

11.0 SOILS

Soil surveys were completed in 2014 within the footprint areas associated with the project. Normandeau Associates, Inc. conducted Class L Soil Surveys in 2014 for all turbine locations and access roads, and Class D Soil Surveys were performed for electrical collector lines. Class B Soil Surveys were also conducted within proposed laydown areas and the area proposed for the substation.

The Soil Survey Report for the Project is provided in Exhibit 11-1. Two substantial changes occurred since the 2014 Normandeau Report in Exhibit 11-1: The Applicant is now owned by Longroad Energy Partners LLC and construction of an Operations and Maintenance (O&M) building is not part of this project. The 2014 Soil Survey is presented in its entirety to preserve the integrity of the document. However, references in that report to First Wind and the O&M building are not relevant to the current application.

Results of the project soil surveys indicate that the soils are appropriate for the proposed construction activities provided proper planning and construction techniques are implemented. Prior to construction, a geotechnical investigation of new road segments and/or turbine pads will be performed. Although both spread footing and rock anchor foundations are anticipated for the turbines, the results of this investigation will determine the final turbine foundation design appropriate for each turbine location.

Weaver Wind Project

MDEP Site Location of Development/NRPA Combined Application

SECTION 11: SOILS

Exhibit 11-1

2014 Normandeau Associates, Inc. Soil Survey Report



Soil Survey Report

Weaver Wind Project Hancock County, Maine

Prepared For:
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December 10, 2014

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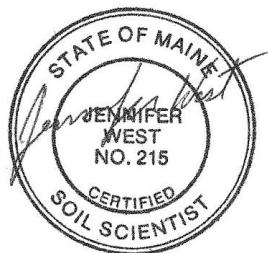


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The accompanying soil profile descriptions, soil survey map and this soil narrative report were done in accordance with the standards adopted by the Maine Association of Professional Soil Scientists, February 1995, as amended and prepared by Jennifer West C.S.S. #215.

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Figure 1. Site Location Map

Figure 2. Typical Forest Road Cross-Section

1.0 Introduction

Normandeau Associates, Inc. (Normandeau) was contracted by Weaver Wind LLC to review and map the soils within the proposed Weaver Wind Project. This report summarizes the review areas for proposed turbines, crane roads, access roads, transmission lines, and proposed substations. Wetland boundaries were delineated and located previously by Stantec Consulting Services, Inc. (Stantec).

Weaver Wind LLC (Applicant), a wholly owned subsidiary of First Wind Energy LLC, proposes to construct the Weaver Wind Project (project), a 23-turbine utility scale wind energy facility in Hancock County, Maine (Figure 1). Eight turbines will be constructed in the Town of Eastbrook, and 15 turbines will be located in the Town of Osborn. The project will be constructed on ridges and hills south of Route 9, including Hardwood Hill, Birch Hill, Een Ridge, Little Bull Hill, and other unnamed hills nearby. The turbines will generate up to 75.9 megawatts (MW) of electricity. Other project features will include: upgrades to existing roads and construction of new roads; up to five permanent and up to eight temporary meteorological (met) towers; and a series of 34.5 kilovolt (kV) electrical collector lines among the turbines and connecting to an interconnection facility adjacent to an existing substation in T16 MD. The majority of collector lines will be installed underground, though there will be portions of above ground collector lines as well. The project will use the Operations and Maintenance (O&M) building permitted as part of the Hancock Wind Project, which will be located in the Town of Aurora.

2.0 Purpose

The purpose of the soil survey is to provide a soil map of the areas proposed for development showing limitations to development, including hydric soil boundaries where observed, for inclusion in a Site Location of Development Permit application that is anticipated to be filed for the project. This survey is appropriate for use in planning site design for stormwater runoff and erosion control. Information is also provided regarding limitations to the potential for site development including roads, shallow excavations, and stormwater detention. It is important to note that soils considered appropriate (non-limiting) for one use may be considered limiting for another use. Soil map units described in this report have been influenced by the intended use of the soil map; consequently, the information provided may not be adequate for uses other than for those for which the soil map was originally developed.

This narrative and the series of accompanying soil survey maps have been completed in accordance with the *Guidelines for Maine Certified Soil Scientists for Soil Identification and Mapping* (MAPSS Guidelines; Maine Association of Professional Soil Scientists, 2009). No other warranty, expressed or implied, is made. This map product is within the technical standards of the National Cooperative Soil Survey. It is a special purpose product intended for the assessment of site limitations to development of the site. It was produced by a professional soil scientist and is not the product of the USDA Natural Resources Conservation Service (NRCS).

Data provided on soil series are based on interpretation of published information by the NRCS. Due to the complexity of the glaciated landscape in Maine, variations in subsurface conditions may exist that were not evident during the project review. Should significant variations in subsurface conditions become evident during site development, re-evaluation of site conditions may be warranted based on the present findings of this report.

3.0 Methodology

3.1 Soil Survey Criteria

The MAPSS Guidelines provide standards for soil survey classes based on the level of detail required by the Maine Department of Environmental Protection (MDEP). Table 1 provides a summary of the classes of soil surveys used for the present project and the minimum standards required.

Class B, High Intensity, soil surveys provide the most detail on soils, as buildings and related structures are proposed for the substations. Normandeau conducted a detailed survey of the proposed substation expansion area and laydown sites, which included the use of an excavator to dig test pits to a minimum of four feet. Observations were recorded and located with a handheld GPS. The Class B standard for map units states that dissimilar limiting individual inclusions must be less than one acre in size. Dissimilar limiting inclusions may total more than one acre per map unit delineation, in the aggregate, if not contiguous.

Table 1. Soil Survey Classes¹

Soil Survey Class	Feature	Map Scale/Base Map Contour Lines	Ground Control
B (High Intensity)	Substations, O&M facility, laydown areas	1 in.= 200 ft./5-foot	Located by compass, taping, or other methods of equal or greater accuracy.
L (Linear Projects)	Turbines, met towers, crane routes, access roads	1 in.= 100 ft./2-foot	Located with GPS with submeter accuracy.
D (Medium Intensity)	Electrical collector lines	1 in.=2,000 ft./ as determined by mapper	As determined by mapper.

¹ Maine Association of Professional Soil Scientists 2009.

Class L, Linear Project, soil survey standards are designed for projects where access is limited and soil observations may be made entirely with a hand shovel or auger. The standard states that map units will not contain dissimilar limiting individual inclusions larger than one-eighth of an acre. Dissimilar limiting inclusions may total more than one-eighth of an acre per map unit delineation, in the aggregate, if not contiguous. It is important to note that in instances where soils were classified to the series level, observations were generally shallow in nature, not exceeding 14 to 18 inches due to the coarse fragments present in many of the lower horizons of many of the soil series encountered. Normandeau recorded representative observations and made visual observations, which were located with a handheld GPS.

Class D, Medium Intensity, soil survey standards are intended to confirm existing NRCS county soil surveys. Normandeau downloaded the SSURGO soil data available from the NRCS Web Soil Survey (Soil Survey Staff, 2014a) for use in the field. Observations using a screw auger and spade were made within the project corridor and located with a GPS. The Class D standard indicates that map units may contain dissimilar limiting individual inclusions larger than five acres provided that each dissimilar limiting inclusion is smaller than the minimum map unit size utilized.

The soil map units used for this survey are either consociations, associations, or complexes, which are the established map units used in the State of Maine by the

NRCS (Soil Survey Staff, 2014b). Consociations are delineated areas dominated by a single soil taxon (series) and similar soils. At least 50% of the map unit is the named series with the remainder made up of similar soils. Complexes consist of two or more dissimilar soils occurring in a regular pattern that cannot be separated at the scale of mapping. Associations also consist of two or more dissimilar soils, which could be shown separately, but it is determined that there is no need to separate them for the soil survey as their use and management is similar.

3.2 Soil Map Unit Descriptions

Map unit symbols in this survey are project-specific. Slope phases are designated as a letter in the map unit symbol - A, B, C, D, E - refers to slope class (Table 2).

Table 2. Slope Class

Slope Symbol	Standard Range
A	0-3%
B	3-8%
C	8-15%
D	15-25%
E	25-45%

The soil interpretations provided are based on information in the soil series descriptions and technical information provided by the NRCS web soil survey (Soil Survey Staff, 2014b). All limitations and constraints invoked by the NRCS for such interpretations also apply to this soil survey.

The map units observed on site are described in Appendices A-1 and A-2, with representative soil logs in Appendix B. Figures showing the soil mapping of the project areas are provided in Appendices C-1, C-2, and C-3.

Map unit descriptions have been refined for the project for the Class B and L surveys (Appendix A-1). Appendix A-2 provides descriptions of NRCS map units within the Class D survey areas. These descriptions are within the NRCS range for each official Soil Series Description. In those cases where observations were limited due to refusal by stones, the NRCS Official Soil Series Description was used to supplement the description (Soil Survey Staff, 2014b). Each map unit description includes information on soil taxonomic classification, general description, morphology, physical characteristics, inclusions, use, and management. The taxonomic

classification follows *Keys to Soil Taxonomy* (Soil Survey Staff, 2014a). Information on soil morphology and physical characteristics was obtained from the NRCS (Soil Survey Staff, 2014b), soil hydrologic group (Soil Science Society of Northern New England, 2009), and erosion factor (Maine Department of Environmental Protection, 2003).

Disturbed soil map units were classified according to methodology developed by the New Hampshire NRCS (NRCS, 2011). The following excavated map units are mapped within the project area: gravel pits are mapped Udorthents, sand and gravelly (UG) and filled land is mapped as Udorthents (UD), smoothed, which includes roads and associated spoil piles. Spoil piles were observed along the forest roads and typically consisted of top soil, cobbles, and boulders. Spoil piles are likely the result of road construction, with larger piles measuring more than 10 feet tall and 10 feet wide. A cross-section of a typical forest road and associated features is depicted on Figure 2.

A summary of potential inclusions of similar and dissimilar soils is provided for each map unit. Each soil map unit, in accordance with the standards, will have a minimum of 75% of the named soil or similar soils within that unit. The named soil will be the most common of all similar soils. The total number of dissimilar soils in any one mapping unit should not exceed 25% of the map unit of which no more than 15% is limiting. Similar soils are alike in most properties and share similar limitations such as depth to water table or content of organic matter. Dissimilar soils do not share limits of some important diagnostic properties of the named soil and may have different use or management requirements for a particular land use. It is important to note that some dissimilar soils are more limiting in their use than the named soil. For instance, an inclusion of somewhat poorly drained soils can occur within a well- drained map unit.

The hydrologic group identifies soils having the same runoff potential under similar storm conditions. Soil properties influencing runoff are those that affect the minimum rate of infiltration for a bare soil after prolonged wetting and when not frozen. Infiltration rate is the rate at which water enters the soil at the surface and is controlled by surface conditions. Transmission rate is the rate at which water moves in the soil and is controlled by soil properties.

3.3 Hydric Soils

Hydric soils refer to those soil series the NRCS considers to be either poorly or very poorly drained. The NRCS (Soil Survey Staff, 2014b) defines hydric soil as "a soil that is saturated, flooded, or ponded long enough during the growing seasons to develop anaerobic conditions in the upper part." The hydric soils mapped in the survey are poorly drained Brayton, very stony; and very poorly drained Peacham, very stony. Inclusions of disturbed land, classified as Endoaquents, were mapped within wetlands. Endoaquents include road ditches and skidder tracks that meet the three parameters (hydric soils, hydrophytic vegetation, and hydrology) that define a wetland. Inclusions of these disturbed soils are small and were not separated out at the present level of mapping. Inclusions of very poorly drained Wonsqueak were noted within the Brayton. The hydric soil boundary corresponds with the wetland boundary in the areas observed for this project.

3.4 Field Procedures

Maine-Certified Soil Scientists conducted the field review for the Weaver Wind Project in October and November of 2014. Wetland boundaries were previously flagged and located in the field by others. Based on best professional judgment, the wetland boundaries also represent hydric soil boundaries. The project engineer provided the location of proposed turbines (Turbines 3 through 25), crane routes between turbines, access roads, transmission line corridors, laydown sites, O&M facility site, a potential substation site, and the expansion of the Bull Hill substation. The following buffers were developed to provide the limits for the soil survey: turbines and met towers, 600 feet; crane routes and access routes, 300 feet; and collector transmission lines, 200 feet.

Representative soil observation logs were completed for the project (Appendix B). Interpreted soil boundaries and backhoe test pits were located with a Trimble® GPS, which provides sub-meter accuracy. Soil map unit boundaries are approximate, as their placement is based on a combination of field observations and surveyed site topography. Confirmation of depth to bedrock was completed by an excavator at a limited number of the proposed turbine sites. Further geotechnical evaluation by others is proposed at the remaining sites.

4.0 Summary of Findings

4.1 Site Characteristics

The landscape is dominated by gently rolling hills and ridges, which have been influenced by glaciation as evidenced by the presence of erratic boulders (some as large as 15 feet in diameter) and outwash deposits observed in gravel pits. The northern end of Spectacle Pond Road runs on top of a steep-sided esker formed by glacially-sorted sand and gravels. Wetlands within the region commonly have very to extremely stony to bouldery surfaces as soils have been eroded by surface runoff. The mapped soils primarily formed in glacial till with a dense basal till below the surface. Glaciofluvial material was observed in the valleys and along eskers. Bedrock-controlled ridges were observed on an unnamed hill located west of Spectacle Pond (Turbines 3-5) and Een Ridge (Turbines 17 and 18).

The project area has been actively managed for timber with recent harvests scattered across the area. Access to the proposed turbine sites is provided by a combination of skidder tracks and well maintained gravel roads. Dense plantings of spruce were observed primarily in the area north of Spectacle Pond. Wetland prevalence has increased due to skidder tracks and harvesting activities that have compacted soil structure, decreasing the infiltration rate of the soils and forming rutted terrain. These conditions were noted near Turbines 21 through 25 and between Turbines 17 and 18.

4.2 Soil Mapping Results

A Class B Survey was completed for the proposed O&M facility, substation expansion, and laydown sites. A Class L survey was completed for the turbine strings, met towers, crane roads, and access roads. A Class D survey was completed for proposed transmission lines. Class B and L map units are summarized with their physical characteristics in Tables A-1 and A-2 (Appendix A-1). Class D map units were obtained from the NRCS mapping and are summarized in Table A-3 (Appendix A-2). Detailed information on each map unit is provided in Appendices A-1 and A-2. Soil observation logs are provided in Appendix B. Soil maps are provided in Appendix C-1 for the Class B survey; Appendix C-2 for the Class L survey; and Appendix C-3 for Class D.

4.2.1 Class B Soil Survey

A Class B survey was completed for the proposed substation expansion of the Bull Hill Substation, an Operations and Maintenance Facility (O&M) facility in Aurora, and various sites proposed for laydown areas within the project area. The soil survey maps are provided in Appendix C-1.

