
1. Nut Applicable				
2.				Hydrophytic
				Vegetation
3				Flesent les No
4				
	Ø	= Total Cov	or.	
		- 10tal COV	· · · · · · · · · · · · · · · · · · · 	
Remarks: (Include photo numbers here or on a separate s	sneet.)			,
				·
·				•

Profile Desc	ription: (Describe	to the dep	th needed to docum	ent the i	ndicator	or confirm	the absence of I	ndicators.)
Depth	Matrix (Table 1)			Features		2	** . (Demondo
(inches) () 10	Color (moist) 2.54 3/1	90	7.5 YR 3/4	<u></u>	Type ¹	Loc² M	Texture	Remarks
10-18	2.54 413	80	2.5431.	15	<u>D</u>	<u>M</u>	CL -	
10 9 0	2.31 10	_60	1048 5/6	<u>'s</u>	<u> </u>	M	<u> </u>	
			104K -14					· · · · · · · · · · · · · · · · · · ·
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			······································				44.0	
								
								
¹Type: C≕Co Hydric Soil I		etion, RM	=Reduced Matrix, MS	=Masked	Sand Gra	ains.		L=Pore Lining, M=Matrix. Problematic Hydric Soils ³ :
Histosol			Polyvalue Below	Surface	(S8) (I RE	R		(A10) (LRR K, L, MLRA 149B)
Histic Ep	pipedon (A2)		MLRA 149B)	Cundoo	(00) (2:11			irie Redox (A16) (LRR K, L, R)
Black Hi			Thin Dark Surface					ky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4) I Layers (A5)		Loamy Mucky M Loamy Gleyed N			, L)		ace (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L)
	Below Dark Surface	(A11)	Depleted Matrix	(F3)	,			Surface (S9) (LRR K, L)
	ark Surface (A12)		Redox Dark Sur		7 \			anese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1) ileyed Matrix (S4)	•	Depleted Dark S Redox Depression		7)			Floodplain Soils (F19) (MLRA 149B) dic (TA6) (MLRA 144A, 145, 149B)
Sandy R	edox (S5)			(7			Red Paren	nt Material (F21)
	Matrix (S6)	I DA 440I	5 1					ow Dark Surface (TF12) plain in Remarks)
Dark Sui	rface (S7) (LRR R, M	LKA 1491	-)				Other (Ext	Jain in Remarks)
		on and we	etland hydrology must	be prese	nt, unless	disturbed	or problematic.	
	ayer (if observed):							
Type: Depth (inc							Hydric Soil Pre	esent? Yes X No
Remarks:	71.00/						Tiyano Con Tio	
Huc	lde o i de							
1190	THE SOIT BEEZ	iuse.	it has redux	(in t	he no	chix of	a dark so	<i>S</i> 1.
						,		
,								
								•
	*							
								•

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Point: DP- 741 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): Ben Virty and Nicese Outher Section, Township, Range: Town of Harrover Landform (hillslope, terrace, etc.): hillstope Local relief (concave, convex, none): Convex Slope (%): 3-102 Subregion (LRR or MLRA): LRR-R Lat: 42.454890 Long: -79.145'204 Datum: NAD 83 Soil Map Unit Name: Fremont 5:1+ Loam, 3 to 8 % Slopes NWI classification: Upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No______No____ Are Vegetation <u>N</u>. Soil <u>N</u>. or Hydrology <u>N</u> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes X No Yes _____ No X within a Wetland? Yes _____ No X Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) Upkand sample point for PEM/PFO wetlood A634. Located on slight hillstype with meture secondary growth forest with little understony growth. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) __ Saturation (A3) ___ Marl Deposits (B15) ___ Crayfish Burrows (C8) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) ___ Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Geomorphic Position (D2) ___ Algal Mat or Crust (B4) ___ Shallow Aquitard (D3) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Microtopographic Relief (D4) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) FAC-Neutral Test (D5) _ Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No X Depth (inches): Surface Water Present? Yes ____ No _X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes ____ No X__ Yes ____ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No bydae indicators observed. Remarks:

p.a	<u> </u>			
Tree Stratum (Plot size: 30' 2)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
		\/		Number of Dominant Species That Are OBL FACW or FAC: (A)
1. Frangula alnus	75	Y	FAC	That Are OBL, FACW, or FAC: (A)
2. Malus prinifolia	12	<u>N</u>	UPL	Total Number of Dominant
3. Fraxinus americana	30	Y	FACU	Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species That Are ORL FACW or FAC: (A/R)
5			· ————	That Are OBL, FACW, or FAC: (A/B)
6				Barriera
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	100	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: \5'(2)				FACW species x 2 =
1. Frangula alnus	10	ý	FAC	FAC species x 3 =
()				FACU species x 4 =
2	 .			UPL species x 5 =
3,				
				Column Totals: (A) (B)
4				Drovelence Index B/A
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
	70	= Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 / 2)				3 - Prevalence Index is ≤3.0 ¹
1. Frazinos americana	10	Υ	FIACU	4 - Morphological Adaptations¹ (Provide supporting
Paris Silvicara		Y		data in Remarks or on a separate sheet)
2. Persicana virginiana			FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Rubur Densilvanicus		<u>N</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Fragaria Virginiana	Ś	N	UPL	be present, unless disturbed or problematic.
7			<u> </u>	Definition of Variation Country
5				Definitions of Vegetation Strata:
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
			•	Continue Monday along the Other DDU
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and grounds than or oqual to 0.20 it (1 iii) tail.
10				Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	40	= Total Cov	or	
300		- 10tai 00V	Gi	
Woody Vine Stratum (Plot size: 30 R)				
1. Not Applicable			<u> </u>	
2.				Hydrophytic
۷,				Vegetation
3	· · · · · · · · · · · · · · · · · · ·			Present? Yes /\ No
4				
	CD.	= Total Cov		
D		- Total Covi	er	
Remarks: (Include photo numbers here or on a separate s	heet.)			
.•				

Profile Desc	ription: (Describe to	the dept	h needed to docur	nent the i	ndicator	or confirm	the absence	of indicate	ors.)	
Depth	Matrix			x Features		12	Tasdersa		Remarks	
(inches)	Color (moist)	<u> </u>	Color (moist)		<u> Type</u>	LOC	<u>Texture</u> Si L		Remarks	
	104R 416	1002								
2-17		<u> 1০০</u> % -					SiL			
17-20	104R 4/4	90	10YR4/2	10	0	<u>M</u>	<u>SiL</u>			
										
										
					~~~~					

										<u></u>
¹Type: C≔Co	oncentration, D=Deple	tion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ains.			Lining, M=Matr matic Hydric S	
Histosol			Polyvalue Belov	w Surface	(S8) (LRF	R.			(LRR K, L, MLI	l
Histic Ep	oipedon (A2)	-	MLRA 149B))			Coast	Prairie Red	ox (A16) (LRR	K, L, R)
	stic (A3)		Thin Dark Surfa					•	or Peat (S3) (L) (LRR K, L, M)	· I
	n Sulfide (A4) I Layers (A5)	-	Loamy Mucky N Loamy Gleyed			, L)			Surface (S8) (Li	
Depleted	Below Dark Surface	(A11)	Depleted Matrix	(F3)					(S9) (LRR K,	-
	ark Surface (A12) lucky Mineral (S1)	-	Redox Dark Su Depleted Dark \$						Masses (F12) (I ain Soils (F19)	
	Bleyed Matrix (S4)		Redox Depress		•,				6) (MLRA 144A	
	ledox (S5)							arent Mate		. \
	Matrix (S6) rface (S7) (LRR R, M l	LRA 149B)					nallow Dar (Explain in	k Surface (TF12 Remarks)	2)
									•	
	f hydrophytic vegetationayer (if observed):	on and wet	land hydrology mus	st be prese	ent, unless	disturbed	or problematio	.		
Type:	MA									,
Depth (inc	ches):						Hydric Soil	Present?	Yes	No
Remarks:							J			
								•		
			,							
				÷						
,										

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Sampling Date: 0 7 10 City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Point: DP-742 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): Ben Vict and Micon Outher Section, Township, Range: Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): Concave Slope (%): 0.3% Subregion (LRR or MLRA): LRR-R Lat: 47.455167 Long: —79.145220 Datum: NAD 83 Soil Map Unit Name: Fremont Silt Loam 3788905 lepon Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No____ Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are Vegetation No., Soil No., or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Ale 34 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) PER portion of PEM/PFO netland A 634. PEM portion in depression and snowmobile trail. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Drainage Patterns (B10) ___ Water-Stained Leaves (B9) X Surface Water (A1) Moss Trim Lines (B16) ___ Aquatic Fauna (B13) X High Water Table (A2) Dry-Season Water Table (C2) __ Mari Deposits (B15) X Saturation (A3) Crayfish Burrows (C8) __ Hydrogen Sulfide Odor (C1) ___ Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) ___ Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) __ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) ___ Other (Explain in Remarks) _ Inundation Visible on Aerial Imagery (B7) ★ FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No ____ Depth (inches): \" Surface Water Present? Yes X No ____ Depth (inches): 10" Water Table Present? Wetland Hydrology Present? Yes 🔀 No _ Yes X No Depth (inches): O" Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VECETATION - Ose scientific flames of plants).			Sampi	ing Point: 21	
Tree Stratum (Plot size:S' x とい')	Absolute % Cover	Dominan Species?	t Indicator Status	Dominance Test worksheet:		
1. Not Applicable				Number of Dominant Species That Are OBL, FACW, or FAC:	2	_ (A)
3			-	Total Number of Dominant Species Across All Strata:	2	_ (B)
					····	. (5)
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	100	_ (A/B)
6				Prevalence Index worksheet:	····	
7				Total % Cover of:	Multiply by:	
	<u> </u>	= Total Co	ver	OBL species x		
Sapling/Shrub Stratum (Plot size: 5' x 1 5')				FACW species x		
1. Not Applicable	,	•		FAC species x	3 =	
			,	FACU species x	4 =	
3	•			UPL species x	5 =	<u> </u>
	•			Column Totals: (A		
5		······································		Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indica	tore:	· · · · · · · · · · · · · · · · · · ·
7				1 - Rapid Test for Hydrophy		
	<u>~</u>		-	2 - Dominance Test is >50%		
C1vc1	<u>Ø</u> :	= Total Cov	/er	3 - Prevalence Index is ≤3.0		
Herb Stratum (Plot size: 5'x 5')	سم	V		4 - Morphological Adaptation	ns ¹ (Provide sur	porting
1. Glyceria melicaria	50	- 1	OBL	data in Remarks or on a	separate sheet))
2. Impatient capensis	20	Y .	FIACW	Problematic Hydrophytic Ve	getation ¹ (Expla	iin)
3. Symphyotrichim prenanthoides		N	FAC	¹ Indicators of hydric soil and wet		must
4. Muhlenbergia Schreberi		N	FAC	be present, unless disturbed or p	problematic.	
4. Muhlenbergia Schreberi 5. Fraxious pennsylvanica	<u> </u>	<u>N</u>	PACW	Definitions of Vegetation Strat	a:	
6				Tree - Woody plants 3 in. (7.6 ci	m) or more in di	ameter
7	·		· · · · · · · · · · · · · · · · · · ·	at breast height (DBH), regardles	ss of height.	
8				Sapling/shrub - Woody plants i	ess than 3 in. D	вн
9				and greater than or equal to 3.28	3 ft (1 m) tall.	
10.				Herb - All herbaceous (non-woody		ss of
11.	 .			size, and woody plants less than 3.2	8 ft tall.	
12.				Woody vines - All woody vines gre	eater than 3.28 ft	in
14	05		<u> </u>	height.		٠
Woody Vine Stratum (Plot size: 5' x 20')	92 =	≃ Total Cov	er ·		. •	
				*		
1. Not Applicable		·		Hydrophytic		
2				Variation		
3				Present? Yes X	No	
4		· · · · · · · · · · · · · · · · · · ·				
·		= Total Cov	er			
Remarks: (Include photo numbers here or on a separate s	heet.)				***************************************	***************************************
Vegetation plot Sizes were	adjust	. J. to	fit mi	the the burden	CAL	
hetland,	/ 0.510	20 10	,	The Disordery of	- The	

Profile Desc	ription: (Describe t	o the dept	th needed to docum	ent the i	ndicator	or confirm	the absence of inc	licators.)	
Depth	Matrix (Features	<u>s</u>	_Loc²	Texture	Remarks	
(inches)	2. SY 2.5/	1002	Color (moist)	%	Type ¹	LOC	SiL	Kemana	
0-6	. 1		- 31						
6-14	2.5Y 4/2	<u>50%</u>	2.57 3/1	40	<u>D</u>	<u>M</u>	<u> </u>		
			7.5YR4/6	10	<u> </u>	<u>GA</u>		, , , , , , , , , , , , , , , , , , ,	

							<u> </u>		
									:
		-			·		2	-David Jalon Man	
¹Type: C=Ce	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	Indicators for P	Pore Lining, M=Mario Poblematic Hydric	Solls ³ :
Histosol			Polyvalue Below	/ Surface	(S8) (LR	R R.		A10) (LRR K, L, M	
	oipedon (A2)		MLRA 149B)		(00)(=::	,	Coast Prairi	e Redox (A16) (LR	R K, L, R)
	stic (A3)		Thin Dark Surfa					Peat or Peat (S3)	
	en Sulfide (A4) d Layers (A5)		Loamy Mucky M Loamy Gleyed N			(, L)		e (S7) (LRR K, L, l elow Surface (S8)	
	d Below Dark Surface	e (A11)	Depleted Matrix		-)		Thin Dark S	urface (S9) (LRR I	(, L)
Thick Da	ark Surface (A12)	• •	Redox Dark Sur	face (F6)				nese Masses (F12)	
	Mucky Mineral (S1)		Depleted Dark S Redox Depress			,		loodplain Solls (F1 ic (TA6) (MLRA 1 4	
	Bleyed Matrix (S4) Redox (S5)		Redux Debiess:	ions (Fo)			Red Parent	Material (F21)	
	Matrix (S6)							w Dark Surface (Ti	F12)
Dark Su	rface (S7) (LRR R, N	ILRA 149E	3)				Other (Expl	ain in Remarks)	
3Indicators o	f hydrophytic vegetat	ion and we	etland hydrology mus	t be pres	ent, unles	s disturbed	or problematic.		
	Layer (if observed):								
Type:									
Depth (in	ches):						Hydric Soil Pres	ent? Yes X	No
Remarks:									
			,						
,									
}	4								

WETLAND DETERMINATION DATA FOR	M – Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project City/C	County: Chautauqua County Sampling Date: 0/7/16
Applicant/Ourner, Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- + 45
Section Repution of Nizal Outile Section	on Township, Range: Town of Hanover
Landform (hillslope, terrace, etc.): depression Local rel	ief (conceve convex none): & 11000 conceve Slope (%):5-102
Subregion (LRR or MLRA): LRR-R Lat: 47.456363	L Long: - 79.146 Z49 Datum: NAD 83
Soil Map Unit Name: Fremont Silt Loan Oto 3	NWI classification: Upland
Soil Map Unit Name:	(on Y No (If no explain in Remarks.)
Are climatic / hydrologic conditions on the site typical for this time of year?	rbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No., Soil No., or Hydrology No. significantly disturbed	
Are Vegetation No., Soil No., or Hydrology No. naturally problem	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.)	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID:
1	1/2 1/2 1/2 - 2)
Upland data point in the middle of trail is a low spot where we but no evidence of hydrology.	Hand regeletion and hydric soils are found
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	(540)
Surface Water (A1) Water-Stained Leav High Water Table (A2) Aquatic Fauna (B13	
10.10	, and a second second
	,
	eres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	ion in Tilled Sails (C6) Geomorphic Position (D2)
- I garage a second and a second a second and a second and a second and a second and a second and a second and a second and a second and a second and a second an	Ole - Harry A moldend (DQ)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Other (Explain in R	(1 D. 8 (1 D. A)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No You Depth (inches):	
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No _X Depth (inches):	Wetland Hydrology Present? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Dodding Hassian Land	
Remarks: No hydrology indicator observe	J.
. the sake	end a contract of the contract

	Absolute	Dominant	Indicator	T
Tree Stratum (Plot size: 30' L)		Species?		Dominance Test worksheet:
1. Fraxitur américana	20	Y	FACU	Number of Dominant Species That Are OBL FACW or FAC: 3
	15	$\frac{}{}$		That Are OBL, FACW, or FAC: (A)
2. Fagus grandifolia		<u> </u>	FACU	Total Number of Dominant
3. Acer saccharum	<u>S_</u>	<u>N</u>	FALU	Species Across All Strata: (B)
4.				m
				Percent of Dominant Species That Are OBL, FACW, or FAC: SO?. (A/B)
3				(20)
6				Prevalence Index worksheet:
7	<u> </u>			Total % Cover of: Multiply by:
	40	= Total Co		-
35.10		- Total Co	vei	1// 5
Sapling/Shrub Stratum (Plot size: 15 ' 2)		i		
1. CUMUST VACEMOSA	<u> </u>	<u>N</u>	FAC	17.0 oposios xo
2. Cornus amonun	: 30	: Y	FACW	FACU species <u>SS</u> x4 = <u>220</u>
3. Rosa multiflora	10	Ÿ	PACU	UPL species
3. KOSK MULTIFIAN			1 1100	Column Totals: 185 (A) 440 (B)
4				0.20
5				Prevalence Index = B/A = 2,38
6				Hydrophytic Vegetation Indicators:
			•	1 - Rapid Test for Hydrophytic Vegetation
7	/1			X 2 - Dominance Test is >50%
•	45	= Total Cov	/er	
Herb Stratum (Plot size: 51 R)	•			X 3 - Prevalence Index is ≤3.0 ¹
1. Juneur effusus	10	N	OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Scirpus cyperinus	45	Y.	08L	Problematic Hydrophytic Vegetation¹ (Explain)
	<u>- </u>	N	FACW	
3. Muhlen bergia Frond cora				¹Indicators of hydric soil and wetland hydrology must
4. Trifolium repens		_Ŋ_	FACU	be present, unless disturbed or problematic.
5. Schow athorizens	15	<u> </u>	OBC	Definitions of Vegetation Strata:
6. Onoclea Sensibilis	5.	N	FACW	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Ranurulus acris	<u> </u>	N	FAC	at breast height (DBH), regardless of height.
1. Nathurymus acris			<u> </u>	
8	25			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9. Fragaria virginiana	<u> S </u>	N	UPL	and greater than or equal to 3.20 it (1 iii) tair.
10. Symphyotrichum prenanthoide	5 5	N	FAC	Herb - All herbaceous (non-woody) plants, regardless of
· · · · · · · · · · · · · · · · · · ·				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12			· <u> </u>	height.
	100	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' 2)				
1. Not Applicable				
• •		<u> </u>		Hydrophytic
2				Vegetation \checkmark
3				Present? Yes No
4,				· ·
	- (X	T-4-1-0		
Pomorko: (Include photo numbers have as an a secretary		= Total Cov	<u>er</u>	
Remarks: (Include photo numbers here or on a separate s	neet.)			
				·

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)								
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	c Features %	Type ¹	Loc ²	Texture	Remarks
0-3	7.543/V	90	2.57 5 b	5	C	M	SiL	
		·	7.57R4/6	5	<u>c</u>	M		
3-15	2.5Y3h	US	2.575/6	25	\overline{c}	M	SiL	
			7.5Y 5/8	10	C	M		
15-20	7. SY 5/2	80	7.5Y31,	15	0	m	SiL	
13 00	2. 01 12	_60_	7.54R416	-13	-0	m		
			70				·	
		 						
						,		
¹ Type: C=C Hydric Soil		oletion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ains.		: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol			Polyvalue Below	w Surface	(S8) (LR	RR,	2 cm N	fluck (A10) (LRR K, L, MLRA 149B)
Histic E	oipedon (A2)		MLRA 149B))				Prairie Redox (A16) (LRR K, L, R)
1	stic (A3) en Sulfide (A4)		Thin Dark Surfa				,	Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L, M)
Stratified	d Layers (A5)		Loamy Gleyed I			,,	Polyva	liue Below Surface (S8) (LRR K, L)
	d Below Dark Surfac	e (A11)	Depleted Matrix					ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R)
	ark Surface (A12) flucky Mineral (S1)		X Redox Dark Sur Depleted Dark S				Piedm	ont Floodplain Soils (F19) (MLRA 149B)
	Bleyed Matrix (S4)		Redox Depress	•	,	·		Spodic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)							arent Material (F21) Shallow Dark Surface (TF12)
	l Matrix (S6) rface (S7) (LRR R,	MLRA 1491	3)					(Explain in Remarks)
				41.		م حاد بامالم	l ar problematic	•
	t nydropnytic vegeta Layer (if observed)		etland hydrology mus	st be pres	ent, unies	S disturbed	or propiernan	J.
l .	NIA							~
Depth (in	ches):						Hydric Soil	Present? Yes X No
Remarks:				•				
Hyd	nc suls.	found i	n 1000 500	17 L	SDra .	لطدها	1 - 1	Surrounced by uplens
arca	-		· r	9	J 140	1 10010	~ Frain	suramed by apiens
ر مراک	•							
,								
,								
-								
1								

WETLAND DETERMINATION DATA FORM	
Project/Site: Ball Hill Wind Project City/Cou	unty: Chautauqua County Sampling Date: 1816
Ball Hill Wind Energy, LLC	State: NY Sampling Point: DF 1796
Section Nicola Duther Section	Township, Range: Town of Hanover
Local relief	(concave, convex, none): CONVAVE Slope (%).
Subregion (LRR or MLRA): LRR-R Lat: 42.438/5/	Long: - Fol. 1206 (3) Datum: Was
Soil Map Unit Name: AShville S: 1+ Locum	NWI classification: Volund
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	s X No (if no, explain in Remarks.)
Are Vegetation No., Soil No., or Hydrology No. significantly disturbed	
Are Vegetation Nu , Soil No , or Hydrology No naturally problemat	
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
	Is the Sampled Area
Hydric Soil Present? Yes X No	∧ 102 c /)
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: 12055
Remarks: (Explain alternative procedures here or in a separate report.)	,
PEM method in comball pen, along	both sider of Stream A537,
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	Surface Soll Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	(040)
Surface Water (A1) Water-Stained Leave	44
High Water Table (A2) Aquatic Fauna (B13)	Dry-Season Water Table (C2)
Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Od	- 715
The state of the s	51 (51)
- CD diese	
Drift Deposits (B3) Presence of Reduced Algal Mat or Crust (B4) Recent Iron Reduction	on in Tilled Soils (C6)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	marks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X _ Depth (Inches):	
Water Table Present? Yes No X Depth (Inches):	Wetland Hydrology Present? Yes X No
Saturation Present? Yes No _X Depth (inches):	Wetland Hydrology Present? 165 165
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
In a depression between two upland/hi	115 - geomorphic pushtin.
1	
. 56	
· ••· /	
. 56.	
. M.	

	Absolute	Dominant Indicator	1
Tree Stratum (Plot size: 30' R)		Species? Status	Dominance Test worksheet:
			Number of Dominant Species
1. Not Applicable			That Are OBL, FACW, or FAC: (A)
2			
3			Total Number of Dominant Species Across All Strate: (B)
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			Percent of Dominant Species That Are OBL, FACW, or FAC: しゅんう? (A/B)
1			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
	<u> </u>	7.416	1
1010		= Total Cover	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 151 (•	FACW species x 2 =
1. Rosa multiflora	10	Y FACU	FAC species x 3 =
· · ·			FACU species x 4 =
2			LIDI anada
3			UPL species x 5 =
1			Column Totals: (A) (B)
4			
5		<u> </u>	Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7	-		1 - Rapid Test for Hydrophytic Vegetation
	1.		2 - Dominance Test is >50%
-10		= Total Cover	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5 ' 2)			
1. Juneux effusus	10	N OBL	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
	15		
2. Mantha aquatica		N OBC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Kanunculur acris	\$	N FAC	¹Indicators of hydric soil and wetland hydrology must
4. Onoclea Sensibilis	10.	N FACW	be present, unless disturbed or problematic.
5. Impatiens capensis	<u> </u>	N FACW	Definitions of Vegetation Strata:
6. Acorus Calamus	30	Y OBL	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Eupatorium perfoliatum	, 5	N FACH	at breast height (DBH), regardless of height.
1. Euperatium perfolialum			
8. Lysimachia nummularia	20	Y FACW	Sapling/shrub - Woody plants less than 3 in. DBH
g ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '			and greater than or equal to 3.28 ft (1 m) tall.
9			Herb - All herbaceous (non-woody) plants, regardless of
10			size, and woody plants less than 3.28 ft tall.
11			•
12.			Woody vines - All woody vines greater than 3.28 ft in
14	140		height.
	100 =	Total Cover	,
Woody Vine Stratum (Plot size: 3012)			
1. Not Applicable			12
2			Hydrophytic Vegetation
3.	;		Present? Yes No
4			100
4	 .		
	<u></u>	Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		
	•		
PEM wetland, no trees now	ladio no	ethand.	
Live voetiano, no tree pos	CO 111 1V	wy run w 1	
		•	
			·

Profile Desc	cription: (Describe t	o the dep	oth needed to docum	nent the	ndicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix			x Feature	<u>\$</u>	Loc²	Texture		Remarks	
(inches)	2. SY 2. S/1	% 95	Color (moist) 5 YR 3/4	<u></u> 5	Type ¹	MIPL			(Chiano	
0-10					<u></u>					
10-	2.544/1	90	7,5YR416	10	<u> </u>	<u>M</u>	SIL			
			-							
	-,					***************************************				, .
										
										
	oncentration, D=Depl	letion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location	: PL=Pore	Lining, M=Mati matic Hydric \$	ix. Solle ³ ·
Hydric Soil			Date 1 D 1	0 :=	. /ON / P	n n			LRR K, L, ML	
Histosol	l (A1) pipedon (A2)		Polyvalue Below		(28) (LK	KK,			ox (A16) (LRR	
	istic (A3)		Thin Dark Surfa		LRR R, M	LRA 149B)	5 cm M	Mucky Peat	or Peat (S3) (L	.RR K, L, R)
Hydroge	en Sulfide (A4)		Loamy Mucky			(, L)			(LRR K, L, M)	
	d Layers (A5)	~ (414)	Loamy Gleyed Depleted Matrix		2)				Surface (S8) (L (S9) (LRR K,	
	d Below Dark Surface ark Surface (A12)	6 (ATT)	X Redox Dark Su)		Iron-M	langanese l	Aasses (F12) (LRR K, L, R)
	Mucky Mineral (S1)		Depleted Dark	Surface (F7)					(MLRA 149B)
	Gleyed Matrix (S4)		Redox Depress	sions (F8)	١			Spodic (TA arent Mater	6) (MLRA 144)	A, 145, 149B)
	Redox (S5) d Matrix (S6)						Verv S	Shallow Dar	k Surface (TF1	2)
	ırface (S7) (LRR R, N	/ILRA 149	(B)			•		(Explain in		•
	of hydrophytic vegetal Layer (if observed):		etland hydrology mu	st be pres	ent, unles	s disturbed	or problemati	С.		
	Layer (ii observed):									
Type: Depth (in	iches).		-				Hydric Soi	l Present?	Yes ×	No
Remarks:	101100)		-				I	····································		
110111111111111111111111111111111111111										
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	FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 67-116
Applicant/Owners Ball Hill Wind Energy, LLC	State: NY Sampling Point: DF- 141
Bea Witt and Nicke Dutcher	Section Township, Range: Town of Haywar
LOUIS CONTRACTOR OF THE STATE O	scal relief (concave, convex, none); CONVXX Slope (%); 37.
Subsection (LDD or All DA): LRR-R Lat: 46143	Long: Datom.
Subjection (LICK of Micros). Aslasilla Silt Logons	NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Ves X No. (If no. explain in Remarks.)
Are climatic / hydrologic conditions on the site typical for this time of y	y disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No , Soil No , or Hydrology No significantly	
Are Vegetation No., Soll No., or Hydrology No naturally pr	·
SUMMARY OF FINDINGS - Attach site map showin	g sampling point locations, transects, important features, etc.
2	In the Complet Area
Hydrophytic Vegetation Present? Hydric Soll Present? Yes No X No X	within a Wetland? Yes No X
1	If yes, optional Wetland Site ID:
Trouble Try and a second to the second to th	ort\
Remarks, (Explain anomaly proceedings have a surely and	A635B. Data point along edge of hillstype
, bland gate bourt to metiano	hossis celapoin along edge of hillstope
in a contout pen.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	y) Surface Soll Cracks (B6)
Surface Water (A1) Water-Staine	ed Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Faur	na (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposit	s (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen St	ulfide Odor (C1) Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhi	Izospheres on Living Roots (C3) Saturation Visible on Aeriai Imagery (C9)
Drift Deposits (B3) Presence of	Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck S	jurface (C7) Shallow Aquitard (D3)
	ain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (Inch	nes):
Water Table Present? Yes NoX Depth (Incl	
Saturation Present? Yes No X Depth (incl	nes): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pi	notos, previous inspections), if available:
Describe (decorded para forestin \$225-1 merins)	
Remarks:	
No much observe is director above al	no to be and a distance of the second
independent of the second of the second	, more to be expected due to topography and
location on hillstype.	· · · · · · · · · · · · · · · · · · ·

Tree Stratum (Plot size: 301 R)		Species?	Status	Dominance Test worksheet: Number of Dominant Species
1. Not Applicable				That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata:(B)
4				Percent of Dominant Species 33, 33
5	· 			That Are OBL, FACW, or FAC: (A/B)
6	-			Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	<u>Ø</u>	= Total Cov	er	OBL species x1 =
Sapling/Shrub Stratum (Plot size: \5' \(\)		•		FACW species x 2 =
1. Not Applicable		· .		FAC species x 3 =
2	· · · · · · · · · · · · · · · · · · ·		***************************************	FACU species x 4 = UPL species x 5 =
3				Column Totals: (A) (B)
4				
5			<u></u>	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	<u> Ø</u>	≕ Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 ' 2)	,			3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting
1. Plantago Ignceolata	<u> </u>	<u>Y</u>	FACU	data in Remarks or on a separate sheet)
2. Ranunculus acris	<u> </u>	N	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Trifolium repens			FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Taraxacum officinale	10	<u>N</u>	FACU	be present, unless disturbed or problematic.
5. Carex Pestucacea	35	Υ	FAC	Definitions of Vegetation Strata:
6. Trifolium pratenze	<u>S</u>	<u>M</u>	FACU	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7. Dancus carota	5	<u>N</u>	UPL	at breast height (DBH), regardless of height.
8	<u> </u>		-	Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
12			<u></u>	Woody vines – All woody vines greater than 3.28 ft in height.
	<u>100 :</u>	= Total Cove	ər	
Woody Vine Stratum (Plot size: 30'2)		* .		
1. Not Applicable	<u></u>			
2				Hydrophytic Vegetation X
3				Present? Yes No
4				
		= Total Cove	ər	
Remarks: (Include photo numbers here or on a separate	sheet.)			
				•
				•

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the i	ndicator	or confirm	the absence o	of indicato	rs.)	
Depth	Matrix			x Feature	<u>s</u>	12	Texture		Remarks	
(inches)	2. SY 4/3	% 80	2.54 3/2	<u> ―%</u> 20	Type ¹	Loc²	S;L		Kemarks	
0-4			2.81 912	<u> </u>	<u>D</u> _	101				
4-15	2. SY 3/3	100					SiL			
15-20	2.5733	90	2.54 4/3	5	\overline{D}	<u>M</u>	SiL			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			2.54 3/2	<u>5</u>	<u>C</u>	M				
										
•			<u></u>		***************************************					
·				<u> </u>						
										·
¹ Type: C=C	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	IS=Maske	d Sand Gr	ains.	² Location:	PL=Pore	Lining, M=Matrix.	
Hydric Soil									matic Hydric Soils ³ :	D)
Histosol			Polyvalue Beld		(S8) (LR	R R,			LRR K, L, MLRA 149 ox (A16) (LRR K, L, R	
	oipedon (A2) istic (A3)		Thin Dark Sur	•	LRR R. M	LRA 149B)			or Peat (S3) (LRR K,	
	en Sulfide (A4)	•	Loamy Mucky				Dark S		(LRR K, L, M)	,
	d Layers (A5)	- /8445	Loamy Gleyed		2)				Surface (S8) (LRR K, I (S9) (LRR K, L)	-)
	d Below Dark Surfact ark Surface (A12)	e (A11)	Depleted Matr)				Masses (F12) (LRR K,	L, R)
	Aucky Mineral (S1)		Depleted Dark				Piedmo	ont Floodpla	ain Soils (F19) (MLRA	149B)
	Bleyed Matrix (S4)		Redox Depres	sions (F8)					6) (MLRA 144A, 145,	149B)
	Redox (S5) I Matrix (S6)							arent Mater hallow Dari	(Surface (TF12)	
	rface (S7) (LRR R, I	/ILRA 149	B)					Explain in I		İ
						11 - 6				
	f hydrophytic vegeta Layer (if observed):		etland hydrology mu	ist be pres	ent, unies	s disturbed	or problematic		· · · · · · · · · · · · · · · · · · ·	
Type:	Layer (il observed).				•					
Depth (in	ches):						Hydric Soll	Present?	Yes No 2	<u> </u>
Remarks:										
,										
			•							
,										
1										
					• .					
1										

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date:___ Project/Site: Ball Hill Wind Project Sampling Point: DP- 751 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): Ben Uirts and Nicole Dutcher Section, Township, Range: Town of Handrer Landform (hillslope, terrace, etc.): Flood plato Local relief (concave, convex, none): Concave _____ Slope (%):_ Lat: 42.444661 Long: -79.122147 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R soil Map Unit Name: Valoi's grovelly S: It Loan, calling Are climatic / hydrologic conditions on the site typical for this time of year? Yes X _ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No_ Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are Vegetation <u>No</u>, Soil <u>No</u>, or Hydrology <u>No</u> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) PEM wetland in flow plain of Stream SA ASIZ. PEM netters in forest with no trees noted in wetland. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Water-Stained Leaves (B9) Drainage Patterns (B10) X Surface Water (A1) Moss Trim Lines (B16) ___ Aquatic Fauna (B13) X High Water Table (A2) Dry-Season Water Table (C2) ___ Marl Deposits (B15) X Saturation (A3) Crayfish Burrows (C8) _ Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aeriai Imagery (B7) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No Depth (inches): 2" Surface Water Present? Yes X No ____ Depth (inches): lo'' Water Table Present? Wetland Hydrology Present? Yes X Yes X No ____ Depth (inches): O" Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absolute	Dominant Indic	ator
Tree Stratum (Plot size: VO'X 30')	% Cover	Species? Sta	tus Dominance lest worksheet:
1. Not Applicable		• •	Number of Dominant Species
2			That Are OBL, FACW, or FAC: (A)
2			1 Total Nullipel of Dollinati
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			That Are OBL, FACW, or FAC: (A/B)
4: · · · · · · · · · · · · · · · · · · ·			
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
	\bigcirc	= Total Cover	OBL species x1 =
Sapling/Shrub Stratum (Plot size: W' x 30')		10101 00101	FACW species x 2 =
1			
1. Not Applicable			FAC species x 3 =
2			FACU species x 4 =
3			LiPI energies v 5 =
			Column Totals: (A) (B)
4			
5			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
1 			1 - Rapid Test for Hydrophytic Vegetation
			
	<u>Ø</u>	≕ Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' x 5')	•		3 - Prevalence Index is ≤3.0¹
1. Impatiens capensis	30	Y FA	4 - Morphological Adaptations (Provide supporting
2. Myosotis Stricta			
3. Onoclea Sensibilis	16	N FAC	Indicators of hydric soil and wetland hydrology must
4. Persicaria Virginiana	S	N FA	
5. Athyrium angustium	5		
5, AT NITUM ANGUSTIUM			
6. Glyceria mericaria	30	<u>Y 03</u>	
7. Boehmena cylindrica	10	N OB	at breast height (DBH), regardless of height.
the contract of the contract o			Sapling/shrub - Woody plants less than 3 in. DBH
8			and greater than or equal to 3.28 ft (1 m) tall.
9			
10			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11			
			Woody vines - All woody vines greater than 3.28 ft in
12			height.
	92 =	Total Cover	
Woody Vine Stratum (Plot size: 16' x 30')		the time	
1. Not Applicable			
			Hydrophytic
۷			Vegetation
3			Present? Yes No
4	*		
		Total Cover	
Pomorko: (includo photo numbos has as as as assessed		- Total Cover	
Remarks: (Include photo numbers here or on a separate s	ineet.)		