The proposed O&M site is located off Route 9 in Aurora, Maine. The site is approximately six acres in size and is primarily an open field. A Class B soil survey and subsurface wastewater disposal system design of the northern half of the site was completed by Dale Knapp, Maine Certified Soil Scientist #386 in December of 2012 for the Hancock Wind Project (Appendix D). Normandeau completed a survey of the southern half of the site in November of 2014. The soils within the proposed site include shallow to bedrock Lyman, 10-20 inches to bedrock and Tunbridge, 20-40 inches to bedrock. Dixfield soils were mapped along the southern end of the site. Made Land (UD) is mapped along a gravel road and gravel pad. Spoil piles consisting primarily of soil are mapped (US) in the southeastern portion of the site. A delineated wetland occurs along the western side of the site. In addition to depth to bedrock, limitations to development are the seasonal water table within Dixfield soils, which can range from 16 to 40 inches within a dense subsoil layer.

Three laydown areas are proposed within existing gravel pits. The soils are all disturbed and are mapped as Made Land, sand and gravel (Map Unit UG). These soils are a mix of sand and gravel. Topography for the large pit east of Turbines 17, 18, and 19 and the smaller pit to the south of this pit has not been updated to show additional excavation work. The large pit has had additional excavations at the northern edge of the pit, and a large pile of boulders and stones exists within the northern end of the pit (Map Unit UR). The southern end of the pit contains a mix of spoil piles containing soil, woody debris, and some metal (Map Unit US). The southern pit has had additional excavations along the east side. A spoil pile was located along the southern edge of the pit (US).

An extension to the Bull Hill substation is proposed in a wooded area to the west and north of the existing substation. Bedrock outcrops were mapped along the southern and western sides of the site. An exposed bedrock face adjacent to the substation borders the eastern boundary of the expansion area (Map Unit UC). Shallow soils, Lyman and Tunbridge, and deep, moderately drained Dixfield were mapped at this site.

4.2.2 Class L Soil Survey

The review within the Class L soil survey area was limited to hand auger borings, with the exception of test pits dug by a backhoe on Een Ridge (Turbines 17 and 18) and Birch Hill (Turbines 23 and 24, one test pit each). Slope phases within the soil map units have been refined based on topography compared to NRCS map units, which may include several slope phases. The following is a brief overview of limitations to development within the turbine strings. Soil mapping is provided in Appendix C-2.

Shallow to bedrock soils (Lyman, 10-20 inches and Tunbridge, 20-40 inches), as well as exposed bedrock, were observed within several areas. Exposed bedrock was mapped along the unnamed ridge west of Spectacle Pond in the vicinity of Turbines 3 and 4 and on Little Bull Hill (Turbine 8). A series of test pits were dug on Een Ridge (Turbines 17 and 18) where exposed bedrock was observed; in other areas, bedrock was encountered at depths between 14 and 53 inches. Bedrock was encountered at 54 inches at the only test pit dug in the vicinity of Turbine 24 on Birch Hill. Additional data will be collected by others during the geotechnical evaluation of the turbine pads to confirm depth to bedrock.

The soils within the project area were generally very stony at the surface as well as through the soil profile. Additionally, large boulders (erratics) were observed throughout the area. Spoil piles ranging from a mix of soil, gravel, and cobbles to only boulders were observed within the Made Land map unit (UD) along the existing gravel roads.

The location of access roads should take into consideration the potential for road cuts to intercept surface flow along hillsides. Additional drainage should be incorporated into the design of roads where the road traverses along the contour of a slope, particularly in Dixfield and Colonel soils, as well as the soil complexes and associations containing these soils.

Poorly drained Brayton and very poorly drained Peacham soils were mapped within the wetland delineation areas. In addition, areas bordering wetlands that have been mapped Colonel-Brayton-Dixfield Association will have up to 20% poorly drained Brayton and similar soils. All of these soils are hydric, and impacts should be avoided where practical.

4.2.3 Class D Soil Survey

A Class D soil survey was completed for proposed electrical collector lines (Appendix C-3). The NRCS soil mapping (Soil Survey Staff, 2014b) was confirmed along the proposed routes. No major changes were made to the mapping other than the identification and delineation of wetlands and streams by Stantec, which are shown in detail in Section 7.0. Slope phases are expected to be more variable than what is shown in the NRCS mapping. NRCS soil map unit descriptions are provided in Appendix A-2.

4.3 Summary

Normandeau completed a soil survey of the Weaver Wind Project site in October and November, 2014. The purpose of the survey was to map soils within the project area for use in stormwater design and to identify limits to development. Limitations to development within the site include wetlands, shallow to bedrock conditions, stony soil surfaces, and shallow to moderately shallow dense lodgment till. Proposed access routes should be designed to ensure sheet flow drainage across the route to minimize concentration of spring runoff.

5.0 References

Maine Association of Professional Soil Scientists. 2009. Guidelines for Maine Certified Soil Scientists for Soil Identification and Mapping. February 2004, Revised March 2009. Available at www.mapss.org.

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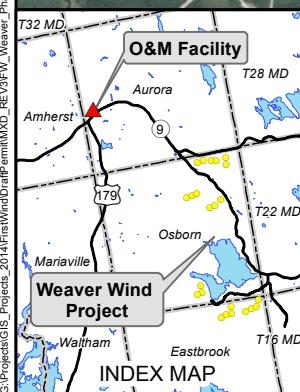
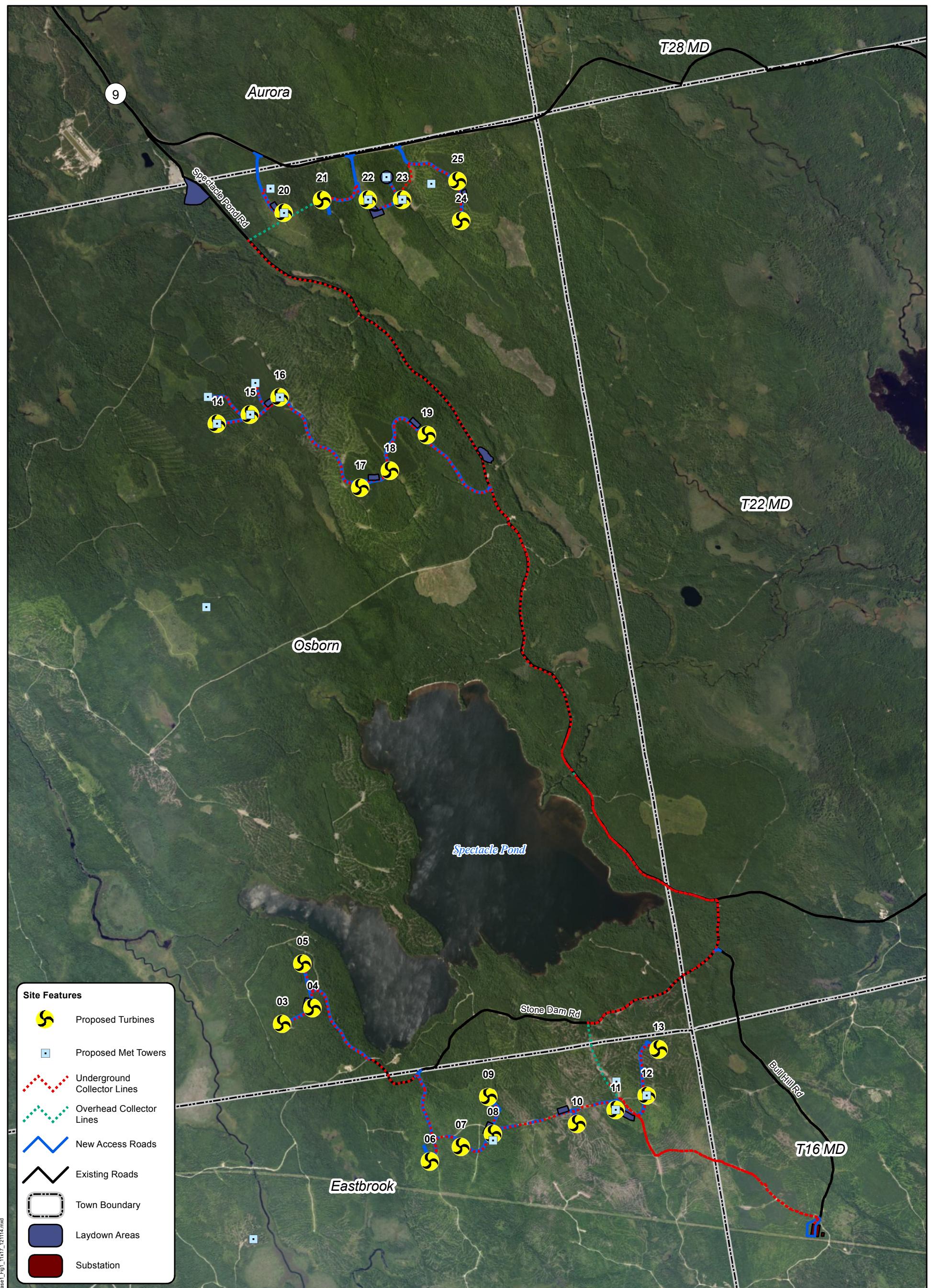
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Figures



*Note: Data provided by: James W. Sewall, Reed & Reed, Inc. NHD, ESRI & MEGIS
For further detail see civil & electrical design

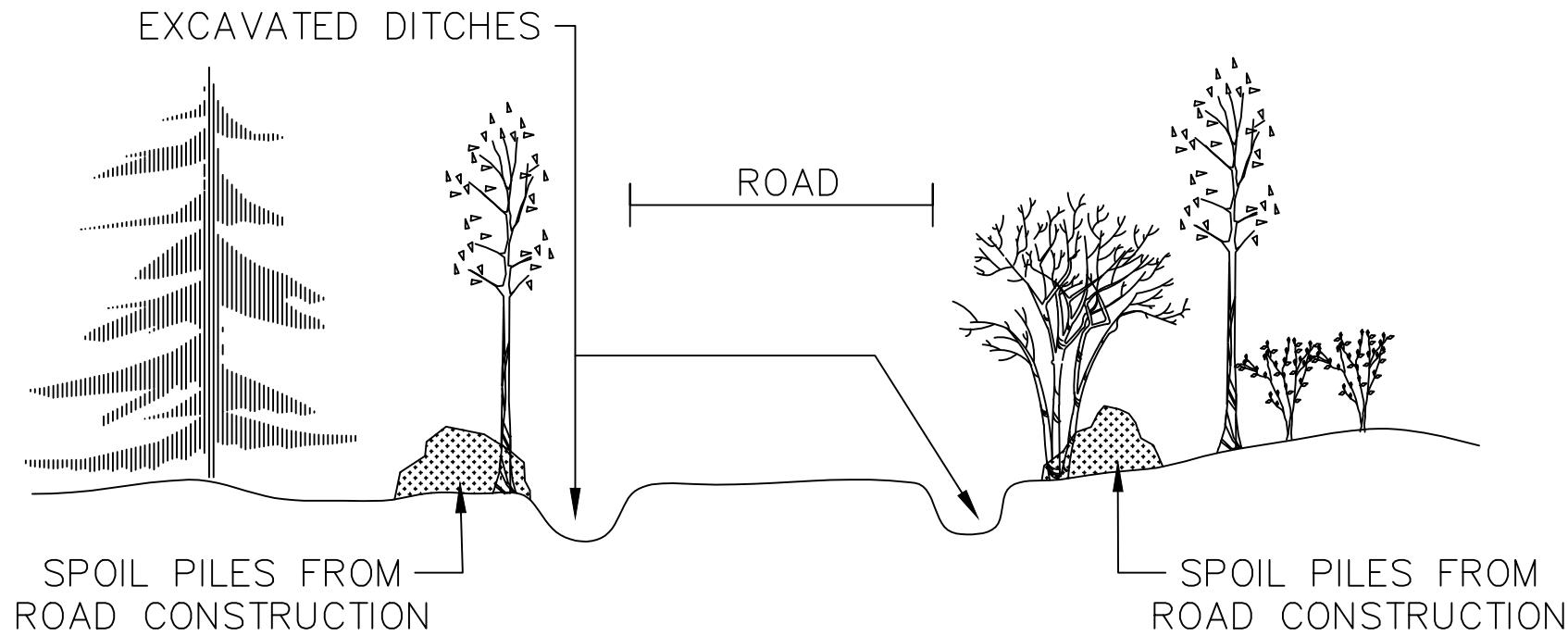
Figure 1

Site Location Map

Weaver Wind Project Hancock County, Maine



Normandeau Associates
8 Fundy Road
Falmouth, ME USA
04105



*NOTE: NOT TO SCALE

SHEET 1 OF 1

PREPARED FOR
FIRST WIND
129 MIDDLE STREET,
3RD FLOOR,
PORTLAND, ME
04101

DATE: 12.03.2014 DRAWN BY: A/V CHECKED: B

Figure 2. TYPICAL FORESTED ROAD
CROSS-SECTION

Hancock County, Maine

Appendix A-1

Map Unit Descriptions: Class B and L Soil Surveys

Table A-1. Class B Soil Survey- Summary of Soil Physical Characteristics

Map Symbol	Name	Slope ¹	Drainage Class ²	Hydrologic Group ³	Range of Depth to Bedrock ² (inches)
BGB	Brayton fine sandy loam, very stony	0-8	P	C	>60
BPA	Brayton-Peacham, extremely stony	0-3	P, VP	D	>60
CSB	Colton-Adams Complex	3-8	EX, SE	A	>60
CTC	Colton-Adams Complex	8-15	EX, SE	A	>60
CSD	Colton-Adams Complex	15-25	EX, SE	A	>60
CSE	Colton-Adams Complex	25-45	EX, SE	A	>60
DAB	Dixfield fine sandy loam	3-8	MW	C	>60
LYB	Lyman	3-8	SE	B	10-20
TNB	Tunbridge	3-8	W	B	20-40
UC	Made land- bedrock substratum	1-45	EX, SE	B/D	<40
UD	Made land - filled	1-15	MWD-SE	B/C	unknown
UG	Made land- gravel pit	1-45	EX, SE	A/B	>60
UR	Made land- rubble	1-45	EX, SE	Unknown	>60
US	Made land- spoils, debris	1-45	MWD-SE	Unknown	>60
V	Rock Outcrop	Unknown	Unknown	Unknown	Unknown

¹ Slope phases based on topography.

² Seasonal water table and depth to bedrock ranges are provided from the NRCS. On-site conditions are expected to fall within these ranges based on test pit observations. Drainage Classes: PD-poorly drained; SWP-somewhat poorly drained; MWD-moderately well drained; WD- well drained; SED-somewhat excessively drained; EX-excessively drained.

³ Soil Survey Staff (2014) and SSSNNE (2009).

⁴ Made land physical characteristics based on NRCS data.

Table A-2: Class L Soil Survey- Summary of Soil Physical Characteristics

Map Symbol	Name	Slope ¹	Drainage Class ²	Hydrologic Group ³	Range of Depth to Bedrock ² (inches)
AP	Made Land- Asphalt	1-45	Unknown	Unknown	Unknown
BGB	Brayton fine sandy loam, very stony	0-8	P	C	>60
BKB	Becket-Skerry Assoc., very stony	3-8	W, MW	C	>60
BKC	Becket-Skerry Assoc., very stony	8-15	W, MW	C	>60
BKD	Becket-Skerry Assoc., very stony	15-25	W, MW	C	>60
BPA	Brayton-Peacham Association	0-8	P,VP	C/D	>60
BSB	Brayton-Colonel Association, very stony	0-8	P, SP	C	>60
CLB	Colonel-Brayton-Dixfield, very stony	0-8	SP,PD	C	>60
CSB	Colton-Adams Complex	3-8	EX, SE	A	>60
CSD	Colton-Adams Complex	15-25	EX, SE	A	>60
CSE	Colton-Adams Complex	25-45	EX, SE	A	>60
DBA	Dixfield fine sandy loam, very stony	1-3	MW	C	>60
DBB	Dixfield fine sandy loam, very stony,	3-8	MW	C	>60
DNA	Dixfield -Colonel complex, very stony	1-3	MW,SP	C	>60
DNB	Dixfield -Colonel complex, very stony	3-8	MW,SP	C	>60
DNC	Dixfield -Colonel complex, very stony	8-15	MW,SP	C	>60
DTB	Dixfield -Colonel complex, very stony, bouldery	3-8	MW,SP	C	>60
DXC	Dixfield-Tunbridge-Colonel complex, very stony	3-15	MW,W,SP	C	20- >60
LTB	Lyman-Tunbridge-rock outcrop, complex, very stony	3-8	SE	D/B	0-40
MDA	Marlow-Dixfield Association, very stony	1-3	W,MW	C	>60
MDB	Marlow-Dixfield Association, very stony	3-8	W,MW	C	>60
MDC	Marlow-Dixfield Association, very stony	8-15	W,MW	C	>60
MDD	Marlow-Dixfield Association, very stony	15-25	W,MW	C	>60
MFA	Marlow-Tunbridge-Dixfield complex, very stony	1-3	W,MW	C	20- >60
MFB	Marlow-Tunbridge-Dixfield complex, very stony	3-8	W,MW	C	20- >60
MFC	Marlow-Tunbridge-Dixfield complex, very stony	8-15	W,MW	C	20- >60
MFD	Marlow-Tunbridge-Dixfield complex, very stony	15-25	W,MW	C	20- >60
UD	Made Land- Udorthents (road corridors) (Udorthents, smoothed) ⁴	0-15	W-SE	B/C	Unknown
UG	Udorthents, sand and gravelly (gravel pits) ⁴	1-15	W-Ex	A	>60
V	Rock Outcrop	Unknown	Unknown	Unknown	Unknown

¹ Slope phases based on topography.

² Seasonal water table and depth to bedrock ranges are provided from the NRCS. On-site conditions are expected to fall within these ranges based on test pit observations. Drainage Classes: PD-poorly drained; SWP-somewhat poorly drained; MWD-moderately well drained; WD- well drained; SED-somewhat excessively drained; EX-excessively drained.

³ Soil Survey Staff (2014) and SSSNNE (2009).

⁴ Made land physical characteristics based on NRCS data.

MAP UNIT DESCRIPTION

Map Unit: **Becket-Skerry Association, very stony**
Map Unit Symbol: **BKB, BKC, BKD**
Classification: Becket: Coarse-loamy, isotic, frigid Oxyaquaic Haplorthods
Skerry: Coarse-loamy, isotic, frigid Aquic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform: Drumlins and glaciated uplands
Landscape Position: Side slope
Parent Material: Coarse loamy lodgment till
Slope Gradient Range: B: 3-8%; C: 8-15%; D: 15-25%
Typical Profile Description¹:
Surface Layer: Slightly decomposed plant material, 0-2".
Subsurface Layer: Pinkish gray fine sandy loam, very friable, 2-4".
Subsoil Layer: Dark reddish brown to yellowish brown fine sandy loam to gravelly sandy loam, friable, 4-33"
Substratum: olive gravelly sandy loam and olive yellow sand, firm, cobbles and rock fragments, 33-67".

PHYSICAL CHARACTERISTICS

Drainage Class: Becket: Well drained Skerry: Moderately well drained
Depth to Water Table: Moderately well drained: Water is removed from the soil somewhat slowly, so that the soil is wet for a short, but significant period of time. A seasonal water table is at sixteen inches to forty inches in depth from November through May. Well drained: Water is removed from the soil readily, but not rapidly, and the soil does not have a seasonal high water table within forty inches of the surface throughout the year.
Hydrologic Group: C
Soil Erodibility Factor (K) 10-20": 0.28
Ksat: Becket: moderately low to moderately high (0.01-0.71 in/hr). Skerry: moderately low (0.01-0.14 in/hr);
Hazard of Flooding: None
Depth to Bedrock: >60"
Surface Stoniness: Very stony

INCLUSIONS

Similar Soils: Marlow, Dixfield, Colton, Adams, Sheepscot
Dissimilar Soils: Colonel, Brayton, Lyman, Tunbridge

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.
Soil Limitations for Proposed Use: Becket and Skerry soils are suitable for development of wind power projects. Limitations to development include very stony surface and dense basal till substratum.

¹ Soil Survey Staff. 2014. Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Description. Web Soil Survey. Accessed October 2014. Available online at <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>.

MAP UNIT DESCRIPTION

Map Unit: **Brayton fine sandy loam, very stony**
Map Unit Symbol: **BGB**
Classification: Loamy, mixed, active, nonacid, frigid, shallow Aeric Endoaquepts

DESCRIPTION AND MORPHOLOGY

Landform: Toe slopes and depressions
Landscape Position: Lowest elevation within landscape
Parent Material: Dense lodgment till
Slope Gradient Range: B: 0-8%
Typical Profile Description:
Surface Layer: Sapric organic material, 0-6"
Subsurface Layer: Very dark grayish brown very fine sandy loam, 6-12" refusal, stones.
Subsoil Layer: Grayish brown fine sandy loam, friable, 12-16"
Substratum: Light olive brown fine sandy loam, firm, 16-23"; olive fine sandy loam, very firm, 23-66".

PHYSICAL CHARACTERISTICS

Drainage Class: Poorly
Depth to Water Table: Water is removed from the soil so slowly that the soil remains wet most of the year. A seasonal high water table is at or near the surface October through June. These soils are hydric and typically support a wetland plant community.
Hydrologic Group: C/D
Soil Erodibility Factor (K): 0.32 (10"-20")
Ksat: Moderately low to moderately high (0.06 to 0.4 in/hr).
Hazard to Flooding: None
Depth to Bedrock: >60"
Surface Stoniness: very stony

INCLUSIONS

Similar Soils: Peacham, Wonsqueak, Naskeag, Kinsman, Endoaquents, Endoaquents include ditches and skidder tracks, which have been disturbed by excavation and/or equipment passage. These soils meet wetland criteria based on the three parameters (hydrophytic vegetation, hydrology and hydric soils) and many have been delineated as wetland.
Dissimilar Soils: Dixfield, Colonel, Skerry, Lyman, Tunbridge

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.
Soil Limitations for Proposed Use: Soil limiting factor is high ground water table. Brayton soils are wetland (hydric) soils and therefore may be a jurisdictional wetland if vegetation and hydrology meet wetland criteria. Impacts to wetlands are subject to wetland regulations. Impacts to wetlands should be avoided and or minimized. Portions of these map units have a stony to boulder surface, which may limit constructability.

MAP UNIT DESCRIPTION

Map Unit: **Brayton-Colonel Association, very stony**
Map Unit Symbol: **BSB**
Classification: Brayton: Loamy, mixed, active, nonacid, frigid, shallow Aeric Endoaquepts
Colonel: Loamy, isotic, frigid, shallow Aquic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform: Till plains
Landscape Position: Footslope, backslope
Parent Material: Coarse-loamy lodgment till
Slope Gradient Range: 0-8%

Typical Profile Description: Refer to Brayton and Colonel descriptions. These soils could not be separated out as they occur within a hummocky relief in which Brayton soils occur in the pits and Colonel on the hummocks. Brayton with similar soils represent 50% each within the unit. Colonel and similar soils represent 30% of this map unit. These soils are very stony.

PHYSICAL CHARACTERISTICS

Drainage Class: Brayton: poorly drained; Colonel: somewhat poorly drained
Depth to Water Table: Poorly drained: Water is removed from the soil so slowly that the soil remains wet most of the year. A seasonal high water table is at or near the surface October through June. These soils are hydric and typically support a wetland plant community.
Somewhat poorly drained: Water is removed from the soil slowly enough to keep it wet for significant periods of time, but not the entire year. A seasonal high water table is at seven inches to sixteen inches in depth from October through May and sometimes June. These soils are not hydric.
Hydrologic Group: C
Soil Erodibility Factor (K): Brayton 0.32; Colonel: 0.24
Ksat: Low to moderately low (0.01-0.13 in/hr).
Hazard of Flooding: None
Depth to Bedrock: >60"
Surface Stoniness: Very stony (0.1-3% surface covered)

INCLUSIONS

Similar to Brayton Peacham, Wonsqueak, Naskeag, Endoaquents, Kinsman
Endoaquents include ditches and skidder tracks, which have been disturbed by excavation and/or equipment passage. These soils meet wetland criteria based on the three parameters (hydrophytic vegetation, hydrology and hydric soils) and many have been delineated as wetland.
Dissimilar Soils: Dixfield, Tunbridge, Lyman, rubble land (extremely bouldery)

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: A high seasonal water table is the limiting factor, ranging from the surface to 16 inches from the soil surface. A high degree of stones and boulders occur within this unit.

MAP UNIT DESCRIPTION

Map Unit: **Brayton-Peacham Association, very stony**
Map Unit Symbol: **BPA**
Classification: Brayton: Loamy, mixed, active, nonacid, frigid, shallow Aeric Endoaquepts
Peacham: Loamy, mixed, active, nonacid, frigid, shallow Histic Humaquepts

DESCRIPTION AND MORPHOLOGY

Landform: Toe slopes and depressions

Landscape Position: Lowest elevation within landscape

Parent Material: Dense lodgment till

Slope Gradient Range: B: 0-8%

Typical Profile Description:

Surface Layer: Sapric organic material, 0-6"

Subsurface Layer: Very dark grayish brown very fine sandy loam, 6-12" refusal, stones.

Subsoil Layer: Grayish brown fine sandy loam, friable, 12-16"

Substratum: Light olive brown fine sandy loam, firm, 16-23"; olive fine sandy loam, very firm, 23-66".

PHYSICAL CHARACTERISTICS

Drainage Class: Brayton: Poorly Peacham: Very Poorly

Depth to Water Table: Poorly: Water is removed from the soil so slowly that the soil remains wet most of the year. A seasonal high water table is at or near the surface October through June. These soils are hydric and typically support a wetland plant community. Very Poorly: Water is removed from the soil so slowly that the water table remains at or above the surface most of the year. A seasonal high water table is at or above the surface from at least October through July and sometimes throughout the year.

Hydrologic Group: C/D

Soil Erodibility Factor (K) (10"-20"): Peacham: 0.28; Brayton: 0.32

Ksat: Brayton: Moderately low to moderately high (0.06 to 0.4 in/hr);
Peacham: Low to moderately low (0.01-0.13 in/hr)

Hazard to Flooding: None

Depth to Bedrock: >60"

Surface Stoniness: very stony

INCLUSIONS

Similar Soils: Wonsqueak, Naskeag, Kinsman, Endoaquents, Endoaquents include ditches and skidder tracks, which have been disturbed by excavation and/or equipment passage. These soils meet wetland criteria based on the three parameters (hydrophytic vegetation, hydrology and hydric soils) and many have been delineated as wetland.

Dissimilar Soils: Dixfield, Colonel, Skerry, Lyman, Tunbridge

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: Soil limiting factor is high ground water table. Brayton soils are wetland (hydric) soils and therefore may be a jurisdictional wetland if vegetation and hydrology meet wetland criteria. Impacts to wetlands are subject to wetland regulations. Impacts to wetlands should be avoided and or minimized. Portions of these map units have a stony to boulder surface, which may limit constructability.

MAP UNIT DESCRIPTION

Map Unit: Colonel-Brayton-Dixfield Association, extremely stony, rubbly
Map Unit Symbol: CLB
Classification: Brayton: Loamy, mixed, active, nonacid, frigid, shallow Aeric Endoaquepts
Colonel: Loamy, isotic, frigid, shallow Aquic Haplorthods
Dixfield: Coarse-loamy, isotic, frigid Aquic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform: Till plains
Landscape Position: Footslope, backslope
Parent Material: Coarse-loamy lodgment till
Slope Gradient Range: 0-8%

Typical Profile Description: Refer to Brayton and Colonel descriptions. These soils could not be separated out as they occur within a hummocky relief in which Brayton soils occur in the pits and Colonel on the hummocks. Colonel and similar soils represent 40% of this map unit, and Dixfield and Brayton with similar soils represent 20% each within the unit. The soils are extremely stony with areas of rubble.

PHYSICAL CHARACTERISTICS

Drainage Class: Brayton: poorly drained; Colonel: somewhat poorly drained
Depth to Water Table: Poorly drained: Water is removed from the soil so slowly that the soil remains wet most of the year. A seasonal high water table is at or near the surface October through June. These soils are hydric and typically support a wetland plant community.
Somewhat poorly drained: Water is removed from the soil slowly enough to keep it wet for significant periods of time, but not the entire year. A seasonal high water table is at seven inches to sixteen inches in depth from October through May and sometimes June. These soils are not hydric.
Hydrologic Group: C
Soil Erodibility Factor (K): Brayton 0.32; Colonel: 0.24
Ksat: Low to moderately low (0.01-0.13 in/hr).
Hazard of Flooding: None
Depth to Bedrock: >60"
Surface Stoniness: Extremely stony (3-15% surface covered) to rubbly (50-90% of surface covered)

INCLUSIONS

Similar and Dissimilar Soils: Brayton, Peacham, Wonsqueak, Naskeag Kinsman, Skerry, Lyman, Tunbridge, Endoaquents. Endoaquents include ditches and skidder tracks, which have been disturbed by excavation and/or equipment passage. These soils meet wetland criteria based on the three parameters (hydrophytic vegetation, hydrology and hydric soils) and many have been delineated as wetland.

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: A high seasonal water table is the limiting factor, ranging from the surface to 16 inches from the soil surface. A high degree of stones and boulders occur within this unit.