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Profile Desc	ription: (Describe t	o the dep	th needed to docun	nent the i	ndicator	or confirm	the absence of Indi	ators.)	
Depth	Matrix		Redo	x Features	;				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks	
<u>0-4</u>	2.5Y 2.5/1	1007.	2 - 21				<u>Si</u>		
4-16	2.542.5/1	80	2.57312	15	D	<u>M</u>	SL_		
			7,57R4/U	_5_	<u> </u>	M			
	· · · · · · · · · · · · · · · · · · ·				`		· · · · · · · · · · · · · · · · · · ·		
						<u> </u>			
									
									,
							2		
¹ Type: C=Ce	oncentration, D=Depl	etion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	*Location: PL=P	ore Lining, M=Mat blematic Hvdric	
Histosol			Polyvalue Belo	w Surface	(S8) (I RI	R.		10) (LRR K, L, ML	
	pipedon (A2)		MLRA 149B		(00) (211	,	Coast Prairie	Redox (A16) (LRR	K, L, R)
Black Hi	istic (A3)		Thin Dark Surfa					eat or Peat (S3) (L	The state of the s
	en Sulfide (A4)		Loamy Mucky I			, L)		(S7) (LRR K, L, M ow Surface (S8) (L	
	d Layers (A5) d Below Dark Surface	e (A11)	Loamy Gleyed Depleted Matrix		,			face (S9) (LRR K,	
	ark Surface (A12)	. (,	X Redox Dark Su					se Masses (F12) (
	Mucky Mineral (S1)		Depleted Dark		7)	•		odplain Soils (F19) (TA6) (MLRA 144	
	eleyed Matrix (S4) Redox (S5)		Redox Depress	sions (F8)			Red Parent M		7, 140, 1402)
	i Matrix (S6)						Very Shallow	Dark Surface (TF1	2)
	rface (S7) (LRR R, N	ILRA 149	B) _				Other (Explain	ı in Remarks)	
31	of hydrophytic vegetat	ion and w	atland hydrology mu	et ha nrae	ant unlac	e disturbed	or problematic.		
	Layer (if observed):		enand hydrology mu	st ne bi ea	oni, umes	3 distarbou	- Problemater		
Type:									
Depth (in	ches):						Hydric Soil Prese	nt? Yes X	No
Remarks:									
			·						
			ı						
,									
	•								
					·				
					·				

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region _ Sampling Date: 6 8 16 City/County: Chautauqua County Project/Site: Ball Hill Wind Project ___ Sampling Point: DP- 752 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): Benvirts and Nicae Outher Section, Township, Range: Town at Hanover Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex Slope (%): 25% Subregion (LRR or MLRA): LRR-R Lat: 47.1(14574 Long: -79.172103 Datum: NAD 83 Soil Map Unit Name: Valois gravelly 5: 1+ locum, Rolling NWI classification: Upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X O No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No____ Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation <u>Mo</u>, Soil <u>No</u>, or Hydrology <u>No</u> naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Yes X No Hydrophytic Vegetation Present? within a Wetland? Yes ____ No X Hydric Soil Present? If yes, optional Wetland Site ID:_____ _ No X Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) Upland data point for wetland (PEN) A 636. Uplood on a hillstyre with ATU/ log road whin 15' and main access Bod with So'. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) ___ Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) __ Marl Deposits (B15) Saturation (A3) ___ Crayfish Burrows (C8) __ Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) ___ Sediment Deposits (B2) __ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) _ Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) ___ Microtopographic Relief (D4) ___ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No X Depth (inches): Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _____ No X Yes No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No hydrology indicators observed.

				
Tree Stratum (Plot size: 30' R)	Absolute	Dominant Species?		Dominance Test worksheet:
		Species?		Number of Dominant Species 2
1. Acer Sacchicum	<u>4Θ</u>		FACU	That Are OBL, FACW, or FAC: (A)
2. Betula alleghaniensis	40	<u> </u>	FAC	Total Number of Dominant
3. Tsuga Canadensis	10	N	FACU	Species Across All Strata: (B)
4				
				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				That All Obe, I Adv, of I Ad (Alb)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	90	= Total Cov	er	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 1512)			0 ,	FACW species x 2 =
	2 5	V	٠,٨٠٠	
1. Acer Saccharum	<u> 25</u>		FACU	FACULTURE X3 =
2. Betula alleghaniensis	25	<u>Y</u>	FAC	FACU species x4 =
3	· · · · · · · · · · · · · · · · · · ·			UPL species x 5 =
4				Column Totals: (A) (B)
·				Prevalence Index = B/A =
5				Frevalence index D/A -
6			-	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	50	= Total Cov	or	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5'/2)	· · · · · · · · · · · · · · · · · · ·	- 10tai 004	G)	3 - Prevalence Index is ≤3.0 ¹
	S		٠.	4 - Morphological Adaptations ¹ (Provide supporting
1. Dyoptens maginalis		N	FACU	data in Remarks or on a separate sheet)
2. Dehila alleghaniensis	15	<u>Y</u>	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Fraxinus americana	5	N	FACU	¹ Indicators of hydric soil and wetland hydrology must
	3	N	FAC	be present, unless disturbed or problematic.
4. Chamaeperichymenum canaden	2	- 17		
5, ricer succiatum			FIACU	Definitions of Vegetation Strata:
6			-	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
				Sapling/shrub - Woody plants less than 3 in. DBH
8				and greater than or equal to 3.28 ft (1 m) tail.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
12				Woody vines – All woody vines greater than 3.28 ft in height.
	30 .	Total Cove		noight.
Woody Vine Stratum (Plot size: 30' (2)		- TOTAL COVE	31 .	
1		•		
1. Not Applicable	<u> </u>			
2				Hydrophytic Vegetation
3.	•			Present? Yes X No
				•
	<u> </u>			
		Total Cove	er	
Remarks: (Include photo numbers here or on a separate s	heet.)			•
				*
•				
			•	
	•			

	cription: (Describe)	to the dept	n needed to docum	ient the indicator	or contirm	the absence of indica	.013.,	
Depth	Matrix		Redox	Features				
(inches)	2.5Y 2.5/1	<u>%</u> .	Color (moist)	% Type ¹	_Loc²	<u>Texture</u>	Remarks	
<u>0- 9</u>	2101	· —— ·				S', L		
4-14	1646 210	<u> 1008</u> .						
14-20	10YR 4/4	1007.			·	SiL With	grovel	
								
								<u> </u>
		. .						
	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked Sand G	rains.	² Location: PL=Por	e Lining, M=Matrix.	11-3.
Hydric Soil			m.,		.D.D	Indicators for Prob	lematic Hydric So) (LRR K, L, MLR/	
Histosol	l (A1) pipedon (A2)		Polyvalue Belov MLRA 149B)	v Surface (S8) (LF	KK K,		dox (A16) (LRR K	
	istic (A3)			ce (S9) (LRR R, N	ILRA 149B) 5 cm Mucky Pea	at or Peat (S3) (LRI	
	en Sulfide (A4)	•		Mineral (F1) (LRR	K, L)		7) (LRR K, L, M) / Surface (S8) (LRI	K I)
	d Layers (A5) d Below Dark Surfac	e (A11)	Loamy Gleyed I Depleted Matrix				ce (S9) (LRR K, L)	
	ark Surface (A12)	O ((())	Redox Dark Sui			Iron-Manganese	Masses (F12) (LR	R K, L, R)
	Mucky Mineral (S1)		Depleted Dark S	Surface (F7)			plain Soils (F19) (N	
						Maria Spedic /7	AAA AG IM/ (AA'	145, 149B)
	Gleyed Matrix (S4)		Redox Depress			Mesic Spodic (1	A6) (MLRA 144A, erial (F21)	145, 149B)
Sandy F	Gleyed Matrix (S4) Redox (S5) d Matrix (S6)					Red Parent Mai	erial (F21) ark Surface (TF12)	
Sandy F	Redox (S5)	MLRA 149E	Redox Depress			Red Parent Mat	erial (F21) ark Surface (TF12)	
Sandy F Stripped Dark Su	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I		Redox Depress	ions (F8)	ss disturbed	Red Parent Mat Very Shallow D Other (Explain i	erial (F21) ark Surface (TF12)	
Sandy F Stripped Dark Su Indicators of	Redox (S5) d Matrix (S6)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mat Very Shallow D Other (Explain i	erial (F21) ark Surface (TF12)	
Sandy F Stripped Dark Su Indicators of	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (If observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mat Very Shallow D Other (Explain i	erial (F21) ark Surface (TF12) n Remarks)	
Sandy F Stripped Dark Su Indicators of Restrictive Type:	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (If observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (If observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (If observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,
Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR R, I of hydrophytic vegeta Layer (if observed)	tion and we	Redox Depress	ions (F8)	ss disturbed	Red Parent Mai Very Shallow D Other (Explain i d or problematic.	erial (F21) ark Surface (TF12) n Remarks)	.,,.,

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Sampling Date: 6810 City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Point: DP- 755 State: NY Applicant/Owner: Ball Hill Wind Energy, LLC Town of Villeroux Investigator(s): Ben Virts and Nicou Duther Section, Township, Range: Landform (hillslope, terrace, etc.): de Are SSION Local relief (concave, convex, none): Concave Linear Slope (%): 0-37 Datum: NAD 83 Lat: 42.419244 Long: -79,152070 Subregion (LRR or MLRA); LRR-R Soll Map Unit Name: Bust S: It Lours 3 to 890 5 lopos (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes X Are "Normal Circumstances" present? Yes X No Are Vegetation <u>No</u>, Soll <u>No</u>, or Hydrology <u>No</u> significantly disturbed? Are Vegetation No., Soil No., or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soll Present? If yes, optional Wetland Site ID: Wetland A 635A Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) Linear PEM wetland alog madside that discharges to Oth ASOF Wetland burders active farm field with hydric solls but no hydrology or wetlow Vegetation. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soll Cracks (B6) Primary Indicators (minimum of one is required: check all that apply) X Drainage Patterns (B10) ___ Water-Stained Leaves (B9) Surface Water (A1) __ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) Mari Deposits (B15) ___ Saturation (A3) _ Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) __ Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) ___ Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) X Microtopographic Relief (D4) ___ Other (Explain in Remarks) ___ Inundation Visible on Aerial Imagery (B7) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? No X Depth (inches): Yes No X Depth (Inches): Water Table Present? Wetland Hydrology Present? Yes X No_ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Drainge patterns run. Horangh met land liverly and discharge to ditch ASO7.

Microtipographic relief du to dap off from brieft up roads

VEGETATION - Ose scientific flames of plants.	·			Sampling Point: 2, 103
Tree Stratum (Plot size: 5x5)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
A/ 1 A				Number of Dominant Species That Are ORL FACW or FAC
1. Not rophable			·	That Are OBL, FACW, or FAC: (A)
2			, 	Total Number of Dominant
3			·	Species Across All Strata: (B)
4				Percent of Dominant Species
5		-		That Are OBL, FACW, or FAC: // UD (A/B)
				
6				Prevalence Index worksheet:
7			·	Total % Cover of:Multiply by:
	φ	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 5' x 5')				FACW species x 2 =
1. Nor Applicable				FAC species x 3 =
2			•	FACU species x 4 =
2.	 ,			UPL species x 5 =
3				Column Totals: (A) (B)
4				, , , , , , , , , , , , , , , , , , ,
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7		*		1 - Rapid Test for Hydrophytic Vegetation
	d			X 2 - Dominance Test is >50%
	<u> </u>	= Total Cov	er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: S' x 5')				4 - Morphological Adaptations ¹ (Provide supporting
1. Typha angustifolia	45	<u> </u>	OBL	data in Remarks or on a separate sheet)
2. Symphyotrichum prenanthoides	30	Υ	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Ranunculus acris	5	W	FAC	
		N		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Solidago nugosa			FAC	
5. Equisetum patustre	10	<u> </u>	FACW	Definitions of Vegetation Strata:
6. Tri Folium repens		N	FACU	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7.				at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH
	·			and greater than or equal to 3.28 ft (1 m) tall.
9	···		-	Herb – All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
12				Woody vines – All woody vines greater than 3.28 ft in height.
	160 =	Total Cove	or .	
Woody Vine Stratum (Plot size: 5' x 5')				
1. Not Applicable				
2				Hydrophytic Vegetation
3				Present? Yes No
4				
	Ø.	Total Cove	ar	*
Remarks: (Include photo numbers here or on a separate si		7010, 0011		
•	·			↑
Vegetation plot sizes wer	t ac	justed	to 1	It within the westland
boll		' .	·	
boundary.				•
U				

Profile Desc	ription: (Describe	to the dept	u useasa to ancau	ient the ir	idicator (or commi	ue abselice (or indicator	3.,
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	c Features %	Type ¹	l oc²	Texture		Remarks
0-3	1018 311	1007	Color (Holst)		TAPE		SiL		
3-20	101R 3/1		7,514/6	~~	\overline{c}	<u>m</u>	SiL		
5 10	101K 1	133	4131 16	<u> </u>		'''- -	<u>ین</u>		
									
		·		······································					
									
	***************************************	· ·							
· · ·									
	***************************************					-			
		·						1	
									
1Type: C=C	oncentration, D=Dep	letion PM=	Paducad Matrix MS		Sand Gr	aine	² I ocation:	PL=Pore I	ining, M=Matrix.
Hydric Soil		ICHOII, INIVI	rteudoed imatrix, inte	J-IMAGROA	Ourid Oil	AII 101	Indicators	for Probler	natic Hydric Soils³:
Histosol	, ,		Polyvalue Belov		(S8) (LR F	R,			LRR K, L, MLRA 149B)
	olpedon (A2) stic (A3)		MLRA 149B) Thin Dark Surfa		.RR R. MI	LRA 149B)			ox (A16) (LRR K, L, R) or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Mucky N				Dark S	urface (S7)	(LRR K, L, M)
L	i Layers (A5)	o (A11)	Loamy Gleyed I Depleted Matrix)				urface (S8) (LRR K, L) (S9) (LRR K, L)
	d Below Dark Surfac ark Surface (A12)		Redox Dark Su				Iron-Ma	anganese M	lasses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark		7)				nin Soils (F19) (MLRA 149B) 6) (MLRA 144A, 145, 149B)
	Bleyed Matrix (S4) Redox (S5)		Redox Depress	ions (F8)				arent Materi	
	Matrix (S6)						Very S	hallow Dark	Surface (TF12)
Dark Su	rface (S7) (LRR R, N	MLRA 149E	3)				Other	Explain in f	Remarks)
³ Indicators of	f hydrophytic vegeta	tion and we	tland hydrology mus	st be prese	ent, unles	s disturbed	or problematic), ·	
Restrictive I	Layer (if observed):								
Type:	<u>nlA</u>	·					Hydric Soil	Present?	Yes X No
Depth (inc	cnes):	-1					Tiyano don	11000111	
r comune.									
			•						
			V						
				,					
				,					

	TA FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: UK IU
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DF- 73 C
1 Boo Witte and Micro Doutster	Section, Township, Range: Town of Villerova
1 Horas (Allelana tarraga ata): + CACL-	Local relief (concave, convex, none): None Slope (%): United Slope
and the same of th	Jong: TI. 13 2203 Datum: 1013
Sall Man Half Marray 1345+ 5: 1+1 av 32	108% Slopen NWI classification: Uplant
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes X No (If no, explain in Remarks.)
Are Vegetation 10 , Soil 10 , or Hydrology 10 significant	antly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No. Soil No., or Hydrology No. natural	
SUMMARY OF FINDINGS - Attach site map show	ring sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X	is the Sampled Area within a Wetland? Yes No
Hydric Soil Present? Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate	report.)
Upland data point for	meetland (PCM) A 1035A
opland all point Tor	100mm C = 1,7 M C =
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	pply) Surface Soll Cracks (B6)
	ained Leaves (B9) Drainage Patterns (B10)
1.3.	auna (B13) Moss Trim Lines (B16) osits (B15) Dry-Season Water Table (C2)
1 = : : : : : : : : : : : : : : : : : :	n Sulfide Odor (C1) Crayfish Burrows (C8) Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	on Reduction in Tilled Soils (C6) Geomorphic Position (D2)
, "G"	sk Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (E	xplain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	landa a la
Surface Water Present? Yes No X Depth (Water Table Present? Yes No X Depth (Inches):
Y 2	
(includes confilent friege)	
Describe Recorded Data (stream gauge, monitoring well, aeria	al photos, previous inspections), if available.
Remarks:	
No hydrology indicators obstruct	•
,	
·	
· · · •	

Tree Stratum (Plot size: 30' R)				
1100 Ottatatii (1 101 3126,	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Robinia psendoacacia		Species	FACU	Number of Dominant Species 3
				That Are OBL, FACW, or FAC: (A)
2. Acer Saccharm	10		FACU	Total Number of Dominant
3				Species Across All Strata:(B)
4		•		Percent of Dominant Species That Are OBL, FACW, or FAC: 42.92 (A/B)
5			·	That Ale Obl., PACVV, of PAC; (A/B)
6				Prevalence Index worksheet:
7,		1		1
	27			Total % Cover of: Multiply by:
.610	<u>~~</u> :	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15'2				FACW species x 2 =
1. Malus prunifolia	5	. Y	UPL	FAC species x 3 =
		·		FACU species x 4 =
2	•		~	UPL species x 5 =
3				
4				Column Totals: (A) (B)
				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	۲ ح	- T-4-1 O		2 - Dominance Test is >50%
210	 -	= Total Cov	er :	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5'R)				4 - Morphological Adaptations ¹ (Provide supporting
1. Kanunculus acris	15	<u> Y </u>	FAC	data in Remarks or on a separate sheet)
2. Dactylis glomerata	25	Y	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
				residing to find the vegetation (Explain)
3. Tribilium pratense		<u>N</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Tri folium repens	<u>5.</u>	<u> </u>	FACU	be present, unless disturbed or problematic.
5. Plaintago lanceolata	5.	N	FAW	Definitions of Vegetation Strata:
6. Asclepias Syriaca		N	UPL	
		<u> </u>		Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7. Scirpus atnovivens	<u> 20</u>	<u>Y</u>	<u> </u>	at breast height (DBH), regardless of height.
8. Muhlenbergin Frondosa	15	Υ	FACW	Sapling/shrub - Woody plants less than 3 in. DBH
•				and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11	 .			
12.				Woody vines - All woody vines greater than 3.28 ft in
	100			height.
				· · · · · · · · · · · · · · · · · · ·
7.10	100 =	Total Cove	er i	
Woody Vine Stratum (Plot size: 32' に_)	100 =	I Otal Cove	er i	
1 1	100 =	· Iotal Cove	er e	
1. Not Applicable	100 =	· I Otal Cove	er	Hydrophytic
1 1	=	· lotal Cove		Hydrophytic Vegetation
1. Not Applicable		· Total Cove		Hydrophytic Vegetation Present? Yes No
1. Not Applicable	=	· Total Cove		Vegetation
1. Not Applicable		Total Cove		Vegetation

LIONER DES	cription: (Describe	to the dep	th needed to docum	IGHT CHE	naicator	or commi	file apseitee		 ,	
Depth	Matrix Color (moist)	%	Color (moist)	c Feature %	<u>Type¹</u>	Loc²	Texture		Remarks	
(inches) O-ろ	1048 4/2	100	Ooloi (Hiolog				SL			
	104R 4/2	95	7.5 YR 5/6			WISI				
3-8	109K-112	95	K3 12 10			HIP	310	Ocaale	F CO-00	action refu
<u>8</u> †								<u>KCOL</u>	1 CON D	20,1-1.10/10
					•					
·										
										
										
								· · · · · · · · · · · · · · · · · · ·		
		letion, RM	=Reduced Matrix, MS	3≃Maske	d Sand G	rains.	² Location	r: PL=Pore L for Problem	_ining, M=N	latrix.
Hydric Soil			makasaksa mak	04	. (60\ /L P	ממ				VILRA 149B)
Histoso	l (A1) pipedon (A2)		Polyvalue Belov		9 (58) (L R	KK K,	Coast	Prairie Redo	ox (A16) (Li	RR K, L, R)
	istic (A3)		Thin Dark Surfa		LRR R, N	ILRA 149B				(LRR K, L, R)
	en Sulfide (A4)		Loamy Mucky N			(, L)		Surface (S7) alue Below S		
	d Layers (A5) d Below Dark Surfac	e (A11)	Loamy Gleyed		4)		Thin C	Dark Surface	(S9) (LRR	K, L)
	ark Surface (A12)	()	Redox Dark Su	rface (F6			Iron-M	langanese M	fasses (F12	2) (LRR K, L, R
	A I									
	Mucky Mineral (S1)		Depleted Dark				Piedm	ont Floodpla	in Soils (F) 6) (MLRA 1	44A. 145. 149E
Sandy	Gleyed Matrix (S4)		Depleted Dark				Mesic	nont Floodpla Spodic (TA6 Parent Materi	6) (MLRA 1	44A, 145, 149E
Sandy Sandy Sandy Sandy Strippe	Gleyed Matrix (S4) Redox (S5) d Matrix (S6)		Redox Depress				Mesic Red F Very \$	Spodic (TA6 Parent Materi Shallow Dark	6) (MLRA 1 al (F21) c Surface (T	44A, 145, 149E
Sandy Sandy Sandy Sandy Strippe	Gleyed Matrix (S4) Redox (S5)	MLRA 149	Redox Depress				Mesic Red F Very \$	Spodic (TA6 Parent Materi	6) (MLRA 1 al (F21) c Surface (T	44A, 145, 149E
Sandy Sandy Strippe Dark St	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, I		Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T	44A, 145, 149E
Sandy (Sandy (Strippe (Dark Si	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, left) of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T	44A, 145, 149E
Sandy of San	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbed	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators of Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in F	6) (MLRA 1 al (F21) c Surface (T	44A, 145, 149E
Sandy of San	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbed	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbed	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbed	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbed	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbed	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)
Sandy (Sandy (Strippe Dark So Indicators (Restrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, l of hydrophytic vegeta Layer (if observed)	ation and w	Redox Depress	sions (F8		ss disturbe	Mesic Red F Very S Other	Spodic (TA6 Parent Materi Shallow Dark (Explain in f	6) (MLRA 1 al (F21) c Surface (T Remarks)	44A, 145, 149E F12)

	A FORM – Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: U/4/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- +58
Investigatorial Rea VIXTY (10) Nickly Dulchy	Section, Township, Range: Town of Harover
Landform (hillolong torroom ato): AP No XXXX	Local relief (concave, convex, none): Concave Slope (%): O S
Subregion (LRR or MLRA): LRR-R Lat: 47.47	-4920) Long: -49,101934 Datum: 11/1000
Soil Map Unit Name: Fremont Silt Lowe	~ 10 to 3% Stopen NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of	f year? Yes X No (If no, explain in Remarks.)
Are Vegetation No., Soil No., or Hydrology No., significan	ntly disturbed? Are "Normal Circumstances" present? Yes A No No
Are Vegetation <u>N。</u> , Soil <u>N。</u> , or Hydrology <u>M</u> 。 naturally	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate re	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: Wetland A638 eport.)
Į.	upland area. Surrounded by upland cultivaried hay NE edge where wetland boundary is.
HYDROLOGY	
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	med Leaves (B9) Moss Trim Lines (B16) Moss Trim Lines (B16)
Field Observations: Surface Water Present? Water Table Present? Saturation Present? Yes No Depth (includes capillary fringe)	ches): Wetland Hydrology Present? Yes No No
diff that normal circumstages have	now been burder of world. Iron deposits of world an lop of Joil surface, Oxidized Mitosphres

	·			
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominan Species?	t Indicator Status	Dominance Test worksheet:
1. Ulmus americana	So	V	FACW	Number of Dominant Species
2. Fraxinus pennsylvanica	25	- \		That Are OBL, FACW, or FAC: (A)
		<u> </u>	FACW	Total Number of Dominant Species Across All Strate: (B)
3. Rhammus Cathartica	15	N	FACU	Species Across All Strata: (B)
4. Lonicera tatarica	10	<u>N</u>	FACU	Percent of Dominant Species 757
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
	100	T-4-1-0		Total % Cover of: Multiply by:
100 100 100 100 100 100 100 100 100 100	700	= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15')		V	٠,	FACW species x 2 =
1. Rhamnus Cathartica	15	1	FACU	FAC species x 3 =
2. Lonicera tatarica	38	<u> Y</u>	FACU	FACU species x 4 =
3. Rosa multiflora	10	N	FACU	UPL species x 5 =
4				Column Totals: (A) (B)
· · · · · · · · · · · · · · · · · · ·		*		Prevalence Index = B/A =
5				
6			· —	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	<u> </u>	= Total Cov	ver	🔀 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5')	•			3 - Prevalence Index is ≤3.0 ¹
1. Euthamia graminifolia	40	Υ	FAC	4 - Morphological Adaptations¹ (Provide supporting
2. Ulmus americana	20	<u> </u>	FACW	data in Remarks or on a separate sheet)
		<u> </u>		Problematic Hydrophytic Vegetation ¹ (Explain)
3. Fraxious penosylvanica		<u> </u>	FACH	¹ Indicators of hydric soil and wetland hydrology must
4. Rosa multiflora	<u> </u>	<u>N</u>	FACU	be present, unless disturbed or problematic.
5. Toxicodendron radicans	15	N	FAC	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
			•	Conting to house Manager plants large than 0 to 1001
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9			· 	
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11			-	
12				Woody vines – All woody vines greater than 3.28 ft in height.
	100	= Total Cov	/er	
Woody Vine Stratum (Plot size: 36')			.	
	16	ν	FAC	
1. Toxicad and on radicons			1110	Hydrophytic
2				Vegetation \/
3				Present? Yes No No
4				
	10	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate s		10141001		
FAC and FACU invasive species	5 gro	win	all lo	nd scape cover types in this
region they are and				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
region they are opertu poportur	17ths	ans ha	ve bee	I seen appuin, in wellends
as well, here in my				J 3
, .				

Profile Desc	ription: (Describe	to the dep	th needed to docun	nent the i	ndicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix	0/	Redo:	x Features	Type ¹	Loc²	Texture		Remarks	
(inches)	Color (moist)	85	SYR416	<u> </u>	Type	MPL	CL		Nemans	
					$\frac{1}{2}$	M	<u> </u>			
7-16	2.57 4/2	80	1048 218	10						
			107R3/1	10	\overline{D}	<u>M</u>	· · · · · · · · · · · · · · · · · · ·			
							·			
										<u> </u>
										
										
									·····	
						 ,	2			
¹ Type: C=Co		letion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	*Location	: PL=Pore l for Probler	_ining, M=Matrix natic Hydric Sc	cils³:
Histosol			Polyvalue Belov	w Surface	(S8) (LR	R.			LRR K, L, MLR	1
	oipedon (A2)		MLRA 149B)			Coast l	Prairie Redo	x (A16) (LRR K	(, L, R)
	stic (A3)		Thin Dark Surfa					-	or Peat (S3) (LR (LRR K, L, M)	RR K, L, R)
	en Sulfide (A4) d Layers (A5)		Loamy Mucky I	•		u la)			Surface (S8) (LR	R K, L)
Depleted	d Below Dark Surfac	e (A11)	Depleted Matrix	(F3)					(S9) (LRR K, L	
1	ark Surface (A12) Iucky Mineral (S1)		Redox Dark Su Depleted Dark					-	lasses (F12) (L i ain Soils (F19) (I	
	Bleyed Matrix (S4)		Redox Depress				Mesic	Spodic (TA	6) (MLRA 144A	
	Redox (S5)							arent Materi	al (F21) cSurface (TF12)	,
	l Matrix (S6) rface (S7) (LRR R, I	AI RA 149	R)					nallow Darr (Explain in f		,
				,						
			etland hydrology mus	st be pres	ent, unles	s disturbed	or problematio) <u>. </u>		
Type:	Layer (if observed):	i								
Depth (in							Hydric Soil	Present?	Yes 🔀	No
Remarks:	,						1			
Hyd	he Soils be	cause	of redux c	uncentra	edras	in the	- matrix	and a	long	
livin	g pore linit	ής.							-	
		,							•	
			•							
,										
:	•									
		. •								
										*
				•	•					
	4									

WETLAND DETERMINATION DATA F	ORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project Ci	ty/County: Chautauqua County Sampling Date: 49/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NT Sampling Point: DT TO
Investigator(s): Ben Uirts and Nicou Dutcher s	ection, Township, Range: Town of Hundust
Landform (hillolong torroop ato): -texasco	relief (concave, convex, none): Con Note Slope (%):
Subregion (LBB or MLRA) LRR-R Lat: 42.4 7516	Long: <u>-79.149453</u> Datum: NAD 83
2-11 Man Unit Name: TE senson + Silt Lorem (0 to 3% slopes NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year	2 Yes X No (If no, explain in Remarks.)
Are climatic / nydrologic conditions on the site typical for this time of year	isturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation Man, Soil Man, or Hydrology Monaturally prob	lematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Yes No	Is the Sampled Area within a Wetland? Yes No X If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report	· ·
Upland data point to wetland Al	838 (PFO). Data point taken on edge
of Cultivaried hoy Field. Upland field	next to dith ASOPTHAN drains field so
it but be horvested for hay.	next to dith ASOPTHAN drains field so
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained L	eaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Fauna (Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (E	
Water Marks (B1) Hydrogen Sulfid	e Odor (C1) Crayfish Burrows (C8)
	spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) duced Iron (C4) Stunted or Stressed Plants (D1)
Drift Deposits (B3) Presence of Re	duction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surfa Inundation Visible on Aerial Imagery (B7) Other (Explain i	
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches)	
Water Table Present? Yes No _X_ Depth (inches)	: Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inches)	, Tronuita ity at 51-53
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:
Remarks:	
	1
No wetland hydrology indicators o	bscred,
. ← ← with	· · · · · · · · · · · · · · · · · · ·
1	·

2 5/	Absolute	Dominant India	ator Dominance Test worksheet:
Tree Stratum (Plot size: 30')			atus .
1. Quercus rubra	20		CO That Are OBL, FACW, or FAC; (A)
2. Acer Saccharum	10	<u>Y</u> <u>HA</u>	Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species
5			That Are OBL, FACW, or FAC: 202 (A/B)
6			
7			Prevalence Index worksheet:
	3	= Total Cover	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: \5'		= Total Cover	OBL species x 1 =
	1	V =	FACW species x 2 =
1. Kosa multiflua	72	1 17	FAC species x3 =
2			FACU species x 4 =
3			UPL species x5 =
4			Column Totals: (A) (B)
			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
7	12		2 - Dominance Test is >50%
~ 1	13	= Total Cover	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5'			4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1. Euthamia graminifolia	10	N FF	data in Remarks or on a separate sheet)
2. Muhlenbergia Frondora	40		Problematic Hydrophytic Vegetation¹ (Explain)
3. Kanunculius acris	10	N FA	1 Indicators of hydric soil and wetland hydrology must
4. Trifolium pratense	30	Y FM	
5. Plantago l'anceolata	5	N FA	Definitions of Vegetation Strata:
6. Dancus carota	5	N UP	
7	 _		Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
			
8			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9		i i	
10			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11		. ·	Woody vines All woody vines prostes then 2.20 A in
12			Woody vines - All woody vines greater than 3.28 ft in height.
	100 :	= Total Cover	
Woody Vine Stratum (Plot size: 30')		1	
1. Not Applicable			
2			Hydrophytic
3			Vegetation Present? Yes No
4		· · · · · · · · · · · · · · · · · · ·	Present Tes NO
4			—
		= Total Cover	
Remarks: (Include photo numbers here or on a separate s	heet.)		
			·

Profile Desc	ription: (Describe t	o the dept	h needed to docun	ent the i	ndicator	or confirm	the absence	of Indicato	ers.)
Depth	<u>Matrix</u>			CFeatures	E	_Loc²	Texture		Remarks
(inches)	2.5 Y 3/2	<u>%</u>	SYR4/6		Type ¹	M	CL		I WITH THE
0-14		90		10	$\frac{1}{2}$				
14-20	2,57 S/1	<u>80</u>	54R 4/6	<u>20</u>	<u>'</u>	<u>M</u>	<u> </u>	· · · · · · · · · · · · · · · · · · ·	
		<u> </u>							
		-		*					
									
									
	<u></u>			·	,	·			
		-							
			·				2.		11-1 Banki-t-h-
	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	i Sand Gr	ains.	*Location Indicators	for Proble	Lining, M=Matrix. matic Hydric Solis³:
Hydric Soil			Polyvalue Belov	w Surface	(S8) (I P	RR.			(LRR K, L, MLRA 149B)
Histosol	pipedon (A2)		MLRA 149B		(50) (210	1 1 1 1 1	Coast	Prairie Red	lox (A16) (LRR K, L, R)
	istic (A3)		Thin Dark Surfa	ice (S9) (l					or Peat (S3) (LRR K, L, R)
	en Sulfide (A4)		Loamy Mucky f			(, L)) (LRR K, L, M) Surface (S8) (LRR K, L)
	d Layers (A5) d Below Dark Surface	e (A11)	Loamy Gleyed Depleted Matrix		()				e (S9) (LRR K, L)
	ark Surface (A12)	, (()	X Redox Dark Su						Masses (F12) (LRR K, L, R)
	Jucky Mineral (S1)		Depleted Dark				Piedm	ont Floodpl	lain Soils (F19) (MLRA 149B) \6) (MLRA 144A, 145, 149B)
	Sleyed Matrix (S4)		Redox Depress	ions (F8)				arent Mate	
	Redox (S5) i Matrix (S6)						Very S	hallow Dar	k Surface (TF12)
	rface (S7) (LRR R, N	ILRA 1491	3)				Other	(Explain in	Remarks)
3	of hydrophytic vegetat		stand budgalagu mu	of ha nrae	ont unles	e dieturhed	l or problematic	n. ·	
	t nydropnytic vegetat Layer (if observed):		aliand nydrology mu	st be bles	ent, umo	a distarbed	T Or problemas		
Type:	N/A					ű.			\checkmark
Depth (in	ches):						Hydric Soi	Present?	Yes No
Remarks:			······································						
Sal	& ace hista	٠ ١٠ ٠							
	s are hydra	- Dut	remnat 1	ny dric	-beca	use th	ey are i	media	the next to
a	ditch that	15 1	muerina 11		L		,		of 1000 12
		_	2 115	Note	Table				
	•								
,									
	;								
	•								

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 6/9/16
Ball Hill Wind Energy, LLC State: NY Sampling Point: DI 75 Samplin
Realist and Nicke Dather Section Township Range: 1000 at Handler
l ocal relief (concave, convex, none); Concave Slope (%), 1
Subregion (I DD or MI DA): LRR-R Long: Datum.
Soil Map Unit Name: Towerille 5: 1+ Loan, 35+050% Sloper NWI classification: Upland
Assettiments / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X. No
Are Vegetation No., Soil No., or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No
Hydric Soil Present? Yes X No
Wetland Hydrology Present? Tes No III yes, optional Notice
Remarks: (Explain alternative procedures here or in a separate report.)
PFO wetland in floodplain of Stream A'540. Floodplain wetland is in
a revine/confined valley. Grown water discharge to the Stream where the Stream
Starts to drop-off and bedrack is exposed. Receives some ground-read seep From Eastern
Donk of raine.
HYDROLOGY Westernet Hydrology Indicators: Secondary Indicators (minimum of two required)
Wetlatid Hydrology indicators.
Primary indicators (minimum of the strength of
More Trim Lines (R16)
High Water Table (AZ)
Crayfish Burrows (CB)
Segment Deposits (D2)
Unit Deposits (B3) Y Commercial Resident (D2)
Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Shallow Aquitard (D3) Algaert Position (C2)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)
Inundation visible on Acids imagery (DF)
Sparsely Vegetated Concave Surface (B8)FAC-Neutral Test (D5)
Surface Water Present? Yes X No Depth (Inches): 0,5
Wester Table Propert? Ves X No. Depth (Inches): 8"
Saturation Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes No No No No No No No No No No No No No
(Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Iron deposits where grandwar is discharged from verlind to Stream. Water Stained leaves from throughout wetland and flood plain.
horse fill and fill all
I may throughout weetland on floor plan.

Tree Stratum (Plot size: 36')	Absolute	Dominar Species	nt Indicator	Dominance Test worksheet:
1 Page 1		V		Number of Dominant Species
1. Raya ovata	20	·	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Betala alleghaniensis		<u> </u>	FAC	Total Number of Dominant
3. Fagus grandifalla	10	N	FACU	Species Across All Strata:(B)
4. Acer Sacharum	S	N	FACU	
				Percent of Dominant Species That Are OBL, FACW, or FAC: 64.672 (A/B)
			-	(PUD)
6	· 			Prevalence Index worksheet:
7		· · · · · · · · · · · · · · · · · · ·		Total % Cover of: Multiply by:
	_SS	= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: \ \ 5')				FACW species x 2 =
1. Ace Sakcharum	15	γ	FACU	FAC species x3 =
R. J. Sastharum	12	- v		FACU species x4 =
2. Betula alleghaniensis	15		FAC	
3. Lindera benzoin	10	\overline{N}	FACW	
4.				Column Totals: (A) (B)
5	***************************************			Prevalence index = B/A =
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7	111	***************************************	-	2 - Dominance Test is >50%
ر بــ	40	= Total Co	ver	1 7
Herb Stratum (Plot size: 5')				3 - Prevalence Index is ≤3.0¹
1. Impatient Capensis	20	Y	FACO	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Carex Flam	40	Y	OBC	Problematic Hydrophytic Vegetation (Explain)
a En 14 custos	<u>'</u>	 N		
3. Euthamia graminifolia			FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Betula alleghaniensis		<u>N</u>	FAC	be present, unless disturbed or problematic.
			<u> </u>	Definitions of Vegetation Strata:
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
	*			at breast height (DBH), regardless of height.
7				
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9			-	
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				size, and woody plants less than 3.28 ft tall.
12.				Woody vines - All woody vines greater than 3.28 ft in
	70			height.
Woody Vine Stratum (Plot size: 30')		= Total Cov	/er	
/ 10.01201				
1. Not Applicable	<u> </u>			
2				Hydrophytic
3.				Vegetation Present? Yes No
4	************			
*-	<u></u>	•		
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	heet.)			
				1

. 101110 0000	cibilou: (nescribe r	rite net	itti ileeded to docui	HIGHL MIC	iluicator c	A COURSE	the absence of indicat		
Depth	Matrix	0/	Color (moist)	ox Feature %	<u>s</u> Type ¹	Loc ²	Texture	Remarks	
(inches)	Gley 1 2.5/ wy	<u>%</u>			TAha		Si L		
0-8				10	Ŕm		<u></u>		
8-20	2.54 3/1	+5%		15	ICIN	<u>M</u>			
			7.5 YR 4/4	10	<u> </u>	<u>M</u>			
			<u>,</u>						
									
<u>-</u>									
									
									,
¹ Type: C=C	oncentration, D=Deple	etion, RM	=Reduced Matrix, M	IS=Maske	d Sand Gra	ains.	² Location: PL=Por	Lining, M=Matri	X.
Hydric Soil	Indicators:						Indicators for Probl		
Histosol			Polyvalue Beld		e (S8) (LRI	RR,) (LRR K, L, MLR dox (A16) (LRR F	
	pipedon (A2) istic (A3)		Thin Dark Sur		LRR R, MI	LRA 149B)	5 cm Mucky Pea	t or Peat (S3) (LF	
Hydroge	en Sulfide (A4)		Loamy Mucky			, L)		7) (LRR K, L, M) · Surface (S8) (LF	DR I I
	d Layers (A5) d Below Dark Surface	(Δ11)	Loamy Gleyed		2)			ce (S9) (LRR K, L	
	ark Surface (A12)	((())	➤ Redox Dark S) .		Iron-Manganese	Masses (F12) (L	RR K, L, R)
Sandy N	Mucky Mineral (S1)		Depleted Dark	Surface (F7\		Piedmont Flood	olain Soils (F19) (MLRA 149B)
						•	Masia Spedia /T	A6) (MI DA 144A	145 149B)
Sandy (Gleyed Matrix (S4)		Redox Depres			,		A6) (MLRA 144A erial (F21)	, 145, 149B)
Sandy (Sandy F	Gleyed Matrix (S4) Redox (S5)						Red Parent Mat	erial (F21) ark Surface (TF12	, 145, 149B)
Sandy (Sandy F Stripped	Gleyed Matrix (S4)	LRA 149	Redox Depres				Red Parent Mat	erial (F21) ark Surface (TF12	, 145, 149B)
Sandy (Sandy F Stripped Dark St	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Do Other (Explain in	erial (F21) ark Surface (TF12	, 145, 149B)
Sandy (Sandy I Stripped Dark Su Indicators of	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Do Other (Explain in	erial (F21) ark Surface (TF12	, 145, 149B)
Sandy (Sandy I Stripped Dark Su Indicators of	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy if Stripped Dark St 3Indicators c	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Do Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy if Stripper Dark St Indicators of Restrictive Type:	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy if Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy if Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy I Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy if Stripped Dark Su *Indicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)
Sandy (Sandy F Stripped Dark Stripped Tindicators of Restrictive Type: Depth (ir	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M of hydrophytic vegetati Layer (if observed): N		Redox Depres	ssions (F8		s disturbed	Red Parent Mat Very Shallow Da Other (Explain in	erial (F21) ark Surface (TF12 n Remarks)	, 145, 149B)

WETLAND DETERMINATION DA	TA FORM – Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 6/9/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: Sampling Folia.
1 Ben Witt and Wide Dubber	Section, Township, Range: Town of Hannier 202
we will the same of the Aillstone	Local relief (concave, convex, none): CSVVX Slope (%): OU **
a Laditar (LDD and LDA), LRR-R Lat: 42.44	Long: John Datum.
Soil Man Unit Name: Towarville Silt Lown	350500/0 Slopes NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes X No (If no, explain in Remarks.)
Are Vegetation No , Soil No , or Hydrology No significa	intly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No., Soil No., or Hydrology No naturally	
SUMMARY OF FINDINGS – Attach site map show	ring sampling point locations, transects, important features, etc.
	is the Sampled Area
Hydrophytic Vegetation Present? Hydric Soil Present? Yes No X Yes No X	within a Wetland? Yes No X
Hydric Soil Present? Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Demarks: (Explain alternative procedures here or in a separate	report.)
Unland data ount for the western	A639. Own point lucated near wetland
la a Cid de la dell'allanda	
in confined valley on the hillstype	
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that ar	(040)
	(5.40)
High Water Table (A2) Aquatic Fa	100 (Table (00)
Saturation (A3) Mari Depo	Sulfide Odor (C1) Crayfish Burrows (C8)
The state of the s	Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	on Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	k Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Ex	plain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (in	
Water Table Present? Yes NoX Depth (in	NA /V
Saturation Present? Yes NoX Depth (in (Includes capillary fringe)	lollos).
(includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	
	· · · · · · · · · · · · · · · · · · ·
No hydrology indicators ob	SErved:
, 1 1 vis	
i	

	A			
Tree Stratum (Plot size: 36)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Ace Saccharum	45	V	FACU	Number of Dominant Species That Are ORL FACW or FAC:
	50			That Are OBL, FACW, or FAC: (A)
2. Betula alleghaniensis			FAC	Total Number of Dominant
3. Tsuga Canadensis	<u> </u>	_N_	FACU	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: So? (A/B)
· ·				
6				Prevalence Index worksheet:
7			-	Total % Cover of: Multiply by:
	100	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: \\)5'	e e di di			FACW species x 2 =
1. Acer saccharm	25 km	. Y	FACU	FAC species <u>95</u> x3 = <u>285</u>
	30	\forall	FAC	FACU species 89 x4 = 356
2. Being diregianensis			THU	UPL species 2 x5= 10
3				Column Totals: 186 (A) USI (B)
4	W-1-7	*************		(5)
5				Prevalence Index = B/A = 3, 5
				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
	22	= Total Cov	er	<u> </u>
Herb Stratum (Plot size: 5')				3 - Prevalence Index is ≤3.0 ¹
1. Betula alleghaniensis	10	Y	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Acer Saccharon	10	V	FACU	Problematic Hydrophytic Vegetation¹ (Explain)
Tolling over the	2		***************************************	
3. Trillium grandiflorum		<u>N</u>	UPL	¹ Indicators of hydric soil and wetland hydrology must
4. Rubus "idaeus	<u>2</u>	<u>N</u>	FACU	be present, unless disturbed or problematic.
5. Toxicodendron radicans	<u> </u>	_N_	FAC	Definitions of Vegetation Strata:
6. Dryopteris maginalis	Ž.	N	FACU	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7	•			
8				Sapling/shrub Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				size, and woody plants less than 3.26 it tall.
12.				Woody vines - All woody vines greater than 3.28 ft in
	21	~		height.
Woody Vine Stratum (Plot size: 30')	<u> </u>	= Total Cove	er ·	
/		٠.		
1. Not Applicable				
2				Hydrophytic Vegetation
3				Present? Yes No
4		***************************************		•
7	$\overline{\alpha}$			
Daniel October		= Total Cove	er .	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
				•
				·

epth						DI 00111111111	the absence of indica		
nches)	Matrix Color (moist)	%	Color (moist)	x Feature:	Type ¹	Loc ²	Texture	Remarks	
)- 13	2.5Y 5/4	90	7.54R 4/4	10	C	M	SiL		
	2.5Y 5/4	- <u>-1-</u> 80	7.5YR414	20	\overline{C}	m	SiL		
<u>, .∀0</u>	<u> </u>	80			$\frac{1}{2}$	m			
		<u> </u>	2.54 5/2	<u> </u>	0			<u></u>	
				•	•				
		-							
									•
							2	a I Imina a Marida	atriv .
ype: C=C	oncentration, D=De	pletion, R	M=Reduced Matrix, M	S=Maske	d Sand G	rains.	² Location: PL=Po indicators for Prob	e ∟ınıng, M≕M lematic Hvdri	c Solls ³ :
	Indicators:		Polyvalue Belo	na Curtos	(QQ\ /I D	RR	2 cm Muck (A10		
_ Histosol	(A1) pipedon (A2)		MLRA 149E		3 (30) (LN	ix ix,	Coast Prairie R	edox (A16) (LF	R K, L, R)
	istic (A3)		Thin Dark Surf		LRR R, M	ILRA 149B	5 cm Mucky Pe		
	en Sulfide (A4)	•	Loamy Mucky			(, L)	Dark Surface (S	(7) (LRR K, L, (98)	M) (LRRK.L)
	d Layers (A5)	44.44	Loamy Gleyed		2)		Polyvalue Below		
	d Below Dark Surfa ark Surface (A12)	ce (A11)	Depleted Matri		s) .		Iron-Manganes	Masses (F12	() (LRR K, L, F
	air Sunace (Aiz)								A. JESS MA 4 4A
Sandy I	Mucky Mineral (S1)		Depleted Dark	Surface ((F7)		Piedmont Floor	plain Soils (F1	9) (MLRA 149
	Mucky Mineral (S1) Gleyed Matrix (S4)		Depleted Dark Redox Depres				Mesic Spodic (A6) (MLRA 1	9) (MLRA 149 44A, 145, 149
Sandy (Sandy i	Gleyed Matrix (S4) Redox (S5)						Mesic Spodic (rA6) (MLRA 1 terial (F21)	44A, 145, 149l
Sandy (Sandy i Strippe	Gleyed Matrix (S4) Redox (S5) d Matrix (S6)	MLRA 14	Redox Depres				Mesic Spodic (rA6) (MLRA 1 terial (F21) ark Surface (T	44A, 145, 149l
Sandy (Sandy i Strippe Dark St	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R,		Redox Depres	sions (F8)		Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	rA6) (MLRA 1 terial (F21) ark Surface (T	44A, 145, 149l
Sandy (Sandy I Stripped Dark Stripped	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R,	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	rA6) (MLRA 1 terial (F21) ark Surface (T	44A, 145, 149l
Sandy (Sandy i Stripped Dark Su ndicators of	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	rA6) (MLRA 1 terial (F21) ark Surface (T	44A, 145, 149 l
Sandy (Sandy i Stripped Dark Stripped Dark Strictive Type:	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149l
Sandy (Sandy if Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy I Stripped Dark Stripped Dark Strictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy I Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy if Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy if Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy if Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy i Stripped Dark Strictive Type:	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy I Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy I Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy if Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy I Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy if Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy I Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy if Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy I Stripped Dark Sundicators (estrictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l
Sandy (Sandy I Stripped Dark Stripped Dark Strictive Type: Depth (in	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic veget Layer (if observed	tation and	Redox Depres	sions (F8)	ss disturbed	Mesic Spodic (Red Parent Ma Very Shallow D Other (Explain	TA6) (MLRA 1 terial (F21) ark Surface (T in Remarks)	44A, 145, 149 l

WETLAND DETERMINATION DATA FOR	
Project/Site: Ball Hill Wind Project City/C	ounty: Chautauqua County Sampling Date: 6 10 10
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DF 708
Section De Lord Gal Micde Dutter Section	on, Township, Range: Town of Henover
Local reli	lef (concave, convex, none): Slope (%): Slope
Subragion (LRR or MLRA): LRR-R Lat: 96,489,60°	Long: Datum:
Soil Map Unit Name: HrB Hornell Sitt loam, 3 to 8 2	Slopes NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of year? Y	'es X No (If no, explain in Remarks.)
Are Vegetation 12. , Soil 12. , or Hydrology 12. significantly distur	bed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No., Soil No., or Hydrology No. naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	ipling point locations, transects, important reatures, cto.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes X No Yes X No	Is the Sampled Area within a Wetland? Yes No If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.)	Tryon, optional treasures
PEM westernd in concare depression	
Old railroad bed. Area burned up at water to pool during part of	ex to ditch outside study area along
old railroad bed. Area burned up at	long old tall road bed, which is cousing
hoter to poor during part of	the year.
UIDKOLOGI	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	Secondary Indicators (Infilmman of two regalities) Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	D. U (D40)
Surface Water (A1) X Water-Stained Leav	(
High Water Table (A2) Saturation (A3) Aquatic Fauna (B13) Marl Deposits (B15)	, and the Table (CO)
Water Marks (B1) Hydrogen Sulfide Or Oxidized Rhizosphe	(00)
Sediment Deposits (B2) Presence of Reduce	
Algal Mat or Crust (B4) Recent Iron Reducti	
Iron Deposits (B5) Thin Muck Surface	(C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	emarks) Microtopographic Relief (D4)
X Sparsely Vegetated Concave Surface (B8)	★ FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X Depth (inches):	
Water Table Present? Yes No X Depth (Inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes No X Depth (inches): (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Remarks:	_
Sportey regeteted concern durface,	area doesn't have surface water now but
evidence of puning stonsing water	during parts of the year. Garnapuz
Pushen -> at water being stipped	by burn that next built up for her railroad,

Tree Stratum (Plot size: 20' × 20')		Dominant		Dominance Test worksheet:
Tige Stratum (Plot size:)	_% Cover	Species?	Status	Number of Dominant Species
1. Not Applicable				That Are OBL, FACW, or FAC:(A)
				THAT AIR ODE, I AOW, OF I AO(A)
2				Total Number of Dominant
3				Species Across All Strata; (B)
1 .				openies resources (b)
4				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
5				(700)
6				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
		T-4-1 O	-	
		≃ Total Cov	/er	OBL species x1 =
Sapling/Shrub Stratum (Plot size: \\S' \times \\S')				FACW species x 2 =
I lister la colo	20	Y	FACW	
1. Lindera benzoin	<u> </u>	<u></u>	THEW	FAC species x 3 =
2			•	FACU species x 4 =
	•			UPL species x 5 =
3				
				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
5	******		·	
6				Hydrophytic Vegetation Indicators:
The state of the s				1
7				★ 1 - Rapid Test for Hydrophytic Vegetation
	26	= Total Cov	or	2 - Dominance Test is >50%
~1,, ~ .		- 10tai 00v	OI	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5'×5')				1 '
1. Lindera benzoin	16	V	FACW	4 - Morphological Adaptations¹ (Provide supporting
1. "aga certors			FFICW	data in Remarks or on a separate sheet)
2				Problematic Hydrophytic Vegetation ¹ (Explain)
3,				¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4. 5.				
5			a Maria	Definitions of Vegetation Strata:
6	,			Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8	4			Sapling/shrub - Woody plants less than 3 in. DBH
				and greater than or equal to 3.28 ft (1 m) tall.
9	A	·		
10			**	Herb - All herbaceous (non-woody) plants, regardless of
				size, and woody plants less than 3.28 ft tall.
11	***************************************	·		•
12.				Woody vines - All woody vines greater than 3.28 ft in
14,				height.
	16 :	Total Cov	er	<u> </u>
14. 1 in a in a in a in a in a in a in a in				•
Woody Vine Stratum (Plot size: 20' x 20')			• • • • •	
1. Not Applicable				
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				123
2				Hydrophytic
0				Vegetation
3				Present? Yes No
4.				· .
	- X			
	<u> </u>	= Total Cov	er	
Remarks: (include photo numbers here or on a separate s	sheet.)			
(management)				
				·
				·
	•			
				İ
	•			<u> </u>

	ribitou: (Describe r	o me deb	tu useded to docau	ient the i	ndicator	or confirm	the absence of ind	icators.)	1
Depth	<u>Matrix</u>			CFeatures	§	. 2		Damania	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u>	Remarks	
0-7	2.54 3/1	90	7. SYR 3/4	10	<u> </u>	<u>M</u>	SIL	w	
7-17	2.544/2	<u>80</u>	2.54 31	15	D	M	<u> </u>		
			7.54 4/6	5	C	M			
		***********	<u></u>						
				***************************************	-	***************************************			

								<u> </u>	
							2		
	oncentration, D=Depi	etion, RM:	=Reduced Matrix, MS	S=Masked	Sand Gr	ains.	*Location: PL=	Pore Lining, M=Mai roblematic Hydric	rix. Solls ³ :
Hydric Soll			Polyvalue Belov	u Quala a -	/00\ /I P	D D		A10) (LRR K, L, M L	
Histosol	(A1) pipedon (A2)		MLRA 149B)		(56) (LK	KK,		Redox (A16) (LRR	
	stic (A3)		Thin Dark Surfa		.RR R, M	LRA 149B)		Peat or Peat (S3) (I	
	en Sulfide (A4)	•	Loamy Mucky N				Dark Surface	e (S7) (LRR K, L, M	
	d Layers (A5)		Loamy Gleyed I		2)			elow Surface (S8) (I	
	d Below Dark Surface	e (A11)	Depleted Matrix					urface (S9) (LRR K, nese Masses (F12) (
	ark Surface (A12)		Redox Dark Sur Depleted Dark \$					oodplain Soils (F19)	
	lucky Mineral (S1)		Depleted Dark (ouriace ir	-/		FIGUITORICE		/ transfer to t
Sandy C	Slaved Matrix (SA)				• ,				
	Sleyed Matrix (S4) Redox (S5)		Redox Depress		•,		Mesic Spodi	c (TA6) (MLRA 144 Material (F21)	
Sandy F	Bleyed Matrix (S4) Redox (S5) I Matrix (S6)				.,	·	Mesic Spodi Red Parent Very Shallov	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1	A, 145, 149B)
Sandy F	Redox (S5)	ILRA 1491	Redox Depress		•,	·	Mesic Spodi Red Parent Very Shallov	c (TA6) (MLRA 144 Material (F21)	A, 145, 149B)
Sandy F Stripped Dark Su	Redox (S5) I Matrix (S6) rface (S7) (LRR R, N		Redox Depress	ions (F8)		e disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1	A, 145, 149B)
Sandy F Stripped Dark Su Indicators o	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N f hydrophytic vegetat	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1	A, 145, 149B)
Sandy F Stripped Dark Su Indicators o Restrictive	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N f hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1	A, 145, 149B)
Sandy F Stripped Dark Su ³ Indicators o Restrictive Type:	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su *Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su ³ Indicators o Restrictive Type:	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su *Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su *Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su ³ Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su *Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su ³ Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su *Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su *Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su *Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su *Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su ³ Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su ³ Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su ³ Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su ³ Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su ³ Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)
Sandy F Stripped Dark Su *Indicators o Restrictive Type: Depth (in	Redox (S5) I Matrix (S6) Irface (S7) (LRR R, N If hydrophytic vegetat Layer (If observed):	ion and we	Redox Depress	ions (F8)		s disturbed	Mesic Spodi Red Parent Very Shallov Other (Expla or problematic.	c (TA6) (MLRA 144 Material (F21) v Dark Surface (TF1 ain in Remarks)	A, 145, 149B)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): Ben Unto an Missile Outster Section, Township, Range: Town of Harrover Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex ____ Slope (%):<u>5-8ん</u> Datum: NAD 83 Lat: 42.484825 Long: -79.149637 Subregion (LRR or MLRA): LRR-R NWI classification: Word Soil Map Unit Name: HrB-Hornell Silt loam, 3-82 slopes No _____ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are "Normal Circumstances" present? Yes __X__ No___ Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation No., Soil No., or Hydrology No. naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Yes_____ No 🛧 Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Yes _____ No X Hydric Soil Present? Yes _____ No X Wetland Hydrology Present? If yes, optional Wetland Site ID:____ Remarks: (Explain alternative procedures here or in a separate report.) Upland data point For wetters (PEM in forest) A640, Located near bemofold railroad bed. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Drainage Patterns (B10) ___ Water-Stained Leaves (B9) Surface Water (A1) ___ Moss Trim Lines (B16) Aquatic Fauna (B13) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) Mari Deposits (B15) Saturation (A3) Cravfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) ___ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes ____ No X Depth (inches): Surface Water Present? Yes ____ No _Y Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _____ No X Yes ____ No _ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No wetters hydrology obstruct.

	Absolute	Dominan	t Indicator	
Tree Stratum (Plot size: 30' L)		Species?		Dominance Test worksheet:
1. Acersaccharum	95	У	FAW	Number of Dominant Species
1		. —/		That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 42.8 (A/B)
0				(35)
6				Prevalence Index worksheet:
7	·			Total % Cover of:Multiply by:
	95	= Total Co	VAT	OBL species x1 =
Sapling/Shrub Stratum (Plot size: \5'\(\mathcal{L}\)		7010,00		FACW species _ '2\circ\ x 2 = _ 4\circ\
	_	V		
1. Acer Sacchorm	20	<u> </u>	FACU	FAC species $37 \times 3 = 111$
2. Lindern benzoin	10	<u>Y</u>	FALW	FACU species _143 _ x4= _572
3. Fagus grandifalia	10	V	FACU	UPL species x5=
50.4	5	7		Column Totals: 22 (A) 723 (B)
4. Fraxinus Pennsylvanica			FACU	
5			· · · · · ·	Prevalence index = B/A: 3.61
6,				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
<u> </u>	45		•	2 - Dominance Test is >50%
J 10	12	= Total Co	ver	3 - Prevalence Index is ≤3.0 ¹
Herb Stratum (Plot size: 5' 12)				
1. Toxicodendron radicans	10	Υ.	FAC	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
2. Fraxinos penesylvania	5	N	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	-2 -			Problematic Hydrophytic vegetation (Explain)
3. Fagus grandifolia		<u>N</u>	FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Inillium erectum	<u>2</u>	N	FAL	be present, unless disturbed or problematic.
5. Fragaria Vilginiana	25	Υ	FAC	Definitions of Vegetation Strata:
6. Lonicera tatarica	3	N.	FACU	
	· 	- 14	rreu	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				at bleast neight (DDD), regardless of neight.
8	1 1 1			Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
40			*	Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12			<u> </u>	height.
	50	- Total Cov	/er	•
Mandu Vina Stratum (Diet at 2412	· · · · · · · · · · · · · · · · · · ·	, otal ook	. •1	
Woody Vine Stratum (Plot size: 36' K)	- 10	V	_	
1. Vitis aestivalis	10		Fren	
2				Hydrophytic Vegetation
3.	_			Present? Yes No
A				
4	1.			
		= Total Cov	/er	
Remarks: (Include photo numbers here or on a separate s	heet.)			
		*		

I	ription: (Describe 1	o the dep	th needed to docur	nent the i	ndicator	or confirm	the absence of Indica	tors.)
Depth (inches)	Matrix	%	Color (moist)	x Features	Type ¹	L c - 2	Texture	Remarks
(inches) 0- 6	2.5 y 3/3	100	Color (moist)		<u>rype</u>	LOC	Si L	I/Gilidivə
			0-1141				CL	
<u>10-20</u>	2.54 514	<u>75</u>	2,544/2	10	<u>U</u>	<u>M</u>	<u> </u>	
			104R 5/8	15	<u> </u>	<u>m</u>		

•						_		
								ν.
			<u> </u>					
*	-			-				
								
								·
¹ Type: C=Co	oncentration, D=Depl	etion. RM	=Reduced Matrix. M	S=Masked	Sand Gra	ins.	² Location: PL=Por	e Lining, M=Matrix.
Hydric Soil I								ematic Hydric Solls³:
Histosol	• •		Polyvalue Belo		(S8) (LR F	R,) (LRR K, L, MLRA 149B)
	oipedon (A2)		MLRA 149B	,	22 2 W	DA 440D)		dox (A16) (LRR K, L, R) at or Peat (S3) (LRR K, L, R)
Black His	stic (A3) n Sulfide (A4)	-	Thin Dark Surfa				S chi Mucky Pea	
	Layers (A5)		Loamy Gleyed			, -,		Surface (S8) (LRR K, L)
	l Below Dark Surface	(A11)	Depleted Matrix					ce (S9) (LRR K, L)
	urk Surface (A12)		Redox Dark Su		7\			Masses (F12) (LRR K, L, R) Diain Solls (F19) (MLRA 149B)
	lucky Mineral (S1) leyed Matrix (S4)		Depleted Dark Redox Depress		"	•		A6) (MLRA 144A, 145, 149B)
	edox (S5)			` '			Red Parent Mate	
	Matrix (S6)						Very Shallow Da	rk Surface (TF12)
~			- \				Other (Evolein in	- Domarka)
Dark Sui	rface (S7) (LRR R, M	ILRA 149	B)				Other (Explain in	n Remarks)
	rface (S7) (LRR R, M			st be prese	nt, unles	s disturbed		n Remarks)
³ Indicators of Restrictive L	hydrophytic vegetat			st be prese	nt, unless	s disturbed		n Remarks)
³ Indicators of Restrictive L Type:	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed (or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed o		*
³ Indicators of Restrictive L Type:	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*
³ Indicators of Restrictive L Type: Depth (ind	hydrophytic vegetat ayer (If observed):			st be prese	nt, unless	s disturbed	or problematic.	*

	A FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 6 16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 773
Investigatoria) Bon Utity and Nicole Dutcher	Section, Township, Range: Town of Hanarer
Landform (hillslone terrace, etc.): de Messian	ocal rellef (concave, convex, none): Cancave Slope (%): 0-2/-
Subrogion (LDB or MLRA), LRR-R Lat: 14.48	8841 Long: -+1,199921 Datum: 14AD 00
Soil Map Unit Name: BrB-Barcelona Sitt loam,	3-82 Slopes NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of	/ear? Yes <u>X</u> No (If no, explain in Remarks.)
Are Vegetation No., Soil No., or Hydrology No significant	ly disturbed? Are "Normal Circumstances" present? Yes X No No
Are Vegetation No Soil No or Hydrology No naturally p	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate rej	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: Dort.)
12 11 Cala pant for wolon Alor	1. Starting at Stream AS46 alluvial Ifan
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	V - 4 - 0.11 0 - 11 (DO)
Primary Indicators (minimum of one is required; check all that appl	
Surface Water (A1) Water-Stalm	
High Water Table (A2) Aquatic Fau	D. C. Wilson Toble (CO)
X Saturation (A3) Marl Deposi	
	Diameter (DA)
	1,000,000 11011 (0.1)
1 1.03	Cl. III A mathemat (DO)
Iron Deposits (B5) Thin Muck S	The state of the s
	ain in Remarks) Microtopographic Relief (D4) X FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)	Zinonomen
Field Observations: Surface Water Present? Yes No X Depth (incident)	nes): O''
Water Table Present? Yes X No Depth (inc	hes); 7"
Saturation Present? Yes X No Depth (inc	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if available:
Describe Mending Suit forestin Sanda) marine in a	
Remarks:	
. · · · · · · · · · · · · · · · · · · ·	••

				
Tree Stratum (Plot size: 15' R)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Ulmur americana	10	Y	FACW	Number of Dominant Species
				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4	• •••••			Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Burnel and Indiana de La Contra
7				Prevalence Index worksheet:
	10			Total % Cover of: Multiply by:
150		= Total Cov	er	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15' C)		1	 .	FACW species x2 =
1. Ulmus americana	. 13		FACH	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
				Prevalence Index = B/A =
b	•		<u></u>	
6	·			Hydrophytic Vegetation Indicators:
7				∠ 1 - Rapid Test for Hydrophytic Vegetation
	15	≃ Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' (L)	•			3 - Prevalence Index is ≤3.0 ¹
1. Onoclea Sensibilis	15	N	FACW	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Impatiens Capensis	·	M	FACH	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Impariens caperisis		N		
3. Toxi coden dran radicans			FAC	Indicators of hydric soil and wetland hydrology must
4. Leersia oryzoides	70	<u> </u>	<u> </u>	be present, unless disturbed or problematic.
5	·			Definitions of Vegetation Strata:
6			• • •	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
		•		Sapling/shrub - Woody plants less than 3 in, DBH
				and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12		<u>.</u>		height.
	100	= Total Cov	өг	
Woody Vine Stratum (Plot size: \\S' \(\mathbb{C}\)				
1. No+ Applicable				
2	·			Hydrophytic
2.				Vegetation
3				Present? Yes /\ No
4				
	<u> </u>	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate	sheet.)	·····		
Vegetation Olat size at well	1 C	£	o /	0, 0.1
Vegetation plot size adjusted	76 17+	in the	Cont	their of the wetland

.	ription: (Describe	to the dep	th needed to docu	ment the li	ndicator	or contirm u	De Spseitce of undicato	ra.)	1
Depth	Matrix		Red	ox Features	i			•	
(inches)	Color (moist)	%	Color (molst)	%	Type ¹	Loc2 _	<u>Texture</u>	Remarks	
0-6	2.5441	70	54R 3/4	30	<u>C</u>	MIPL	<u> </u>		
6-20	2, 54 4/1	95	54R 3/4	5	C	M	- Síl		
0 00	-33'		1			 -			_
				•					
		· ····				***********			
				·			· · · · · · · · · · · · · · · · · · ·		
			 				<u> </u>		
									l
***************************************			<u>, , , , , , , , , , , , , , , , , , , </u>					· · · · · · · · · · · · · · · · · · ·	-
									
1Tune: 0=0			-Dadward Matthe A				² Location: PL=Pore	Lining M≃Matrix	
Hydric Soll I		uletion, KM	=Reduced Matrix, N	NO-IVIASKO	oanu U	ali iə.	Indicators for Proble		\neg
Histosol			Polyvalue Bel	ow Surface	(S8) (LR	R.R.		(LRR K, L, MLRA 149B)	
	oipedon (A2)		MLRA 149		(00) (4	,	Coast Prairie Rec	lox (A16) (LRR K, L, R)	į
	stic (A3)		Thin Dark Sur	face (S9) (I				or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)		Loamy Mucky			(, L)	Dark Surface (S7		1
	Layers (A5)		Loamy Gleyer		2)			Surface (S8) (LRR K, L)	
	d Below Dark Surfac ark Surface (A12)	ce (A11)	Depleted Mate				Thin Dark Surfac	6 (35) (LRR R, L) Masses (F12) (LRR K, L, F	ر) ا
	lucky Mineral (S1)		Depleted Dark					lain Soils (F19) (MLRA 149	
	Bleyed Matrix (S4)		Redox Depre			•		(6) (MLRÀ 144A, 145, 149	
	tedox (S5)			. ,			Red Parent Mate	rial (F21)	
Stripped	Matrix (S6)							rk Surface (TF12)	
Dark Su	rface (S7) (LRR R,	MLRA 149	B)				Other (Explain In	Remarks)	
									1
3indiantors o	f hydronhydlo yogof	otion and u	otland hydrology m	net ha nrae	ant unla	e dieturhed	or problematic		
			etland hydrology m	ust be pres	ent, unle	s disturbed	or problematic.		
Restrictive	Layer (if observed) ;		ust be pres	ent, unle	ss disturbed	or problematic.		
Restrictive Type:	Layer (if observed N (A) :		ust be pres	ent, unle	ss disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) ;		ust be pres	ent, unle	ss disturbed	or problematic. Hydric Soll Present?	Yes No	
Restrictive Type:	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	
Restrictive Type: Depth (in	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	-
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unles	s disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unles	s disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unles	s disturbed		Yes No	
Restrictive Type: Depth (in-	Layer (if observed N (A) :		ust be pres	ent, unles	s disturbed		Yes No	
Restrictive Type: Depth (in	Layer (if observed N (A) :		ust be pres	ent, unles	s disturbed		Yes No	
Restrictive Type: Depth (in	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	
Restrictive Type: Depth (in	Layer (if observed N (A) :		ust be pres	ent, unle	s disturbed		Yes No	
Restrictive Type: Depth (in	Layer (if observed N (A) :		ust be pres	ent, unles	s disturbed		Yes No	

	FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 6/10/16
Applicant/Outper: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 1.11
Investigator(s): Ben VI/T and Nigote Dutcher	Section, Township, Range: Toun of Hanover
· · · · · · · · · · · · · · · · · · ·	ralization (concave convex none): ((XCAVC Slope (%):
Subragion (IBB or MI DA): LRR-R Lat. 42,489	9576 Long: -11,1503612 Datum: 14AD 03
Soil Map Unit Name: Barcelona SiltLoan	3to 8% Slopes NWI classification: Upland
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes X No (If no, explain in Remarks.)
Are Vegetation No., Soll No., or Hydrology No. significantly	disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation No., Soil No., or Hydrology No naturally pro	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes 😾 No	Is the Sampled Area Within a Wetland? Yes No
Hydric Soil Present? Yes X No	101011
Wetland Hydrology Present? Yes X No	If yes, optional vveiland Site iD.
Remarks: (Explain alternative procedures here or in a separate repo	rt.)
PSS portion of wetland A64	
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	a to a Call Ornale (DC)
Primary Indicators (minimum of one is required; check all that apply)	V 7 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Surface Water (A1) Water-Stained High Water Table (A2) Aquatic Fauna	44 The Hose (D46)
High Water Table (A2) Aquatic Fauna Mari Deposits	To Water Table (CO)
Water Marks (B1) Hydrogen Sul	fide Odor (C1) Crayfish Burrows (C8)
	ospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Presence of F	Reduced Iron (C4)Stunted or Stressed Plants (D1)
	teduction in Tilled Solls (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Su	
	n in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)	[AO-Notice 1 to 1 to 2 to 3
Field Observations: Surface Water Present? Yes No Depth (inche	as):
Surface Water Present? Yes No Depth (inche	no):
Saturation Present? Yes No X Depth (inche	1 m (a V X Na 1
(includes contillary frings)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	Jus, previous inspectation, it are inspect
Remarks:	
Daires all	
Thoughout, running	ing towards North end where it pools
more and turns more Pan want	
1 21-6" 1000240	n section of wetlow along the slope of
hiliside.	