MAP UNIT DESCRIPTION

Map Unit: **Colton-Adams Complex**
Map Unit Symbol: **CSB; CTC; CSD; CSE**
Classification: Colton: Sandy-skeletal, isotic, frigid Typic Haplorthods
Adams: Sandy, isotic, frigid Typic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform: Eskers
Landscape Position: Side-slope
Parent Material: Sandy-skeletal glaciofluvial deposits
Slope Gradient Range: B: 3-8%; C: 8-15%; D: 15-25%; E: 25-45%
Typical Profile Description¹: **Colton:**
Surface Layer: Gravelly coarse sandy loam, 2-4".
Subsurface Layer: Very gravelly coarse sandy loam, 4-18".
Subsoil Layer: Very gravelly coarse sand, 18-38".
Substratum: Extremely gravelly coarse sand, 38-65".

Adams:
Loamy sand, 2-3"
Loamy fine sand, 3-34"
Sand, 34-65"

PHYSICAL CHARACTERISTICS

Drainage Class: Colton: Excessively; Adams: Somewhat excessively
Depth to Water Table: Somewhat excessively drained: Water is removed from the soil rapidly, and the soil does not have a seasonal high water table. Excessively drained: Water is removed from the soil very rapidly, and the soils do not have a seasonal water table.
Hydrologic Group: A
Soil Erodibility Factor (K) 10-20": 0.17
Ksat: Moderately high to very high (1.42-14.17 in/hr).
Hazard of Flooding: None
Depth to Bedrock: >60"
Surface Stoniness: Nonstony

INCLUSIONS

Similar Soils: Marlow, Dixfield, Skerry
Dissimilar Soils: Colonel, Lyman, Tunbridge

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: Colton and Adams are suitable for construction purposes as they are generally not erodible and do not have a seasonal water table within 6 feet of the soil surface.

¹ Soil Survey Staff. 2014. Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Description. Web Soil Survey. Accessed October 2014. Available online at <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>.

MAP UNIT DESCRIPTION

Map Unit: Dixfield fine sandy loam, very stony
Map Unit Symbol: DBA, DBB
Classification: Coarse-loamy, isotic, frigid Aquic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform: Drumlins and till ridges
Landscape Position: Side slopes
Parent Material: Coarse-loamy lodgment till
Slope Gradient Range: A: 1-3%, B: 3-8%

Typical Profile Description:

Surface Layer: Brown very fine sandy loam, friable, very stony 0-4".
Subsurface Layer: Very dark brown very fine sandy loam, friable, 4-14".
Subsoil Layer: Dark brown very fine sandy loam, friable, 14-20".
Substratum: Brown gravelly fine sandy loam, firm, >20".

PHYSICAL CHARACTERISTICS

Drainage Class: Moderately well drained
Depth to Water Table: Water is removed from the soil somewhat slowly, so that the soil is wet for a short, but significant period of time. A seasonal water table is at sixteen inches to forty inches in depth from November through May.
Hydrologic Group: C/D
Soil Erodibility Factor (K) 10-20": 0.24
Ksat: Low to moderately low (0.01-0.13 in/hr)
Hazard of Flooding: None
Depth to Bedrock: >60"
Surface Stoniness: Very stony (0.1-3.0% surface covered)

INCLUSIONS

Similar Soils: Skerry, Marlow, Becket
Dissimilar Soils: Colonel, Tunbridge, Lyman, Naskeag

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: Dixfield soils are suited for development of wind power projects with the major limitation being depth to seasonal water table over a dense basal till substratum.

MAP UNIT DESCRIPTION

Map Unit: **Dixfield-Colonel Complex, very stony**
Map Unit Symbol: **DNA, DNB, DNC, DTB (very bouldery)**
Classification: Dixfield: Coarse-loamy, isotic, frigid Aquic Haplorthods
Colonel: Loamy, isotic, frigid, shallow Aquic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform: Drumlinoid ridges

Landscape Position: Backslope

Parent Material: Coarse-loamy lodgment till

Slope Gradient Range: **A: 1-3%, B: 3-8%, C: 8-15%**

Typical Profile Description: Refer to Dixfield and Colonel map unit descriptions. The soils within this map unit are hummocky with Colonel soils within the pits and Dixfield soils on the mounds. Extensive soils occur limiting observations.

PHYSICAL CHARACTERISTICS

Drainage Class: Dixfield: moderately well; Colonel: somewhat poorly

Depth to Water Table: Somewhat poorly drained: Water is removed from the soil slowly enough to keep it wet for significant periods of time, but not the entire year. A seasonal high water table is at seven inches to sixteen inches in depth from October through May and sometimes June. These soils are not hydric. Moderately well drained: Water is removed from the soil somewhat slowly, so that the soil is wet for a short, but significant period of time. A seasonal water table is at sixteen inches to forty inches in depth from November through May.

Hydrologic Group: C/D

Soil Erodibility Factor (K): 0.24

Ksat: low to moderately low (0.01-0.13 in/hr)

Hazard of Flooding: None

Depth to Bedrock: >60"

Surface Stoniness: Very stony (0.1-3.0% surface cover) to rubbly (15-50% surface cover)

INCLUSIONS

Similar Soils: Marlow, Skerry

Dissimilar Soils: Lyman, Tunbridge, Brayton

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: A seasonal high water table within 16" of the soil surface is a major limitation for Colonel soils. These soils are easily impacted by compaction from vehicles, resulting in a perched water table closer to the surface. Additional drainage should be incorporated where road crossings follow the toe of slope, intercepting surface flow and subsurface flow along impermeable layers.

MAP UNIT DESCRIPTION

Map Unit: Dixfield-Tunbridge-Colonel Complex, very stony

Map Unit Symbol: DXC

Classification:

DESCRIPTION AND MORPHOLOGY

Landform: Upland ridges, till plains

Landscape Position: Upper positions on landforms

Parent Material: Coarse-loamy lodgment till

Slope Gradient Range: C: 3-15%

Typical Profile Description:

Surface Layer: Brown fine sandy loam, friable, 0-2".

Subsurface Layer: Brown fine sandy loam, friable, 2-14".

Subsoil Layer: Dark yellowish brown, friable, 14- 20".

Substratum: Yellowish brown, firm, >20".

PHYSICAL CHARACTERISTICS

Drainage Class: Tunbridge: Well; Dixfield: Moderately well; Colonel: Somewhat poorly

Depth to Water Table: Somewhat poorly drained: Water is removed from the soil slowly enough to keep it wet for significant periods of time, but not the entire year. A seasonal high water table is at seven inches to sixteen inches in depth from October through May and sometimes June. These soils are not hydric. Moderately well drained: Water is removed from the soil somewhat slowly, so that the soil is wet for a short, but significant period of time. A seasonal water table is at sixteen inches to forty inches in depth from November through May. Well drained: Water is removed from the soil readily, but not rapidly, and the soil does not have a seasonal high water table within forty inches of the surface throughout the year.

Hydrologic Group: Dixfield: C/D; Tunbridge: B; Colonel: C

Soil Erodibility Factor (K) 10-20": 0.20-0.24

Ksat: Dixfield/Colonel: Low to moderately low (0.01-0.13 in/hr); Tunbridge: very low to moderately high (0-0.20").

Hazard of Flooding: None

Depth to Bedrock: Tunbridge: <40"

Surface Stoniness: Very stony (0.1-3.0% surface covered)

INCLUSIONS

Similar Soils: Skerry, Marlow

Dissimilar Soils: Brayton, Naskeag, Kinsman

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: Depth to bedrock is variable within this complex, requiring additional geotechnical review. Limitations include bedrock, which may require blasting. The seasonal water table at lower elevations or within pits may require additional engineering.

MAP UNIT DESCRIPTION

Map Unit:	Lyman-Tunbridge Complex, very stony
Map Unit Symbol:	LTB
Classification:	Lyman: Loamy, isotic, frigid Lithic Haplorthods Tunbridge: Coarse-loamy, isotic, frigid Typic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform:	Glaciated uplands
Landscape Position:	Slopes and ridge lines
Parent Material:	Coarse-loamy till
Slope Gradient Range:	B: 3-8%
Typical Profile Description:	Surface Layer: Strong brown fine sandy loam, friable, 0-2" Subsurface Layer: Light olive brown fine sandy loam, friable, 2-18". Subsoil Layer: Light olive brown fine sandy loam, gravelly and cobbles, firm, 26-33". Substratum: Bedrock at 33" Tunbridge; Lyman has bedrock within 20".

PHYSICAL CHARACTERISTICS

Drainage Class:	Lyman: Somewhat excessively; Tunbridge: well
Depth to Water Table:	<u>Well drained</u> : Water is removed from the soil readily, but not rapidly, and the soil does not have a seasonal high water table within forty inches of the surface throughout the year. <u>Somewhat excessively drained</u> : Water is removed from the soil rapidly, and the soil does not have a seasonal high water table.
Hydrologic Group:	Lyman: D; Tunbridge: B
Soil Erodibility Factor (K):	Tunbridge: 0.20; Lyman: 0.32
Ksat:	Very low to moderately high (0-0.20 in/hr)
Hazard of Flooding:	None
Depth to Bedrock:	Lyman: 10-20"; Tunbridge: 20-40".
Surface Stoniness:	Very stony (0.1-3.0% surface cover)

INCLUSIONS

Similar Soils:	Dixfield, Marlow, Skerry, Becket
Dissimilar Soils:	Naskeag, Colonel, Brayton

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: Lyman soils are shallow to bedrock with bedrock within 20 inches of the soil surface. Tunbridge soils have bedrock 20-40" from the soil surface.

MAP UNIT DESCRIPTION

Map Unit: Made Land- Disturbed Soil Mapping Units

AP- Asphalt

UC- Udorthents, bedrock substratum

UD- Udorthents, smoothed: road corridors

UG- Udorthents, sand and gravelly: gravel pits

UR- Rubble

US- spoil piles, debris

AP, Piles of asphalt from road work on Route 9. Asphalt has hardened limiting permeability.

UC, Udorthents, bedrock substratum, soils have been cut to bedrock and bedrock removed. Soils generally fine sandy loam with bedrock within 40".

UD, Udorthents, smoothed, are soils that have been cut and filled for roads. Generally the fill material is sand and gravelly from the local area. This map unit includes inclusions of spoil piles of soil, stone and boulders moved to the side during road construction.

UG, Udorthents, sand and gravelly, are soils that have been excavated for sand and gravel. Seasonal water table is generally greater than 40".

UR, Rubble, stones, boulders and soil have been piled within excavated gravel pit.

US, Spoil piles and debris, piles of mixed material, which may include very fine sandy loam, fine sand, sand, gravel, and cobbles. Maybe mixed with wood and metal debris.

Estimated Physical Characteristics of Made Land based on NRCS data.

Characteristic	UC	UD	UG
Drainage class	Somewhat excessively to somewhat poorly	Well to excessively	Well to excessive
Parent material	Fine sands, sands	Sand and gravel	Sand, gravel, cobbles
Restrictive layer	Bedrock	None observed	None observed
Estimated Ksat ¹	Low to high	Very rapid	Very rapid
Estimated Hydrologic Soil Group ²	B/D	B/C	A/B

Endoquents soil units are small inclusions within the poorly and very poorly drained map units. These disturbed soils include ditches and skidder tracks that have been mapped as wetland, having met wetland criteria based on the three parameters (hydrophytic vegetation, hydrology and hydric soils). These soils have been disturbed by excavation and/or equipment passage.

¹ USDA Natural Resources Conservation Service. 2014. Saturated Hydraulic Conductivity in Relation to Soil Texture. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/office/ssr10/tr/?cid=nrcs144p2_074846

² Soil Survey Division Staff. 1993. Soil Survey Manual. USDA Handbook 18. US Government Printing Office, Washington, D.C.

MAP UNIT DESCRIPTION

Map Unit: **Marlow-Dixfield Association, very stony**

Map Unit Symbol: **MDA, MDB, MDC, MDD**

Classification: Marlow: Coarse-loamy, isotic, frigid Oxyaquic Haplorthods
Dixfield: Coarse-loamy, isotic, frigid Aquic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform: Upland ridges

Landscape Position: Ridge tops and side slopes

Parent Material: Coarse-loamy lodgment till

Slope Gradient Range: A: 1-3%, B: 3-8%, C: 8-15%; D: 15-25%

Typical Profile Description: **Dixfield**

Surface Layer: Very dark brown hemic material, friable, 0-4".

Subsurface Layer: Brown very fine sandy loam, friable, 4-6".

Subsoil Layer: Dark brown very fine sandy loam, friable, 5-14"

Substratum: Dark brown to brown stony, gravelly, very fine sandy loam, firm, 14- 46".

PHYSICAL CHARACTERISTICS

Drainage Class: Marlow: well; Dixfield: moderately well

Depth to Water Table: Moderately well drained: Water is removed from the soil somewhat slowly, so that the soil is wet for a short, but significant period of time. A seasonal water table is at sixteen inches to forty inches in depth from November through May. Well drained: Water is removed from the soil readily, but not rapidly, and the soil does not have a seasonal high water table within forty inches of the surface throughout the year.

Hydrologic Group: Marlow: C; Dixfield: C/D

Soil Erodibility Factor (K) 10-20": 0.24-0.32

Ksat: Low to moderately low (0.01-0.13 in/hr)

Hazard of Flooding: None

Depth to Bedrock: >60"

Surface Stoniness: Very stony (0.1-3.0% surface cover)

INCLUSIONS

Similar Soils: Skerry, Becket

Dissimilar Soils: Tunbridge, Lyman, Colonel, Brayton

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: Dixfield soils are suited for development of wind power projects with the major limitation being depth to seasonal water table over a dense basal till substratum. Marlow soils are generally suitable for development.

MAP UNIT DESCRIPTION

Map Unit: **Marlow-Tunbridge-Dixfield Complex, very stony**
Map Unit Symbol: **MFA, MFB, MFC, MFD**
Classification: Marlow: Coarse-loamy, isotic, frigid Oxyaeric Haplorthods
Tunbridge: Coarse-loamy, isotic, frigid Typic Haplorthods
Dixfield: Coarse-loamy, isotic, frigid Aquic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform: Ridges and slopes
Landscape Position: Upper elevations along ridges and slopes
Parent Material: Coarse-loamy lodgment till
Slope Gradient Range: A: 1-3%, B: 3-8%, C: 8-15%; D: 15-25%
Typical Profile Description: Tunbridge:
Surface Layer: Mixed light gray and strong brown fine sandy loam, friable, 0-2".
Subsurface Layer: Light olive brown fine sandy loam, friable, 2-18".
Subsoil Layer: Olive fine sandy loam, firm, redox, 18-36".
Substratum: Bedrock, 39".

PHYSICAL CHARACTERISTICS

Drainage Class: Marlow and Tunbridge: Well; Dixfield: Moderately well
Depth to Water Table: Well drained: >40"; Moderately well: 16-40"
Hydrologic Group: Marlow and Tunbridge: C; Dixfield: C/D
Soil Erodibility Factor (K) 10-20": Dixfield: 0.24; Marlow: 0.32; Tunbridge: 0.20
Ksat: Marlow and Dixfield: Low to moderately low (0.01-0.13 in/hr)
Tunbridge: Low to moderately high (0-0.20 in/hr).
Hazard of Flooding: None
Depth to Bedrock: Marlow and Dixfield: >60"; Tunbridge: 20-40"
Surface Stoniness: Very stony (0.1-3.0% surface cover)

INCLUSIONS

Similar Soils: Becket, Skerry,
Dissimilar Soils: Lyman, Brayton, Colonel, Brayton

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: Tunbridge soils have bedrock 20-40" from the soil surface.