				
Tree Stratum (Plot size: 30' L)		Dominant Species?		Dominance Test worksheet:
1. Nor Applicable				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				, ,
3				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species 1057
5		-		That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	Ø	= Total Cov	er	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15 12)				FACW species x 2 =
1. Salix nigra	50	Y	OBL	FAC species x 3 =
2. Cornus racemusa		Y	FAC	FACU species x 4 =
3				UPL species x 5 =
4			——————————————————————————————————————	Column Totals: (A) (B)
5		*********		Prevalence index = B/A =
·				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	ጎ.	= Total Cov		Z 2 - Dominance Test is >50%
Herb Stratum (Plot size: S' 2)		- Total Cov		3 - Prevalence Index is ≤3.0 ¹
1. Symphyotrichum puniceum	10	N	OBL	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Ranuncy in acris	5	- N	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Symphy otrichum prenanthoides	10	<u> </u>	FAL	
4. Impations Carpensis		<u>V</u>	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. Lysimachia nummularia	20		FACW	Definitions of Vegetation Strata:
6. Toxicodendron radicans	38	$\overline{\gamma}$	FAC	
	<u> </u>	N	PAC	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				
8			· `	Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.
9.				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11,				Woody vines - All woody vines greater than 3.28 ft in
12	140			height.
3010	700	= Total Cov	er .	
Woody Vine Stratum (Plot size: 30'R)			• • • • •	
1. NOT Applicable				Hydrophytic
2				Vegetation 🗸
3				Present? Yes No
4		·		
		= Total Cov	er	
Remarks: (Include photo numbers here or on a separate s	sheet.)			
				•
	•			

Depth Malik Scolor (motes) Sco	Profile Desc	ription: (Describe	to the dep	th needed to docun	ent the l	ndicator	or confirm	the absence	of Indicato	rs.)	
Type: C=Concentration, D=Depletion, RN=Reduced Matrix, M3=Masked Sand Grains. *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Indicators: *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil R= N=Matrix, Hydric Soil Present? *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil R= N=Matrix, Hydric Soil R= N=Matrix, Hydric Soil R= N=Matrix, Hydric Soil R= N=Matrix, Hydric Soil Present? *Locallon: PL=Pore Lining, M=Matrix, Hydric Soil Present? *Locallon: PL=Pore Lining, Hydric Soil Present? *Locallon: PL=Pore Lining, Hydric Soil Present? *Locallon: PL=Pore Lining, Hydric Soil Present? *Locallon: PL=Pore Lining, Hydric Soil Present? *Locallon: PL=Pore Lining, Hydric Soil Present? *Locallon: PL=Pore Lining, Hydric Soil Present? *Locallon: PL=Pore Lining, Hydric Soil Present? *Locallon: PL=Pore Lining, Hydric Soil Present? *Locallon: PL=Pore Lining, Hydric Soil Present *Locallon: PL=Pore Lining, Hydric Soil Pre				Redox		<u>.</u> . 1	. 2	T4		Domorko	
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"Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Histosoil (A1) Polyvalue Below Surface (S9) (LRR R, Heliate Epipedon (A2)	10 10	a, 51 4/2				2				··········	
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Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)	} . •			Polyvalue Relov	w Surface	/S8\ /I RI	a p				i
Hydrogen Sulfide (A4)						(00) (111	× 14,				
Stratified Layers (A5)											
Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Dark Surface (S7) Citing Agriculture (S7) Siripped Matrix (S6) Dark Surface (S7) Citing Agriculture (S7)							, L)				
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Solls (F19) (MLRA 149B) Sandy Cleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) 3¹Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: VI IX Depth (inches): Hydric Soll Present? Yes No Remarks:			e (A11)	Depleted Matrix	(F3)			Thin D	ark Surface	(S9) (LRR K,	L)
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parenti Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: VH IN Depth (inches): Hydric Soli Present? Yes No Presents:									-		
Sandy Redox (S5) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 3-Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: VI IN Depth (inches): Hydric Soli Present? Yes No Remarks:					•	-	•				
Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: \lambda \lambda \lambda Depth (inches): Hydric Soll Present? Yes No Remarks:	Sandy R	ledox (S5)		•	• ,						
3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: 以 \nabla \nabla Depth (inches): Hydric Soll Present? Yes No Remarks:			MI DA 4401	> \			•				2)
Restrictive Layer (if observed): Type:(\(\lambda \) \(\lambda \) Depth (inches):	Daik Gui	riaco (Or) (Erere II)	TIMENUT 1401	-) .				011101	(mylphani ii)	,,	i
Type: NI IN Depth (inches): Hydric Soil Present? Yes No	<u></u>			etland hydrology mus	st be pres	ent, unles	s disturbed	or problemati	C		
Depth (inches): No Remarks:	1		•								
Remarks:	1		,					Hydric Sol	Present?	Yes X	No
		5,100 <u>7</u>]			
										•	
				•							
	,										•
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						•					

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County _ Sampling Date: (0 | 10 | 1 (o Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 775 Town of Hanover Investigator(s): Ben Virty and Mark Dith Section, Township, Range:____ Local relief (concave, convex, none): CONUCX Slope (%): 5-102 Landform (hillslope, terrace, etc.). hillslope Subregion (LRR or MLRA); LRR-R Lat: 47.489858 Long: 79.1505612 Datum: NAD 83 Soll Map Unit Name: NIGA - Niggra 511+ loam, O-325lyxx, lugny Substatum NWI classification: Upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No_____ No___ Are Vegetation <u>No</u>, Soil <u>No</u>, or Hydrology <u>No</u> significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation No., Soil No., or Hydrology No naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Yes ____ No X Hydrophytic Vegetation Present? Yes ____ No X within a Wetland? Yes ____ No X Hydric Soll Present? Wetland Hydrology Present? _ No X If yes, optional Wetland Site ID:____ Remarks: (Explain alternative procedures here or in a separate report.) do point to wexland AWYI. On a hillslope leading down **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) ___ Surface Water (A1) ___ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) ___ Mari Deposits (B15) ___ Saturation (A3) ___ Crayfish Burrows (C8) ___ Hydrogen Suifide Odor (C1) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) ___ Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) ___ Presence of Reduced Iron (C4) ___ Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) ___ Algal Mat or Crust (B4) Shallow Aquitard (D3) ___ Thin Muck Surface (C7) ___ Iron Deposits (B5) ___ Microtopographic Relief (D4) ___ Other (Explain in Remarks) ___ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) _ Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No X Depth (inches): Surface Water Present? Yes No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No hydrology indicators observed.

		·····		
Tree Stratum (Plot size: 30 R)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
		N 1	FACW	Number of Dominant Species
1. Fraviour pennsylvanica	2		<u> </u>	That Are OBL, FACW, or FAC:(A)
2. Acer Sacchorum	38		FACU	Total Number of Dominant
3				Species Across All Strata:(B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 20% (A/B)
6				
0				Prevalence Index worksheet:
/	<u> </u>	-		Total % Cover of: Multiply by:
	60	= Total Cove	ər	OBL species x1=
Sapling/Shrub Stratum (Plot size: 15' R			*,	FACW species x 2 =
1. Lonicera tartarica	Su	Y	FACU	FAC species x3 =
		 '		FACU species x 4 =
2	 .			UPL species x 5 =
3				Column Totals: (A) (B)
4				(0)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators;
				1 - Rapid Test for Hydrophytic Vegetation
7	<u> </u>			2 - Dominance Test is >50%
	20	= Total Cove	er er	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5' R)				4 - Morphological Adaptations ¹ (Provide supporting
1. Solidago Caradennii	_3p_	Υ.	FACU	data in Remarks or on a separate sheet)
2. Lonicera fartarica	50	Y	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Toxicraden dron radicans	10	<u> </u>	FAL	
	5			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Fragaria Virginiara		<u>N</u>		
5. Parthenocissus quinquefolia	5	<u>N</u>	FACU	Definitions of Vegetation Strata:
6		1		Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8			············	Sapling/shrub Woody plants less than 3 in, DBH
l 🔦				and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11				
12			<u> </u>	Woody vines - All woody vines greater than 3.28 ft in height.
	100	= Total Cove		
Woody Vine Stratum (Plot size: 34 尺)			"	
		•	•	
1. Not Applicable				
2				Hydrophytic Vegetation
3	-			Present? Yes No Yes
4				
	4	= Total Cove	\r	
Remarks: (Include photo numbers here or on a separate s	,	- TOTAL COVE	JI	
remainer (modes prior familiaris here of off a separate s	311001.7			
				•

Profile Desc	ription: (Describe t	o the dep	th needed to docum	nent the i	ndicator	or confirm	the absence of l	ndicators.)	
Depth (Inches)	Matrix Color (moist)	~~~	Redo Color (moist)	x Feature: %	<u>Type</u> 1	Loc ²	Texture	Remarks	,
(Inches) () ~ 8	104R43	100	Color (moist)		_1 \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1.00	SIL		
8-26	2.57 5/6	75	2.51 4/3	5	0	m	<u> </u>		
2-00	213110	45	2.54 4/2	-16	0	M			
	,				<u></u>				
	,		104R 5/4	10		<u>M</u>			
		·							
									
							. <u></u>		
¹ Type: C=C	oncentration, D=Dep	etion. RM	=Reduced Matrix. M	S=Maske	d Sand Gr	ains.	² Location: P	L=Pore Lining, M=N	Matrix.
Hydric Soil							Indicators for	Problematic Hydr	ic Solls³:
Histosol			Polyvalue Belo		(S8) (LR	R R,		k (A10) (LRR K, L, iirle Redox (A16) (L	
	pipedon (A2) Istic (A3)		MLRA 149B Thin Dark Surf		LRR R, M	LRA 149B		ky Peat or Peat (S3	
Hydroge	en Sulfide (A4)		Loamy Mucky	Mineral (F	1) (LRR I		Dark Surf	ace (S7) (LRR K, L	
	d Layers (A5) d Below Dark Surfac	۵11۱ م	Loamy Gleyed Depleted Matri		2)			Below Surface (S8 Surface (S9) (LRR	
	ark Surface (A12)	v (~11)	Redox Dark St		i) .		Iron-Mang	ganese Masses (F1	2) (LRR K, L, R)
	Mucky Mineral (S1)		Depleted Dark			,		: Floodplain Soils (F odic (TA6) (MLRA 1	
	Gleyed Matrix (S4) Redox (S5)		Redox Depres	sions (Fo)		Red Pare	nt Material (F21)	
	i Matrix (S6)							llow Dark Surface (TF12)
Dark Su	ırface (S7) (LRR R, I	/ILRA 149	B)				Other (Ex	plain in Remarks)	
³ Indicators o	of hydrophytic vegeta	tion and w	etland hydrology mu	st be pre	sent, unles	s disturbe	d or problematic.		
	Layer (If observed):								
Type:			•				Hydric Soil Pr	resent? Yes	No X
Depth (in Remarks:	icnes):		-				ilyuna com.		
riomano									
									•
ĺ.									
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	-								
		;			•				

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

IAPI PULID DEL PLUMINALI DEL			
Project/Site: Ball Hill Wind Project	City/County: Chau	tauqua County	Sampling Date: 6121116
Applicant/Owner Ball Hill Wind Energy, LLC	54 St	State: NY	Sampling Point: DP- FFF
BYLOTE J. Scholori	Section Township. I	Range: Town of	Howover
was served (hill-land torrang ata): Hill Slope	Local relief (concave, c	onvex, none):	<u>ر</u> Slope (%): <u>0 7</u>
Subregion (LRR or MLRA): LRR-R Lat: 42.6	1993629	ong: -79,15367	SS Datum: NAD 83
Soil Map Unit Name: Noggra S: Hloam 10+	- 30/ slagge	NWI classific	ation: Upland
Soil Map Unit Name: Noggre S: 1718am 104	83163101Da	//f no evalois is D	omarke)
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes No	(If tio, explain in it	
Are Vegetation <u>vo</u> , Soil <u>vo</u> , or Hydrology <u>vo</u> signif	-		present? Yes X No
Are Vegetation <u>~ ゜</u> , Soil <u>~ ゜</u> , or Hydrology <u>~ ②</u> natur		f needed, explain any answe	
SUMMARY OF FINDINGS – Attach site map sho			, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Samp		No
Hydric Soil Present? Yes No	within a We		
Wetland Hydrology Present? Yes No	If yes, option	nal Wetland Site ID: <u>we</u>	Hard 19645
Remarks: (Explain alternative procedures here or in a separat	te report.)		
Pen Octa Station	for westerd	1 A643,	
		•	
			•
HYDROLOGY		Sacandary Indic	ators (minimum of two required)
Wetland Hydrology Indicators:		Secondary indic	
Primary Indicators (minimum of one is required; check all that		Surface Sol	
Guilago trator (11)	Stained Leaves (B9)	Moss Trim	
	Fauna (B13)		Water Table (C2)
	eposits (B15)	Dry-Season	
	en Sulfide Odor (C1)		Visible on Aerial Imagery (C9)
	d Rhizospheres on Living I		Stressed Plants (D1)
	ce of Reduced Iron (C4)		c Position (D2)
	Iron Reduction in Tilled Sc	Shallow Aq	
Total Popularia	uck Surface (C7)		raphic Relief (D4)
management violate extra control of the contro	Explain in Remarks)		al Test (D5)
Sparsely Vegetated Concave Surface (B8)		1	
Field Observations:	(inches):		
Surface Water Present? Yes No _x _ Depth			
Water Table Present? Yes No X Depth		Wetland Hydrology Pres	ent? Yes 🙏 No
Saturation Present? Yes No Mo Depth (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aer			
Describe Recorded Data (stream gauge, monitoring well			
Remarks:			
	•		
'			
			•
1. 1. 1. Mr.			v • 1

VEGETATION – Use scientific names of plants.

Sampling Point: DP- 777

Tree Stratum (Plot size: 30)	Absolute	Dominant Indicator Species? Status	Dominance Test worksheet:
1. DOT PROVICEDLE			Number of Dominant Species
			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3			Species Across All Strata: (B)
4			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5			That Are OBL, FACW, or FAC: (A/B)
6	· · · · · · · · · · · · · · · · · · ·		Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
	_0	= Total Cover	OBL species x 1 =
Sapling/Shrub Stratum. (Plot size: \(\sigma'\)		· · · · · · · · · · · · · · · · · · ·	FACW species x 2 =
1. not Applicable			FAC species x 3 =
2			FACU species x 4 =
3	·	· · · · · · · · · · · · · · · · · · ·	UPL species x 5 =
4			Column Totals: (A) (B)
5			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
	_ 0	= Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size:5')	• •		3 - Prevalence Index is ≤3.0 ¹
1. Impatiens copensis	80	Ves FACE	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
2. Eupotorium perfolictum	10	NO PACH	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Entrania gaminifolia	10		¹ Indicators of hydric soil and wetland hydrology must
4.	***************************************		be present, unless disturbed or problematic.
5.			Definitions of Vegetation Strata:
6			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7	7.7		at breast height (DBH), regardless of height.
8			Sapling/shrub - Woody plants less than 3 in. DBH
			and greater than or equal to 3.28 ft (1 m) tall.
10			Herb All herbaceous (non-woody) plants, regardless of
11			size, and woody plants less than 3.28 ft tall.
12			Woody vines - All woody vines greater than 3.28 ft in
12.	100		height.
		= Total Cover	
Woody Vine Stratum (Plot size: 30')			
1. Not applicable			Hydrophytic
2			Vegetation
3			Present? Yes No
4			
		= Total Cover	
Remarks: (Include photo numbers here or on a separate s	heet.)		
			·
			•

Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Totalism: PL=Pore Lining, MeMatrix, Plydic Soil Indicators: Polyvalue Balov Surface (SS) (LRR R, MLRA 149B) Stratelled Explosion (A2) Smithed Matrix (RS) Loany Mucky Minera (S1) Loany Mucky Minera (S1) Loany Mucky Minera (S1) Depleted Below Dark Surface (RS) Depleted Below Dark Surface (SS) RR K, L) Thick Dark Surface (SS) RR R, MLRA 149B) Sandy Redox (SS) Sandy Redox (SS) RR R, MLRA 149B) Redox Depressions (FS) Redox Depression		ubriou: (nescrine	to the de	oth needed to docu	ment the i	ndicator	or contirm	the absence o	r indicators.)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. SIL			%			Type ¹	_Loc²	Texture	Re	marks
**Jupe: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Jupe: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Jupe: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Jupe: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Jupe: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Jupe: C=Concentration, D=Depletion, RM=Reduced Matrix. **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Problematic Hydric Soils*: **Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbe								SIL		
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils*: Lomatrix Hydric Soils	8":16"	2.54411	ტბ	2.54412	10	٥	<u>m</u>	SIL		
Hydric Soil Indicators: Histosol (A1)					10	ر	~			<i>*</i>
Hydric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators: Histosol (A1)						,				
Hydric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators: Histosol (A1)			· ———				C			
Hydric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators: Histosol (A1)										
Hydric Soil Indicators: Histosol (A1)				·						
Hydric Soil Indicators: Histosol (A1)				<u>· · · · · · · · · · · · · · · · · · · </u>						
Hydric Soil Indicators: Histosol (A1)			· ••••							
Hydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Pledmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. **Restrictive Layer (if observed):** Type: Depth (inches): Hydric Soil Present? Yes No	¹Tyne: C=C	oncentration D=Den	letion. RM	=Reduced Matrix. M	S=Maske	 d Sand Gr	ains.	² Location:	PL=Pore Lining	, M=Matrix.
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sardy Redox (S5) Dark Surface (S7) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S9) MLRR K, L, R) Sandy Redox (A16) Redox Dark Surface (S9) Matrix (F1) Depleted Matrix (F2) Depleted Below Surface (S8) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Dark Surface (S9) Itan Matrix (S6) Mesic Spodic (TA6) Mesic Spodic			10.1011, 1 1.1					Indicators f	or Problematic	Hydric Soils ³ :
Black Histic (A3)						(S8) (LR	RR,			
Stratified Layers (A5)						LRR R, M	LRA 149B))5 cmi Mi	ıcky Peat or Pe	at (S3) (LRR K, L, R)
Depleted Below Dark Surface (A11)							(, L)			
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Type: Depth (inches): Hydric Soil Present? Yes X No			e (A11)			-)		Thin Da	rk Surface (S9)	(LRR K, L)
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Type: Depth (inches): Hydric Soil Present? Yes X No										
Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? YesX No								Mesic S	podic (TA6) (MI	LRA 144A, 145, 149B)
Dark Surface (S7) (LRR R, MLRA 149B) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No										
Restrictive Layer (if observed): Type:										
Restrictive Layer (if observed): Type:		rface (S7) (LRR R, I	MLRA 149	B)				Other (Explain in Rema	rks)
Depth (inches): Hydric Soil Present? Yes X No					ist he pres	ent unles	s disturbed			rks)
Deput (incres).	³ Indicators o	f hydrophytic vegeta	ition and v		ıst be pres	ent, unles	s disturbed			rks)
Remarks.	³ Indicators o Restrictive Type:	f hydrophytic vegeta Layer (if observed)	ition and v		ust be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators of Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ıst be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators of Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ist be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators of Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ist be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators of Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ist be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators o Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ist be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators o Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		st be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators of Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ist be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators of Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		st be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators o Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ist be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators of Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ast be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators of Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ist be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators of Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		st be pres	ent, unles	s disturbed	or problematic.	-	
	³ Indicators o Restrictive Type: Depth (in	f hydrophytic vegeta Layer (if observed)	ition and v		ist be pres	ent, unles	s disturbed	or problematic.	-	

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ball Hill Wind Pr	oject	City/County: Chaut	auqua County State: NY	Sampling Date: 6 2 Sampling Point: DP-	طال 776
Applicant/Owner: Ball Hill Win	a Energy, LLC				
Landform (hillslope, terrace, etc.):	Jeremy Scholer: Hillstope Loc R-R Lat: 42,4994	cal relief (concave, co	onyex, none): <u>60-2024</u> ong: <u>-79.1538</u> 0	Slope (%): OOB Datum: NAD	
Soil Map Unit Name: 📉 🗀 🥰	crasilt Loan 10 to	2 200 2100a	1NVVI Classi	ncanoni, or race	
Are climatic / hydrologic condition	ns on the site typical for this time of ye	ar? Yes No	(If no, explain in	Remarks.)	
Are Vegetation NO , Soil No	_, or Hydrology <u>~ o</u> significantly	disturbed? Are	e "Normal Circumstances	" present? Yes <u>K</u> No	
	O, or Hydrology NO naturally pro		needed, explain any ansv	vers in Remarks.)	
_	S – Attach site map showing				i, etc.
Hydrophytic Vegetation Present	t? Yes No X	is the Sampl	ed Area	No ×	
Hydric Soil Present?	YesNo ×	16	-I Welland Sita ID:		
Wetland Hydrology Present?			al Wetland Site ID:		
Remarks: (Explain alternative p	procedures here or in a separate repo	и с)	•		
hPland	Octa Point fo	r Wetterd	1 A643.		
		•	•		
HYDROLOGY					ulrod\
Wetland Hydrology Indicators	s:			licators (minimum of two requ	THEAT
Primary Indicators (minimum of	f one is required; check all that apply)			oil Cracks (B6)	
Surface Water (A1)	Water-Stained	Leaves (B9)		Patterns (B10)	
High Water Table (A2)	Aquatic Fauna	(B13)		n Lines (B16)	- 1
Saturation (A3)	Marl Deposits			on Water Table (C2)	1
Water Marks (B1)	Hydrogen Sulf			Burrows (C8)	20)
Sediment Deposits (B2)		ospheres on Living R		n Visible on Aerial Imagery (C) (BC
Drift Deposits (B3)	Presence of R			r Stressed Plants (D1)	
Algal Mat or Crust (B4)		eduction in Tilled Soi		hic Position (D2)	
Iron Deposits (B5)	Thin Muck Su		Shallow A		l
Inundation Visible on Aeria		n in Remarks)		ographic Relief (D4)	ļ
Sparsely Vegetated Conca	ave Surface (B8)		FAC-Neu	trai Test (D5)	
Field Observations:				• •	
Surface Water Present?	Yes No _ X Depth (inche		35 A		
Water Table Present?	Yes No _X_ Depth (inche	1		An Maria	v
Saturation Present? (includes capillary fringe)	Yes No _X_ Depth (inche am gauge, monitoring well, aerial pho	1	Wetland Hydrology Pre	sent? Yes No _	
Describe Recorded Dara (streat	ani gauge, monitoring wen, acriai prio	range to the second section of			İ
		•			
Remarks:					
			•		
	and the selection of th				
				•	
	•			•	
		,			
			•		
1					

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Indicator Species? Status	Dominance Test worksheet:
1. Acer saccharum		Yes FACE	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. Carya ovata			
3			Total Number of Dominant Species Across All Strata: (B)
4			
5			Percent of Dominant Species That Are OBL, FACW, or FAC: 33%, (A/B)
7	·		Prevalence index worksheet:
	65		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15')	<u> </u>	= Total Cover	OBL species
			FAC species 10 x3 = 30
1. Acer Saccharum		YES PACE	FACU species 90 x4= 360
2			UPL species C x 5 = C
3			Column Totals: 105 (A) 400 (B)
4			
5			Prevalence Index = B/A = 5.81
6			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
	15	= Total Cover	2 - Dominance Test is >50% 3 - Prevalence Index is ≤3,0 ¹
Herb Stratum (Plot size: 5')			4 - Morphological Adaptations ¹ (Provide supporting
1. Podophyllum neltatum	10	Yes FACL	data in Remarks or on a separate sheet)
2. Enthamia graminitalia	10	Yes Fac	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Fraxinus Pennsylvenica			Indicators of hydric soil and wetland hydrology must
4			be present, unless disturbed or problematic.
5,	····		Definitions of Vegetation Strata:
6			Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7			at breast height (DBH), regardless of height.
8			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9			
10,			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11			
12			Woody vines — All woody vines greater than 3.28 ft in height.
,	25 :	= Total Cover	<u> </u>
Woody Vine Stratum (Plot size:)		* .**	
1. not Applicable			
2			Hydrophytic Vegetation
3			Present? Yes No X
4			,
	۔ ۵	= Total Cover	
Remarks: (Include photo numbers here or on a separate	sheet.)		

Profile Description: (Describe to the di	epth needed to document the indicator or co	Milli tio appoince of materials.	- 1
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type ¹ Lo	oc² Texture Remarks	
(inches) Color (moist) % 0"-8" 7.5 / 5) 3) 60	Color (moist) % Type Lu	ST.	
	7 8 . 611 . 2 .	STL	_
8'-20" Z.54613 80	2.54 516 20	31.0	-
	·		
			<u> </u>
		2	
¹ Type: C=Concentration, D=Depletion, R Hydric Soil Indicators:	M=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :	
Histosol (A1)	Polyvalue Below Surface (S8) (LRR R,		
Histic Epipedon (A2)	MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)	
Black Histic (A3) Hydrogen Sulfide (A4)	Thin Dark Surface (S9) (LRR R, MLRA Loamy Mucky Mineral (F1) (LRR K, L))
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Polyvalue Below Surface (S8) (LRR K, L)	i
Depleted Below Dark Surface (A11)	Depleted Matrix (F3)	Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R	> \
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	Redox Dark Surface (F6) Depleted Dark Surface (F7)	Piedmont Floodplain Soils (F19) (MLRA 149)	
		Mesic Spodic (TA6) (MLRA 144A, 145, 149E	
Sandy Gleyed Matrix (S4)	Redox Depressions (F8)		•
Sandy Redox (S5)	Redox Depressions (F8)	Red Parent Material (F21)	•
			•
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14	9B)	Red Parent Material (F21)Very Shallow Dark Surface (TF12)Other (Explain in Remarks)	•
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14 Indicators of hydrophytic vegetation and		Red Parent Material (F21)Very Shallow Dark Surface (TF12)Other (Explain in Remarks)	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14	9B)	Red Parent Material (F21)Very Shallow Dark Surface (TF12)Other (Explain in Remarks)	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) Indicators of hydrophytic vegetation and Restrictive Layer (if observed):	9B)	Red Parent Material (F21)Very Shallow Dark Surface (TF12)Other (Explain in Remarks)	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) Indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type:	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) indicators of hydrophytic vegetation and Restrictive Layer (if observed): Type: Depth (inches):	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14	9B)	Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) sturbed or problematic.	

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region _____ City/County: Chautauqua County Sampling Date: 6121116 Project/Site: Ball Hill Wind Project _ Sampling Point: DP- 779 Applicant/Owner: Ball Hill Wind Energy, LLC State: J. Scider Section, Township, Range: Town of Hurover Investigator(s): B. Viars Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): O% Datum: NAD 83 Lat: 42.5638697 Long: -79.1528564 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Nicacra S: 1+ 100m 10 +03% Slopes NWI classification:___ Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No____ Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Yes X No Hydrophytic Vegetation Present? within a Wetland? Yes 😕 No Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Yes X No Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) PRO Data Point. **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ✓ Drainage Patterns (B10) X Water-Stained Leaves (B9) ___ Surface Water (A1) ___ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) ___ High Water Table (A2) ___ Dry-Season Water Table (C2) ___ Marl Deposits (B15) ___ Saturation (A3) Crayfish Burrows (C8) ___ Hydrogen Sulfide Odor (C1) ___ Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) ___ Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) X Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) ___ Iron Deposits (B5) _ Microtopographic Relief (D4) ___ Other (Explain in Remarks) ___ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes ____ No ___ Depth (inches): Surface Water Present? Yes ____ No ___ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes _____ No ____ Yes ____ No ___ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

<u>Tree Stratum</u> (Plot size: <u>3</u> る')	Absolute		Indicator	Dominance Test worksheet:
	35	r <u>Species?</u> ソセミ	FAC	Number of Dominant Species That Are ORL FACILY or FACILY
2. Froxing Pensylvaica			FACE	That Are OBL, FACW, or FAC: (A)
3. Tsuge Concedersis			FACL	Total Number of Dominant Species Across All Strata; (B)
			1120	
4		•	·	Percent of Dominant Species That Are OBL, FACW, or FAC: 29% (A/B)
5				That to obt, thow, of the (AB)
6				Prevalence Index worksheet:
7		·	- '	Total % Cover of: Multiply by:
	<u>60</u>	_ = Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 16')				FACW species x 2 =
1. Her Inbrum		Yes	FAL	FAC species x 3 =
2. Fragines porsylvinia		Yes	PACU	FACU species x 4 =
3. TSuga conodersis			FACE	UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6		***************************************		Hydrophytic Vegetation Indicators:
7		***************************************		1 - Rapid Test for Hydrophytic Vegetation
	20	- T-1-1 O-		2 - Dominance Test is >50%
Herb Stratum (Plot size:)		_ = Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
1. Toxicoderdon Radicars	20	Yes	FAC	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Impations expensis		Yes	FACUL	Problematic Hydrophytic Vegetation¹ (Explain)
3. CARRY Intumescens		105	FREW	
		ar j	<u>912w</u>	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				Definitions of Vegetation Strata:
6				
6	1.1			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				
8				Sapling/shrub Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11		-		Woody vines – All woody vines greater than 3.28 ft in
12			<u> </u>	height.
- <i>t</i>	40	= Total Cov	er	
Woody Vine Stratum (Plot size: 30')				
1. Smilax rotundifolia	10	Yes	FAL	
2		· · · · · · · · · · · · · · · · · · ·	-	Hydrophytic Vegetation
3		·		Present? Yes No No
4				·
	(0	= Total Cov	er	
Remarks: (Include photo numbers here or on a separate		70.00		
,				

	intion: (Describe	to the deb	tn needed to docum	ient the ir	dicator	or contirm	the absence of	illaioatoio	1.1	
Depth (inches)	Matrix Color (moist)	~~~	Color (moist)	x Features %	Type ¹	Loc ²	Texture		Remarks	
O"-1"	2.59311		Octor (motor)				8.≖			
2"-14"			7.542 516	25%		~				
2-14	2,37 6/	3376	<u>GE</u>		<u> </u>					
		<u> </u>						······································		
										
					`					
			-					····		
								· · · · · · · · · · · · · · · · · · ·	····	
										
										·
¹Type: C=Ce	oncentration, D=Dep	letion, RM:	=Reduced Matrix, MS	======================================	Sand Gr	ains.	² Location: 1	PL=Pore Li	ning, M=Matr	ix.
Hydric Soil							Indicators fo			
Histosol			Polyvalue Belov		(S8) (LR	RR,			RR K, L, MLI ((A16) (LRR	
	oipedon (A2) istic (A3)		MLRA 149B		.RR R, M	LRA 149B)			Peat (S3) (L	
Hydroge	en Sulfide (A4)		Loamy Mucky f	Mineral (F1) (LRR I		Dark Sur		LRR K, L, M)	
	d Layers (A5) d Below Dark Surfac	o (Δ11)	Loamy Gleyed Depleted Matrix)				rface (S8) (L l S9) (LRR K, l	
	ark Surface (A12)	υ (ΛΙΙ)	Redox Dark Su							RR K, L, R)
				indoo (i o)						
Sandy N	lucky Mineral (S1)		Depleted Dark	Surface (F			Piedmon	t Floodplai	n Soils (F19)	(MLRA 149B) A. 145. 149B)
Sandy N	Mucky Mineral (S1) Bleyed Matrix (S4)			Surface (F			Piedmon Mesic Sp Red Pare	t Floodplai odic (TA6) ent Materia	n Soils (F19)) (MLRA 144/ Il (F21)	A, 145, 149B)
Sandy N Sandy S Sandy F Stripped	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6)		Depleted Dark Redox Depress	Surface (F			Piedmon Mesic Sp Red Pard Very Sha	t Floodplai oodic (TA6) ent Materia illow Dark	n Soils (F19)) (MLRA 144 4 Il (F21) Surface (TF12	A, 145, 149B)
Sandy N Sandy S Sandy F Stripped	Mucky Mineral (S1) Bleyed Matrix (S4) Redox (S5)	VILRA 149	Depleted Dark Redox Depress	Surface (F		•	Piedmon Mesic Sp Red Pard Very Sha	t Floodplai odic (TA6) ent Materia	n Soils (F19)) (MLRA 144 4 Il (F21) Surface (TF12	A, 145, 149B)
Sandy N Sandy O Sandy F Stripped Dark Su	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6)		Depleted Dark Redox Depress	Surface (F sions (F8)	7)	ss disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai oodic (TA6) ent Materia illow Dark	n Soils (F19)) (MLRA 144 4 Il (F21) Surface (TF12	A, 145, 149B)
Sandy N Sandy P Sandy P Stripped Dark Su Indicators of	Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai oodic (TA6) ent Materia illow Dark	n Soils (F19)) (MLRA 144 4 Il (F21) Surface (TF12	A, 145, 149B)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type:	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	es disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type:	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	es disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy F Sandy F Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	s disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)
Sandy N Sandy P Sandy P Stripped Dark Su Indicators of Restrictive Type: Depth (in	Mucky Mineral (S1) Bieyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I If hydrophytic vegeta Layer (If observed)	tion and w	Depleted Dark Redox Depress	Surface (F sions (F8)	7)	es disturbed	Piedmon Mesic Sp Red Pare Very Sha Other (E	t Floodplai odic (TA6) ent Materia illow Dark xplain in R	n Soils (F19)) (MLRA 1444 Il (F21) Surface (TF1: emarks)	2)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 6/21/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 780
Investigatorial R. Vince T School	Section, Township, Range: Down of Harover
Law dearns (hillstone torroom ato): Hillstone	ocal relief (concave, convex, none): Convex Slope (%):
Catalonia (Indianope, torrace) stay.	4065 Long: -77,153 1048, Datum: NAD 83
Subregion (LRR or MLRA).	to 3 % Slapes NWI classification: UPland
Soil Map Unit Name: 11103ct a 5113 10cm, 5	O V V V No (If no explain in Remarks)
Are climatic / hydrologic conditions on the site typical for this time of y	ly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation <u>ND</u> , Soil <u>ND</u> , or Hydrology <u>ND</u> significanti	
Are Vegetation NO, Soil NO, or Hydrology NO naturally p	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No K	Is the Sampled Area
Hydric Soil Present? Yes No X	within a Wetland? Yes No
Wetland Hydrology Present? Yes No >	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate rep	
upland Data point for	
what both point for	Datiates 130 1 12
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	y) Surface Soil Cracks (B6)
Surface Water (A1) Water-Staine	ed Leaves (B9) Drainage Patterns (B10)
High Water Table (A2) Aquatic Faur	ma (B13) Moss Trim Lines (B16)
Saturation (A3) Marl Deposit	is (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Su	
Sediment Deposits (B2) Oxidized Rhi	izospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) Geomorphic Position (D2) Surface (C7) Shallow Aquitard (D3)
Iron Deposits (B5) Thin Muck S	11 D (C/D 1)
mandador violeta en la companya en l	in in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8) Field Observations:	
Surface Water Present? Yes No _X Depth (inch	nes):
Water Table Present? Yes No X Depth (Inch	nac)·
Saturation Present? Yes No > Depth (inch	1 N N N N N
(Includes espillary frings)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	10tos, previous inspections), ii avaliable.
Remarks:	
et to edi	A Company of the Comp
	·

2 /	Absolute	Dominant Indic	ator Barriage Barr
Tree Stratum (Plot size: 36')		r Species? Sta	Dominance Test worksheet: Number of Dominant Species
1. Acer Saccherum		YES FAC	That Are OBL, FACW, or FAC: (A)
2. Penns Sentina	20	YES FA	ch
3			Total Number of Dominant Species Across All Strata: (B)
4			
		· —————	Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6			Prevalence index worksheet:
7	-	- 	Total % Cover of: Multiply by:
	100	_ = Total Cover	OBL species
Sapling/Shrub Stratum (Plot size: 15')		$\mathcal{I} = \{(x,y) \mid x \in \mathbb{N}\}$	FACW species D x2 =
1. Au Sacherum	3	yes for	FAC species O x3 = O
		· <u> </u>	FACU species 160 x4= 640
2			IIPI eneries o v5= C
3			Column Totals: 160 (A) 610 (B)
4			
5			Prevalence Index = B/A = 4.0
6			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
		= Total Cover	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5′)		_= rotal Cover	3 - Prevalence Index is ≤3.0 ¹
	-		4 - Morphological Adaptations (Provide supporting
1. Podophyllum Peltatum		the state of the s	
2			Problematic Hydrophytic Vegetation ¹ (Explain)
3			1Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
5.			Definitions of Vegetation Strata:
6.			
			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7			
8			Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9		-	and greater that or equal to 0.20 it (1 iii) tall.
10			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11			
12			Woody vines - All woody vines greater than 3.28 ft in
	7.0	= Total Cover	height.
Woody Vine Stratum (Plot size: ろみ')		- Total Cover	
1. Vitus aestivalis	<u>lo</u>	YOS FA	
2			Hydrophytic Vegetation
3			Present? Yes No No
4			
	10	= Total Cover	
Remarks: (Include photo numbers here or on a separate s	sheet.)	. 10101 00101	
(

Profile Desc	ription: (Describe to the	depth needed to docum	nent the indicator or	confirm th	e absence of indica	itors.)
Depth	Matrix	Redo:	K Features	12	Texture	Remarks
(inches)	_	Color (moist)			<u>Texture</u> ムエ	Nomano
0"-("	7.5y312				<u></u>	
1"-7"	~					
7"07"	10gR416				SIC	
,						*
·						
					· · · · · · · · · · · · · · · · · · ·	
	oncentration, D=Depletion	, RM=Reduced Matrix, M	S=Masked Sand Grai	ns.	² Location: PL=Po	re Lining, M=Matrix. Diematic Hydric Soils³:
Hydric Soil		Polygolue Belo	w Surface (S8) (LRR	R		0) (LRR K, L, MLRA 149B)
Histosol	oipedon (A2)	MLRA 149B		11,	Coast Prairie R	edox (A16) (LRR K, L, R)
Black Hi	stic (A3)		ace (S9) (LRR R, MLI			eat or Peat (S3) (LRR K, L, R)
	en Sulfide (A4) d Layers (A5)	Loamy Mucky I Loamy Gleyed	Mineral (F1) (LRR K, Matrix (F2)	L)		S7) (LRR K, L, M) w Surface (S8) (LRR K, L)
	d Below Dark Surface (A1				Thin Dark Surfa	ace (S9) (LRR K, L)
	ark Surface (A12)	Redox Dark Su				e Masses (F12) (LRR K, L, R) dplain Solls (F19) (MLRA 149B)
	flucky Mineral (S1) Bleyed Matrix (S4)	Depleted Dark Redox Depress		•		TA6) (MLRA 144A, 145, 149B)
	Redox (S5)		. ,		Red Parent Ma	iterial (F21)
	Matrix (S6)	4400)			Very Shallow L	Dark Surface (TF12)
Dark Su	rface (S7) (LRR R, MLRA	(1486)			Ottor (mybrani	,
	f hydrophytic vegetation a	nd wetland hydrology mu	st be present, unless	disturbed o	r problematic.	
	Layer (if observed):					
Type: Depth (in	chae).				Hydric Soll Presen	t? Yes No <u>×</u>
Remarks:	01103).					
		·				
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		,				
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1						
						•
			·			

WETLAND DETERMINATION DATA FOR	i ,
Project/Site: Ball Hill Wind Project City/C	ounty: Chautauqua County Sampling Date: 7/15 10
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-783
Investigator(s): Ben Virty and Nicole Dutcher section	in, Township, Range: Town of Hanover
Landform (hillslope, terrace, etc.): depression Local reli	ef (concave, convex, none); Con (Qvc Slope (%); O-27
Subregion (LRR or MLRA): LRR-R Lat: 42,448 42	Long: -79.12.40.72 Datum: NAD 83
Soil Map Unit Name: Frement Silt Loam, 3-82 Slope	NWI classification: Voland
Soil Map Unit Name: WYCH STEF STEF COMM, J 570 Clop	(If no explain in Pamerke)
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation N, Soil N, or Hydrology N significantly distur	bed? Are "Normal Circumstances" present? Yes X No
Are Vegetation N, Soil N, or Hydrology N naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area within a Wetland? Yes X No
Hydric Soil Present? Yes X No	
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: Wetland AU45
Remarks: (Explain alternative procedures here or in a separate report.)	
PEM data point for wettens AL	145 - PEM wettern in Forcet wi
,	12.101.101.101
no trees noisted in wetland.	
Region has experienced below ave	rage valitall for year To Cone
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) X Water-Stained Leave	
High Water Table (A2) Aquatic Fauna (B13)	141 (T-bl- (00)
Saturation (A3) Marl Deposits (B15)	the second secon
Water Marks (B1) Hydrogen Sulfide Oc	res on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
Sediment Deposits (B2) Oxidized Rhizosphe Drift Deposits (B3) Presence of Reduce	
	on in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explain in Re	
Sparsely Vegetated Concave Surface (B8)	X FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (Inches):	
Water Table Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes No X Depth (inches): (includes capillary fringe)	Wettalid Hydrology Fresent: 163 No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
Evidence of water-stained leaves and di	zirage patterns found throughout the
Wetland, No Saturation / Ware table / Suife	ce water observed due to the region
receiving below average rainfall y	ear to -date (NYS DEC annunced 7/15/14
drought warning).	

Tree Stratum (Plot size:)	Absolute Dominant Indicator	Dominance Test worksheet:
	<u>% Cover Species? Status</u>	
1. Not Applicabe		That Are OBL, FACW, or FAC:(A)
2		
3		Total Number of Dominant
4		
5	· 	That Are OBL, FACW, or FAC: 100/. (A/B)
6		Prevalence Index worksheet:
7		Tretaiente mask werkeneet.
	= Total Cover	Total % Cover of: Multiply by:
	= lotal Cover	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 101)		FACW species x 2 =
1. Not Applicable		FAC species x 3 =
2		FACU species x 4 =
I .		UPL species x 5 =
3		Column Totals: (A) (B)
4		
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
		1 - Rapid Test for Hydrophytic Vegetation
7	· ~/	X 2 - Dominance Test is >50%
	= Total Cover	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5')		
1. Onoclea sensibilis	80 Y FALCW	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Carex flava	5 N OBL	Problematic Hydrophytic Vegetation¹ (Explain)
,		Problematic Hydrophytic vegetation (Explain)
3		Indicators of hydric soil and wetland hydrology must
4		be present, unless disturbed or problematic.
5		Definitions of Vegetation Strata:
6		Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7		
8		Sapling/shrub Woody plants less than 3 in. DBH
9		and greater than or equal to 3.28 ft (1 m) tall.
10		Herb - All herbaceous (non-woody) plants, regardless of
		size, and woody plants less than 3.28 ft tall.
11		Woody vines - All woody vines greater than 3.28 ft in
12		height.
	85 = Total Cover	
Woody Vine Stratum (Plot size: 15')	٠.	
1. Not Applicable		
Test represent		Hydrophytic
2		Vegetation
3		Present? Yes No
4		
	= Total Cover	•
Remarks: (Include photo numbers here or on a separate		
remarks. (include priote fluitibers fiele of off a separate	Sileet.)	
	·	

								Sampling Follic.
Profile Desc	ription: (Describe t	o the dep	th needed to docun	nent the in	dicator	or confirm	the absence	of Indicators.)
Depth	Matrix			<u>k Features</u>		•		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	<u>Texture</u>	Remarks
0-4	2.54 2.5/1	90%	54R 414	10%	\circ	M	SiL	
4-12	2,54 5/2	952	7.54R 4/6.	5%	<u></u>	M		
	2101 12		710111 70			'''		
12+								Rock/graves refural
								. 3
								
-								
								
								
,								
¹ Type: C=Co	oncentration, D=Depl	etion. RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil I								for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Belov	v Surface ((S8) (L R I	R.	2 cm N	fuck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		MLRA 149B)		(00) (=:	,		Prairie Redox (A16) (LRR K, L, R)
Black Hi			Thin Dark Surfa		RR R. M	RA 149B		fucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4)	-	Loamy Mucky N					urface (S7) (LRR K, L, M)
	i Layers (A5)		Loamy Gleyed			, –,		lue Below Surface (S8) (LRR K, L)
	d Below Dark Surface	(A11)	Z Depleted Matrix					ark Surface (S9) (LRR K, L)
	ark Surface (A12)		X Redox Dark Su				Iron-M	anganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark	Surface (F	7)		Piedm	ont Floodplain Soils (F19) (MLRA 149B)
Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F8)			Mesic	Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy R	ledox (S5)							arent Material (F21)
Stripped	Matrix (S6)							hallow Dark Surface (TF12)
Dark Sui	rface (S7) (LRR R, M	LRA 149E	3)				Other	(Explain in Remarks)
3								
	f hydrophytic vegetati	on and we	tland hydrology mus	t be prese	nt, unles	s disturbed	or problemation	S
	Layer (if observed):						}	
Туре:	N/A							
Depth (inc	ches):						Hydric Soil	Present? Yes X No
Remarks:							 	
								0
5	oil demons	trates	a destete	d mat	rix a	ed wed	ox of de	ark Surface in the
	·		49-010		,	,,,,,	,, 0, -	,
fixt	H'' L	. ວ	\	1 0	1.	<u> </u>	.1	1711/12 11 By Oth
17737	7 laye	C K	ak and gre	irci ic	pusal	TOWN	6 at	12" (matripa pits
			\wedge	1	١.			
Were	attempted	to 9	et further	down).			
	•	,	100		,			
,								

	/ LOKIM - Molflicetifiat and Molfliegar (region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 7/5/16
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 789
Investigator(s): Ben Virtx and Nicole Outher	Section, Township, Range: Town of Hansver
Landform (hillsione, terrace, etc.): hillsione Le	ocal relief (concave, convex, none): Slope (%): Slope
Subregion (LRR or MLRA); LRR-R Lat: 42.44	18520 Long: -79,124059 Datum: NAD 83
Soil Man Unit Name: Frement Silt Loan 3-8%	Slopes NWI classification: Uplons
Are climatic / hydrologic conditions on the site typical for this time of y	rear? Yes No X (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N significant	
Are Vegetation N, Soil N, or Hydrology N naturally p	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No ★	Is the Sampled Area within a Wetland? Yes No X
Hydric Soil Present? Yes No ×	ì
Wetland Hydrology Present? Yes No X	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate rep	· · · · · · · · · · · · · · · · · · ·
Upland soit data point for	Withand AU45
Area has received below average drought warnings for all NYS	rainfull year-to-dote, NYS DEC announced on 7/15/16.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Water-Staine	7 (740)
High Water Table (A2) Aquatic Faur	
Saturation (A3) Marl Deposit	m = \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	ulfide Odor (C1) Crayfish Burrows (C8)
	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck S	· · · · · · · · · · · · · · · · · · ·
	uin in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)	PAG-Neutral rest (DD)
Field Observations: Surface Water Present? Yes NoX Depth (inch	, as).
Water Table Present? Yes No Depth (Inch	
Saturation Present? Yes No Depth (inch	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pr	lotos, previous inspections), it available.
D	
Remarks: No hydrology Indicators Obsc	ered.

	A1			
Tree Stratum (Plot size: 30' R)	Absolute	Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Isuga Canadensis	80	<u> </u>	FACU	That Are OBL, FACW, or FAC:
2. Fagus grandifolia	20	γ	FACU	
			7.00	Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
				That Are OBL, FACW, or FAC: 33.332 (A/B)
5				(AB)
6				Prevalence Index worksheet:
7	16.			Total % Cover of: Multiply by:
	100	= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15'R)				FACW species x 2 =
Suppling Grand (1 lot 3/20.	1 ~	٧	ار بر الرمسي	FAC species x 3 =
1. Fagus grandifolia	10		FACU	
2				FACU species x 4 =
	-			UPL species x 5 =
3				Column Totals: (A) (B)
4				(3)
				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
	10	≃ Total Cov	er er	l "
Herb Stratum (Plot size: 1012)				3 - Prevalence Index is ≤3.0 ¹
·	175	V	۸	4 - Morphological Adaptations (Provide supporting
1. Athyrum angustium	10		FAC	data in Remarks or on a separate sheet)
2. Fagus gandifolia	5	Y	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Onoclea Sensibilis		V	FACW	
3. Orbatea Sensitariis			Incus	¹ Indicators of hydric soil and wetland hydrology must
4	****			be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
5				
6				Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
				Sanling labour Mandy plants less than 2 in DDU
8				Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall,
9				and grouter than or equal to 0.20 ft (1 m) tail.
10				Herb - All herbaceous (non-woody) plants, regardless of
			·	size, and woody plants less than 3.28 ft tall.
11				TT 1 1 1 1 1 1 1 1 1
12				Woody vines - All woody vines greater than 3.28 ft in height.
	2 >			neight.
	αo	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30' K)				
1. Not Applicable				
1. TUBI TOPICODE				Hydrophytic
2				Vegetation
3.				Present? Yes No
				,
4				
	\mathcal{Q}	= Total Cov	/ег	
Remarks: (Include photo numbers here or on a separate	sheet.)		·····	
(and a price in an a price in an a coparation	J.10011,			
·				
				·

Profile Desc	ription: (Describe	to the dep	th needed to docum	ent the inc	dicator o	or confirm t	he absence o	of Indicators.)
Depth	Matrix			Features	- 1	. 2	* 4	Domanico
(inches)	Color (moist) 107尺314	1002	Color (moist)		i ype	Loc ²	Texture Si	Remarks
0-2							<u>-31</u> -5;	
2-20	2,54514	1602					_ 	
					······			
								
					, , , , ,			
								
								
¹Type: C=Co		etion, RM=	Reduced Matrix, MS	=Masked {	Sand Gra	ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Histosol			Polyvalue Below	v Surface (S8\ (I R F	R.		luck (A10) (LRR K, L, MLRA 149B)
	oipedon (A2)		MLRA 149B)		50) (E iti	v iv,		Prairie Redox (A16) (LRR K, L, R)
Black His			Thin Dark Surfa					lucky Peat or Peat (S3) (LRR K, L, R)
	n Sulfide (A4) I Layers (A5)		Loamy Mucky M Loamy Gleyed M		(LRR K	, L)		urface (S7) (LRR K, L, M) ue Below Surface (S8) (LRR K, L)
	i Eayers (A5) I Below Dark Surface	e (A11)	Depleted Matrix					ark Surface (S9) (LRR K, L)
	rk Surface (A12)	` ,	Redox Dark Sur					anganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Depleted Dark S		")			ont Floodplain Soils (F19) (MLRA 149B)
	ileyed Matrix (S4) edox (S5)		Redox Depress	ions (F8)				Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)
	Matrix (S6)							hallow Dark Surface (TF12)
	rface (S7) (LRR R, N	ILRA 149E	3)				Other (Explain in Remarks)
³ Indicators of	hydronhytic vegetet	ion and we	etland hydrology mus	t ha nrasar	nt unioe	e dieturhed (or problematic	
	ayer (if observed):		mand Hydrology mus	r ne breser	ii, uiiies	s distuibed (or problematic	•
Type:	NIA							<u>~</u>
Depth (inc	ches):						Hydric Soil	Present? Yes No X
Remarks:		"					<u> </u>	
Λ.	~ buda-	Call I	indicators p		ام	,		
100	3 Manne	∞1 1	no / caters /	vere	Obscr	rvedi		
•								
,								
								,
								•

	ORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project City	/County: Chautauqua County Sampling Date: 4/4/17
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 189/1
Investigator(s): B. Virts and N. Dutche/ Sec	ction, Township, Range: Town of Hanover
Landform (hillologo torrana etc.): De Ace (Casia)	relief (concave, convex, none): Concave Slope (%): 0-3/
Subregion (LRR or MLRA): LRR-R Lat: 42,49334	Do Long: <u>-79, 150 647</u> Datum: NAD 83
Soil Map Unit Name: Po - Pompton Silt loam	NWI classification: Nt + M. 1 p. J
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes X No (If no, explain in Remarks.)
Are Vegetation N , Soil N , or Hydrology N significantly dist	turbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation \(\bar{\mathbb{N}} \), Soil \(\bar{\mathbb{N}} \), or Hydrology \(\bar{\mathbb{N}} \) naturally proble	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.)	Is the Sampled Area within a Wetland? If yes, optional Wetland Site iD: WL-AUU
DSS d. and Go Wetland Aloyle, F	Os main located on nathern potion of
wetland complex, wetland is a low s irrigation lines underneath.	PSS porus located on northern portion of pot with a nearly Pond (OH-site) and
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
∑ Surface Water (A1) Water-Stained Lea	
★ High Water Table (A2) Aquatic Fauna (B)	
X Saturation (A3) Marl Deposits (B1	
Water Marks (B1) Hydrogen Sulfide	
	heres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) NIAPresence of Redu	
1 — •	uction in Tilled Soils (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface	· · · · · · · · · · · · · · · · · · ·
X Inundation Visible on Aerial Imagery (B7) Other (Explain in	Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	6 411
Surface Water Present? Yes X No Depth (inches):	
Water Table Present? Yes X No Depth (inches): Saturation Present? Yes X No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Remarks:	
ware levels above average due	to heavy ran event during time of
date collection.	
·	

2-10	Absolute	Dominant	Indicator	Bartana
Tree Stratum (Plot size: 30' (2)	% Cover	Species?		Dominance Test worksheet:
1. Robinia pseudoacacia	10	Y	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
•				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
				V/
6				Prevalence Index worksheet:
7			·	Total % Cover of:Multiply by:
	10	= Total Cov	ver	OBL species x1=
Sapling/Shrub Stratum (Plot size: 15' R)				FACW species x 2 = \$0
1 -	10	N	٠	· _
1. Robinia pseudoacacia		- 17	FACU	FACIl angles 44
2. Lonicera tatanca	<u> 20</u>		FACU	FACU species 44 x4 = 170
3. Cornus amanum	40	λ	FACW	UPL species x5 =
			<u> </u>	Column Totals: 94 (A) 256 (B)
4				D
5			- 	Prevalence Index = B/A = . 3.0
6				Hydrophytic Vegetation Indicators:
			·	1 - Rapid Test for Hydrophytic Vegetation
7	80			2 - Dominance Test is >50%
	00	= Total Cov	ver	3 - Prevalence Index is ≤3.0¹
Herb Stratum (Plot size: 5'R)	1.5	V	. ہے	4 - Morphological Adaptations (Provide supporting
1. Solidago rugosa	10		FAC	data in Remarks or on a separate sheet)
2. Rosa multiflera	<u>_a</u>	N	FACU	Problematic Hydrophytic Vegetation¹ (Explain)
3. Taraxacum officinale	2	N	FACU	Newtonian of budden and and array to the
			ITICU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
				at breast height (DBH), regardless of height.
7			• ———	
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				
10				Herb - All herbaceous (non-woody) plants, regardless of
11				size, and woody plants less than 3.28 ft tall.
				Woody vines - All woody vines greater than 3.28 ft in
12	111		-	height.
	14	= Total Cov	ver	
Woody Vine Stratum (Plot size:ろらん)				
1				
-	**********			Hydrophytic
Z				Vegetation
3				Present? Yes No
4				
	d	- Total Car		
Pamarka: (Include photo numbers have as an a second	about \	= Total Co	AG!	
Remarks: (Include photo numbers here or on a separate	sneet.)			
				İ

Profile Desc	ription: (Describe t	o the dept	h needed to docum	ent the i	ndicator	or confirm	the absence c	f indicator	's.)	
Depth	Matrix Matrix			Feature	<u>s</u>	Loc ²	Taxtura		Remarks	
(inches)	2,51 4/2	% 95	2,57 6/8	<u></u> —%	Type ¹		Texture S:L		Remarks	**
0-5				<u>5</u>	<u></u>	<u>M</u> .				
5-16	2.54 5/2	<u>56</u>	2.54514	<u>30</u>	<u> </u>	<u>M</u>	SiL.			
			7.54R416	<u>20</u>	<u> </u>	<u>M</u>	SiL.			······
					,					
									······································	
										
									······································	
1							21	Di Doro I	Ining MaMotel	
Hydric Soil	oncentration, D=Depl Indicators:	etion, RM=	Reduced Matrix, MS	=Maske	a Sand Gi	ains.	Indicators	for Probler	Lining, M=Matrix matic Hydric So	oils ³ :
Histosol			Polyvalue Belov	v Surface	(S8) (LR	RR,			LRR K, L, MLR	
	pipedon (A2)		MLRA 149B)				Coast f	Prairie Redo	ox (A16) (LRR I	(, L, R)
	stic (A3)		Thin Dark Surfa					-	or Peat (S3) (LF	RR K, L, R)
	en Sulfide (A4) d Layers (A5)		Loamy Mucky M Loamy Gleyed !			(, L)			(LRR K, L, M) Surface (S8) (LF	RR K, L)
1	d Below Dark Surface	e (A11)	Nepleted Matrix		-,		Thin D	ark Surface	(S9) (LRR K, L	.)
1 '	ark Surface (A12)		Redox Dark Sur	-	-				Masses (F12) (L	
	Mucky Mineral (S1) Bleyed Matrix (S4)		Depleted Dark S Redox Depress						ain Soils (F19) (6) (MLRA 144A	
	Redox (S5)		Nodox Boproso	(1 -)			Red Pa	arent Mater	ial (F21)	
Stripped	Matrix (S6)								k Surface (TF12)
Dark Su	rface (S7) (LRR R, N	ILRA 149E	3)				Other	(Explain in I	Remarks)	
3Indicators o	f hydrophytic vegetat	ion and we	etland hydrology mus	t be pres	sent, unles	ss disturbed	or problemation).		
Restrictive	Layer (if observed):	V 1 = 1								
Type:	NIA								🗸	
Depth (in	ches):						Hydric Soil	Present?	Yes _X_	No
Remarks:				*						
So	il is hydr	c								
	, ,									
,										
, ·										

WEILAND DETERMINATION DATA	FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 4/4/17
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- +85/
Investigator(s): Virtz B and Dutcher, N	Section, Township, Range: Town of Hanover
Landform (hillelong terrace atc.): CEDTASSON LO	ncal relief (concave, convex, none): Concor Slope (%): UTO
Subregion (LRR or MLRA): LRR-R Lat: 42, 49	2576 Long: -17, 150111 Datum: NAD 65
Soil Map Unit Name: Po - Pomoton Sill loam	NWI classification: Not mapped
Are climatic / hydrologic conditions on the site typical for this time of y	rear? Yes X No (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N significantly	
Are Vegetation N, Soil N, or Hydrology N naturally p	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _X No	Is the Sampled Area within a Wetland? Yes No
Hydric Soil Present? Yes X No	
Wetland Hydrology Present? Yes X No	If yes, optional Wetland Site ID: WL-AW46
Remarks: (Explain alternative procedures here or in a separate rep	ort.)
YEM data point for wetland	Abyle, Wetland receives Outfall the west and drains to ditch along
from impation and offsite to	the west and drains to ditch along
·	σ
Dennison Rd.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
X Surface Water (A1) Water-Staine	d Leaves (B9)X Drainage Patterns (B10)
X High Water Table (A2) Aquatic Faun	Moss Trim Lines (B16)
X Saturation (A3) Marl Deposit	
Water Marks (B1) Hydrogen Su	
Drift Deposits (B3)	
	A 4 4 (DO)
Iron Deposits (B5) Thin Muck S	
Inundation Visible on Aerial Imagery (B7) Other (Expla Sparsely Vegetated Concave Surface (B8)	in in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes X No Depth (inch	es): 1"
Water Table Present? Yes X No Depth (inch	as). A
Saturation Present? Yes X No Depth (inch	Wetland Hydrology Present? Yes No No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if available:
Remarks:	
Water levels above average	due to rain event taking place
d	
canny time of sampling.	

VEGETATION – Use scie	entific names of plants.
------------------------------	--------------------------

Tree Stratum (Plot size: 30 / R)	Absolute		Indicator	Dominance Test worksheet:
l .	*****	Species?	-	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata:
3				Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				
	_Ø	= Total Co	ver	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15 'R)				FACW species x 2 =
1				FAC species x 3 =
			-	FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6	-			Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
•	· ~/	= Total Co	ver	∠ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 / R)				3 - Prevalence Index is ≤3.0¹
1. Carex flava	15	N	OBL	4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
2. Junear effuras		7	OBL	Problematic Hydrophytic Vegetation (Explain)
		-		
3. Glyceria melicana			OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Tritolium repens			FACU	
5. Daucus Carota			NL	Definitions of Vegetation Strata:
6. Solidago nigosa	2	<u>N</u>	FAC	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7	-			at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tail.
10				Herb - All herbaceous (non-woody) plants, regardless of
11				size, and woody plants less than 3.28 ft tall.
12.				Woody vines - All woody vines greater than 3.28 ft in
121	100	~		height.
2010	100	= Total Co	ver	
Woody Vine Stratum (Plot size: 30'R)				
1				Harbarata Ra
2				Hydrophytic Vegetation
3				Present? Yes No
4				
	<u>Ø</u>	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Desc	cription: (Describe	to the dept	th needed to docum			or confirm	the absence	of indicator	's.)	
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	Features %	Type ¹	Loc ²	Texture		Remarks	
0-10	2.5141,	95	101R416	5	Ċ	M	SL	distor	act	•
			···							
		· 	· · · · · · · · · · · · · · · · · · ·							
			· · · · · · · · · · · · · · · · · · ·		<u>, </u>					
,	<u></u>									
							······································			
										
			*							
		letion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.			.ining, M≃Matr	
Hydric Soil									natic Hydric S	
Histosol	(A1) pipedon (A2)		Polyvalue Below MLRA 149B)		(S8) (LR I	RR,			LRR K, L, MLI ox (A16) (LRR	
Black Hi			Thin Dark Surfa		.RR R, M	LRA 149B			or Peat (S3) (L	
Hydroge	en Sulfide (A4)	•	Loamy Mucky M	lineral (F	1) (LRR K		Dark S		(LRR K, L, M)	
	d Layers (A5)	~ (A44)	Loamy Gleyed Matrix)				surface (S8) (L l (S9) (LRR K, l	
	d Below Dark Surfac ark Surface (A12)	e (A11)	Redox Dark Sur						lasses (F12) (I	
	fucky Mineral (S1)		Depleted Dark S	Surface (F			-	-	ain Soils (F19)	
	Bleyed Matrix (S4)		Redox Depress	ions (F8)				Spodic (TA6 arent Materi	6) (MLRA 144/ Isl (E21)	A, 145, 149B)
	tedox (S5) Matrix (S6)								Surface (TF1)	2)
	rface (S7) (LRR R, I	MLRA 149E	3)					(Explain in F		
3Indicators of	f hydronhydio yegete	tion and we	etland hydrology mus	t ha nrae	ent unles	s disturbed	or problematic	3 .		
	Layer (if observed)		Mana Hydrology Mad	t bo proof		o diotal boo	1			
Type:	NIA						ļ			
Depth (in	ches):						Hydric Soil	Present?	Yes X	No
Remarks:										
120	dox Concer	tation	s in the	mot	iv he	as dis	tiret born	adaries	-	
				~ 1.	.~	-, 4,,	/	370-47-63	•	
			•							
,										

	DATA FORM – Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 4/4/17
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP-786
Investigator(s): B. Victs and N. Outcher	Section, Township, Range: Town of Hanover
Landform (hillslope terrace etc.): de no ssix	Local relief (concave, convex, none): None Slope (%): 0 - 3
Subsection (I BB or MI BA): LRR-R Let: 42	2. 492 4/8 Long: - 79. 1507 14 Datum: NAD 83
	loam, Oto 3 posent lives NWI classification: Not Mapped
/ /	
	ne of year? Yes No (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N signi	
Are Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> natu	rally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS Attach site man she	owing sampling point locations, transects, important features, etc.
SUMMART OF FINDINGS - Attach site map site	Dwilly Sampling point locations, transcots, important roatalos, etc.
Hydrophytic Vegetation Present? Yes No >	Is the Sampled Area
Hydrophytic Vegetation Present? Yes No No No No No No No No No No No No No	
Wetland Hydrology Present? Yes No X	
Remarks: (Explain alternative procedures here or in a separa	ite report.)
Upland data point for wetle	and A646 in open field. Thes recently
	The way recently
removed from area within ne	cent dycan
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	(apply) Surface Soil Cracks (B6)
	Stained Leaves (B9) Drainage Patterns (B10)
	Fauna (B13) Moss Trim Lines (B16)
	eposits (B15) Dry-Season Water Table (C2)
Water Marks (B1) Hydrog	en Sulfide Odor (C1) Crayfish Burrows (C8)
	ed Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	ce of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	t fron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	uck Surface (C7) Shallow Aquitard (D3) Explain in Remarks) Microtopographic Relief (D4)
Inundation Visible on Aerial Imagery (B7) Other (Sparsely Vegetated Concave Surface (B8)	Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No _X _ Depth	(inches):
Water Table Present? Yes No X Depth	(inches):
Saturation Present? Yes No _'X Depth	The second control of the second control of
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aer	iai photos, previous inspections), ii avaliable.
Remarks:	
	^
No evidence of hydrology	tir wetlands,
'''	
9	

9.10	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30' (2)	% Cover	Species?	Status	Number of Dominant Species
				That Are OBL, FACW, or FAC: (A
				Total Number of Dominant
•				Species Across All Strata: (B
				Percent of Dominant Species
· · · · · · · · · · · · · · · · · · ·				That Are OBL, FACW, or FAC:
				Prevalence Index worksheet:
· · · · · · · · · · · · · · · · · · ·	Ø			Total % Cover of: Multiply by:
1010	-	= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 'R)		V		FACW species x 2 =
. Robinia pseudoacacia		<u> </u>	FACU	FACULATORIAN X 3 =
. Lonicera tatarica		7	FACU	FACU species x 4 = UPL species x 5 =
<u> </u>				Column Totals: (A) (E
				Column Totals(A)(E
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
		-		1 - Rapid Test for Hydrophytic Vegetation
L	1-			2 - Dominance Test is >50%
Z.0	13	= Total Co	/er	3 - Prevalence Index is ≤3.01
Herb Stratum (Plot size: 5'R)			٠.	4 - Morphological Adaptations ¹ (Provide support
. Symphyotichum lateriflorur	n_5	N	FAC	data in Remarks or on a separate sheet)
. Ranunculus acris	10	N	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
. Taraxacum Officinale	5	N	FACU	¹ Indicators of hydric soil and wetland hydrology must
. Daucus Carota	10		NI	be present, unless disturbed or problematic.
. Hocus mollis		4	FACU	Definitions of Vegetation Strata:
. Solidago rugosa		N	FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diame
			- ILis	at breast height (DBH), regardless of height.
				Sapling/shrub - Woody plants less than 3 in, DBH
·				and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
0				size, and woody plants less than 3.28 ft tall.
1			-	Woody vines - All woody vines greater than 3.28 ft in
2				height.
	100	= Total Co	ver	
Voody Vine Stratum (Plot size: 30'R)				
			A citizent land a land	Language Control of the Control of t
				Hydrophytic
	-		-	Vegetation Present? YesNoX
·				
•	a	-		
	4	= Total Co	ver	

- "	ibriou: (nescribe	to the depth n	eeded to document the indi	cator or confirm	the absence of indicator	rs.)
Depth (inches)	Matrix Color (moist)	% (Redox Features Color (moist) % T	vne¹ Loc²	Texture	Remarks
	104R 314	100	Joiot (moist) 78 1	100	SiL	T. Company
	10 114	100			5.0	
						
				-		
					21	Line Mallati
Type: C=Cor lydric Soil In			duced Matrix, MS=Masked Sa		² Location: PL=Pore Indicators for Problem	matic Hydric Solls³:
_ Histosol (/			Polyvalue Below Surface (St MLRA 149B)	8) (LRR R,		(LRR K, L, MLRA 149B) ox (A16) (LRR K, L, R)
Black Hist	tic (A3)	-	Thin Dark Surface (S9) (LRF			or Peat (S3) (LRR K, L, R)
_ Hydrogen _ Stratified	Sulfide (A4) Lavers (A5)	_	Loamy Mucky Mineral (F1) (Loamy Gleyed Matrix (F2)	LRR K, L)	Dark Surface (S7) Polyvalue Below S	Gurface (S8) (LRR K, L)
Depleted	Below Dark Surface		Depleted Matrix (F3)		Thin Dark Surface	(S9) (LRR K, L)
	k Surface (A12)	-	Redox Dark Surface (F6)			Masses (F12) (LRR K, L, R) ain Solls (F19) (MLRA 149 8
	icky Mineral (S1) eyed Matrix (S4)	_	Depleted Dark Surface (F7) Redox Depressions (F8)			6) (MLRA 144A, 145, 149B)
_ Sandy Re	edox (S5)				Red Parent Mater	
	Matrix (S6) ace (S7) (LRR R, M	LRA 149B)			Very Shallow Dark Other (Explain in I	
		ion and wetlan	d hydrology must be present	, unless disturbed	or problematic.	
lestrictive La Type:	ayer (if observed):					
Depth (inch					Hydric Soil Present?	Yes No <u>X</u>
Remarks:						
No	endence	of V	lydne Soil.			
			1			
G.						
1,1						40
G)						1
G.						1

WETLAND DETERMINATION DATA			
Project/Site: Ball Hill Wind Project	City/County: Chautauqua	County	Sampling Date: 4/4/17
Applicant/Owner: Ball Hill Wind Energy, LLC		_ State: NY	_ Sampling Point: DP-791
Investigator(s): B. Virty and N. Dutzher	Section, Township, Range:	Town of	Hunover
andform (hillslope, terrace, etc.): Tox 5 lak	ocal relief (concave, convex, no	ne): _ Concevo	Slope (%): 0 - 5 /
Subregion (LRR or MLRA): LRR-R Lat: 42, 4	79338 Long:	79,153528	Datum: NAD 83
Soil Map Unit Name: HrB- Hornell Silt loam			
Are climatic / hydrologic conditions on the site typical for this time of the			
Are Vegetation N, Soil N, or Hydrology N significant		l Circumstances" p	resent? Yes X No
Are Vegetation N, Soil N, or Hydrology N naturally p		explain any answer	
SUMMARY OF FINDINGS - Attach site map showing	ig sampling point locati	ons, transects,	important features, etc.
Hydrophytic Vegetation Present? Hydric Soll Present? Wetland Hydrology Present? Yes X No Yes X No Yes X No	Is the Sampled Area within a Wetland? If yes, optional Wetland	Yes X	
Remarks: (Explain alternative procedures here or in a separate re	Jort.)	. 0	0
PEM wetland along edge of & seepige offer of port and from	will up torm for	o, Keciain	were tron
See a se olital and and from	& runoff from t	arm acces	s mod.
so y po oper of por			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	y)	Surface Soil	Cracks (B6)
X Surface Water (A1) Water-Staine		Drainage Pa	tterns (B10)
─────────────────────────────────────	na (B13)	Moss Trim L	
★ Saturation (A3)		The second of th	Water Table (C2)
	ulfide Odor (C1)	Crayfish Bur	rows (C8) isible on Aerial Imagery (C9)
10	izospheres on Living Roots (C3		Stressed Plants (D1)
	Reduction in Tilled Soils (C6)	∑ Geomorphic	
Algal Mat or Crust (B4) Recent from Recent from Thin Muck S		Shallow Aqu	
	ain in Remarks)	Microtopogr	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		X FAC-Neutra	Test (D5)
Field Observations:			
Surface Water Present? Yes X No Depth (inch			
Water Table Present? Yes X No Depth (inch			Y
Saturation Present? Yes X No Depth (incl	nes): O Wetland	d Hydrology Prese	nt? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pt	notos, previous inspections), if a	available;	
Remarks:			
Water levels above average of Sampling.	tue to rain ex	nt Occur	ing during
Samalia			J
ping.			

Tree Stratum (Plot size:30'(\(\mathbb{L}\))	Absolute % Cover	Species?	-	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
3				Total Number of Dominant Species Across All Strata:
4				Percent of Dominant Species That Are OBL, FACW, or FAC:/U\(\text{O}\). (A/B)
6		= Total Co		Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 15 'R) 1				FACW species x 2 = FAC species x 3 = FACU species x 4 =
2				UPL species x 5 = Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5 ' R)	\$	= Total Co	ver	∠ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹
1. Juneus effasus	30	Y	OBL	4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Carex flava		N	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Trifolium repens	10	N	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic,
4. Ranunculus acris 5. Leersia oryzoides	<u>5</u>	- 1	FAC	Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				Sapling/shrub – Woody plants less than 3 in, DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: 301)	100	= Total Co	ver	
1	-	-		Hydrophytic
3				Vegetation Present? Yes X No
4	Ø	= Total Co		
Remarks: (Include photo numbers here or on a separate	sheet.)	- Total Oc	7101	1

Depth _	Matrix			x Features				2004
inches)	Sy 3/1	<u>%</u>	SVR 5/0	<u>%</u>	Type ¹	Loc2	Texture	Remarks
0-8	3171	70	3/11/18	15	-	PL	Sich	district
			54R 3/4	15	<u>C</u>	PL		distinct
0-10	5 y 3/1	70	SYR 3/4	30	C	PLIM	Sich	distinct
10-16+	5y3/1	55	5/12 3/4	_5_	C	PL	SICL	distinct
4			54R 518	20	C	PL/M		
			2.54 4/4	20	C	M		
			X-1					
		letion, RM	=Reduced Matrix, M	S=Masked	Sand G	rains.		: PL=Pore Lining, M=Matrix.
ydric Soil In _ Histosol (/			Polyvalue Belo	77.5				for Problematic Hydric Soils ³ : Muck (A10) (LRR K, L, MLRA 149B)
Stratified I Depleted I Thick Dark Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa	Matrix (S6) ace (S7) (LRR R, M nydrophytic vegetat	ILRA 149	Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depres Redox Depres	Matrix (F2 x (F3) urface (F6) Surface (F sions (F8))		Polyva Thin D Iron-M Piedm Mesic Red P Very S Other	Surface (S7) (LRR K, L, M) slue Below Surface (S8) (LRR K, L) lark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 1491 Spodic (TA6) (MLRA 144A, 145, 1498 arent Material (F21) Shallow Dark Surface (TF12) (Explain in Remarks)
Type:	ayer (if observed):							Dragant? Vac X No
Depth (inch	nes):						Hydric Soil	Present? Yes X No
Redo, mat	Cancentra n'x lwcre	Hons	found along	q ruot	por	e linin	gs, and	within the

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 4/4/17 Project/Site: Ball Hill Wind Project Sampling Point: DP-792 __ State: NY Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): B. Vins and N. Dutcher Section, Township, Range: Town of Subregion (LRR or MLRA); LRR-R Lat; 42.479140 Long; -79.154678 Datum; NAD 83 Soil Map Unit Name: HrB- Hrnell Silt loam, 3 to 8 general Sluger NWI classification: Not mapped Are climatic / hydrologic conditions on the site typical for this time of year? Yes ______ No ______ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No Are Vegetation N, Soil N, or Hydrology N significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation N, Soil N, or Hydrology N naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? Yes ____ No X

Remarks: (Explain alternative procedures here or in a separate report.) If yes, optional Wetland Site ID:___ Upland Chra point for Wetland AU47. Along form access read. HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) __ Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) ___ Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) __ Marl Deposits (B15) __ Saturation (A3) Crayfish Burrows (C8) ___ Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) ___ Saturation Visible on Aerial Imagery (C9) __ Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) __ Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) __ Algal Mat or Crust (B4) Shallow Aquitard (D3) ___ Thin Muck Surface (C7) ___ Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: No X Depth (inches): Surface Water Present? Yes ____ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes ____ No X No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No Wetland hydrology observed.