Dixfield soils are suited for development of wind power projects with the major limitation being depth to seasonal water table over a dense basal till substratum. Marlow soils are generally suitable for development.

MAP UNIT DESCRIPTION

Map Unit: Tunbridge fine sandy loam
Map Unit Symbol: TNB
Classification: Coarse-loamy, isotic, frigid Typic Haplorthods

DESCRIPTION AND MORPHOLOGY

Landform: Glaciated uplands
Landscape Position: Slopes and ridge lines
Parent Material: Coarse-loamy till
Slope Gradient Range: B: 3-8%
Typical Profile Description:
Surface Layer: Very dark brown very fine sandy loam, friable, 0-8".
Subsurface Layer: Dark yellowish brown very fine sandy loam, friable, 8-12".
Subsoil Layer: Light olive brown loam, gravelly, friable, 12-26".
Substratum: Olive brown loam, gravelly, firm, 26-48".
Bedrock at 40, with several observations of bedrock within 55".

PHYSICAL CHARACTERISTICS

Drainage Class: Well
Depth to Water Table: Well drained: Water is removed from the soil readily, but not rapidly, and the soil does not have a seasonal high water table within forty inches of the surface throughout the year.
Hydrologic Group: B
Soil Erodibility Factor (K): 0.20
Ksat: Very low to moderately high (0-0.20 in/hr)
Hazard of Flooding: None
Depth to Bedrock: 20-40"
Surface Stoniness: None

INCLUSIONS

Similar Soils: Dixfield, Marlow, Skerry, Becket
Dissimilar Soils: Lyman, Naskeag, Colonel, Brayton

USE AND MANAGEMENT

Proposed Use: Proposed electric generating facility utilizing wind turbines. Construction of associated turbine pads, crane routes, access roads and transmission line corridors.

Soil Limitations for Proposed Use: Tunbridge soils have bedrock 20-40" from the soil surface. At the present site bedrock was encountered 48" (TP 18) and 55" (TP19).

Appendix A-2

NRCS Map Unit Descriptions

Table A-3: Class D Soil Survey- Summary of Soil Physical Characteristics¹

Map Unit Symbol	Map Unit	Hydrologic Group
BLB	Brayton-Colonel Association, 0-8% slopes, very stony	D/C
BKC	Becket-Skerry Association, 3-15% slopes, very stony	C
BPA	Brayton-Peacham Association, 0-8% slopes, very stony	D/C
BSB	Brayton-Colonel Association, gently sloping, very stony	C/D
CLB	Colonel-Dixfield-Brayton Association, 1-8% slope	C/D
CNC	Colonel-Dixfield-Brayton Association, 1-15% slope	C/D
CSE	Colton-Adams Complex, 15-45% slope	A
CUC	Colton-Hermon Association, 5-15% slopes, very bouldery	A
DOC	Dixfield-Colonel-Marlow Association, 3-15% slopes, very stony	C/D
DXC	Dixfield-Tunbridge-Colonel Complex, 3-15% slope, very stony	C/D
HMC	Hermon-Monadnock-Dixfield Complex, 3-15% slopes, very bouldery	B/A/C/D
HVC	Hermon-Monadnock-Dixfield Complex, strongly sloping, very stony	A/B/C
MDC, MDD	Marlow-Dixfield Association, 15-30% slope, very stony	C/D
MDE	Marlow-Dixfield Association, steep, very stony	C
MEC	Marlow-Dixfield Association, 3-15% slopes, extremely bouldery	C
MFD	Marlow-Tunbridge-Dixfield Complex, 8-30% slopes, very stony	C/B/D

1. Natural Resources Conservation Service. 2014. Custom Soil Resource Report for Hancock County Area and Northern Hancock and Western Washington County Area, Maine. NRCS Web Soil Survey. Accessed October 2014. Available online at <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>.

Northern Hancock and Western Washington County Area, Maine

BLB—Brayton-Colonel association, 0 to 8 percent slopes, very stony

Map Unit Setting

National map unit symbol: 222km

Elevation: 10 to 2,500 feet

Mean annual precipitation: 34 to 48 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Brayton and similar soils: 50 percent

Colonel and similar soils: 30 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Brayton

Setting

Landform: Till plains

Landform position (two-dimensional): Foothills

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-loamy lodgment till derived from mica schist and/or coarse-loamy lodgment till derived from gneiss

Typical profile

Oa - 0 to 5 inches: highly decomposed plant material

H1 - 5 to 10 inches: gravelly fine sandy loam

H2 - 10 to 23 inches: fine sandy loam

H3 - 23 to 65 inches: fine sandy loam

Properties and qualities

Slope: 0 to 8 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 10 to 25 inches to densic material

Natural drainage class: Poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 0 to 7 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D

Description of Colonel

Setting

Landform: Till plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy lodgment till derived from granite and gneiss

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material
H1 - 1 to 4 inches: fine sandy loam
H2 - 4 to 12 inches: fine sandy loam
H3 - 12 to 20 inches: gravelly fine sandy loam
H4 - 20 to 65 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 15 to 22 inches to densic material
Natural drainage class: Somewhat poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D

Data Source Information

Soil Survey Area: Hancock County Area, Maine
Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine
Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

BKC—Becket-Skerry association, 3 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 222nh

Elevation: 30 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Becket and similar soils: 40 percent

Skerry and similar soils: 40 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Skerry

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Head slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-loamy lodgment till derived from granite and gneiss

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

H1 - 2 to 5 inches: fine sandy loam

H2 - 5 to 19 inches: fine sandy loam

H3 - 19 to 24 inches: gravelly fine sandy loam

H4 - 24 to 65 inches: gravelly loamy sand

Properties and qualities

Slope: 3 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 21 to 35 inches to densic material

Natural drainage class: Moderately well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low (0.01 to 0.14 in/hr)

Depth to water table: About 19 to 36 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C

Description of Becket

Setting

Landform: Hills, drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite and gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

H1 - 1 to 2 inches: fine sandy loam

H2 - 2 to 22 inches: sandy loam

H3 - 22 to 33 inches: sandy loam

H4 - 33 to 65 inches: gravelly loamy sand

Properties and qualities

Slope: 5 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 18 to 36 inches to densic material

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.01 to 0.71 in/hr)

Depth to water table: About 31 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C

Data Source Information

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine

Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

BPA—Brayton-Peacham association, 0 to 3 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: 222s0

Elevation: 0 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Brayton and similar soils: 50 percent

Peacham and similar soils: 25 percent

*Estimates are based on observations, descriptions, and transects of the
mapunit.*

Description of Brayton

Setting

Landform: Till plains

Landform position (two-dimensional): Foothills

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Coarse-loamy lodgment till derived from granite
and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 5 inches: highly decomposed plant material

H1 - 5 to 10 inches: gravelly fine sandy loam

H2 - 10 to 23 inches: fine sandy loam

H3 - 23 to 65 inches: fine sandy loam

Properties and qualities

Slope: 1 to 3 percent

Percent of area covered with surface fragments: 9.0 percent

Depth to restrictive feature: 10 to 25 inches to densic material

Natural drainage class: Poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Low to
moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 0 to 7 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D

Description of Peacham

Setting

Landform: Till plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 13 inches: highly decomposed plant material
H2 - 13 to 18 inches: gravelly fine sandy loam
H3 - 18 to 65 inches: gravelly loam

Properties and qualities

Slope: 0 to 2 percent
Percent of area covered with surface fragments: 9.0 percent
Depth to restrictive feature: 10 to 20 inches to densic material
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D

Data Source Information

Soil Survey Area: Hancock County Area, Maine
Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine
Survey Area Data: Version 4, Sep 14, 2014

Hancock County Area, Maine

BSB—Brayton-Colonel association, gently sloping, very stony

Map Unit Setting

National map unit symbol: 9kn1

Elevation: 10 to 2,500 feet

Mean annual precipitation: 34 to 60 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Brayton and similar soils: 50 percent

Colonel and similar soils: 30 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Brayton

Setting

Landform: Ground moraines

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Lodgment till

Typical profile

Oa - 0 to 5 inches: highly decomposed plant material

A - 5 to 10 inches: fine sandy loam

Bg - 10 to 23 inches: fine sandy loam

Cd - 23 to 65 inches: fine sandy loam

Properties and qualities

Slope: 0 to 8 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 10 to 27 inches to densic material

Natural drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.06 to 0.40 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: C/D

Description of Colonel

Setting

Landform: Till plains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-loamy lodgment till derived from granite and gneiss

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

H1 - 2 to 6 inches: fine sandy loam

H2 - 6 to 18 inches: fine sandy loam

H3 - 18 to 65 inches: fine sandy loam

Properties and qualities

Slope: 3 to 8 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 10 to 24 inches to densic material

Natural drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 7 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C/D

Data Source Information

Soil Survey Area: Hancock County Area, Maine

Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area,

Maine

Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

CLB—Colonel-Brayton-Dixfield association, 1 to 8 percent slopes, very stony

Map Unit Setting

National map unit symbol: 222ry

Elevation: 0 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Colonel and similar soils: 40 percent

Brayton and similar soils: 20 percent

Dixfield and similar soils: 20 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Colonel

Setting

Landform: Till plains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Base slope, talus

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-loamy loam derived from granite and/or coarse-loamy loam derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 4 inches: fine sandy loam

H2 - 4 to 12 inches: fine sandy loam

H3 - 12 to 20 inches: gravelly fine sandy loam

H4 - 20 to 65 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 15 to 22 inches to dense material

Natural drainage class: Somewhat poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Description of Dixfield

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite
and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 3 inches: fine sandy loam

H2 - 3 to 24 inches: fine sandy loam

H3 - 24 to 65 inches: gravelly loam

Properties and qualities

Slope: 1 to 8 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 21 to 36 inches to densic material

Natural drainage class: Moderately well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Low to
moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 17 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C/D

Description of Brayton

Setting

Landform: Till plains

Landform position (two-dimensional): Foothslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Coarse-loamy lodgment till derived from granite
and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 5 inches: highly decomposed plant material

H1 - 5 to 10 inches: gravelly fine sandy loam



H2 - 10 to 23 inches: fine sandy loam
H3 - 23 to 65 inches: fine sandy loam

Properties and qualities

Slope: 1 to 6 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 10 to 25 inches to densic material

Natural drainage class: Poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Low to
moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 0 to 7 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Data Source Information

Soil Survey Area: Hancock County Area, Maine

Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area,
Maine

Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

CUC—Colton-Hermon association, 5 to 15 percent slopes, very bouldery

Map Unit Setting

National map unit symbol: 222k2

Elevation: 0 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Colton and similar soils: 40 percent

Hermon and similar soils: 35 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Colton

Setting

Landform: Eskers

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy-skeletal glaciofluvial deposits derived from granite and gneiss

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

H1 - 2 to 4 inches: gravelly coarse sandy loam

H2 - 4 to 18 inches: very gravelly coarse sandy loam

H3 - 18 to 38 inches: very gravelly coarse sand

H4 - 38 to 65 inches: extremely gravelly coarse sand

Properties and qualities

Slope: 5 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Excessively drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to very high (1.42 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: A

Description of Hermon

Setting

Landform: Ground moraines

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Side slope, crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy-skeletal supraglacial meltout till derived from granite and gneiss

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 4 inches: gravelly sandy loam

H2 - 4 to 9 inches: very cobbly sandy loam

H3 - 9 to 65 inches: very gravelly loamy sand

Properties and qualities

Slope: 5 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat excessively drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to very high (1.42 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A

Data Source Information

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine

Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

CNC—Colonel-Dixfield-Brayton association, 1 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 222rz

Elevation: 0 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Dixfield and similar soils: 35 percent

Colonel and similar soils: 35 percent

Brayton and similar soils: 15 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Colonel

Setting

Landform: Till plains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Base slope, talus

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Coarse-loamy logment till derived from granite and/or coarse-loamy logment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 4 inches: fine sandy loam

H2 - 4 to 12 inches: fine sandy loam

H3 - 12 to 20 inches: gravelly fine sandy loam

H4 - 20 to 65 inches: gravelly loam

Properties and qualities

Slope: 3 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 15 to 22 inches to dense material

Natural drainage class: Somewhat poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Description of Dixfield

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite
and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 3 inches: fine sandy loam

H2 - 3 to 24 inches: fine sandy loam

H3 - 24 to 65 inches: gravelly loam

Properties and qualities

Slope: 5 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 21 to 36 inches to densic material

Natural drainage class: Moderately well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Low to
moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 17 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C/D

Description of Brayton

Setting

Landform: Till plains

Landform position (two-dimensional): Foothslope

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Coarse-loamy lodgment till derived from granite
and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 5 inches: highly decomposed plant material

H1 - 5 to 10 inches: gravelly fine sandy loam



H2 - 10 to 23 inches: fine sandy loam
H3 - 23 to 65 inches: fine sandy loam

Properties and qualities

Slope: 1 to 8 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 10 to 25 inches to densic material

Natural drainage class: Poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Low to
moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 0 to 7 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Data Source Information

Soil Survey Area: Hancock County Area, Maine

Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area,
Maine

Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

CSE—Colton-Adams complex, 15 to 45 percent slopes

Map Unit Setting

National map unit symbol: 222f2

Elevation: 30 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Colton and similar soils: 55 percent

Adams and similar soils: 30 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colton

Setting

Landform: Eskers

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy-skeletal glaciofluvial deposits derived from granite and gneiss

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

H1 - 2 to 4 inches: gravelly coarse sandy loam

H2 - 4 to 18 inches: very gravelly coarse sandy loam

H3 - 18 to 38 inches: very gravelly coarse sand

H4 - 38 to 65 inches: extremely gravelly coarse sand

Properties and qualities

Slope: 15 to 45 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Excessively drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to very high (1.42 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e



Hydrologic Soil Group: A

Description of Adams

Setting

Landform: Eskers, outwash plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread, rise

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy glaciofluvial deposits derived from crystalline rock

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

H1 - 2 to 3 inches: loamy sand

H2 - 3 to 34 inches: loamy fine sand

H3 - 34 to 65 inches: sand

Properties and qualities

Slope: 15 to 45 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat excessively drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to very high (1.42 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Data Source Information

Soil Survey Area: Hancock County Area, Maine

Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine

Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

DOC—Dixfield-Colonel-Marlow association, 3 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 222rw

Elevation: 30 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Dixfield and similar soils: 40 percent

Colonel and similar soils: 25 percent

Marlow and similar soils: 20 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Dixfield