Tree Stratum (Plot size: 30'R) 1. Acer Saccharum	Absolute % Cover S	Dominant Species?	Indicator Status FACU	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. Fagus grandifolia	5	Y	FACU	matale obc, FACW, of FAC(A)
3. Ulmur americana	10	Y	FACW	Total Number of Dominant Species Across All Strata; (B)
				Species Across All Strata;(B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 16, 672 (A/B)
5				That Are OBL, FACW, of FAC: 1015 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	20	= Total Cov	er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 'R)				FACW species x 2 =
1. Lonicera tatarica	20	Y	FACU	FAC species x 3 =
2. Rosa multiflora	10	Y	FACU	FACU species x 4 =
				UPL species x 5 =
3				Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6			-	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
		= Total Cov	er	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5'R)				3 - Prevalence Index is ≤3.0 ¹
1. Fragada Virginiana	2	N	FALU	4 - Morphological Adaptations¹ (Provide supporting
	-	N		data in Remarks or on a separate sheet)
2. Ranunculus acris		-	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Rumex Crispus		N	FAL	¹Indicators of hydric soil and wetland hydrology must
4. Holcus mollis			FACU	be present, unless disturbed or problematic.
5. Infolium repens		N	FACU	Definitions of Vegetation Strata:
6. Carex Flava	_ 2	N	OBL	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7. Taraxacum Officinale	5	N	FACU	at breast height (DBH), regardless of height.
8. Plantago lanceolata	5	N	FACU	Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of
			-	size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in
12				height.
	100	= Total Cov	er	
2.10				
Woody Vine Stratum (Plot size:)				Control of the Contro
Woody Vine Stratum (Plot size:) 1				
Woody Vine Stratum (Plot size: OK) 1 2				Hydrophytic
Woody Vine Stratum (Plot size:				Vegetation
1				
Woody Vine Stratum (Plot size:) 1		= Total Cov		Vegetation

Depth	Matrix			x Feature	<u>s</u> ,		40.00	6
inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc²	Texture	Remarks
0-8	104R 4/2	98	7.5/R 4/4	2	<u>c</u>	<u>M</u>	Sil	fin
8-10	2.543/4	65	164/2 4/2	40	0	<u>M</u>	SIL	A
			7.5 YR \$14	5	C	M		faint
0-18	2.54 \$14	70	7.54R 918	30	C	M	L	. Kinamatan
	4-10-10-10-10-10-10-10-10-10-10-10-10-10-				<u>-</u>			
				-	_			
					-			
	-					=		
	oncentration, D=Dep	eletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.		n: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils ³ :
Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Su	pipedon (A2) stic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfacerk Surface (A12) Mucky Mineral (S1) Bleyed Matrix (S4) Redox (S5) Matrix (S6) rface (S7) (LRR R, Iff hydrophytic vegetal Layer (If observed)	MLRA 149	Polyvalue Belo MLRA 149B MIRA 149B Thin Dark Surfi Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress B)) ace (S9) (Mineral (F Matrix (F) x (F3) urface (F6 Surface (F8)	LRR R, M 1) (LRR k 2)) F7)	LRA 149B) (, L)	Coas 5 cm Dark Polyv Thin Iron-I Piedr Mesi Red Very Othe	Muck (A10) (LRR K, L, MLRA 149B) t Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L, M) value Below Surface (S8) (LRR K, L) Dark Surface (S9) (LRR K, L) Manganese Masses (F12) (LRR K, L, R) mont Floodplain Soils (F19) (MLRA 149I c Spodic (TA6) (MLRA 144A, 145, 149E Parent Material (F21) Shallow Dark Surface (TF12) or (Explain in Remarks) tic.
pn	aint bounda	nes of 8"	redox in the	he m nakes	atinx dep	Found Letel 1	within rating	top 10" of Soil indicator.

WETLAND DETERMINA	ATION DATA FORM — Northce		
Project/Site: Ball Hill Wind Project	City/County: Chauta	uqua County	_ Sampling Date: 4/4/17
pplicant/Owner: Ball Hill Wind Energy, LLC		State: NY	Sampling Point: DP-] 90
overstinatoris): B. Victs and N. Dute	Section, Township, Ra	ange: Town of	thenover
andform (hillslope, terrace, etc.): Terrace	Local relief (concave, con	nvex, none):	Cave Slope (%): 0-5/
Subregion (LRR or MLRA): LRR-R La	+ 42,498153 Lou	na: -79, 15024	/4 Datum: NAD 83
Soil Map Unit Name: Cb - Canandaigu	a Sitt Lagra Lagray Su	h tra tum NWI classif	scation: Not minor!
Are climatic / hydrologic conditions on the site typical			
			present? Yes No
Are Vegetation, Soil, or Hydrology			
Are Vegetation N, Soil N, or Hydrology <u>N</u>	naturally problematic? (if n	needed, explain any answ	vers in remarks.)
SUMMARY OF FINDINGS - Attach site	map showing sampling point	locations, transect	ts, important features, etc.
Hydrophytic Vegetation Present? Yes X	No Is the Sample	ed Area	No No
Hydric Soil Present? Yes X		Wetland Site ID: W	h-A1043
Wetland Hydrology Present? YesX Remarks: (Explain alternative procedures here or in		Welland Site ID. Ve	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
[19] [20] 146. [122] 156. [15] 156. [15] 15. [15] 15. [15] 15. [15] 15. [15] 15. [15] 15. [15]		7	A.C. 122 39.A.
PEM parties of Wetla			
as an NWI or DEC			
Soils and regulation are			
John Tagasattary one	Significating City of Sec	GUE	0
	, , , , , , , , , , , , , , , , , , , ,	- (i) - 144	
HYDROLOGY		Sagandani Ind	icators (minimum of two required)
Wetland Hydrology Indicators:	at all that and A		oil Cracks (B6)
Primary Indicators (minimum of one is required; che			Patterns (B10)
The state of the s	_ Water-Stained Leaves (B9) _ Aquatic Fauna (B13)		Lines (B16)
	Marl Deposits (B15)		on Water Table (C2)
	_ Hydrogen Sulfide Odor (C1)		Burrows (C8)
	X Oxidized Rhizospheres on Living Ro	oots (C3) Saturation	Visible on Aerial Imagery (C9)
	Presence of Reduced Iron (C4)		r Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils		hic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow A	
	_ Other (Explain in Remarks)	Microtopo	ographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		∑ FAC-Neu	tral Test (D5)
Field Observations:			
Surface Water Present? Yes X No	Depth (inches): 2 "		
Water Table Present? Yes X No	Depth (inches): O"	Wetland Hydrology Pre	sent? Yes X No
Saturation Present? Yes X No No	Depth (inches): O "	Wetland Hydrology Fre	seller res z 1 No
Describe Recorded Data (stream gauge, monitorin	g well, aerial photos, previous inspection	ons), if available:	
Remarks:			
2" water depth in net	-1- 16 C to	. h. C	
2 water depth in lut	si gieves left from the	CICI	
	¥		
The state of the s			

<u>Tree Stratum</u> (Plot size: <u>30 ' (2</u>) 1		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata:
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B
5,				THAT ALE OBE, TAOW, ST TAO. (AVB
),				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	Ø:	= Total Cov	PL T	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' R	-	7014.001	7	FACW species x 2 =
				FAC species x 3 =
				FACU species x 4 =
				UPL species x 5 =
<u></u>				Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
· ·				1 - Rapid Test for Hydrophytic Vegetation
	Ø:	= Total Cov	er	∠ 2 - Dominance Test is >50%
lerb Stratum (Plot size: 5'R)				3 - Prevalence Index is ≤3.0 ¹
. Juneur effusus	40	V	OBL	4 - Morphological Adaptations ¹ (Provide supportin
		-1		data in Remarks or on a separate sheet)
. Ranunculus acris	15	7	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
. Glyceria melicana	10	N	OBL	¹ Indicators of hydric soil and wetland hydrology must
. Solidago nyosa	5	N	FIAC	be present, unless disturbed or problematic.
				Definitions of Vegetation Strata:
				Definitions of Vegetation Strata.
·				Tree - Woody plants 3 in. (7.6 cm) or more in diamete
-				at breast height (DBH), regardless of height.
·				Sapling/shrub - Woody plants less than 3 in. DBH
L				and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
0				size, and woody plants less than 3.28 ft tall.
1				Woody vines - All woody vines greater than 3.28 ft in
2				height.
	70	= Total Cov	er	
/oody Vine Stratum (Plot size: 30 ' R)				
(10,020				
**************************************	-			Hydrophytic
·				Vannatation
				Present? Yes No
				**
	05	= Total Cov	or	
temarks: (Include photo numbers here or on a separat	e sheet)	= Total Cov		
Ventoria solution dis	-L . la a l	d	to for	m machine (HIII a. f.
Vegetation actively dis	woed	que	10 10	the practices (Illing for
Cultivated Cal have	minulal	. 30	2 06	bare ground present.
communed com). Appr	WILL OF CREA	7 50		J
	_			

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. PL=Pore Hydric Soil Indicators: Indicators for Proble Histosol (A1)	ematic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) () (LRR K, L, M) Surface (S8) (LRR K, L)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. A	e Lining, M=Matrix. ematic Hydric Soils³: (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) 7) (LRR K, L, M) Surface (S8) (LRR K, L)
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) Histic Epipedon (A2) MLRA 149B) Coast Prairle Rec Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peal Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7 Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodp Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Mate	ematic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) () (LRR K, L, M) Surface (S8) (LRR K, L)
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) Histic Epipedon (A2) MLRA 149B) Coast Prairle Rec Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peal Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7 Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Iron-Manganese Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA Sandy Redox (S5)	ematic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) () (LRR K, L, M) Surface (S8) (LRR K, L)
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) Histic Epipedon (A2) MLRA 149B) Coast Prairle Rec Black Histic (A3) Thin Dar,k Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peal Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7 Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodp Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Mate	ematic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) () (LRR K, L, M) Surface (S8) (LRR K, L)
Adric Soil Indicators: Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thin Dark Surface (F6) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Indicators for Problet Indicators for Problet (A10) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Prairle Reconductive (S7) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) Polyvalue Below Thin Dark Surface (S7) Redox Dark Surface (F6) Iron-Manganese Depleted Dark Surface (F7) Redox Depressions (F8) Red Parent Mater	ematic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) () (LRR K, L, M) Surface (S8) (LRR K, L)
Adric Soil Indicators: Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thin Dark Surface (F6) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Indicators for Problet Indicators for Problet (A10) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Prairle Reconductive (S7) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) Polyvalue Below Thin Dark Surface (S7) Redox Dark Surface (F6) Iron-Manganese Depleted Dark Surface (F7) Redox Depressions (F8) Red Parent Mater	ematic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) () (LRR K, L, M) Surface (S8) (LRR K, L)
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) Histic Epipedon (A2) MLRA 149B) Coast Prairle Rec Black Histic (A3) Thin Dar,k Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peal Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7 Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodp Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Mate	ematic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) () (LRR K, L, M) Surface (S8) (LRR K, L)
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) Histic Epipedon (A2) MLRA 149B) Coast Prairle Rec Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peal Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7 Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodp Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Mate	ematic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) () (LRR K, L, M) Surface (S8) (LRR K, L)
ydric Soil Indicators: Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) Histic Epipedon (A2) MLRA 149B) Coast Prairle Rec Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peal Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7 Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodp Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Mate	ematic Hydric Soils ³ : (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) () (LRR K, L, M) Surface (S8) (LRR K, L)
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7 Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Thin Dark Surface Bedox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Red Parent Mater	dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) 7) (LRR K, L, M) Surface (S8) (LRR K, L)
Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodp Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA Sandy Redox (S5)	t or Peat (S3) (LRR K, L, R) 7) (LRR K, L, M) Surface (S8) (LRR K, L)
Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7 Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodp Mesic Spodic (TA Sandy Redox (S5)	7) (LRR K, L, M) Surface (S8) (LRR K, L)
Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Thin Dark Surface (F6) Iron-Manganese Piedmont Floodp Mesic Spodic (TA Redox Depressions (F8) Red Parent Mate	Surface (S8) (LRR K, L)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Mesic Spodic (TA Red Parent Mater	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Mesic Spodic (TAR) Red Parent Mater	a (Su) (I PP K I)
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodp Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA Sandy Redox (S5) Red Parent Mate	
Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA Sandy Redox (S5) Red Parent Mate	Masses (F12) (LRR K, L, R
Sandy Redox (S5) Red Parent Mate	olain Soils (F19) (MLRA 149)
	A6) (MLRA 144A, 145, 149B
Stripped Matrix (S6)	
	rk Surface (TF12)
_ Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in	Remarks)
ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.	
Type: NIA	1,300
Depth (Inches): Hydric Soil Present?	Yes No
emarks:	
Soils are significantly distursed due to Form practices (tilling For
cultivated corn). Distinct redux features were touris).
Soil profile builted from an orea that seemed to not	have been
extremely threed up.	

WETLAND DETE		 Northcentral and Northeast 	221
Project/Site: Ball Hill Wind Project	City/Coun	ty: Chautauqua County	Sampling Date: 4517
Applicant/Owner: Ball Hill Wind Energy	, LLC	State: NY	Sampling Point: DP- +4+
Investigator(s): Ben VITT and Nico	Le Outche Section, 7	Township, Range: Town o	f Hanover
Landform (hillslope, terrace, etc.):	Messica Local relief (concave, convex, none):Concev	Slope (%): 0 - 1 ?
Subregion (LRR or MLRA): LRR-R	lat: 42,501778	3 Long: -79,14981	4 Datum: NAD 83
Soil Map Unit Name: Cb - Quando	aigue silt Iram loc	my Substratum NWI classific	ation: Not mapped
Are climatic / hydrologic conditions on the site	a tunical for this time of year? Yes	No. (If no, explain in R	emarks.)
Are Vegetation	typical for this time of year? Tes	? Are "Normal Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydro	logy naturally problematic	(If needed, explain any answer	is in Nomanio.)
SUMMARY OF FINDINGS - Attac	h site map showing sampl	ing point locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Y Wetland Hydrology Present?	es X No Is w es X No If	the Sampled Area ithin a Wetland? Yes	_ No - A 648
Remarks: (Explain alternative procedures	nere or in a separate report.)		
PEM data pont	tor linear Wetland	A 648: Wetland S	terts at
antheial drain A706	and drains Into	Dirch A700 Area revie	ving runoff from
adjacent agricultural frele	ts and vinyard.		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is requ	ired; check all that apply)	Surface Soi	Cracks (B6)
X Surface Water (A1)	X Water-Stained Leaves (atterns (B10)
Kigh Water Table (A2)	Aquatic Fauna (B13)	Moss Trim	
X Saturation (A3)	Marl Deposits (B15)		Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor	1	/isible on Aerial Imagery (C9)
Sediment Deposits (B2)	Oxidized Rhizospheres NIA Presence of Reduced In		Stressed Plants (D1)
Drift Deposits (B3) Algal Mat or Crust (B4)	Recent Iron Reduction i		
Algar Mat of Crost (B4) Iron Deposits (B5)	Thin Muck Surface (C7)		
Inundation Visible on Aerial Imagery (- 10 To Table	rks) Microtopog	raphic Rellef (D4)
Sparsely Vegetated Concave Surface		∑ FAC-Neutr	al Test (D5)
Field Observations:	1.11		
Surface Water Present? Yes X	No Depth (inches): 1"	10.	
Water Table Present? Yes X	No Depth (inches): 0"	Markland Madualana Dras	ent? Yes X No
Saturation Present? Yes X (Includes capillary fringe)	No Depth (inches): O"	Wetland Hydrology Fles	eliti 165 No
Describe Recorded Data (stream gauge, r	nonitoring well, aerial photos, previ	ous inspections), if available:	
Remarks:			
Recent heavy rain	event cousing wet	er levels to be about	c average,
The state of the s			

			Number of Dominant Species That Are OBL, FACW, or FAC: (A)
			Total Number of Dominant
	-		Species Across All Strata: 2 (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: 100 7. (A/B
			That Are OBL, FACW, or FAC:
	-		Prevalence Index worksheet:
			Total % Cover of: Multiply by:
4	= Total Cov	er	OBL species x 1 =
			FACW species x 2 =
			FAC species x 3 =
			FACU species x 4 =
		-	UPL species x 5 =
			Column Totals: (A) (B)
			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
	**********		1 - Rapid Test for Hydrophytic Vegetation
do	- Total Con		∑ 2 - Dominance Test is >50%
	= Total Cov	er	3 - Prevalence Index is ≤3.01
1/1	. 1	ROI	4 - Morphological Adaptations ¹ (Provide supporting
			data in Remarks or on a separate sheet)
10	14		Problematic Hydrophytic Vegetation ¹ (Explain)
35			¹Indicators of hydric soil and wetland hydrology must
			be present, unless disturbed or problematic.
			Definitions of Vegetation Strata:
			Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
			Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.
			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
			Woody vines - All woody vines greater than 3.28 ft in height.
100	= Total Cov	ег	
		121	
*			Hydrophytic
			Vegetation Present? Yes No
	-		
Ø	= Total Cov	ver	
neet.)			
	\$ 10 10 55 25 25 700	= Total Cov	## Total Cover ## Total Cover ## Total Cover ## Total Cover ## Total Cover

Depth	Matrix		Redox Features				
(inches)	Color (moist) 2, 5 / 3/2	100	Color (moist) %	Type ¹	Loc ²	Texture .	Remarks
2-8	2.543/2	95	7.5/R4/6 5	C	M	SiL	distinct
8-16	2.543/2	75	2.54 4/1 10	0	n	FSL	distinct
			7.542 4/6 15	C	M	FSL	distinct

11							
Type: C=Co		letion, RM	=Reduced Matrix, MS=Masked	Sand Gra	ins.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, III) hydrophytic vegeta ayer (If observed):	VILRA 149	Thin Dark Surface (S9) (I Loamy Mucky Mineral (F Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (I Redox Depressions (F8)	1) (LRR K, 2) 	L)	Dark SI Polyval Thin Da Iron-Ma Piedmo Mesic S Red Pa Very SI Other (ucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M) ue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Solls (F19) (MLRA 1498 Spodic (TA6) (MLRA 144A, 145, 1498 arrent Material (F21) hallow Dark Surface (TF12) Explain in Remarks)
Type: Depth (inc	N/A hes):					Hydric Soil	Present? Yes X No
Remarks: Dr.S.	stinct redox	c Cana	entrations found	through	hart	matrix	thoughout

	1111
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 4517
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 198
Investigator(s): B. Virts and N. Dutcher	Section, Township, Range: Town of Hanover
10 000 1000 1000 1000 1000 1000 1000 1	sool relief (concave convex none): CONVOX Slope (%): U X /
Subsection (I BB or MI BA): LRR-R 1at: 42.50	52 989 Long: -79. 149872 Datum: NAD 83
Subregion (LRR of MLRA).	n, luany Substratus NWI classification: Not Mapped
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantly	[1] 이 보다 [1] [1] [1] [1] [1] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2
Are Vegetation N, Soil N, or Hydrology N naturally pr	roblematic? (If needed, explain any answers in Remarks.)
OLIMANA DV OF EINDINGS Attach cite man showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X	Is the Sampled Area within a Wetland? Yes No X If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures nere or in a separate rep	1.116 - 1 01.49
Upland data point for wetlers A	040 and 1411.
Entire field is dominated by lead Cons	1948 and Ale49. The Gais which acts more as a FAC in this Ell,
Region. Area is an own active hay for	ž. U,
Jan Jan Jan Jan Jan Jan Jan Jan Jan Jan	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	y) Surface Soil Cracks (B6)
Surface Water (A1) Water-Staine	
High Water Table (A2) Aquatic Faun	
Saturation (A3) Marl Deposits	
	ulfide Odor (C1) Crayfish Burrows (C8)
	izospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Reduced Iron (C4) Stunted or Stressed Plants (D1)
Drift Deposits (B3) NA Presence of	Reduced from (C4) Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	1870 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187 NO 187
Inundation Visible on Aerial Imagery (B7) Other (Expla Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No X Depth (inch	nes);
Surface Water Frederick	
Water Table Present? Yes No X Depth (inch	les): —
Water Table Present? Yes No X Depth (inch Yes No X Depth (inch	
Saturation Present? Yes No X Depth (inch	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No _X Depth (inch	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inch	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X Depth (inch	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No _X Depth (inch (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No _X Depth (inch (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No _X Depth (inch (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No _X Depth (inch (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No _X Depth (inch (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No _X Depth (inch (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No _X Depth (inch (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	es): - Wetland Hydrology Present? Yes No X
Saturation Present? Yes No _X Depth (inch (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	es): - Wetland Hydrology Present? Yes No X

vacation of plant	Absoluto	Dominant	Indicator	I Samping Form
Tree Stratum (Plot size: 30'R)	% Cover	Species?	Status	Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2				
3				Total Number of Dominant Species Across All Strata: (B)
				Opecies Across All ottata.
4				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6		-		Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
	_ Ø	= Total Co	ver	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 'R)				FACW species
				FAC species 5 x3 = 15
1		=		FACU species
2				UPL species x5 = Column Totals: 95 (A) 305 (B)
3				Column Totals: 95 (A) 305 (B)
4				Prevalence Index = B/A = 3,21
5				
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	_ Ø	= Total Co	ver	2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' 2)				3 - Prevalence Index is ≤3.0¹
1. Phalans arundinacea	35	Y	FACW	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Trifolium repens		N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Plantugo lanccolata	5	N	FACU	
4. Ambosia artenisii filia		N	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
			FACU	
5. Taraxacum Officionale		N		Definitions of Vegetation Strata:
6. Ranunculus acris		_ N_	FAC	Tree - Woody plants 3 in. (7.6 cm) or more in diameter
7. Daucus Corota			MI	at breast height (DBH), regardless of height.
8. <u>Dactylis glomerata</u>		<u> </u>	FACU	Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11.				size, and woody plants less than 3.28 it tail.
12.				Woody vines - All woody vines greater than 3.28 ft in
	100	= Total Co		height.
Woody Vine Stratum (Plot size: 30172)		- 10tal CO	401	
woody vine Stratum (Plot size:)				
1	-	-	-	Hydrophytic
2	-			Vegetation
3		,4.1	-	Present? Yes No X
4				
	Ø	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate	sheet.)			
Vegetation is significantly	distr	bed a	due to	active how field. the
not yet been cut I have	ech l	. thi	- Sept	on. Phalaris arundinacea (reed
Con	csica y	CF IIII	, 0000	College College
conony gross) is an invar	sinc in	this r	egion	and tound growing in both
Wetlands and uplands, it	acts m	none 1	ike a	FAC Species,

Depth	Matrix		th needed to docum Redo	x Features		a w. land. State of the	Victoria de la companya del companya de la companya del companya de la companya d
inches)	Color (moist)	_%	Color (moist)	%Type	Loc2	Texture	Remarks
-110	10YR 3/3	981.	7.542 34	2 <u>C</u>	_ <u>M</u> -	SiL_	
	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	S=Masked Sand	Grains.		PL=Pore Lining, M=Matrix. or Problematic Hydric Soils ³ :
Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Su	oipedon (A2) stic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) ducky Mineral (S1) eleyed Matrix (S4) dedox (S5) Matrix (S6) rface (S7) (LRR R, I	MLRA 1491	MLRA 149B Thin Dark Surfa Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress Redox Depress	ace (S9) (LRR R, Mineral (F1) (LRF Matrix (F2) ((F3) rface (F6) Surface (F7) sions (F8)	MLRA 149B) R K, L)	Coast Pr 5 cm Mu Dark Sui Polyvalu Thin Dar Iron-Mar Piedmor Mesic S Red Par Very Sh	ick (A10) (LRR K, L, MLRA 149B) rairie Redox (A16) (LRR K, L, R) rairie Redox (A16) (LRR K, L, R) ricky Peat or Peat (S3) (LRR K, L, R) riace (S7) (LRR K, L, M) rie Below Surface (S8) (LRR K, L) rik Surface (S9) (LRR K, L) riganese Masses (F12) (LRR K, L, R) riganese Masses (F12) (MLRA 149B) ripodic (TA6) (MLRA 144A, 145, 149B) rent Material (F21) raillow Dark Surface (TF12) Explain in Remarks)
estrictive I	Layer (if observed): N/A		etland hydrology mu	st be present, un	ess disturbed		V
Depth (included the control of the c		.,				Hydric Soil F	^
18	edux Concer	oils i	were obse	wed Soil	s are	very on	wn with faint
j.							

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 4/5/17 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 799 Investigator(s): B- Virts and Ni Dutcher Section, Township, Range: Town of Hanover Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): Concave Slope (%): 0 - 3/2 Lat: 42, 50 3/35 Long: -79, 150 252 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Substratum NWI classification: Net Mapped Soil Map Unit Name: Cb- Canandaiqua Silt luam, loamy Are climatic / hydrologic conditions on the site typical for this time of year? Yes ________ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes_ Are Vegetation ______, Soil ______, or Hydrology _______ significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation N, Soil N, or Hydrology N naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Netland ALO49 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) Pen data point for Wetland ALO49. PEM Wetland in active hay field and snew mobile that trail, wetland drains to ditch HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) ___ Water-Stained Leaves (B9) X Surface Water (A1) ___ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) __ Marl Deposits (B15) X Saturation (A3) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) X Oxidized Rhizospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) N/A Presence of Reduced Iron (C4) __ Drift Deposits (B3) Geomorphic Position (D2) __ Recent Iron Reduction in Tilled Soils (C6) ___ Algal Mat or Crust (B4) Shallow Aquitard (D3) __ Thin Muck Surface (C7) __ Iron Deposits (B5) Microtopographic Relief (D4) __ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No Depth (inches): 1-2" Surface Water Present? Yes X No Depth (inches): 0 " Water Table Present? Wetland Hydrology Present? Yes X No ___ X No ____ Depth (inches): O " Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Inundation and war level above average high due to recent heavy rainfall (4/4/17)

Tree Stratum (Plot size: 30'R)		Dominant Species?		Dominance Test worksheet:		
				Number of Dominant Species	2	
				That Are OBL, FACW, or FAC:		_ (A)
<u> </u>				Total Number of Dominant	2	
·				Species Across All Strata:	2	_ (B)
				Persont of Dominant Species		
		-		Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B
·				matrice obligative my entries.		_ (/ 0.5
				Prevalence Index worksheet:		
				Total % Cover of:	Multiply by:	
	Ø	= Total Cov	or.	OBL species x1	The state of the s	
Sapling/Shrub Stratum (Plot size: 15 'R)		Total Ook	O,	FACW species x 2		
apling/Shrub Stratum (Plot size:						
· · · · · · · · · · · · · · · · · · ·				FAC species x3	200	
				FACU species x 4		
				UPL species x 5		-
	4.00			Column Totals:(A)		(B)
•				Bassalana ladas - B/A -		
<u> </u>	-			Prevalence Index = B/A =		
				Hydrophytic Vegetation Indicato	rs:	
				1 - Rapid Test for Hydrophytic	Vegetation	
· · · · · · · · · · · · · · · · · · ·	1	T.1.10		X 2 - Dominance Test is >50%		
510	Ψ	= Total Cov	er	3 - Prevalence Index is ≤3.01		
lerb Stratum (Plot size: 5 'R)		34		4 - Morphological Adaptations	1 (Provide eu	pportin
Juneur effectus	35	4	OBL	data in Remarks or on a se	parate sheet)
. Trifolium repens	10	N	FACU	Problematic Hydrophytic Vege	tation1 (Expl	ain)
Phalaris anindinacea	35	Y	FACW			
		N		¹ Indicators of hydric soil and wetlan be present, unless disturbed or pro	nd hydrology	must
Lemna Minor		10	OBL	be present, unless disturbed or pro	objematic.	
Carex Hava	10	N	OBL	Definitions of Vegetation Strata:		
Alisma Subcordatum	5	N	OBL	Tree - Woody plants 3 in. (7.6 cm)	or more in c	liamote
				at breast height (DBH), regardless	of height.	namete
·				Sapling/shrub - Woody plants les and greater than or equal to 3.28 f	ss than 3 in. I	овн
<u> </u>				and groater than or equal to 0.25	t (1 m) tan.	
0				Herb - All herbaceous (non-woody)		ess of
1.				size, and woody plants less than 3.28	ft tall.	
		***************************************		Woody vines - All woody vines great	ter than 3.28 f	in
2	1.0			height.		
	100	= Total Cov	er			
Voody Vine Stratum (Plot size: 30'R)						
				Hydrophytic		
				Vegetation Present? Yes		
· · · · · · · · · · · · · · · · · · ·				Present? Yes		
•					NO	
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NO	

epth	Matrix			Feature	s			
nches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc²	Texture	Remarks
2-8	2,543/1	85	2.5YR3/4	15	0	PL	CL_	district
3-11	2,543/1	80	51R 4/6	20	C	M	CL	distinct
1-16	2.544/3	65	104R 5/8	20	C	14	ESCL	distinct
			10 YR 7/8	15	<u>c</u>	M	FSCL	distinct
	oncentration, D=Dep	pletion, RM	=Reduced Matrix, MS	=	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy F Stripped Dark Su	stic (A3) on Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) ducky Mineral (S1) dedox (S5) Matrix (S6) rface (S7) (LRR R, I f hydrophytic vegeta Layer (if observed)	MLRA 149	Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress Redox Depress	Mineral (F Matrix (F3) rface (F6 Surface (sions (F8)	(1) (LRR F (2) (1) (5) (7)	(, L)	Dark S Polyva Thin D Iron-M: Piedmo Mesic Red Po Very S Other	Mucky Peat or Peat (S3) (LRR K, L, R) surface (S7) (LRR K, L, M) slue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149) Spodic (TA6) (MLRA 144A, 145, 149E arent Material (F21) shallow Dark Surface (TF12) (Explain in Remarks)
Type: Depth (in	NIA						Hydric Soll	Present? Yes X No
emarks: Re	dox cincent	sa hons-	found through	hout	profi	le n	vere dist	inct boundaries,

	A FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	_ City/County: Chautauqua County sampling Date: 45 17
Pall Hill Wind Energy LLC	State: NY Sampling Point: DP- 804
vestigator(s). B. Vint and N. Dutcher	Section, Township, Range: Town of Hanover
andform (hillelane terrace etc.): 120 MCCO	ocal relief (concave, convex, none):
bengion (LBB or MLBA): LRR-R Lat: 42.5	Datum: NAD 83
"Mar Hall Name: Ch- Guanadaigue silt loam	, loamy substratum NWI classification: Not Mapped
re climatic / hydrologic conditions on the site typical for this time of	year? Yes X No. (If no. explain in Remarks.)
re Vegetation, SoilIV_, or Hydrology Significan	두 [1] 사이트 경기 (1) - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
re Vegetation <u>N</u> , Soil <u>N</u> , or Hydrology <u>N</u> naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site man showing	ng sampling point locations, transects, important features, etc
	The state of the s
Hydrophytic Vegetation Present? Yes X	Is the Sampled Area within a Wetland? Yes No
Hydric Soil Present? Yes X No	A1.5
Wetland Hydrology Present? Yes X No	II you, oparital restains
Remarks: (Explain alternative procedures here or in a separate re	port.)
PEM dit Don't he Isolated	Wetland ALOSO located in active hay
O .	Figure 1 State Control of the
field, wetland is isolated.	× · ·
10 10 10 10 10 10 10 10 10 10 10 10 10 1	
	**
YDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	
★ Surface Water (A1)	
X High Water Table (A2) Aquatic Fau	
Saturation (A3) Marl Depos	
	Sulfide Odor (C1) Crayfish Burrows (C8) hizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	Surface (C7) Shallow Aquitard (D3)
	lain in Remarks) Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	K FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes X No Depth (inc	thes): U-2''
Water Table Present? Yes No Depth (inc	thes): O"
Saturation Present? Yes No Depth (inc	ches): O" Wetland Hydrology Present? Yes X No
(Includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if available:
Domarka:	
Remarks:	
Jame Shall hummacks throughout he	that of uplant herbacous very growing on top.
Are visibly saturated for parts of	ges ere mesmos
0 1 1 1111	h h t
Keccent Newy Pain event (4/4/17) Can	ning want levels to be above average.

2 / 2	Absolute	Dominan	t Indicator	Line and Lawrence and the
ree Stratum (Plot size: 30'R)				Dominance Test worksheet:
				Number of Dominant Species That Are OBL, FACW, or FAC:
				Total Number of Dominant Species Across All Strata: (B)
				openies / in ordina.
				Percent of Dominant Species That Are OBL, FACW, or FAC: 1002. (A)
				That Are OBL, FACW, or FAC:(A/
				Prevalence Index worksheet:
	Ø	= Total Co	ver	OBL species x1 =
apling/Shrub Stratum (Plot size: 151 R				FACW species x 2 =
				FAC species x 3 =
				FACU species x 4 =
				UPL species x 5 =
	استساء			Column Totals: (A) (E
				(1)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
	-			1 - Rapid Test for Hydrophytic Vegetation
The second secon	Ø	-	-	✓ 2 - Dominance Test is >50%
510	$\underline{\varphi}$	= Total Co	over	3 - Prevalence Index is ≤3.01
erb Stratum (Plot size: 5'R)	NV.			4 - Morphological Adaptations ¹ (Provide supporti
Phalans anindiracea	46		FACW	data in Remarks or on a separate sheet)
Dactylis glomerata	15	N	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
Carex Plave	20	Y	OBL	¹ Indicators of hydric soil and wetland hydrology must
Jungur effurur		N	OBL	be present, unless disturbed or problematic.
Trifolium repens	2	N	FACU	Definitions of Vegetation Strata:
		-		Definitions of Vegetation offsta.
Symphyotricum lateriflorum		N	FAC	Tree – Woody plants 3 in. (7.6 cm) or more in diamet at breast height (DBH), regardless of height.
· · · · · · · · · · · · · · · · · · ·			-	Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless of
	-			size, and woody plants less than 3.28 ft tall.
	-	-	-	Woody vines - All woody vines greater than 3.28 ft in
· · · · · · · · · · · · · · · · · · ·	100	= Total Co		height.
		i oldi ol		
pody Vine Stratum (Plot size: 30' R)				
pody Vine Stratum (Plot size: 30' R)				
pody Vine Stratum (Plot size: 30' R)				Hydrophytic
pody Vine Stratum (Plot size: 30' R)				Vegetation
pody Vine Stratum (Plot size: 30' R)				
oody Vine Stratum (Plot size: 30'R)				Vegetation

epth	ription: (Describe Matrix	are depti		x Features			. and appointed	
nches)	Color (moist)	%	Color (moist)	_ %	Type ¹	_Loc2	Texture	Remarks
0-7	2.5 y3/1	95	5 YR 3/4.	5	C	PL	SIL	diffuse
7-14	2.5y31.	75	5 yr 314	25	<u> </u>	PL	_S.L	diffuse
ydric Soil I Histosol Histic Ep Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	(A1) ipedon (A2)	e (A11)	Polyvalue Belo MLRA 149B Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Si Depleted Dark Redox Depres	w Surface (S9) (L Mineral (F Matrix (F2 x (F3) urface (F6) Surface (F8)	(S8) (LR LRR R, M 1) (LRR K)	R R, LRA 1498 (, L)	Indicators	: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ : Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) surface (S7) (LRR K, L, M) silue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B Spodic (TA6) (MLRA 144A, 145, 149B arent Material (F21) shallow Dark Surface (TF12) (Explain in Remarks)
Type: Depth (inc							Hudric Soil	Present? Yes X No
emarks:		Conc (Flo)	entrations	alo	3	<i>pre</i>		ound throughout

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 4517 Project/Site: Ball Hill Wind Project _ State: NY Applicant/Owner: Ball Hill Wind Energy, LLC _ Sampling Point; DP-863 Investigator(s): B. Virts and N. Dutcher Section, Township, Range: Town of Hanover Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none); Conceve Slope (%): 0-3) Subregion (LRR or MLRA): LRR-R Lat: 42.504769 Long: -79.15/145 Datum: NAD 83 Soil Map Unit Name: Cb-Canandaigua Silt loam, loamy Substratum NWI classification: Not mapped Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No____ Are Vegetation N, Soil N, or Hydrology N naturally problematic? (if needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: Wetland A & 51 Remarks: (Explain alternative procedures here or in a separate report.) PEM data station for wetland AUSI. Wetland dwa point located in open field. The wetland continues to the North beyond the study limits and Connects with Wetland ASY9 (DEC Wetland SC-12). HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soll Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ___ Drainage Patterns (B10) __ Water-Stained Leaves (B9) X Surface Water (A1) __ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) X High Water Table (A2) __ Dry-Season Water Table (C2) ___ Marl Deposits (B15) X Saturation (A3) __ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) __ Water Marks (B1) X Oxidized Rhizospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) ___ Stunted or Stressed Plants (D1) N// Presence of Reduced Iron (C4) __ Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) __ Algai Mat or Crust (B4) __ Shallow Aquitard (D3) __ Thin Muck Surface (C7) ___ Iron Deposits (B5) ___ Microtopographic Relief (D4) __ Other (Explain in Remarks) __ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) __ Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No Depth (inches): 1-3" Surface Water Present? Yes X No Depth (inches): O" Water Table Present? Wetland Hydrology Present? Yes X No_ X No ____ Depth (inches): \(\Omega''\) Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Recent rain event (4/4/17) is causing water levels to be above average.

<u>Tree Stratum</u> (Plot size: <u>30' Q</u>)	Absolute % Cover		t Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata:
5.				Percent of Dominant Species That Are OBL, FACW, or FAC:
6		= Total Co		Prevalence Index worksheet:
1				FACW species x 2 = FAC species x 3 = FACU species x 4 =
2				UPL species x 5 = Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5' R)	Ψ.	= Total Co	ver	3 - Prevalence Index is ≤3.0 ¹
1. Phalais arundinacea	40		FACW	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Juneur effusus	25	7	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Carex flava 4. Triblium repens		N N	<u>OBL</u> FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
5. Solidago regosa	10	N	FAC	Definitions of Vegetation Strata:
6. Symphyotrichum lateriflorum		_ N	FAC	Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
8				Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				Woody vines - All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: 30'R)	100	= Total Co	ver	
1	-			
2			 	Hydrophytic Vegetation Present? Yes No
4		-		rieseitti 162 // NO
		= Total Co	over	
Remarks: (Include photo numbers here or on a separate s Mixed vegetation found becau Since it is in an action	we V	egetat vy fic	ion is	significantly distribed

(inches) 0 ~ 4				x Features	- 1	. 2	Eav. o	Distriction	
0 7	2.5 \ 3/1	98	Syr 46	2	Type ¹	Loc² -	Texture _	Remarks	
4-8		90			0		CL -	distinct	
	2.5/3/1	85	54R 4/6	10		<u>M</u> _	CL	distinct	
3-12	2,543/2	3.)	10/R 4/6	10	<u>C</u>	<u>m</u> .		district	
			104R 0/8	_5_	<u></u>	<u> </u>	CL	district	· · · · · · · · · · · · · · · · · · ·
2-80	2.54 4/4	60	1048 4/8	25	<u>.c</u>	M	CL	distorct	
			2,5y 3/2		_0_	<u>M</u>	CL_	distinct	
				_					· · · · · · · · · · · · · · · · · · ·
ydric Soil _ Histosol	oncentration, D=Dep Indicators: (A1) Dipedon (A2)	letion, RM	=Reduced Matrix, M Polyvalue Belo MLRA 149B	w Surface			Indicators fo	PL=Pore Lining, M=Mat or Problematic Hydric ick (A10) (LRR K, L, ML rairie Redox (A16) (LRR	Solls³: .RA 149B)
Stratified Depleted Thick Da Sandy M Sandy G Sandy R	en Sulfide (A4) I Layers (A5) I Below Dark Surface Ark Surface (A12) Iucky Mineral (S1) Ideyed Matrix (S4) Idedox (S5) Matrix (S6) Iface (S7) (LRR R, M		Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su Depleted Dark Redox Depress	Matrix (F2 x (F3) urface (F6) Surface (F)	, -/	Polyvalu Thin Dai Iron-Mar Piedmor Mesic S Red Par Very Sh	rface (S7) (LRR K, L, M le Below Surface (S8) (I rk Surface (S9) (LRR K, nganese Masses (F12) e nt Floodplain Soils (F19) podic (TA6) (MLRA 144 rent Material (F21) allow Dark Surface (TF1 explain in Remarks)	LRR K, L) L) (LRR K, L, R) (MLRA 1498 A, 145, 1498
_ Dark Su	A CONTRACTOR OF THE PROPERTY O			ot he proce	nt unles	s disturbed	or problematic.		
	f hydrophytic vegetal	tion and w	etland hydrology mu	at he hiese	in unico				
Indicators of Restrictive I	f hydrophytic vegetal Layer (if observed): パ / ハ		etland hydrology mu	st be prese	in, unico				Na
ndicators of	f hydrophytic vegetal Layer (if observed): パ / ハ		etland hydrology mu	st be prese	int, unico			Present? Yes X	. No
ndicators of estrictive in Type: Depth (indemarks:	f hydrophytic vegetal Layer (if observed): パ / ハ			Junear	2502		Hydric Soil F		No
ndicators of estrictive in Type: Depth (indicemarks:	f hydrophytic vegetal Layer (if observed): N/A ches):			Junear	2502		Hydric Soil F		No

	ATA FORM - Northcentral and Northeast Region
Project/Site: Ball Hill Wind Project	City/County: Chautauqua County Sampling Date: 4/5/17
Applicant/Owner: Ball Hill Wind Energy, LLC	State: NY Sampling Point: DP- 864
Investigator(s): B. Virtr and N. Dutcher	Section, Township, Range: Town of Hanover
Landform (hillslope, terrace, etc.): hillslope.	Local relief (concave, convex, none): CONX Slope (%): 0 - 5/.
S. Landison (Imissippe, Kiriasa, Kiria). LRR-R	504289 Long: -79, 150701 Datum: NAD 83
Subregion (LRR of MLRA).	m, loamy Substratum NWI classification: Not mapped
	e of year? Yes 'X No (If no, explain in Remarks.)
Are Vegetation 💆 Y, Soil 🔃 N, or Hydrology 📈 signifi	
Are Vegetation N , Soil N , or Hydrology N natura	ally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No X
Wetland Hydrology Present? Yes No >	
Remarks: (Explain alternative procedures here or in a separat	
Upland data print for wetler Upland dam printisin achie h	TO TOSG and AUSI.
Uplant dom pracisis achie h	ay Right
The same of	.9 re.e.,
INVESTIGATION OF THE PROPERTY	
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that	
	Stained Leaves (B9) Drainage Patterns (B10) Fauna (B13) Moss Trim Lines (B16)
X Saturation (A3) Marl De	
	en Sulfide Odor (C1) Crayfish Burrows (C8) d Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
	ce of Reduced Iron (C4) Stunted or Stressed Plants (D1)
	Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)
	-1 " 1 (50)
	uck Surface (C7) Shallow Aquitard (D3) Explain in Remarks) Microtopographic Relief (D4)
[18]	FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8) Field Observations:	
Surface Water Present? Yes No _X Depth	(inches):
Water Table Present? Yes X No Depth	
Saturation Present? Yes No X Depth	X.
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aer	al photos, previous inspections), if available:
Remarks:	
his bill above and	1 h 1 so west (4/4/12)
Water Those doore average	due to heavy ranevent (4/4/17),
	6
1.4	

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size: 30' R)		Species?		Dominance Test worksheet:
1				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2				
3				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 7 (A/B)
5				That Ale OBE, FACW, of FAC (A/B)
6				Prevalence Index worksheet:
7				
	Ø	= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15'2)				FACW species x 2 = 1
1				FAC species x 3 =
			-	FACU species 32 x4= 128
2				UPL species x 5 =
3				Column Totals: 90 (A) 244 (B)
4			-	
5				Prevalence Index = B/A = 2.7 \
6				Hydrophytic Vegetation Indicators:
7			-	1 - Rapid Test for Hydrophytic Vegetation
	05	T-1-10		2 - Dominance Test is >50%
Z'0	<u> </u>	= Total Cov	/er	X 3 - Prevalence Index is ≤3.01
Herb Stratum (Plot size: 5'(2)	~ ~	31	~.	4 - Morphological Adaptations (Provide supporting
1. Phalans arundinacea		The second second	FACW	data in Remarks or on a separate sheet)
	_10	N	NI	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Dactylis glomerata	20		FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Infolium repens		N	FACU	be present, unless disturbed or problematic.
5. Achilla millefolium	7	N	FACO	Definitions of Vegetation Strata:
			TACO	
6			-	Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
7				
8	-			Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.
9				and greater trial or equal to 5.25 it (1 iii) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11.				size, and woody plants less than 3.28 it tall.
12.			-	Woody vines - All woody vines greater than 3.28 ft in
	100	= Total Cov		height.
3/10	100	= Total Cov	/өг	
Woody Vine Stratum (Plot size: 30'R)				
1				W 18 A S
2				Hydrophytic Vegetation
3				Present? Yes No
4.				, , , , , , , , , , , , , , , , , , , ,
	OB	= Total Cov	101	3.0
Remarks: (Include photo numbers here or on a separate	- 1	- Total Co	761	
				A.V.
Phalans arendinacea in	rainn	is an	in Castin	and acts more tike FA
	9.0.		mozz, w	e and
Species, Vegetation is Signi	Reantle	, dis	wrter	I due to being in an
)			7
active may field.				

Depth	Matrix		Redo	x Features	- 1	. 2	+	Domarko
inches)	Color (moist)	%	Color (moist)	%	Type.	_Loc ² _	Texture	Remarks
0.8	104R 3/2	100	7 = 10 3/				SIL	
3-18	2.543/1	90	7.54R3/4	10	<u>C</u>	in_	SIL	10-50
8-20	2, Sy 3/1	80	2.5/24/3	10	<u>c</u>	14	SiL	
			104R 5/8	10	<u>c</u>	M	S.L	
					$\stackrel{\sim}{=}$			
0								
	and the second s		-			An included an inc		
ype: C=Co		oletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	rains.		: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
_ Stratified _ Depleted	n Sulfide (A4) I Layers (A5) I Below Dark Surfac Irk Surface (A12)	ce (A11)	Thin Dark Surfi Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su	Mineral (F Matrix (F x (F3) urface (F6	1) (LRR F 2))		Dark S Polyva Thin D Iron-M	surface (S7) (LRR K, L, M) slue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149E
_ Sandy M _ Sandy G _ Sandy R _ Stripped _ Dark Sur	Jucky Mineral (S1) Bleyed Matrix (S4) Bedox (S5) Matrix (S6) rface (S7) (LRR R,		Redox Depres	sions (F8)			Red Pa Very S Other	Spodic (TA6) (MLRA 144A, 145, 149B arent Material (F21) shallow Dark Surface (TF12) (Explain in Remarks)
Sandy M Sandy G Sandy R Stripped Dark Sur	eleyed Matrix (S4) ledox (S5) Matrix (S6) rface (S7) (LRR R,	ation and w	Redox Depres	sions (F8)		ss disturbed	Red Pa Very S Other	Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21) shallow Dark Surface (TF12) (Explain in Remarks)
Sandy M Sandy G Sandy R Stripped Dark Sur	ileyed Matrix (S4) ledox (S5) Matrix (S6) rface (S7) (LRR R, I f hydrophytic vegeta Layer (If observed)	ation and w	Redox Depres	sions (F8)		ss disturbed	Red Pa Very S Other	Spodic (TA6) (MLRA 144A, 145, 1 arent Material (F21) shallow Dark Surface (TF12) (Explain in Remarks)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): B. Virty and N. Outzher Section, Township, Range: 10wn of loc 5/499 Local relief (concave, convex, none): Ococave Slope (%): 1-32 Landform (hillslope, terrace, etc.): ___ Datum: NAD 83 Lat: 42, 451091 Long: -79, 133275 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: FmB- Fremont Silt loam, 3 to 8 percent Slopes NWI classification: Not Mapped __ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes X Are "Normal Circumstances" present? Yes X or Hydrology W significantly disturbed? Are Vegetation W . Soil W (If needed, explain any answers in Remarks.) Are Vegetation W, Soil W, or Hydrology N naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) PEM data point for Wetland USZ. Wetland along a snow mobile trail and open, mentured field HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Drainage Patterns (B10) X Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) X High Water Table (A2) ___ Aquatic Fauna (B13) ___ Dry-Season Water Table (C2) __ Marl Deposits (B15) X Saturation (A3) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) NIA Presence of Reduced Iron (C4) __ Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aguitard (D3) Thin Muck Surface (C7) __ Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) X FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: No X Depth (inches): -Surface Water Present? X No ____ Depth (inches): / " Water Table Present? Wetland Hydrology Present? Yes X No _ Depth (inches): 0" Saturation Present? (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Water levels higher than average due to heavy rain event on 4/4/17,

Tree Stratum (Plot size:30' R) 1			Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata: (B)
4	-			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7		-		Prevalence Index worksheet:
15:0	9	= Total Cov	/er	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15' (C)	-	-1	r10.	FACW species x 2 =
1. Rosa multiflora		<u> </u>	FACU	FAC species x 3 = FACU species x 4 =
2. Cornus amomum			FACW	UPL species x 5 =
3. Acer rubrum		7	FAC	Column Totals: (A) (B)
4 5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	20	= Total Cov	/er	∑ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5'R)				3 - Prevalence Index is ≤3.0¹
1. Juneus effusus	50	Y	OPI	 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Euthomia graninifolia		V	FAC	Problematic Hydrophytic Vegetation (Explain)
3. Ranunculur acris	-	N	FACU	
	10	N	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Solidago rugosa 5. Carex Flava	10	N	OBL	Definitions of Vegetation Strata:
6			-	Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7		*****		at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.
9				Herb - All herbaceous (non-woody) plants, regardless of
10				size, and woody plants less than 3.28 ft tall.
11			نسسن	Woody vines - All woody vines greater than 3.28 ft in
12	1/20			height.
Woody Vine Stratum (Plot size: 30' R)	100	= Total Cov	/er	
1	-			0.45-1.45
2,				Hydrophytic Vegetation
3				Present? Yes X No
4	- d			
	(D)	= Total Cov	/er	

nches)	Matrix			Feature		4			Destar -	
	Color (moist)	%	Color (moist)	%	Type ¹	Loc2	Texture		Remarks	10
7-10	0,0	90	7,54R4/W	10		MIPL		dishe	et and p	Fitt prom
0-16	2.544/1	70	7,5 YR 4/8	20	<u>C</u>	<u>m</u>	SICK			
			2,54 4/4	10	C	M				
6-20	2.545/4	50	1040 4/8	40	C	M	1			
4			2.54 41,	10	D	M	L			
			0.10 1 11							
					-					
		-						****		
		***************************************	<u> </u>							
vne: C=Cr	oncentration, D=Deple	etion RM=		=Masker	d Sand Gr	ains	² Location:	PL=Pore Lir	ning, M=Matri	χ.
	Indicators:	Stion, I tivi	- reduced mains, me	, madico	u ound of	anio,			atic Hydric S	
Histosol	(A1)		Polyvalue Belov	v Surface	(S8) (LR	RR,			RR K, L, MLR	
	olpedon (A2)		MLRA 149B)						(A16) (LRR I	
Black Hi	stic (A3) en Sulfide (A4)		Thin Dark Surfa Loamy Mucky N						Peat (S3) (LF .RR K, L, M)	(RK, L, K)
	d Layers (A5)		Loamy Gleyed I			·, -)			rface (S8) (LF	RRK, L)
	d Below Dark Surface	(A11)	X Depleted Matrix		-,				39) (LRR K, L	
	ark Surface (A12)		Redox Dark Su					**************************************	sses (F12) (L	
	fucky Mineral (S1)		Depleted Dark						n Soils (F19) ((MLRA 144A	
_ Sandy G	Bleyed Matrix (S4)		Redox Depress	ions (F6)			The second secon	arent Material		, 143, 1436)
Sandy R	todak (ob)			185					Surface (TF12)
_ Sandy R _ Stripped	Matrix (S6)						Other (Explain in Re	emarks)	
Stripped	Matrix (S6) rface (S7) (LRR R, M	LRA 149E	3)							
_ Stripped _ Dark Sui	rface (S7) (LRR R, M			et he nres	ent unles	s disturbed	or problematic			
Stripped Dark Sui				st be pres	ent, unles	s disturbed	or problematic),		
Stripped Dark Sui	rface (S7) (LRR R, M f hydrophytic vegetati			st be pres	ent, unles	s disturbed		*		
Stripped Dark Sui dicators of	rface (S7) (LRR R, M f hydrophytic vegetati Layer (if observed): ハノA			st be pres	ent, unles	s disturbed	or problemation	*	Yes <u>X</u>	No
_ Stripped _ Dark Sundicators of estrictive I Type: _ Depth (incommarks:	rface (S7) (LRR R, M f hydrophytic vegetati Layer (if observed): N/A ches):	on and we	etland hydrology mus		-		Hydric Soll	* Present?	Yes <u>X</u>	No
Stripped Dark Sundicators of estrictive I Type: Depth (incomarks:	rface (S7) (LRR R, M f hydrophytic vegetati Layer (if observed): N/A ches):	on and we	etland hydrology mus		-		Hydric Soll	* Present?	Yes <u>X</u>	No
Stripped Dark Sun dicators of estrictive I Type: Depth (incomarks:	rface (S7) (LRR R, M f hydrophytic vegetati Layer (if observed): ハノA	on and we	etland hydrology mus		-		Hydric Soll	* Present?	Yes <u>X</u>	No
Dark Sundicators of strictive I Type: Depth (incomparks:	rface (S7) (LRR R, M f hydrophytic vegetati Layer (if observed): N/A ches):	on and we	etland hydrology mus		-		Hydric Soll	* Present?	Yes <u>X</u>	No

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 4/5//7 Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP-807 Applicant/Owner; Ball Hill Wind Energy, LLC Investigator(s): B. Virtr and N. Dutcher Section, Township, Range: Town of Hanover Subregion (LRR or MLRA): LRR-R Lat: 42.451369 Long: -79, 133576 Datum: NAD 83 Soil Map Unit Name: FMB - Fremont Silt loam, 3 to 8 percent Slopes NWI classification: Not Mapped Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No____ (If needed, explain any answers in Remarks.) Are Vegetation N, Soil N, or Hydrology N naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? Yes ____ No X within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID:_ Remarks: (Explain alternative procedures here or in a separate report.) Upland data point for Wetland Alosz. Data point taken along edge of access road, Recent rain event caused soil saturation and high were tables that would normally not be pressent. HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) .___ Drainage Patterns (B10) ___ Water-Stained Leaves (B9) Surface Water (A1) __ Moss Trim Lines (B16) ___ Aquatic Fauna (B13) X High Water Table (A2) __ Dry-Season Water Table (C2) __ Marl Deposits (B15) ✓ Saturation (A3) ___ Crayfish Burrows (C8) ___ Hydrogen Sulfide Odor (C1) ___ Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) __ Stunted or Stressed Plants (D1) MA Presence of Reduced Iron (C4) _ Drift Deposits (B3) __ Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) ___ Algal Mat or Crust (B4) Shallow Aquitard (D3) __ Thin Muck Surface (C7) ___ Iron Deposits (B5) ___ Microtopographic Relief (D4) __ Other (Explain in Remarks) ___ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes ____ No X Depth (inches): -Surface Water Present? Yes X No ____ Depth (Inches): ** Water Table Present? Wetland Hydrology Present? Yes X No ____ Yes X No Depth (inches): 4" Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology levels above average die to recent heavy rainfull event (4/4/17), No other evidence of wetlend by dictogy observed.

Tree Stratum (Plot size: 30' R)	Absolute	Dominant		Dominance Test worksheet:
1. Populus deltoides	30	Species?	Status FAC	Number of Dominant Species
2. Acer Nibrum	20	У	FAC	That Are OBL, FACW, or FAC: (A)
3				Total Number of Dominant Species Across All Strata; (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 57. 142 (A/B)
6	Carl.			Description of Index workshop and
7				Prevalence Index worksheet:
	50	= Total Cov	/er	OBL species x1 =
Sapling/Shrub Stratum (Plot size: 15'R)				FACW species x 2 =
1. Lonicera tatarica	30	У	FACU	FAC species x 3 =
2. Cornus racemosa	20	_ y	FAC	FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
	50	= Total Cov	/er	≥ 2 - Dominance Test is >50%
Herb Stratum (Plot size: 5 R)				3 - Prevalence Index is ≤3.0¹
1. Parthenocissus quinquefilia	5	Y	FACU	4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Fraçoria Virginiana	5	Y	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3				¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Tree – Woody plants 3 in. (7.6 cm) or more in diameter
7				at breast height (DBH), regardless of height.
8				Sapling/shrub - Woody plants less than 3 in. DBH
9				and greater than or equal to 3.28 ft (1 m) tall.
10				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11				
12				Woody vines - All woody vines greater than 3.28 ft in height.
	10	= Total Cov	ver	
Woody Vine Stratum (Plot size: 30' R)				
1. Toxicodendron radicans	_5_		FR	Charles and the control of the contr
2				Hydrophytic Vegetation
3				Present? Yes No
4				
	5	= Total Co	ver	
Remarks: (Include photo numbers here or on a separate so Though Vegetation meets we and Possibly Change as	Hand	Chorac Seas	teristic	econes more established.

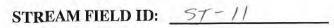
Depth	Matrix	Santan Son		Feature		or commi	n the absence o	
nches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc2	Texture	Remarks
0-10	2.54 3/3	100					SiL	
0-16	2,5 / 3/2	85	2.544/1	10	D	M	SiL	
			7.5484/6	5	C	M	SiL	
Ιω-	2,54 4/4	85	2.5441	10	a	M	CL	
			7.54R 5/8	5	.c	14	CL	
		letter DM	=Reduced Matrix, MS	-Masks	d Sand G		² Location	: PL=Pore Lining, M=Matrix.
Black Hi Hydroge Stratified Depleted Thick De Sandy M Sandy C Sandy F Stripped Dark Su	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, I	VILRA 149	Polyvalue Below MLRA 149B; Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress B)) Ace (S9) (Mineral (F Matrix (F ((F3) rface (F6 Surface (F8)	LRR R, M (1) (LRR I (2)) F7)	ILRA 149I (, L)	Coast I B) 5 cm M Dark S Polyva Thin D Iron-M Piedm Mesic Red P: Very S Other	Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Mucky Peat or Peat (S8) (LRR K, L, R) Mue Below Surface (S8) (LRR K, L) Mue Below Surface (S8) (LRR K, L) Mark Surface (S9) (LRR K, L) Manganese Masses (F12) (LRR K, L, R) Mont Floodplain Soils (F19) (MLRA 149B Marent Material (F21) Mallow Dark Surface (TF12) Mallow Dark Surface (TF12) Mallow Dark Surface (TF12) Mallow Dark Surface (TF12) Mallow Dark Surface (TF12) Mallow Dark Surface (TF12) Mallow Dark Surface (TF12) Mallow Dark Surface (TF12) Mallow Dark Surface (TF12) Mallow Dark Surface (TF12)
Type: Depth (in	Layer (If observed)	:					Hydric Soil	I Present? Yes No ×
Remarks:	Vot enough						os to m	eet on Fle.
	Rec No hydric	Soils	not deplement obsi	ted e	nowyt	カル	rect an	F7,
								3



Stream Data Forms



Stream Name:		Date: 11/04/2015		
County: Chautauqua		State: New York		
Evaluator(s): DSC, VSM		Data Point ID: DR-54	<u> </u>	
	Stream Characteristics		Bottom Characteristics	
Perceptible Flow [yes [] no Flow Regime: Perennial [] Intermittent [] Ephemeral Stream Flow Direction West to fine Width (ft) (water's edge to water's edge) 5 Width (ft) (bank to bank) 25		Substrate Type: Probed Stream Depth (if water present): 0 - 6" 7 - 12"		
	Bank Height and Slope		Associated Habitat	Size Class
Left Bank* [] [] [] [] [] []	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+) 6' + High	Right Bank* [] [] [] []	Riparian Vegetation[X] yes [] no If yes, list: Hemloch Forth Aquatic Vegetation [] yes [X no If yes, list: Associated Wetland [] yes [X no If yes, list ID: Aquatic Organisms [X] yes [] no If yes, list: Macro Invertebrates Riparian/Terrestrial Organisms [X] yes [] no If yes, list: T&E Species [] yes [] no If yes, list:	[] Major > 100 ft Intermediate > 10 ft, < 100ft [] Minor < 10 ft
[] 0-20% (0-11°) [] [] 21-50% (12-27°) [] [] 51-100% (38-45°) [] [] 100% (46°+) [] Provide Detail of any Evidence of Erosion:		Stream Photos Collected ID, Direct Moto# 76 Right- Photo# 71 upstra Photo# 72 dwnstra	to left north	





Project Name: Ball H	ini wina Project		1 1	
Stream Name:		Date: 11/05/2015		
County: Chautauqua		State: New York		
Evaluator(s):	st, vsm		Data Point ID: DP-63	
	Stream Characteristics		Bottom Characteristics	
Perceptible Flow	√ yes [] no		Substrate Type: Probed Stre (if water pre	
Flow Regime: [/] Pe	erennial [] Intermittent []	Ephemeral	[] Bedrock [] 0 - 6	n
Stream Flow Direction Width (ft) (water's extended by the content of the content	on South to Midge to water's edge) 2 Gerank) 4	ortho et	[] Cobble	24" 36"
	Bank Height and Slope		Associated Habitat	Size Class
	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +) 6' + High 0 - 20% (0-11°) 21 - 50% (12-27°)		Riparian Vegetation [] yes [] no If yes, list: Aquatic Vegetation [] yes [] no If yes, list: Associated Wetland [X yes [] no If yes, list ID: WL - V I Aquatic Organisms [A] yes [] no If yes, list: Macro [and three feet] Riparian/Terrestrial Organisms [A] yes [] no If yes, list: Mere [] yes [] no If yes, list: Mere [] yes [] no If yes, list: Stream Photos Collected ID, Direction [] yes [] no If yes, list:	[] Major >100 ft [] Intermediate >10 ft, <100ft Minor <10 ft
	51 - 100% (38-45°) 100% (46°+) of any Evidence of Erosion: Trail (2 West ([]	Photo 81 Right Photo 82 upstru Photo 83 dunstru	

STREAM FIELD ID: 57/3



Stream Name:		Date: 11/05/2015		
County: Chautauqua		State: New York		
Evaluator(s): DJC, VJV		Data Point ID: 69	105	
	Stream Characteristics		Bottom Characteristics	
Perceptible Flow [x] yes [] no Flow Regime: Perennial [] Intermittent [] Ephemeral Stream Flow Direction		Substrate Type: Probed Stream Depth (if water present): 0 - 6"		
	Bank Height and Slope		Associated Habitat	Size Class
Left Bank* [] [] [] [] [] [] [] [] []	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+) 6' + High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)		Riparian Vegetation [] yes [] no If yes, list: Associated Wetland [] yes [] no If yes, list ID: Aquatic Organisms [] yes [] no If yes, list: Riparian/Terrestrial Organisms [] yes [] no If yes, list: T&E Species [] yes [] no If yes, list: Stream Photos Collected ID, Direct	tion, and Description:
	il of any Evidence of Erosion:		Photo 39 upstra	n north

STREAM FIELD ID: 57-14



Stream Name:		Date: 11/06/2015	
County: Chautauqua		State: New York	
Evaluator(s): DJL, VJM		Data Point ID: DP - 72	1
Stream Characteristics		Bottom Characteristics	Warafe
Perceptible Flow [X yes [] no Flow Regime: [XPerennial [] Intermittent [] Ephemeral Stream Flow Direction		Substrate Type: Probed Stream Depth (if water present): Octoble Gravel Sand Silt/Clay No Perceptible Depth	
Bank Height and Slope		Associated Habitat	Size Class
D-3' High	Right Bank* [X] [] [] [] [] [] [] [] [] [] [] []	Riparian Vegetation [] yes [] no If yes, list: Associated Wetland [] yes [] no If yes, list ID: Aquatic Organisms [] yes [] no If yes, list: Riparian/Terrestrial Organisms [] yes [] no If yes, list: Riparian/Terrestrial Organisms [] yes [] no If yes, list: T&E Species [] yes [] no If yes, list: Stream Photos Collected ID, Direct Photos [] yes [] no If yes, list:	[] Major >100 ft [] Intermediate >10 ft, <100ft Minor <10 ft tion, and Description:

STREAM FIELD ID: DP-73/51-15



Date: 11/6/15	Date: 11/6/15	
Data Point ID: DP_73		
Bottom Characteristics		
(if water p [] Bedrock		
Associated Habitat	Size Class	
Aquatic Vegetation [1] yes [] no If yes, list: Aye Associated Wetland [1] yes [] no If yes, list ID: [1] yes [] no If yes, list: Riparian/Terrestrial Organisms [1] yes [] no If yes, list: Riparian/Terrestrial Organisms [2] yes [] no If yes, list: [] yes [] no If yes, list: Stream Photos Collected ID, Directly [] PH-99 Right been		
	Substrate Type: Probed St (if water part of the pa	

STREAM FIELD ID: ST-18



Stream Name: unnamed Tributary		Date: 11/12/15		
County: Chautauqua		State: New York		
Evaluator(s): M. Boberg O. LOCKWOOD		Data Point ID: 90		
	Stream Characteristics		Bottom Characteristics	
Perceptible Flow [X] yes [] no Flow Regime: [X] Perennial [] Intermittent [] Ephemeral Stream Flow Direction		Substrate Type: Probed Stream Depth (if water present): [] Bedrock [X] 0 - 6" [] Cobble [] 7 - 12" [X] Gravel [] 13 - 24" [] Sand [] 25 - 36" [X] Silt/Clay [] 37" + [] Other [] No Perceptible Depth		
	Bank Height and Slope		Associated Habitat	Size Class
Left Bank*	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)	Right Bank* [X] [] [] [] [] [] []	Riparian Vegetation [] yes [] no If yes, list: Aquatic Vegetation [] yes [] no If yes, list: Associated Wetland [] yes [] no If yes, list ID: WL-A3 Aquatic Organisms [] yes [] no If yes, list: Riparian/Terrestrial Organisms [] yes [] no If yes, list: T&E Species [] yes [] no If yes, list:	[] Major >100 ft [] Intermediate >10 ft, <100ft [Minor <10 ft
[] 0-20% (0-11°) [] [] 21-50% (12-27°) [] [] 51-100% (38-45°) [] [] 100% (46°+) [] Provide Detail of any Evidence of Erosion:		Stream Photos Collected ID, Direct PHOTO 120 DS/	/w 'E	

STREAM FIELD ID: 5T-19



Stream Name:		Date: 1//12/2015			
County: Chautauqua		State: New York			
Evaluator(s): OTL, MAB		Data Point ID: 7) P - 95			
	Stream Characteristics		Bottom Characteristics		
erceptible Flow	yes [] no		Substrate Type: Probed Stream Depth (if water present): [] Bedrock [] 0 - 6"		
low Regime:	Perennial [] Intermittent []	Ephemeral			
tussus Flour Disco	day Cul + 1	1	Cobble 7 - 1 7 - 1	24"	
	tion fast to bus		[] Sand [] 25 - 36" [] 37" +		
	edge to water's edge)3		[] Other [] No I	Perceptible Depth	
Vidth (ft) (bank to	bank)		×. • • • • • • • • • • • • • • • • • • •		
· · · · · · · · · · · · · · · · · · ·	Bank Height and Slope		Associated Habitat	Size Class	
Left Bank* [] [] [] [] []	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)	Right Bank* [] [] [] []	Riparian Vegetation [] yes [] no If yes, list: Associated Wetland [] yes [] no If yes, list ID: Aquatic Organisms [] yes [] no If yes, list: Riparian/Terrestrial Organisms [] yes [] no If yes, list: T&E Species [] yes [] no If yes, list:	[] Major >100 ft [] Intermediate >10 ft, <100ft Minor <10 ft	
			- 1 you, not		
[] [] []	0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)	[] [] []	Stream Photos Collected ID, Directi		
Provide Detail	of any Evidence of Erosion:		that 1)	1. 20-1	
NO 4	rasion observe	phone of the same	166 4/21201	V-43 /	
			Photo 127 Dura Stom	East	



Stream Field ID:	SI-AZOD(EPH)
Data Point ID:	DP- 210 Date: 5/20/1/2
Project Name:	Ball Hill Wind Project
Evaluator(s):	J. ZSIAOG & S. BUCKENMEVER
County: Chautau	
Stream Name:	NIA
State Classified:	Yes No Not Applicable
If Yes, Cla	ssification:
Lat: 42,41769	b Long: -79,136144
	Hydrologic Characteristics
Flow Regime:	Perennial Intermittent Ephermeral
Surface Water:	Present Absent X
Perceptible Flow:	Present Absent ×
Water Depth at Tha	alweg: N/A Wetted Perimeter Width: N/A
Flow/Gradient Direct	
k	Geomorphologic Characteristics
Primary Substrat	e Class: Same Band Del ; Decondary Colle
	Width
	at DP Max
OH	WM a' a'
Top of B	
	Left Right
Bank Slope (
	Bank Stability Summary
Left B	Bank: Now & erroles
Right B	Bank: Daw & grooded
	Habitat Characteristics
Aquatic Vegetation	Present: Yes No
If Yes, Descril	
Aquatic Organisms	
If Yes, Descri	
Terrestrial Organis	
If Yes, Descri	



	Riparian	Characteristics
Riparian Vegetation	Description (0' to	o 150' from TOB):
Right: P. sen	Sulvamod ?	yalus spp. Jamerianos
Croolo	d stome	dantes
Left:	ugasa J.	conadenses, Croaled stemas
Associated Wetland If Yes, Describ		Yes No No
Associated Artificial If Yes, ID:	Drain Present:	Yes No No
	Indena F	Photos I make the work and the same
	Direction	Notes/Additional Description
Upstream	E	
Dowsnstream	NN	The same of the sa
Cross Channel	SE	
	Jurisdictional	Connectivity Notes:
og field	notes from	ato an intermitter!
	Supplemental	Notes & Comments:



Stream Field ID: 5T-A200(INT)			
Data Point ID: DP- 211 Date: 5/26/16			
Project Name: Ball Hill Wind Project			
Evaluator(s): J.75TROS & S. BUCKENMEYER			
County: Chautauqua State: NY			
Stream Name: N/M			
State Classified: Yes No Not Applicable If Yes, Classification:			
Lat: 43, 417081 Long: -79,137333			
Hydrologic Characteristics			
Flow Regime: Perennial Intermittent Ephermeral			
Surface Water: Present Absent			
Perceptible Flow: Present Absent			
Water Depth at Thalweg: 31 Wetted Perimeter Width: 3			
Flow/Gradient Direction:			
Geomorphologic Characteristics			
Primary Substrate Class: 2 2nd Secondary; Cobble			
Width			
at DP Max			
OHWM 5' 10'			
Top of Bank 6' 30'			
Left Right			
Bank Slope (H:V) /: 4 /: 2			
Bank Stability Summary			
Left Bank: 2 level the			
Right Bank: Now E eroded			
Habitat Characteristics			
Aquatic Vegetation Present: Yes No In No In Strain Chamel	0		
Aquatic Organisms Observed: Yes No No If Yes, Describe:			
Terrestrial Organisms Observed: Yes No No			



	Riparian	Characteristics
Right:		o 150' from TOB): B. alleghamenas, a sacchar
Left:	ml	THERE I I SAV
Associated Wetland If Yes, Describ		Yes No No
Associated Artificial	Drain Present:	Yes No No
	meada P	Photos The Aug - The Award Sidkerson
	Direction	Notes/Additional Description
Upstream	NE	And the second s
Dowsnstream	SE	al Palacega strong
Cross Channel	E	R.tol Balling
	Jurisdictional	Connectivity Notes:
extends out	contain a contain a meral to main the	les or is hydrologically
	Supplemental	Notes & Comments:



Stream Field ID:	T-A202
Data Point ID: DP-	222 Date: 5/24/16
Project Name: Ball	Hill Wind Project
Evaluator(s):	me Z and Nicole Outch
County: Chautauqua	
Stream Name: N	A
State Classified: Yes	No Not Applicable
If Yes, Classifi	cation:
Lat: 42, 43000b	Long:79,135808
	Hydrologic Characteristics
Flow Regime: Pere	ennial Intermittent 😾 Ephermeral
Surface Water:	Present 🔀 Absent
Perceptible Flow:	Present X Absent
Water Depth at Thalwe	g: _2in Wetted Perimeter Width: _2[i
Flow/Gradient Direction	: West
G	eomorphologic Characteristics
Primary Substrate Cl	ass: Silt some cabbles
	Width
	at DP Max
OHWM	2.0 8in
Top of Bank	2.5ft 7ft
	Left Right
Bank Slope (H:V)	
	Bank Stability Summary
Left Bank	Mostly Stable by herbacear plants
_\$	one ension where it meandors
Right Bank	Very Stable
<u>-</u>	Habitat Characteristics
Aquatic Vegetation Pre	sent: Yes No 🗡
If Yes, Describe:	
Aquatic Organisms Obs If Yes, Describe:	served: Yes X No
Terrestrial Organisms (Observed: Yes No X



A substitute of the second	Riparian	Characteristics
Riparian Vegetation Right: 0-150	Description (0' to	o 150' from TOB): Reld Cover
Left: <u>0 -100</u> '	- herbroious	plants cap field
Associated Wetland If Yes, Describ	Present: De: _WL-AA	Yes 😾 No 🔙
Associated Artificial If Yes, ID:	Drain Present:	Yes No No
	i imaeda F	Photos Carreston Commence of the Commence of t
il, mili	Direction	Notes/Additional Description
Upstream	E	
Dowsnstream	ω	-15 marin marin 41
Cross Channel	N	Connectivity Notes:
Theon loca	Supplemental act	Notes & Comments:
modified in	thopast	
	- 411	PROFESIONS



Stream Field ID: 57	A 203
Data Point ID: DP-	243 Date: 5/26/16
Project Name: Ball H	Hill Wind Project
Evaluator(a):	- 0 Quas
County: Chautauqua	State: NY
Stream Name: N/	+
State Classified: Yes [If Yes, Classific	No Not Applicable ation:
Lat: 42,396578	Long: <u>-79, 151477</u>
La company de la	Hydrologic Characteristics
Flow Regime: Perer	nnial Intermittent X Ephermeral
Surface Water:	Present Absent
Perceptible Flow:	Present X Absent
Water Depth at Thalweg:	
Flow/Gradient Direction:	N
Ge	omorphologic Characteristics
Primary Substrate Clas	
	Width
	at DP Max
онум	4' 62'
Top of Bank	5' 7'
	Left Right
Bank Slope (H:V)	Left Right
Janux Grope (1117)	Bank Stability Summary
Left Bank:	
	- montant manual
Right Bank:	Incised channel - moderate stability
<u> </u>	Habitat Characteristics
Aquatic Vegetation Prese	ent: Yes No 🗡
Aquatic Organisms Obse If Yes, Describe:	erved: Yes No 🗡
Terrestrial Organisms Ob If Yes, Describe:	oserved: Yes No 🔀