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 3 inches: fine sandy loam

H2 - 3 to 24 inches: fine sandy loam

H3 - 24 to 65 inches: gravelly loam

Properties and qualities

Slope: 3 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 21 to 36 inches to densic material

Natural drainage class: Moderately well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 17 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: C/D

Description of Colonel

Setting

Landform: Till plains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Base slope, talus

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Coarse-loamy lodgment till derived from granite
and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 4 inches: fine sandy loam

H2 - 4 to 12 inches: fine sandy loam

H3 - 12 to 20 inches: gravelly fine sandy loam

H4 - 20 to 65 inches: gravelly loam

Properties and qualities

Slope: 3 to 12 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 15 to 22 inches to dense material

Natural drainage class: Somewhat poorly drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Low to
moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Description of Marlow

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Nose slope, crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite
and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material



H1 - 1 to 3 inches: fine sandy loam
H2 - 3 to 36 inches: gravelly fine sandy loam
H3 - 36 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 21 to 40 inches to densic material
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)
Depth to water table: About 30 to 35 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C

Data Source Information

Soil Survey Area: Hancock County Area, Maine
Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine
Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

DXC—Dixfield-Tunbridge-Colonel complex, 3 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 222rm

Elevation: 30 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Dixfield and similar soils: 40 percent

Tunbridge and similar soils: 25 percent

Colonel and similar soils: 20 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Dixfield

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 3 inches: fine sandy loam

H2 - 3 to 24 inches: fine sandy loam

H3 - 24 to 65 inches: gravelly loam

Properties and qualities

Slope: 3 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 21 to 36 inches to densic material

Natural drainage class: Moderately well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 17 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C/D

Description of Tunbridge

Setting

Landform: Ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Nose slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Coarse-loamy till derived from granite, schist, phyllite, or gneiss

Typical profile

O - 0 to 5 inches: highly decomposed plant material
H1 - 5 to 7 inches: sandy loam
H2 - 7 to 22 inches: channery sandy loam
H3 - 22 to 33 inches: channery sandy loam
R - 33 to 37 inches: bedrock

Properties and qualities

Slope: 3 to 15 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B

Description of Colonel

Setting

Landform: Till plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Base slope, talus
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material



H1 - 1 to 4 inches: fine sandy loam
H2 - 4 to 12 inches: fine sandy loam
H3 - 12 to 20 inches: gravelly fine sandy loam
H4 - 20 to 65 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 15 to 22 inches to dense material
Natural drainage class: Somewhat poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D

Data Source Information

Soil Survey Area: Hancock County Area, Maine
Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area,
Maine
Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

HMC—Hermon-Monadnock-Dixfield complex, 3 to 15 percent slopes, very bouldery

Map Unit Setting

National map unit symbol: 222rs

Elevation: 0 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Monadnock and similar soils: 35 percent

Hermon and similar soils: 35 percent

Dixfield and similar soils: 15 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Hermon

Setting

Landform: Ground moraines

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Side slope, crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy-skeletal supraglacial meltout till derived from granite and gneiss

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 4 inches: gravelly sandy loam

H2 - 4 to 9 inches: very cobbly sandy loam

H3 - 9 to 65 inches: very gravelly loamy sand

Properties and qualities

Slope: 3 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat excessively drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to very high (1.42 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A

Description of Monadnock

Setting

Landform: Ground moraines, ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope, nose slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Coarse-loamy over sandy skeletal supraglacial meltout till derived from granite and gneiss

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material

H1 - 2 to 4 inches: fine sandy loam

H2 - 4 to 25 inches: gravelly fine sandy loam

H3 - 25 to 29 inches: gravelly loamy sand

H4 - 29 to 65 inches: very gravelly sand

Properties and qualities

Slope: 3 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 15 to 30 inches to strongly contrasting textural stratification

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Description of Dixfield

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material
H1 - 1 to 3 inches: fine sandy loam
H2 - 3 to 24 inches: fine sandy loam
H3 - 24 to 65 inches: gravelly loam

Properties and qualities

Slope: 3 to 15 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 21 to 36 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)
Depth to water table: About 17 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C/D

Data Source Information

Soil Survey Area: Hancock County Area, Maine
Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine
Survey Area Data: Version 4, Sep 14, 2014

Hancock County Area, Maine

HVC—Hermon-Monadnock-Dixfield complex, strongly sloping, very stony

Map Unit Setting

National map unit symbol: 9knr

Elevation: 10 to 3,500 feet

Mean annual precipitation: 34 to 50 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 100 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Hermon and similar soils: 35 percent

Monadnock and similar soils: 25 percent

Dixfield and similar soils: 20 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Hermon

Setting

Landform: Moraines

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Side slope, crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy-skeletal supraglacial meltout till derived from granite and gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

H1 - 1 to 3 inches: sandy loam

H2 - 3 to 12 inches: gravelly sandy loam

H3 - 12 to 65 inches: extremely gravelly sand

Properties and qualities

Slope: 8 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to very high (1.42 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s



Hydrologic Soil Group: A

Description of Monadnock

Setting

Landform: Moraines

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Side slope, crest

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Coarse-loamy over sandy skeletal supraglacial
meltout till derived from granite and gneiss

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

H1 - 2 to 8 inches: fine sandy loam

H2 - 8 to 20 inches: fine sandy loam

H3 - 20 to 65 inches: very gravelly loamy sand

Properties and qualities

Slope: 8 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Description of Dixfield

Setting

Landform: Ridges

Landform position (two-dimensional): Foothslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

H1 - 2 to 6 inches: fine sandy loam

H2 - 6 to 28 inches: fine sandy loam

H3 - 28 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 15 percent

Percent of area covered with surface fragments: 1.6 percent



Depth to restrictive feature: 18 to 36 inches to densic material

Natural drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C/D

Data Source Information

Soil Survey Area: Hancock County Area, Maine

Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area,
Maine

Survey Area Data: Version 4, Sep 14, 2014

Hancock County Area, Maine

MDC—Marlow-Dixfield association, strongly sloping, very stony

Map Unit Setting

National map unit symbol: 9kpc

Elevation: 10 to 2,500 feet

Mean annual precipitation: 34 to 48 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 100 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Marlow and similar soils: 45 percent

Dixfield and similar soils: 35 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Marlow

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oe - 0 to 4 inches: moderately decomposed plant material

H1 - 4 to 6 inches: fine sandy loam

H2 - 6 to 25 inches: fine sandy loam

H3 - 25 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 8 to 15 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 18 to 36 inches to densic material

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C



Description of Dixfield

Setting

Landform: Drumlinoid ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Head slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material
H1 - 2 to 6 inches: fine sandy loam
H2 - 6 to 28 inches: fine sandy loam
H3 - 28 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 18 to 36 inches to densic material
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C/D

Data Source Information

Soil Survey Area: Hancock County Area, Maine
Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine
Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

MDD—Marlow-Dixfield association, 15 to 30 percent slopes, very stony

Map Unit Setting

National map unit symbol: 222rx

Elevation: 30 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Marlow and similar soils: 45 percent

Dixfield and similar soils: 40 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Marlow

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest, nose slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 3 inches: fine sandy loam

H2 - 3 to 36 inches: gravelly fine sandy loam

H3 - 36 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 15 to 30 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 21 to 40 inches to densic material

Natural drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 30 to 35 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C

Description of Dixfield

Setting

Landform: Drumlinoid ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material
H1 - 1 to 3 inches: fine sandy loam
H2 - 3 to 24 inches: fine sandy loam
H3 - 24 to 65 inches: gravelly loam

Properties and qualities

Slope: 15 to 25 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 21 to 36 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)
Depth to water table: About 17 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C/D

Data Source Information

Soil Survey Area: Hancock County Area, Maine
Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine
Survey Area Data: Version 4, Sep 14, 2014

Hancock County Area, Maine

MDE—Marlow-Dixfield association, steep, very stony

Map Unit Setting

National map unit symbol: 9kpd

Elevation: 10 to 2,500 feet

Mean annual precipitation: 34 to 48 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 100 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Marlow and similar soils: 50 percent

Dixfield and similar soils: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Marlow

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oe - 0 to 4 inches: moderately decomposed plant material

H1 - 4 to 6 inches: fine sandy loam

H2 - 6 to 25 inches: fine sandy loam

H3 - 25 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 15 to 45 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 18 to 36 inches to densic material

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat):

Moderately low to moderately high (0.06 to 0.60 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: C

Description of Dixfield

Setting

Landform: Drumlinoid ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Head slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 2 inches: highly decomposed plant material
H1 - 2 to 6 inches: fine sandy loam
H2 - 6 to 28 inches: fine sandy loam
H3 - 28 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 15 to 30 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 18 to 36 inches to densic material
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat):
Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C/D

Data Source Information

Soil Survey Area: Hancock County Area, Maine
Survey Area Data: Version 14, Sep 14, 2014

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine
Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

MEC—Marlow-Dixfield association, 3 to 15 percent slopes, extremely bouldery

Map Unit Setting

National map unit symbol: 222pz

Elevation: 30 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Marlow and similar soils: 45 percent

Dixfield and similar soils: 40 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Marlow

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest, nose slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 3 inches: fine sandy loam

H2 - 3 to 36 inches: gravelly fine sandy loam

H3 - 36 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 6 to 15 percent

Percent of area covered with surface fragments: 9.0 percent

Depth to restrictive feature: 21 to 40 inches to densic material

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 30 to 35 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C

Description of Dixfield

Setting

Landform: Drumlinoid ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material
H1 - 1 to 3 inches: fine sandy loam
H2 - 3 to 24 inches: fine sandy loam
H3 - 24 to 65 inches: gravelly loam

Properties and qualities

Slope: 3 to 12 percent
Percent of area covered with surface fragments: 9.0 percent
Depth to restrictive feature: 21 to 36 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)
Depth to water table: About 17 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C/D

Data Source Information

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine
Survey Area Data: Version 4, Sep 14, 2014

Northern Hancock and Western Washington County Area, Maine

MFD—Marlow-Tunbridge-Dixfield complex, 8 to 30 percent slopes, very stony

Map Unit Setting

National map unit symbol: 222rn

Elevation: 30 to 1,480 feet

Mean annual precipitation: 39 to 51 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Marlow and similar soils: 35 percent

Tunbridge and similar soils: 25 percent

Dixfield and similar soils: 20 percent

Estimates are based on observations, descriptions, and transects of the map unit.

Description of Marlow

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest, nose slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material

H1 - 1 to 3 inches: fine sandy loam

H2 - 3 to 36 inches: gravelly fine sandy loam

H3 - 36 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 8 to 30 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 21 to 40 inches to densic material

Natural drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)

Depth to water table: About 30 to 35 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: C

Description of Tunbridge

Setting

Landform: Ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Nose slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Coarse-loamy till derived from granite, schist, phyllite, or gneiss

Typical profile

O - 0 to 5 inches: highly decomposed plant material

H1 - 5 to 7 inches: sandy loam

H2 - 7 to 22 inches: channery sandy loam

H3 - 22 to 33 inches: channery sandy loam

R - 33 to 37 inches: bedrock

Properties and qualities

Slope: 8 to 30 percent

Percent of area covered with surface fragments: 1.6 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Natural drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Description of Dixfield

Setting

Landform: Drumlinoid ridges

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Coarse-loamy lodgment till derived from granite and/or coarse-loamy lodgment till derived from mica schist

Typical profile

Oa - 0 to 1 inches: highly decomposed plant material



H1 - 1 to 3 inches: fine sandy loam
H2 - 3 to 24 inches: fine sandy loam
H3 - 24 to 65 inches: gravelly loam

Properties and qualities

Slope: 8 to 20 percent
Percent of area covered with surface fragments: 1.6 percent
Depth to restrictive feature: 21 to 36 inches to densic material
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.01 to 0.13 in/hr)
Depth to water table: About 17 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.5 inches)

Interpretive groups

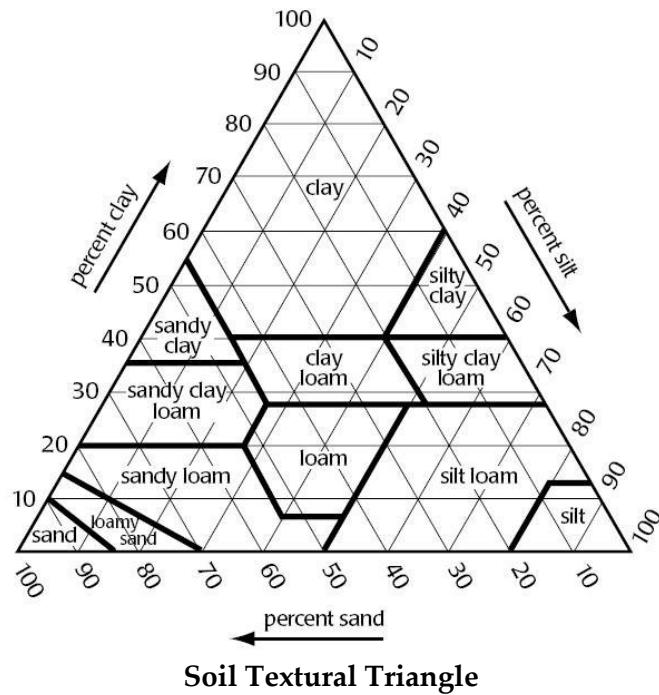
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C/D

Data Source Information

Soil Survey Area: Northern Hancock and Western Washington County Area, Maine
Survey Area Data: Version 4, Sep 14, 2014

Appendix B

Soil Observation Logs



Soil Observation Log Abbreviations

Abbreviation	Soil Texture	Consistence	Miscellaneous
S	Sandy		
FS	Fine Sand		
FSL	Fine Sandy Loam		
VFSL	Very Fine Sandy Loam		
CS	Coarse Sand		
GRY	Gravelly		
L	Loam		
SL	Sandy Loam		
FR		Friable	
			Extent of Excavation
EOE			

**Test Pit and Observation Logs for
Class B Soil Survey and Turbines 17-18, 23, and 25**

Town, City, Plantation <i>Eastbrook / MT16</i>	Street, Road, Subdivision <i>Bull Hill Substation</i>	Owner or Applicant Name <i>WEAVER</i>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION		
(Location of Observation Holes Shown Above)		

Observation Hole # TP-1 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FSL	cl. friable	10YR7/1	none
6	FSL	firm	7.5YR4/6	none
12	FSL	firm	10YR5/6	none
17	<i>At 17" redox depletion column 10/12 7/1</i>			
24	FSL	dense	2.5Y15/4	7.5YR7/6 few fine
30	<i>At 30" 10/12 7/1</i>			
36	SL	massive dense	2.5Y5/4	<i>Beds of depleted soil in this area</i>
42	SL	gravel	5/4	<i>to R. Cobbles rounded</i>
48	Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			~5	17 "
				<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group		
<i>Dixfield</i>				

Observation Hole # Z Test Pit Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FSL	v. friable	10YR7/1	none
6	FSL	v. friable	7.5YR4/6	none
12	SL	v. friable	7.5Y4/6	none
18	SL	friable	2.5Y5/4	<i>@ 22 depleted Coarse</i>
24	SL	dense	2.5Y5/3	<i>10YR7/1</i>
30	SL	dense	2.5Y5/3	<i>base of M-C sand</i>
36	Calcareous	2.5Y6/3	<i>to 32" (1" thick)</i>	
42	Calcareous	2.5Y6/3		
48	Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			~22	22 "
				<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group		
<i>Dixfield</i>				

Observation Hole # 5 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FSL	v. friable	7.5YR7/1	none
6	FSL	v. friable	7.5YR4/6	none
12	SL	friable	2.5Y5/4	
18	SL	friable	2.5Y5/4	
24	ASL	firm	2.5Y5/4	
30	SL	dense	5/4	
36	Calcareous	2.5Y6/3	<i>@ 29"</i>	
42	Calcareous	2.5Y6/3	<i>redox depletion</i>	
48	Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			~5%	27 "
				<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group		
<i>Dixfield</i>				

Observation Hole # 4 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FSL	v. friable	10YR7/1	none
6	FSL	v. friable	7.5YR4/6	none
12	SL	friable	10YR5/6	none
18	ASL	friable	2.5Y5/4	<i>@ 20"</i>
24	ASL	dense	2.5Y6/3	<i>redox depletion</i>
30	ASL	dense	2.5Y6/3	<i>7.5YR5/6</i>
36	ASL	friable	2.5Y5/4	<i>Calcareous gravel C. sand lenses</i>
42	ASL	friable	2.5Y5/4	<i>10YR7/1 mineral</i>
48	Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			~4%	20 "
				<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group		
<i>Dixfield</i>				

Soil Scientist/Site Evaluator Signature

305
CSS/LS#

11/21/14
Date

Town, City, Plantation

Street, Road, Subdivision

Owner or Applicant Name

WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # 5 Test Pit Boring

2" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	F.S. 1e	V. Crumbly	10VR4/14	none
6	F.S. 1	Stable	2.5Y5/3	
12				
18				
24				
30				
36				
42				
48				

21"
varied
cement
7.5YR 5/6

24"
dense
2.5Y 6/3

30"
dense
7.5YR 5/6

36"
no ledge to 60"
although cut up 30'
to the north

Soil Classification: Slope: Limiting Factor: Groundwater
Profile Condition: Percent: Depth: Restrictive Layer Bedrock

Soil Series Name: Dixfield Hydrologic Group:

Observation Hole # 6 Test Pit Boring

1" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	F.S. 1	V. Crumbly	10VR4/14	none
6	F.S. 1	Stable	2.5Y5/3	none
12				
18				
24				
30				
36				
42				
48				

19"
common
7.5YR 5/6

24"
dense
7.5YR 5/6

30"
common
7.5YR 5/6

36"
and 7.5YR
cobbles

42"
no rock to 72" 6/9/5

Soil Classification: Slope: Limiting Factor: Groundwater
Profile Condition: Percent: Depth: Restrictive Layer Bedrock

Soil Series Name: Dixfield Hydrologic Group:

Observation Hole # 7 Test Pit Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	F.S. 1	V. Crumbly	10VR4/14	none
6	F.S. 1	Stable	2.5Y5/6	none
12				
18				
24				
30				
36				
42				
48				

19"
dense
2.5Y5/6

24"
redox
conc.

42"
Bedrock 9/9/11

Soil Classification: Slope: Limiting Factor: Groundwater
Profile Condition: Percent: Depth: Restrictive Layer Bedrock

Soil Series Name: Tunbridge Hydrologic Group:

Observation Hole # 8 Test Pit Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	F.S. 1	V. Crumbly	10VR4/14	none
6	S. 1	V. Crumbly	10VR5/6	none
12				
18				
24				
30				
36				
42				
48				

19"
dense

24"
2.5Y5/6

30"
S. 1. V. dense
7.5Y6/3

36"
Stable
as fine
gravel
7.5YR 5/6

42"
40" to bedrock

Soil Classification: Slope: Limiting Factor: Groundwater
Profile Condition: Percent: Depth: Restrictive Layer Bedrock

Soil Series Name: Tunbridge Hydrologic Group:

Soil Scientist/Site Evaluator Signature

305
CSS/EE#11/21/14
Date

Town, City, Plantation

Street, Road, Subdivision

Owner or Applicant Name

WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole #

9

 Test Pit Boring

Depth below mineral soil surface (inches)

Texture

Consistency

Color

Mottling

F.S.L.

Variable

7.5YR4/6 none

F.S.L.

V.F. stiff

7.5Y5/6

(a) BR

blue are

common

color 10YR5/6

</div

Town, City, Plantation

Street, Road, Subdivision

Owner or Applicant Name

WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # 13 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	PSL	V. Fribble	7.5 YR 4/6	none
6				
12				
18				
24				
30				
36				
42				
48				

Soil Classification: Slope: Limiting Factor: Groundwater
 Profile Condition: Percent: Depth: Restrictive Layer Bedrock

Soil Series Name: Tunbridge Hydrologic Group:

Observation Hole # 14 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	PSL	V. Fribble	7.5 YR 4/6	none
6	PSL	Fribble	7.5 YR 4/6	none
12				
18				
24				
30				
36				
42				
48				

Soil Classification: Slope: Limiting Factor: Groundwater
 Profile Condition: Percent: Depth: Restrictive Layer Bedrock

Soil Series Name: Dixfield Hydrologic Group:

Observation Hole # 15 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	PSL	V. Fribble	7.5 YR 4/6	none
6	Soil	Fribble	10YR 4/3	none
12	Soil			
18				
24				
30				
36				
42				
48				

Soil Classification: Slope: Limiting Factor: Groundwater
 Profile Condition: Percent: Depth: Restrictive Layer Bedrock

Soil Series Name: Lyman Hydrologic Group:

Observation Hole # 16 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	PSL	V. Fribble	7.5 YR 4/6	none
6	PSL	Fribble	10YR 4/3	none
12				
18				
24				
30				
36				
42				
48				

Soil Classification: Slope: Limiting Factor: Groundwater
 Profile Condition: Percent: Depth: Restrictive Layer Bedrock

Soil Series Name: Tunbridge Hydrologic Group:

Soil Scientist/Site Evaluator Signature

CSS/LSE#

305

Date

11/21/14

Town, City, Plantation

Street, Road, Subdivision.

Owner or Applicant Name

WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole #		17	<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring		
Depth of organic horizon above mineral soil						
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling		
0	f31	Variable	5YR 4/6	none		
6	f51	Plastic	10YR 4/6			
12						
18	S.1	loose	25YR 5/4			
24	w/ gto			@ 27"		
26	C.1's			common		
30	as f.c			at 28" 5YR 6/8		
32	gravel ad					
34	caliche					
36	(varved)			fine conc.		
42						
48						
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater Restrictive Layer Bedrock		
Dix Field		34%	18"	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Soil Series Name			Hydrologic Group			

Observation Hole #		18	<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring
		1 "	Depth of organic horizon above mineral soil	
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FS-1	V. friable	7.5YR 4/6	none
6	FS-1	friable	10YR 4/6	
12				
18				
24	S. L. w/ sgn cl. sas	dense	7.5YR 5/6	12/4"
30	fg. gravel and cobbles			common nodose concentric 7.5YR
36				5/8
42				
48				Bedrock 44/11
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			58	20 "
				<input type="checkbox"/> Groundwater <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
Tunbridge				

Observation Hole #		19	<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	LS, 1 (A1) 41/5%	Firm	10 MRY 4/3	none
6		for woods		
12	LS, 1 41/5%	Firm	10 MRY 4/4	
18	LS			
24	as FC			
30	Gravel arc ashies			
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
				<input type="checkbox"/> Groundwater <u>25</u> " <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group		
Tunbridge				

Observation Hole #		20	<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring	
1 "		Depth of organic horizon above mineral soil			
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling	
0	Soil Organic Bubbles	fibile	10YR 5/3	none	
6	Fill (Road side)				
12	SL. fibile	10YR 4/4	me		
18					
24				(2) 24" column depth 7.5 MR 5/8 fine	
30	SL. cl. 5/5	dense	2.5 Y 5/4		
36	gravel				
42	fibiles				
48					
	Soil Profile	Classification	Slope Percent	Limiting Factor Depth	<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
	Condition				
Soil Series Name Tunbridge			Hydrologic Group		

Soil Scientist/Site Evaluator Signature

Town, City, Plantation

Laydown #1, gravel pit nr R+9

Street, Road, Subdivision

Owner or Applicant Name

WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

BP near R+9

Observation Hole # TP-25 Test Pit Boring

1/2 "			
Texture	Consistency	Color	Mottling
coarse	stiff	10R4/5	none
fine	loose	5Y1/5	none
sand	soft	5Y1/5	none
FC	soft	5Y1/5	none
Gravel			
W/15%			
cobbles			
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		0	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer
Percent			<input type="checkbox"/> Depth Bedrock
Hydrologic Group			
Soil Series Name			
Udorthents, sand + gravel			

Pore 60" (hollo)

Pore 60" (hollo)

Pore 60" (hollo)

Observation Hole # TP-26 Test Pit Boring

1/2 "			
Texture	Consistency	Color	Mottling
coarse sand	stiff	10R4/5	none
fine	loose	5Y1/5	none
Gravel	loose	5Y1/5	none
fine sand	soft	5Y1/5	none
w/10%			
FC			
cobbles			
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		3	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer
Percent			<input type="checkbox"/> Depth Bedrock
Hydrologic Group			
Soil Series Name			
Udorthents sand + gravel			

Pore 67"

Pore 67"

Pore 67"

Observation Hole # 27 Test Pit Boring

1/2 "			
Texture	Consistency	Color	Mottling
loose	stiff	10R4/5	none
fine	loose	5Y1/5	none
sand	soft	5Y1/5	none
FC			
gravely			
w/5%			
PM			
cobbles			
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		29	<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer
Percent			<input type="checkbox"/> Depth Bedrock
Hydrologic Group			
Soil Series Name			
Udorthents sand + gravel			

Pore 68"

Soil Scientist/Site Evaluator Signature

305

CSS/EE#

11/21/14

Date

Town, City, Plantation

Laydown #2, Large gravel pit

Street, Road, Subdivision

10-28-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # SN1 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 gravelly LFS	Firm 1/4 in	10X123/3	
6	Wet compacted from equipment		
12	MASSIVE LOOSE		
18			
24	Cobbles CS	color of particles	
30	Gravel pit excavated to subsoil.		
36	Glacial outwash		
42	EDGES ¹ , no bedrock		
48			

Soil Series Name

Udorthents, sand + gravel

Hydrologic Group

Observation Hole # SN2 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 V. cobbly	Firm in place	10X123/3	
6 gry LFS			
12 gry LFS	Loose massive	10X123/2, 3/3	
18			
24	med grain cobbles	color gravel	
30	Large boulders at 48"		
36	Some woody debris		
42	EDGES 72"		
48			

Soil Series Name

Udorthents, sand + gravel

Hydrologic Group

Observation Hole # SN2 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 V. cobbly	Firm in place	10X123/2	
6			
12	Firm MASSIVE		
18	C gravel	MASSIVE Loose	color of gravel
24			
30	Stones 1. Sand gravel		
36			
42	EDGES 72"		
48			

Soil Series Name

Udorthents, sand + gravel

Hydrologic Group

Observation Hole # SN3 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 V. cobbly	Firm in place	10X123/3	
6 gry LFS			
12 gry LFS	Loose massive	10X123/2, 3/3	
18			
24	med grain cobbles	color gravel	
30	Large boulders at 48"		
36	Some woody debris		
42	EDGES 72"		
48			

Soil Series Name

Udorthents, sand + gravel

Hydrologic Group

Observation Hole # SN4 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 gry LFS	Loose	10X123/3	
6 V. cobbly	MASSIVE		
12 gry sand wavy	Loose		
18 gry granitic cobbles	color of gravel		
24			
30			
36	EDGES 72"		
42			
48			

Soil Series Name

Udorthents, sand + gravel

Hydrologic Group

Soil Scientist/Site Evaluator Signature

215

CSS/LSE#

10-28-14

Date

Town, City, Plantation

Laydown #2, large grassy part

Street, Road, Subdivision

10-28-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # SNS Test Pit Boring

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth Restrictive Layer Bedrock

Hydrologic Group

Soil Series Name Udorthents, sand + gravel

Observation Hole # SNL Test Pit Boring

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth Restrictive Layer Bedrock

Hydrologic Group

Soil Series Name Udorthents, sand + gravel

Observation Hole # Test Pit Boring

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth Restrictive Layer Bedrock

Hydrologic Group

Soil Series Name

Observation Hole # Test Pit Boring

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth Restrictive Layer Bedrock

Hydrologic Group

Soil Series Name

Soil Scientist/Site Evaluator Signature

CSS/LSE#

215

10-28-14

Date

Town, City, Plantation <i>CLB1</i>	Street, Road, Subdivision <i>10-2-14</i>	Owner or Applicant Name <i>W. W. W. G.</i>
---------------------------------------	---	---

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Laydown #2 Large gravel pit

Observation Hole # CLB1 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 gray SL	Friable	7.5YR 1/2	
		7.5YR 3/4	
		10YR 3/6	3.5YR 3/4
12 gray FSL		10YR 5/4	10YR 3/2
18			
24 EDE 16"			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock

Soil Series Name
Colonel

Hydrologic Group

Observation Hole # CLB2 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 CS		10YR 2/1	
		7.5YR 5/1	
		(sand grains)	
12		10YR 4/2	few
18			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock

Soil Series Name
Brayton - poorly drained

Hydrologic Group

Observation Hole # CLB3 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 Hemic organic material		7.5YR 2/2	
12 Hemic organic material			
18			
24 VESL to LS stony			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock

Soil Series Name

Wonsqueak - vpd

Soil Scientist/Site Evaluator Signature
J. W. Hart

Observation Hole # CLB4 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 gray FS	Friable	10YR 2/2	
		7.5YR 3/3	
6 G. Gravel			
		7.5YR 4/4, 3/3	
12			
18 EDE 14"			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock

Soil Series Name

Colonel

215
CSS/LSE#

10-2-14
Date

Town, City, Plantation

Street, Road, Subdivision
10-1-14Owner or Applicant Name
Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Laydown #2 Large Gravel P.T.

Observation Hole # SSN1 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		10 YR 2/2	
	FRIMBLE		
6		Brokene	
		7.5 YR 5/1	
12		7.5 YR 2.5/2	
18		7.5 YR 3/3	
24		10 YR 4/3	
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			□ Groundwater □ Restrictive Layer □ Bedrock

Soil Series Name

Cotton

Hydrologic Group

Observation Hole # SSN2 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		7.5 YR 2.5/3	
	VSCL	4/2	
6		5 YR 3/4	
12		Loose	10 YR 3/4
18			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			□ Groundwater □ Restrictive Layer □ Bedrock

Soil Series Name

Cotton

Hydrologic Group

Observation Hole # SSN3 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		10 YR 4/2	
	VSCL	4/2	
6			
12			
18		10 YR 2.5/4	
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			□ Groundwater □ Restrictive Layer □ Bedrock

Soil Series Name

Cotton

Hydrologic Group

Observation Hole # SSN4 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		7.5 YR 2.5/3	
	ESL	4/2	
6		5 YR 3/4	
		7.5 YR 3/4	
12			
18		gry, cobby	10 YR 3/4
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			□ Groundwater □ Restrictive Layer □ Bedrock

Soil Series Name

Cotton

Hydrologic Group

Soil Scientist/Site Evaluator Signature

215

CSS/LSE#

10-1-14

Date

Town, City, Plantation

Street, Road, Subdivision

Owner or Applicant Name

10-1-14

WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Laydown #2, large gravel pit

Observation Hole # SSNR35 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 VFSL	friable	715YR3/3	
6 Cobbley		4/2	
12		7.5YR3/3	
18			
24 EOD 14"			
30			
36			
42			
48			

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition	Percent	Depth	"	Restrictive Layer
				Bedrock

Soil Series Name Cotton Hydrologic GroupObservation Hole # Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Series Name Hydrologic Group

Observation Hole # Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Series Name Hydrologic Group

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Series Name

Hydrologic Group

Soil Scientist/Site Evaluator Signature John Went

CSS/LSE# 215

Date 10-1-14

**Test Pit Logs for
Class L Soil Survey**

Town, City, Plantation

A - Turbines 3-5

Street, Road, Subdivision

10-9-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # AT1 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		7.5YR 4/2	
6	Friable	5YR 3/3 Bg	
		5YR 3/4 Bg	
12		7.5YR 3/4	
18			
24		EOE 14" at stn 20	
30		Few stones on surface	
36		Early successional H/W	
42		Fag grn, Bot dk f.	
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth " Restrictive Layer
 Bedrock

Soil Series Name Marlawn Hydrologic Group

Observation Hole # AT2 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		7.5YR 4/2	
6	VFSL	Friable	7.5YR 4/4
12			
18		EOE 14" refusal, at stn 20	
24		Increasing surface stones	
30		Pic rub, Bot dk	
36		red spruce increasing as move into site	
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth " Restrictive Layer
 Bedrock

Soil Series Name Marlawn-Dixfield Hydrologic Group

Observation Hole # AT3 Test Pit Boring

4 " Oy" Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		7.5YR 25/1	
6	VFSL	Friable	
		10YR 4/3, 9/1	
12			
18		EOE 14" refusal stones	
24		Strong surface	
30		Area has been cut over recently	
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth " Restrictive Layer
 Bedrock

Soil Series Name Dixfield w/ pockets of colored Hydrologic Group

Jennifer West
Soil Scientist/Site Evaluator Signature

Observation Hole # AT4 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		10YR 3/2	A
6	VFSL	Friable	7.5YR 3/4 Bg
12		10YR 4/4	
		(1/2 broken E) (and Bg)	
18			
24		FIRUM SBK	
30		gry FSL	10YR 5/4
36		EOE 34"	
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth " Restrictive Layer
 Bedrock

Soil Series Name Marlawn / Dixfield Hydrologic Group

215
CSS/SE#

10-9-14
Date

Town, City, Plantation

A - Turbines 3-5

Street, Road, Subdivision

10-9-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # AT5 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0-6" VFSL	Friable	7SYR2.6/1	7SYR3/4
12" 18" 24" 30" 36" 42" 48"		10YR4/4	
EDE 18" refusal stones			
Scattered boulders / stones			
Soil Classification Slope Limiting Factor			
Profile	Condition	B	<input type="checkbox"/> Groundwater
		Percent	<input type="checkbox"/> Restrictive Layer
		Depth	<input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Dixfield stone			

Observation Hole # AT6 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0-6" VFSL	Friable	7SYR4/2.5	
12" 18" 24" 30" 36" 42" 48"		7SYR4/4	
EDE 12" stones			
Scattered boulders / products / stones			
Soil Classification Slope Limiting Factor			
Profile	Condition	C	<input type="checkbox"/> Groundwater
		Percent	<input type="checkbox"/> Restrictive Layer
		Depth	<input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Dixfield stone			

Observation Hole # AT7 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0-6" VFSL	Friable	7SYR4/2.5	
12" 18" 24" 30" 36" 42" 48"		7SYR3/3	
Bedrock 16"			
Soil Classification Slope Limiting Factor			
Profile	Condition	A	<input type="checkbox"/> Groundwater
		Percent	<input type="checkbox"/> Restrictive Layer
		Depth	<input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Lyman			

Observation Hole # AT8 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0-6" Oa	Friable	7SYR3/3	
12" 18" 24" 30" 36" 42" 48"		10YR3/2 A	
SL to Ldm			
EDE 11" refusal stones			
Boulders surface, water collects in hollows to a depth of 10" + based on water marks of boulders			
Delineated wetland			
Soil Classification Slope Limiting Factor			
Profile	Condition	A	<input type="checkbox"/> Groundwater
		Percent	<input type="checkbox"/> Restrictive Layer
		Depth	<input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Brayton v. boulders			

Soil Scientist/Site Evaluator Signature
J. H. Hart215
CSS/ES#10-9-14
Date

Town, City, Plantation-

A - Turbines 3-5

Street, Road, Subdivision

10-9-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # AT9 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Fr. 26	7.5YR 4/2 E	
		7.5YR 2.5/2 Dus	
		7.5YR 3/4	
6			
12			
18			
24			
30			
36			
42			
48			

Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth

Depth below mineral soil surface (inches)

refusal at 18"

Soil Series Name Dix Field

Hydrologic Group

Observation Hole # AT10 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Fr. 26	7.5YR 4/2 E	
		7.5YR 3/4	
6			
12			
18			
24			
30			
36			
42			
48			

Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth

Depth below mineral soil surface (inches)

refusal stones at 10"

Soil Series Name Dix Field

Hydrologic Group

Observation Hole # Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth

Depth below mineral soil surface (inches)

Soil Series Name

Hydrologic Group

Observation Hole # Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth

Depth below mineral soil surface (inches)

Soil Series Name

Hydrologic Group

Soil Scientist/Site Evaluator Signature

John West

CSS/LS#

215

Date

10-9-14

Town, City, Plantation

B - Turbines 6-13/14

Street, Road, Subdivision

10-6-14

Owner or Applicant Name

Wookee

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # <u>BT1</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
Depth of organic horizon above mineral soil			
0	Texture	Consistency	Color
6		FR	2.5Y4/3
12			2.5Y4/4 faint, few
18			
24			
30			
36			
42			
48			
Soil Classification Slope Limiting Factor <input type="checkbox"/> Groundwater			
Profile	Condition	Percent	Depth
			"
			Bedrock
Soil Series Name		Hydrologic Group	
Ud - wet			

Observation Hole # <u>BT2</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
Depth of organic horizon above mineral soil			
0	Texture	Consistency	Color
6	VS	FR	7.5YR3/2
12			7.5YR4/4
18			10YR4/3
24			7.5YR3/4 faint
30			
36			
42			
48			
Soil Classification Slope Limiting Factor <input type="checkbox"/> Groundwater			
Profile	Condition	Percent	Depth
			"
			Bedrock
Soil Series Name		Hydrologic Group	
Colonel SWP		Few stones	

Observation Hole # <u>BT3</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
Depth of organic horizon above mineral soil			
0	Texture	Consistency	Color
6	VS	fratible	7.5YR2.5/2
12			7.5YR3/2
18			7.5YR4/3
24			7.5YR3/4
30			10YR3/3
36			
42			
48			
Soil Classification Slope Limiting Factor <input type="checkbox"/> Groundwater			
Profile	Condition	Percent	Depth
			"
			Bedrock
Soil Series Name		Hydrologic Group	
Dixfield, MWD			

Observation Hole # <u>BT4</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
Depth of organic horizon above mineral soil			
0	Texture	Consistency	Color
6	VS	fratible	7.5YR3/2
12			2.5/1
18			7.5YR2.5/2
24			7.5YR3/2
30			
36			
42			
48			
Soil Classification Slope Limiting Factor <input type="checkbox"/> Groundwater			
Profile	Condition	Percent	Depth
			"
			Bedrock
Soil Series Name		Hydrologic Group	
Dixfield		MWD	

Jeff Woot

Soil Scientist/Site Evaluator Signature

215

CSS/SE#

10-6-14

Date

Town, City, Plantation

Turbines 6-13

Street, Road, Subdivision

10-6-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # BT5 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VS	FR	10YR3/2
6			
12		7.5YR3/3	
18	Firm	10YR3/3	
24	V Stony		
30	in place		
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor Groundwater
 Profile Condition Percent Depth Restrictive Layer Bedrock

Soil Series Name Dixfield Hydrologic Group MWD

Observation Hole # BT6 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	Loam	FR	7.5YR3/3
6			
12		7.5YR3/3	
18	ED 12", Strong		
24	Stony Surface		
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor Groundwater
 Profile Condition Percent Depth Restrictive Layer Bedrock

Soil Series Name Dixfield Hydrologic Group MWD

Observation Hole # BT7 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	Loam	FR	7.5YR4/1
6	Strong	2.5Y4/3	10YR4/6
12			
18	ED 10"		
24	refusal stone		
30			
36	Strong to V. Stony surface		
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor Groundwater
 Profile Condition Percent Depth Restrictive Layer Bedrock

Soil Series Name Brayton, PD Hydrologic Group

Observation Hole # BT8 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VS	FR	10YR3/1
6		2.5Y4/1	10YR4/4
12			200
18	refusal stones 10"		
24	hummock surface		
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor Groundwater
 Profile Condition Percent Depth Restrictive Layer Bedrock

Soil Series Name Colonel - Brayton Area. Hydrologic Group

Anh West

Soil Scientist/Site Evaluator Signature

215

CSS/EE#

10-6-14

Date

Town, City, Plantation

Turbinos 6-13

Street, Read, Subdivision

10-7-14

Owner or Applicant Name

Werner

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # BT9 Test Pit Boring

Depth of organic horizon above mineral soil											
Texture	Consistency	Color	Mottling								
0		7-YR 4/2 E									
6	VSFL	7-SYR 2,5/3									
		7-SYR 3/3									
12		10YR 4/4									
18											
24											
30											
36											
42											
48											
<table border="1"> <tr> <td>Soil Profile</td> <td>Classification Condition</td> <td>Slope Percent</td> <td>Limiting Factor Depth</td> </tr> <tr> <td></td> <td></td> <td></td> <td>□ Groundwater " Restrictive Layer Depth Bedrock</td> </tr> </table>				Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth				□ Groundwater " Restrictive Layer Depth Bedrock
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth								
			□ Groundwater " Restrictive Layer Depth Bedrock								
Soil Series Name		Hydrologic Group									
Dixfield		MWD									

Observation Hole # BT10 Test Pit Boring

Depth of organic horizon above mineral soil											
Texture	Consistency	Color	Mottling								
0		5YR 4/2 E									
6	VSFL	5YR 2/3									
		7-SYR 2/3									
12											
18											
24											
30											
36											
42											
48											
<table border="1"> <tr> <td>Soil Profile</td> <td>Classification Condition</td> <td>Slope Percent</td> <td>Limiting Factor Depth</td> </tr> <tr> <td></td> <td></td> <td></td> <td>□ Groundwater " Restrictive Layer Depth Bedrock</td> </tr> </table>				Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth				□ Groundwater " Restrictive Layer Depth Bedrock
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth								
			□ Groundwater " Restrictive Layer Depth Bedrock								
Soil Series Name		Hydrologic Group									
Dixfield		MWD									

Observation Hole # BT11 Test Pit Boring

Depth of organic horizon above mineral soil											
Texture	Consistency	Color	Mottling								
0	Loam	5YR 4/2									
6											
12		2.5x5/2	7.5YR 3/4								
			M 10%								
18											
24											
30											
36											
42											
48											
<table border="1"> <tr> <td>Soil Profile</td> <td>Classification Condition</td> <td>Slope Percent</td> <td>Limiting Factor Depth</td> </tr> <tr> <td></td> <td></td> <td></td> <td>□ Groundwater " Restrictive Layer Depth Bedrock</td> </tr> </table>				Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth				□ Groundwater " Restrictive Layer Depth Bedrock
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth								
			□ Groundwater " Restrictive Layer Depth Bedrock								
Soil Series Name		Hydrologic Group									
Brayton rd											

Observation Hole # BT12 Test Pit Boring

Depth of organic horizon above mineral soil											
Texture	Consistency	Color	Mottling								
0	VSFL	5YR 4/2									
6		10YR 4/4									
		10YR 3/3									
12											
18											
24											
30											
36											
42											
48											
<table border="1"> <tr> <td>Soil Profile</td> <td>Classification Condition</td> <td>Slope Percent</td> <td>Limiting Factor Depth</td> </tr> <tr> <td></td> <td></td> <td></td> <td>□ Groundwater " Restrictive Layer Depth Bedrock</td> </tr> </table>				Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth				□ Groundwater " Restrictive Layer Depth Bedrock
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth								
			□ Groundwater " Restrictive Layer Depth Bedrock								
Soil Series Name		Hydrologic Group									
Dixfield		MWD									

Soil Scientist/Site Evaluator Signature

*A. Hart*215
CSS/LSE#

10-7-14

Date

Town, City, Plantation
*Turbines 6-13*Street, Road, Subdivision
*10-7-14*Owner or Applicant Name
Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # BT13 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	VFSL	Friable	7.5YR4/2
6			
12			10YR4/3
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
		B		Bedrock

Soil Series Name *Dixfield, MWD, stony*

Hydrologic Group *SWP*

Observation Hole # BT14 Test Pit Boring

1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			10YR4/2
6			
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
		A		Bedrock

Soil Series Name *Colonel SWP*

Hydrologic Group *SWP*

Observation Hole # BT15 Test Pit Boring

3 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	VFSL	Friable	7.5YR4/2
6			
12			7.5YR4/4
18			10YR4/3
24			10YR4/2
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
		A		Bedrock

Soil Series Name *Dixfield stony*

Hydrologic Group

Observation Hole # BT16 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	VFSL	Friable	5YR7/3
6			
12			7.5YR2/3/4
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
		A		Bedrock

Soil Series Name *Dixfield stony*

Hydrologic Group

John West

Soil Scientist/Site Evaluator Signature

215

CSS/LSCE#

10-7-14

Date

Town, City, Plantation
T 6-13

Street, Road, Subdivision

Owner or Applicant Name

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # <u>BT17</u>		<input type="checkbox"/> Test Pit	<input type="checkbox"/> Boring
Depth of organic horizon above mineral soil			
Depth