	Riparian	Characteristics
Riparian Vegetation	Description (0' to	o 150' from TOB):
Right: WL -	A230 U	sland. P. bremulauntes
Par	anice!	
Left: P. per	sylvonica	, a saccharum, C graculle
Associated Wetland If Yes, Describ		Yes 😾 No 🔙
Associated Artificial	Drain Present:	Yes X No
	AD-2031	
	ingeli, i P	Photos
- 1111	Direction	Notes/Additional Description
Upstream	5	
Dowsnstream	N	d A move Marches
Cross Channel	W	LtoR
No. well-state to the second	Jurisdictional	Connectivity Notes:
Oxtendo are	tride of	de lineation area
	0	LWK.
		and a state of the
		Non-
		1000
	Sunnlemental	Notes & Comments:
9-1-0		
and and and	0 W-	Tion area, Incised channel
Sentid sedio	OF OLON	and the same
securch onec		
THE WAY WAY		and a second second second second second second second second second second second second second second second
		Harris I and I also a little and the second



Stream Field ID: 51	- A 204 .	
Data Point ID: DP-		:5/06/16
	lill Wind Project	
	me Bus	
County: Chautauqua	0	State: NY
Stream Name: N/A		
State Classified: Yes [Applicable
If Yes, Classifica		The state of the s
Lat: 42,393235	Long:	-79.141472
d.,	Hydrologic Charact	eristics
Flow Regime: Perer	nnial 🔀 Intermit	tent Ephermeral
Surface Water:	Present	Absent
Perceptible Flow:	Present	Absent
Water Depth at Thalweg:	7 " W	etted Perimeter Width: 8
Flow/Gradient Direction:	SÉ	
Ge	omorphologic Char	acteristics
Primary Substrate Clas		
	Width	
	at DP Max	
онум	8 9	
Top of Bank	9 10	r.
	Left Right	Ī
Bank Slope (H:V)	1:1 (:)	•
	Bank Stability Sur	mmarv
Left Bank:	Incised cha	mel - moderate stability
Right Bank:	Irrised sha	mel - moderate stability
	Habitat Characte	ristics
Aquatic Vegetation Presented If Yes, Describe:	ent: Yes	No 🗶
Aquatic Organisms Obse If Yes, Describe:	erved: Yes	No Dentified) Quater shippers, Stoneflies
Terrestrial Organisms O	bserved: Yes	No X maybles



	Riparian	Characteristics
Riparian Vegetation	Description (0' to	o 150' from TOB):
Right: WL-	A227, J	consdesses
Left: Pastu	no with m	imble weed, D glomerator,
Associated Wetland If Yes, Describ		Yes No No
Associated Artificial If Yes, ID:	Drain Present:	Yes No 🔀
	LineauA. F	Photos World and Use 1
11100	Direction	Notes/Additional Description
Upstream	NW	The Fill Motos News
Dowsnstream	SE	
Cross Channel	SW	L-R
	Jurisdictional	Connectivity Notes:
2558-JW	DT-ABOI	. Oxtends autside of search
onea		F DAW SID
		Just to the
		Igag Isa
		And the state of t
William The Committee of the		
	Supplemental	Notes & Comments:
G -00 .00	110 0	V
faw smuos	ty.	uparo Oncised channel
	-1	



Stream Field ID:	T-A304
Data Point ID: DF	P- 261 Date: 5/31/16
	Hill Wind Project
Evaluator(s):	ind Lonos
County: Chautauqua	State: NY
Stream Name: N	/A
State Classified: Yes	
If Yes, Classi	fication: Thous into state slassified (
Lat: 42.388510	Long: -79, 145813
	Hydrologic Characteristics
Flow Regime: Per	rennial Intermittent Figure Ephermeral
Surface Water:	Present / Absent
Perceptible Flow:	Present Absent
Water Depth at Thalwe	A 11
Flow/Gradient Directio	
	Geomorphologic Characteristics
Primary Substrate C	
	Width
	at DP Max
OHWN	
Top of Ban	k 3.5' 5.5'
	Left Right
Bank Slope (H:\	
	Bank Stability Summary
Left Ban	k: Stable
Right Ban	k: Stubb
	Habitat Characteristics
Aquatic Vegetation Pro- If Yes, Describe:	esent: Yes No X
Aquatic Organisms Ob If Yes, Describe:	
Terrestrial Organisms If Yes, Describe:	



	Riparian (Characteristics
Riparian Vegetation Right: <u>J. gv</u>	Description (0' to	
Left: <u>J. Co.</u>	nadensis	forest
Associated Wetland If Yes, Describe		Yes No 🗡
Associated Artificial If Yes, ID:	Drain Present:	Yes No 🔀
	P	Photos Massacra de la managara de la companya de la
	Direction	Notes/Additional Description
Upstream	5	
Dowsnstream	NE	Last Topics
Cross Channel	W	R to 1
I laws in	to ST-AS	509, a Ny state listed
It john grad		Notes & Comments:
cif de l'inevilia	checa	



Stream Field ID: ST- A265	
Data Point ID: DP- 272	Date: 61116
Project Name: Ball Hill Wind Project	<u> </u>
Evaluator(s): Ocime Dougo	
County: Chautaugua	State: NY
Stream Name:	
State Classified: Yes No If Yes, Classification:	Not Applicable
Lat: 42, 451975	ong: <u>-79,111869</u>
Hydrologic Cha	aracteristics
Flow Regime: Perennial / Int	ermittent Ephermeral
Surface Water: Present	Absent
Perceptible Flow: Present	Absent
Water Depth at Thalweg:	Wetted Perimeter Width:
Flow/Gradient Direction:	
Geomorphologic (Characteristics
Primary Substrate Class: 2000/	Gravel Decondary Coloble & boule
Width	
at DP M	1ax
OHWM 9' /	5'
	o'
Left R	ight
	1
Bank Stability	y Summary
Left Bank: <u>hoderate</u>	ly stable
Right Bank: Moderall	ley stable
right bank	of shared
Habitat Char	acteristics
Aquatic Vegetation Present: Y If Yes, Describe:	es Y No (scattered)
Aquatic Organisms Observed: Y	es X No Despers dans elflies
Terrestrial Organisms Observed: Y	es No No



	Riparian	Characteristics
	Lyons up	land forest J. conaders
		pullis (Digithi hot)
Left: Son		
Associated Wetland If Yes, Describ		Yes X No 34
Associated Artificial If Yes, ID:		Yes No 🔀
	The same of F	Photos
	Direction	Notes/Additional Description
Upstream	W	
Dowsnstream	E	
Cross Channel	S	LtoR
17 inota cun	SION SE CH	elineation area
	Supplemental	Notes & Comments:
7 91	ween 1:3	to 1:1. Sunucrity is a 3.5



Stream Field ID:	51-A306
Data Point ID:	DP- 275 Date: 6/1/16
Project Name:	Ball Hill Wind Project
Evaluator(s):	Jaine 2000
County: Chautau	qua State: NY
Stream Name:	UNT
State Classified:	Yes No No Not Applicable
If Yes, Cla	ssification: Connects to a A, A designated st
Lat: 42. 45233	Long: - 79.1140.5.3
	Hydrologic Characteristics
Flow Regime:	Perennial Intermittent Ephermeral
Surface Water:	
	Present Absent
Perceptible Flow:	Present Absent
Water Depth at Tha	
Flow/Gradient Direct	otion:
	Geomorphologic Characteristics
Primary Substrat	e Class: Clay transition to sond & grave
	Width
	at DP Max
OH	WM
Top of B	
	Left Right
Bank Slope (
Darin Giopo (Bank Stability Summary
Left B	
Leit	allk
Dight D	Bank: Stable
Right B	Mark
	Habitat Characteristics
Aquatic Vegetation	Present: Yes No
If Yes, Descri	The state of the s
Aquatic Organisms	
If Yes, Descri	
Terrestrial Organisi If Yes, Descri	



	Riparian (Characteristics
Riparian Vegetation Right: Open	2 4 1 2	o 150' from TOB):
Left: Open	field to	sition to forested
Associated Wetland If Yes, Descri		Yes No X outside of searchare
Associated Artificia	l Drain Present:	Yes No No
	P	hotos
	Direction	Notes/Additional Description
Upstream	N	
Dowsnstream	5	Target and the same
Cross Channel	E	
	Jurisdictional	Connectivity Notes:
and a wetle	uth a stat	e of de lenes tion area
Stream opporting field him	. /1	Notes & Comments:



Stream Field ID:	ST - A 20	7					
Data Point ID:	DP-278	Date	: 61/16				
Project Name:	Ball Hill Wind Pro	oject					
Evaluator(s):							
County: Chautau			State: NY				
Stream Name:	unnamed -	trib of					
State Classified: If Yes, Cla	Yes X No assification:		Applicable				
Lat: 42.4526			-79.115992				
	Hydrologi	c Charact	teristics				
Flow Regime:	Perennial 🔀	Intermit	tent Ephermeral				
Surface Water:	Present	X	Absent				
Perceptible Flow:	Present	X	Absent				
Water Depth at The		n We	etted Perimeter Width: 3'				
Flow/Gradient Dire	ction:						
	Geomorpholo	ogic Char	acteristics				
Primary Substra	te Class:	Silt/SF	ONF				
	Wic	dth					
	at DP	Max					
OH	IWM 3'	5'					
Top of E	Bank 3/	8'					
	Left	Right					
Bank Slope	The state of the s	2:1					
8		ability Sur	mmary				
Left E			etated, Som undercutting				
		0)				
Right E	Bank: Stable,	vegetotal	to bank, undercutting at				
	meandering 16	Doints					
	Habitat	Character	ristics				
Aquatic Vegetation If Yes, Descri		Yes	No ∑				
Aquatic Organisms If Yes, Descr		Yes alstiders	以 No □				
Terrestrial Organis	~	Yes	X No				



If Yes, Describe: WL-A236	Right: O-20 fr PEM/PSS Westerd 20-150 ft Uplon Vegetated field Left: O-30 fr PEM/PSS westerd 30-50 ft Uplon bordern Crop field Sociated Wetland Present: Yes X No If Yes, Describe: WL A2360 Sesociated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Rock Jurisdictional Connectivity Notes:
Left: 0-30 ft PEM/PSS wetlond 30-50 ft Uplond bordeng Crop Reld S0-150 Cuts Associated Wetland Present: Yes X No If Yes, Describe: WL A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Roc Jurisdictional Connectivity Notes:	Left: 0-30 ft PEM PSS weetland 30-50 ft Upland bardenn Crop Reld S0-150-1 Associated Wetland Present: Yes X No If Yes, Describe: WL-A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Root Jurisdictional Connectivity Notes:
Left: 0-30 ft PEM PSS western 30-50 ft Uplord bordern Crop Reld SO 150 Cum Associated Wetland Present: Yes X No If Yes, Describe: WL A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel S Jurisdictional Connectivity Notes: Atends outside of deliveration Cross.	Left: 0-30 ft PEM PSS weetland 30-50 ft Upland bardenn Crop Reld SO-150. Associated Wetland Present: Yes X No If Yes, Describe: WL A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Roc Jurisdictional Connectivity Notes:
Associated Wetland Present: Yes X No If Yes, Describe: WL A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Roy Jurisdictional Connectivity Notes:	Associated Wetland Present: Yes X No If Yes, Describe: WL A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Rock Jurisdictional Connectivity Notes:
Associated Wetland Present: Yes X No If Yes, Describe: WL A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description	Associated Wetland Present: Yes X No If Yes, Describe: WL A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Root Jurisdictional Connectivity Notes:
If Yes, Describe: WL A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Roce Jurisdictional Connectivity Notes:	If Yes, Describe: WL A236 Associated Artificial Drain Present: Yes X No If Yes, ID: A0-205 Photos Direction Notes/Additional Description
Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel S S Jurisdictional Connectivity Notes:	Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Roc Jurisdictional Connectivity Notes:
Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel S S Jurisdictional Connectivity Notes: Stands autside of deliveration Green	Photos Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Root Jurisdictional Connectivity Notes: A tends outside of delineation Grean.
Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel S Rocc Jurisdictional Connectivity Notes: A tends outside of delineation ones.	Direction Notes/Additional Description Upstream S Dowsnstream N Cross Channel E Rot Jurisdictional Connectivity Notes: Attends outside of delineation ones
Upstream S Dowsnstream N Cross Channel E Roce Jurisdictional Connectivity Notes: A tends outside of delineation ones	Upstream S Dowsnstream N Cross Channel E Roce Jurisdictional Connectivity Notes: Atends autside of delineation ones.
Dowsnstream N Cross Channel & Rive Jurisdictional Connectivity Notes: Intends outside of delineation ones	Dowsnstream Cross Channel S Roc Jurisdictional Connectivity Notes: Intends outside of delineation ones
Jurisdictional Connectivity Notes:	Jurisdictional Connectivity Notes:
Intends autside of delineation ones.	Intends autside of delineation ones.
Supplemental Notes & Comments:	Supplemental Notes & Comments:
Supplemental Notes & Comments:	Supplemental Notes & Comments:
Supplemental Notes & Comments:	Supplemental Notes & Comments:
Supplemental Notes & Comments:	Supplemental Notes & Comments:
Supplemental Notes & Comments:	Supplemental Notes & Comments:



Stream Field ID:	T-A209		
Data Point ID: DP	- 285	Date	: 6/2/16
Project Name: Ball	Hill Wind Pro	oject	
-	emo Derso	10	
County: Chautauqua	0		State: NY
Stream Name: U			
State Classified: Yes		✓ Not	t Applicable
If Yes, Classif			to a c 1 state classifie
Lat:		Long:	
	Hydrologic	Charact	teristics
Flow Regime: Per	ennial	Intermit	tent Ephermeral 🗡
Surface Water:	Present	, , , , , , , , , , , , , , , , , , , ,	Absent ×
Perceptible Flow:	Present		Absent ×
Water Depth at Thalwe		W	etted Perimeter Width: NA
Flow/Gradient Direction		7	ottod i omnotor viidan <u>i v ii i</u>
		ala Char	a of a vinting
	eomorpholo		
Primary Substrate C			condary cobble
	Wid		
	at DP	Max	
OHWM		25"	
Top of Bank	3011	40"	
	Left	Right	
Bank Slope (H:V			
	Bank Sta	bility Sur	mmary
Left Bank		0	
Right Bank	: Stobl	0	
. again Dann			
	Habitat (Characte	ristics
Aquatic Vegetation Pre	sent:	Yes	No 😾
If Yes, Describe:			
Aquatic Organisms Ob	served:	Yes	□ No ∠
If Yes, Describe:			
Terrestrial Organisms (Observed:	Yes	No 🗡



	Riparian	Characteristics
Riparian Vegetation Right: <u>New</u>		to 150' from TOB):
Left: Deci	duans for	nest (I. americano, a saccha
Associated Wetland If Yes, Describ		Yes No X
Associated Artificial	Drain Present:	Yes No 🔀
	Inosca 1	Photos Manager Complete Comple
Upstream	Direction	Notes/Additional Description
Dowsnstream	NW	hiti alpakataserasei
Cross Channel	S	R.to L
	Jurisdictional	Connectivity Notes:
connects in	e 51-Ad	e listed shear
9-1-1-1	Supplemental	Notes & Comments:
nated grad	Ment of hom	enal slog with disturbione
	3 715	Maries Cilie
		and the state of t
-		



Stream Field ID: 37	1-A308
Data Point ID: DP-	2-286 Date: 6/2/16
Project Name: Ball	Hill Wind Project
Evaluator(s):	ine Suras
County: Chautauqua	State: NY
Stream Name: U.N.	VT.
State Classified: Yes	No Not Applicable
If Yes, Classifi	fication: I lows into a state classified (C,C)
Lat: 42.467262	Long: -79,148979
	Hydrologic Characteristics
Flow Regime: Pere	ennial Intermittent Ephermeral
Surface Water:	Present Absent <
Perceptible Flow:	Present Absent X
Water Depth at Thalwe	eg: NIA Wetted Perimeter Width: NIA
Flow/Gradient Direction	
G	Geomorphologic Characteristics
Primary Substrate Cla	1
	Width
	at DP Max
OHWM	
Top of Bank	
Bank Slope (H:V)	
Barilt Glopo (11.1)	
Loft Ponk	Bank Stability Summary
Leit Dank	« Stollo
	- F A A
Right Bank	« Stable
	Habitat Characteristics
Aquatic Vegetation Pres	
If Yes, Describe:	
Aquatic Organisms Obs	served: Yes No X
If Yes, Describe:	
Terrestrial Organisms (Observed: Yes X No



	Riparian	Characteristics
Riparian Vegetation Right:		to 150' from TOB):
Left: Decid	luans fo	conest
Associated Wetland If Yes, Describe		Yes No 🗵
Associated Artificial If Yes, ID:	Drain Present:	Yes No No
	JuneadA T	Photos magagine sand additioning
- Allera I	Direction	Notes/Additional Description
Upstream	IS	TO SELECT THE SHOOT
Dowsnstream	N	22 de Sur Sur de 20
Cross Channel	W	R to L
	Jurisdictiona	Connectivity Notes:
stream (C, C)	th SI-A	211 (INT), a slote classifie
Strem is a	Supplemental Singus end Stream	I Notes & Comments:



Stream Field ID: 51 - A 3 1 0	
Data Point ID: DP- 387 Date: 6/2-1/6	
Project Name: Ball Hill Wind Project	
Evaluator(s): Jame Dings	
County: Chautauqua State: NY	
Stream Name: Unimaun	
State Classified: Yes V No Not Applicable	
If Yes, Classification: ,	
Lat: 40,461741 Long: -79,149329	
Hydrologic Characteristics	
Flow Regime: Perennial Intermittent > Ephermeral	
Surface Water: Present / Absent	
Perceptible Flow: Present / Absent	
Water Depth at Thalweg: Wetted Perimeter Width: 3	
Flow/Gradient Direction:	
Geomorphologic Characteristics	
Primary Substrate Class: Berhard Brand Grand Coops	00
Width	
at DP Max	
OHWM 8 15	
Top of Bank 20.5' 25'	
Bank Slope (H:V)	
Bank Stability Summary	
Left Bank: Portions eroded	
Right Bank: <u>Portions one raw and enoded</u>	
Habitat Characteristics	
Aquatic Vegetation Present: Yes No S	
Aquatic Organisms Observed: Yes Y No I If Yes, Describe: Quater Super Megalostera	
Terrestrial Organisms Observed: Yes No No	



	Riparian	Characteristics
Riparian Vegetation Right:	Description (0' to	
		<u> </u>
Left: Dece	duans fo	crest
Associated Wetland If Yes, Describ	Present:	Yes X No 337
Associated Artificial If Yes, ID:	Drain Present:	Yes No 🗡
	P	Photos Walledon Work of the Photos
	Direction	Notes/Additional Description
Upstream	E	
Dowsnstream	W	
Cross Channel	5	p to L
	Jurisdictional	Connectivity Notes:
Ilaws auto	side of del	In eating area
	0	
	Cumplemental	Notes 9 Comments
0 - 10	71	Notes & Comments:
. Uncised who	mel, ra	ur c eroded bonks



Stream Field ID: ST-A2/1
Data Point ID: DP- 288 Date: 6/3/16
Project Name: Ball Hill Wind Project
Evaluator(s): Jame Duras
County: Chautauqua State: NY
Stream Name: UNT
State Classified: Yes No No Not Applicable
If Yes, Classification:
Lat: 42,467250 Long: -79,149374
Hydrologic Characteristics
Flow Regime: Perennial Intermittent Ephermeral
Surface Water: Present Absent
Perceptible Flow: Present Absent
Water Depth at Thalweg: Wetted Perimeter Width:
Flow/Gradient Direction:
Geomorphologic Characteristics
Primary Substrate Class: Whave I Clay But Berndon Cobbl
Width
at DP Max
OHWM 2.5' 2.5'
Top of Bank 5 5
Left Right
Bank Slope (H:V)
Bank Stability Summary
Left Bank: moderately stable
Right Bank: moderately stable
Habitat Characteristics
Aquatic Vegetation Present: Yes No
If Yes, Describe:
Aquatic Organisms Observed: Yes No 🗡
Terrestrial Organisms Observed: Yes No No If Yes, Describe:



	Riparian	Characteristics
Riparian Vegetation Right:		to 150' from TOB):
Left: Deric	Luous fo	crest
Associated Wetland If Yes, Describe		Yes No 🗡
Associated Artificial If Yes, ID:	Drain Present: A A - ユの 9	Yes No
1	Trially .	Photos Hasana water and the
10.74	Direction	Notes/Additional Description
Upstream	5	
Dowsnstream	N	
Cross Channel	W	Rto L
	Jurisdictional	Connectivity Notes:
(Connects to	o ST-AS	170, a state designaled
gdigh gradu	1 1	Notes & Comments:
disturbonce	e nortoid	
		• • • • • • • • • • • • • • • • • • • •



Stream Field ID: ST-ADID
Data Point ID: DP- 293 Date: 613/16
Project Name: Ball Hill Wind Project
Evaluator(s): Jame Sources
County: Chautauqua State: NY
Stream Name: LANT
State Classified: Yes No No Not Applicable
If Yes, Classification:
Lat: 42.469657 Long: -79.149371
Hydrologic Characteristics
Flow Regime: Perennial Intermittent Ephermeral
Surface Water: Present Absent
Perceptible Flow: Present Absent
Water Depth at Thalweg: Wetted Perimeter Width:
Flow/Gradient Direction:
Geomorphologic Characteristics
Primary Substrate Class: 2 and / March / Clay 2 econdary outle
Width
at DP Max
OHWM 3.51 3.5'
Top of Bank 6 6
Left Right
Bank Slope (H:V)
Bank Stability Summary
Left Bank: Delatively stable
Right Bank: Delatively stable
U-bit-4 Ob
Habitat Characteristics
Aquatic Vegetation Present: Yes No V
Aquatic Organisms Observed: Yes No No No If Yes, Describe:
Terrestrial Organisms Observed: Yes No Mo



	Riparian (Characteristics	
Riparian Vegetation		150' from TOB):	
Right: Dec	duans fe	nest	
Left: Dec	iduans be	nest	
Associated Wetland If Yes, Describ		Yes X No 38 - mantains a hydrologic co	Jun
Associated Artificia	Drain Present:	Yes 🗡 No	
If Yes, ID:	116-0A		
The second	MINISTER P	hotos	
	Direction	Notes/Additional Description	
Upstream	E		
Dowsnstream	W	E. Herringer	
Cross Channel	5	R.to L	
	Jurisdictional	Connectivity Notes:	
Ilams int	o a state	designated (C) stream	
oritside og	PSL. Str	eon was promis al.	
nepped on	5T-A210	within another partion	
(de la la la la la la la la la la la la la	Supplemental	Notes & Comments:	
2 them son	mnences à	t AD-211 and has formed	
from ML-As	338 dram	age. Stream exhibits.	1
headout an	d leaf little	idisturbanco, Aligh gradient	1
Madurile,	Theen X	treon width ranges. from	
2 to 6			
	×		



Stream Field ID: 51-A213
Data Point ID: DP- 294 Date: 6/3/16
Project Name: Ball Hill Wind Project
Evaluator(s):
County: Chautauqua State: NY
Stream Name: LINT
State Classified: Yes No Not Applicable If Yes, Classification:
Lat: 42, 469299 Long: -79, 149667
Hydrologic Characteristics
Flow Regime: Perennial Intermittent Ephermeral
Surface Water: Present Absent
Perceptible Flow: Present Absent >
Water Depth at Thalweg: word Some Wetted Perimeter Width: Most channel
Flow/Gradient Direction:
Geomorphologic Characteristics
Primary Substrate Class: 2 and 1 Sharel / Clay / Leap litter desturban
Width
at DP Max
OHWM 1' 3'
Top of Bank 3 4 4
Left Right
Bank Slope (H:V)
Bank Stability Summary
Left Bank: Stable
Right Bank: Stable
Habitat Characteristics
Aquatic Vegetation Present: Yes No
If Yes, Describe:
Aquatic Organisms Observed: Yes No
Terrestrial Organisms Observed: Yes No I



	Riparian (Characteristics
Riparian Vegetation Right:		
Left: Dew	duans fo	nest
Associated Wetland If Yes, Describ		Yes No X
Associated Artificial If Yes, ID:	Drain Present:	Yes No 🔀
	P P	Photos Mazgari Andria Majori Rejulige ma
18.00	Direction	Notes/Additional Description
Upstream	E	
Dowsnstream	W.	Administration of the second
Cross Channel	5	RtoL
	Jurisdictional	Connectivity Notes:
Connecta to		ignated (C, C) atream
2 tream ox	Supplemental Advisor As	Notes & Comments:
	process of	

STREAM FIELD ID: A500



Project Name: Ball I	Hill Wind Project		-	
Stream Name:		Date: 10 26/15		
County: Chautauqu	a		State: New York	
Evaluator(s): B	V.RTS, M. Boberg		Data Point ID: DP-507-	Constitution of the Consti
	Stream Characteristics		Bottom Characteristics	
Perceptible Flow [X] yes [] no Flow Regime: [X] Perennial [] Intermittent [] Ephemeral Stream Flow Direction		Substrate Type: Probed Stream Depth (if water present): Substrate Type: Probed Stream Depth (if water present): Substrate Type: Substrate Type: Probed Stream Depth (if water present): Substrate Type: Su		
	Bank Height and Slope		Associated Habitat	Size Class
	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +) 6' + High	Right Bank*	Riparian Vegetation[X] yes [] no If yes, list: Aquatic Vegetation [] yes [X] no If yes, list: Associated Wetland [X] yes [] no If yes, list ID: Aquatic Organisms [X] yes [] no If yes, list: FISH (+ 20 14) Riparian/Terrestrial Organisms [] yes [X] no If yes, list: T&E Species [] yes [X] no If yes, list:	[] Major > 100 ft [X] Intermediate > 10 ft, < 100 ft [] Minor < 10 ft
Left Bend of Stall Vent. CU	0-20% (0-11°) 21-50% (12-27°) 51-100% (38-45°) 100% (46°+) of any Evidence of Erosion: C: cs have alternated and erosion: A: evs.an is present instable	banks-	Stream Photos Collected ID, Direct 50Z US W 503 DS E 504 RTU N	tion, and Description:

STREAM FIELD ID: ST-A501



Stream Name: unnamed Tributary		Date: 10/20/2015		
County: Chautau			State: New York	
Evaluator(s): M	Boberg B. Virts		Data Point ID: DO-504	
	Stream Characteristics		Bottom Characteristics	100
Perceptible Flow [X] yes [] no Flow Regime: [] Perennial [X] Intermittent [] Ephemeral Stream Flow Direction		Substrate Type: Probed Stream Depth (if water present): [] Bedrock [x] 0 - 6" [] Cobble [] 7 - 12" [x] Gravel [] 13 - 24" [] Sand [] 25 - 36" [] Silt/Clay [] 37" + [] Other [] No Perceptible Depth		
	Bank Height and Slope		Associated Habitat	Size Class
Left Bank* [] [] [] []	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +) 6' + High	Right Bank* [] [] [] [] []	Riparian Vegetation [X] yes [X] no If yes, list: Associated Wetland [X] yes [X] no If yes, list ID: Aquatic Organisms [] yes [X] no If yes, list: Riparian/Terrestrial Organisms [] yes [X] no If yes, list: T&E Species [] yes [X] no If yes, list:	[] Major >100 ft [] Intermediate >10 ft, <100f Minor <10 ft
Verticle	0-20% (0-11°) 21-50% (12-27°) 51-100% (38-45°) 100% (46°+) f any Evidence of Erosion: banks with mina	[] [] [] []	Stream Photos Collected ID, Direction Photo 5010 US (N) Photo 607 05 (S) Photo 508 ptl (E)	on, and Description:

STREAM FIELD ID: _ST-A502



Stream Name: UNNamed Tributary		Date: 10/28/2015		
County: Chautauqua		State: New York		
Evaluator(s): M	BOBERG B. VIRTS		Data Point ID: DP=52.0	
	Stream Characteristics		Bottom Characteristics	
Perceptible Flow [X] yes [] no Flow Regime: [X] Perennial [] Intermittent [] Ephemeral Stream Flow Direction West Width (ft) (water's edge to water's edge)		Substrate Type: Probed Stream Depth (if water present): W 0 - 6"		
	Bank Height and Slope	36400-1	Associated Habitat	Size Class
	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +) 6' + High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +) any Evidence of Erosion: A evosion through	Right Bank* [] [] [] [] [] [] []	Riparian Vegetation[[]] yes [] no If yes, list: Aquatic Vegetation [] yes [[]] no If yes, list: Associated Wetland [] yes [[]] no If yes, list ID: Aquatic Organisms [] yes [[]] no If yes, list: Riparian/Terrestrial Organisms [] yes [[]] no If yes, list: T&E Species [] yes [[]] no If yes, list: Stream Photos Collected ID, Direction Sec	
reach.	- in ough		Photo 527 (RTZ) s	

STREAM FIELD ID: STREAM ASO3



Stream Name:		Date: 10/29/15	
County: Chautauqua		State: New York	
Evaluator(s): B. V. 275, M. Bob	era	Data Point ID: DP - 527	
Stream Characteristics		Rottom Chouset Living	
Perceptible Flow [X] yes [] no Flow Regime: [X] Perennial [] Intermittent [] Ephemeral Stream Flow Direction		Substrate Type: Probed Stream Depth (if water present):	
Bank Height and Slope		Associated Habitat	Sino Class
D-3' High	Right Bank* [] [] [] [] [] [] [] []	Riparian Vegetation [] yes [] no If yes, list: Facultative Aquatic Vegetation [] yes [] no If yes, list: Associated Wetland [] yes [] no If yes, list ID: Aquatic Organisms [] yes [] no If yes, list: Riparian/Terrestrial Organisms [] yes [] no If yes, list: T&E Species [] yes [] no If yes, list: Stream Photos Collected ID, Directic	Size Class [] Major > 100 ft [] Intermediate > 10 ft, < 100ft [] Minor < 10 ft
Chamel is stable with			ile L/N

STREAM FIELD ID: A 504



Project Name: Ball Hill Wind Project		r	
Stream Name: unnamed Tributary		Date: 10 29 15	
County: Chautauqua		State: New York	
Evaluator(s): B. V.275, 17. Bob	asey	Data Point ID: OP-525	
Stream Characteristics		Bottom Characteristics	
Perceptible Flow yes [] no Flow Regime: Perennial [] Intermittent [] Ephemeral Stream Flow Direction South Width (ft) (water's edge to water's edge) 15' Width (ft) (bank to bank) 20'		Substrate Type: Probed Stream Depth (if water present): [] Bedrock [] 0 - 6" [] Cobble [] 7 - 12" [] Gravel [] 13 - 24" [] Sand [] 25 - 36" [] Silt/Clay [] 37" + [] Other [] No Perceptible Depth	
Bank Height and Slope		Associated Habitat	Size Class
Left Bank* 0-3' High 0-20% (0-11°) 21-50% (12-27°) 11-51-100% + (38-45°) 100%+(46°+) 3-6' High 0-20% (0-11°) 21-50% (12-27°) 51-100% (38-45°) 100% (46°+) 6'+ High		Riparian Vegetation [] yes [] no If yes, list: Frank Tranke Aquatic Vegetation [] yes [] no If yes, list: Associated Wetland [] yes [] no If yes, list ID: WETLAND RENTAL AQUATIC Organisms [] yes [] no If yes, list: Riparian/Terrestrial Organisms [] yes [] no If yes, list: T&E Species [] yes [] no If yes, list:	[] Major >100 ft [M. Intermediate >10 ft, <100ft [] Minor <10 ft
[] 0-20% (0-11°) [] [] 21-50% (12-27°) [] [] 51-100% (38-45°) [] [] 100% (46°+) [] Provide Detail of any Evidence of Erosion: Y is ble erosion and bank underatting on outside meander bench of		Stream Photos Collected ID, Direct 545 US / W 546 DS/E 547 LTR/S)

STREAM FIELD ID: A505



Stream Name: Unramed Tr. Burney		Date: 10 76 15			
County: Chautauqua			State: New York		
Evaluator(s): B. Vizzs, M. Boberg			Data Point ID: DP-526		
Stream Characteristics			Bottom Characteristics		
Perceptible Flow [X] yes [] no Flow Regime: [X] Perennial [] Intermittent [] Ephemeral Stream Flow Direction			Substrate Type: Probed Stream Depth (if water present): Gravel 7 - 12" 13 - 24" 25 - 36" 37" + 1 Other No Perceptible Depth 1 N		
Bank Height and Slope			Associated Habitat	Size Class	
[] [] [] [] [] [] [] [] [] []	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +) 6' + High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)	[] [] [] [] [] [] []	Riparian Vegetation[X] yes [] no If yes, list: FACULTATION Aquatic Vegetation [] yes [A no If yes, list: Associated Wetland [X] yes [] no If yes, list ID: Wetland ASIN Aquatic Organisms [] yes [X] no If yes, list: Riparian/Terrestrial Organisms [] yes [X] no If yes, list: T&E Species [] yes [X] no If yes, list: Stream Photos Collected ID, Direction SH& US [C.	The second second	
Stable with little to no			549 DS/E 550 RTL/N		

STREAM FIELD ID: ASO6



Project Name: Ball Hill Wind Pro	ect		
Stream Name: Unnume	1 Taibutage	Date: 10 29 15	
County: Chautauqua	٥	State: New York	
Evaluator(s): B. Vi,12.75,	M. Boberg	Data Point ID: DP-527	
Stream Ch	aracteristics	Bottom Characteristics	
Perceptible Flow [] yes [] n Flow Regime: [] Perennial []] Stream Flow Direction North Width (ft) (water's edge to water's of the company of the com	Intermittent [] Ephemeral edge)	Substrate Type: Probed Stream Depth (if water present): A	
Bank Heigh	t and Slope	Associated Habitat	Size Class
Left Bank* 0-3'] [] 0-20% ([] 21-50% [] 100%+(3-6'] [] 0-20% ([] 21-50% [] 51-100% (46) [] 0-20% ([] 21-50% [] 51-100% (46) [] 100% (46)	(0-11°) [] (12-27°) [] % + (38-45°) [] 46° +) [] High 0-11°) [] (12-27°) [] % (38-45°) [] High 0-11°) [] (12-27°) [] (12-27°) [] (12-27°) [] (12-27°) []	Riparian Vegetation[X] yes [] no If yes, list: homock and Facultature beautiful and the list. Associated Wetland [X] yes [] no If yes, list: Associated Wetland [X] yes [] no If yes, list ID: LUTIVAND A515 Aquatic Organisms [] yes [X] no If yes, list: Riparian/Terrestrial Organisms [] yes [X] no If yes, list: T&E Species [] yes [X] no If yes, list: Stream Photos Collected ID, Direction 551 5 45	[] Major > 100 ft [] Intermediate > 10 ft, < 100ft Minor < 10 ft
Provide Detail of any Evidence of	cornel with	552 NIOS 553 WIRTL	

STREAM FIELD ID: A508



Stream Name: unrained Tr. butay			Date: 10/30/15	
County: Chautauqua			State: New York	
Evaluator(s): B. V. RTS, M. Boberg			Data Point ID: DD537	
Stream Characteristics			Bottom Characteristics	
Flow Regime: [V] Stream Flow Direct Width (ft) (water's	[外yes [] no Perennial [] Intermittent [] etion		Substrate Type: Probed Stream Depth (if water present): [] Bedrock [] 0-6" [] Cobble [X] 7-12" [] Gravel [] 13-24" [] Sand [] 25-36" [X] Silt/Clay [] 37" + [] Other [] No Perceptible Depth	
Bank Height and Slope			Associated Habitat	Size Class
[X]	0-3' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+) 3-6' High 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+) 6' + High 0 - 20% (0-11°)	Right Bank* [] [] [] []	Riparian Vegetation [] yes [] no If yes, list: Aquatic Vegetation [] yes [X] no If yes, list ID: Wetland [X] yes [] no If yes, list ID: Aquatic Organisms [] yes [X] no If yes, list: Riparian/Terrestrial Organisms [] yes [X] no If yes, list: T&E Species [] yes [X] no If yes, list:	[] Major > 100 ft [] Intermediate > 10 ft, < 100ft [] Minor < 10 ft
Provide Detail	21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+) of any Evidence of Erosion: Chanel ha litt	[] [] [] -1-e to	Stream Photos Collected ID, Direction 561 US / N 562 DS / S 563 RTL E	on, and Description: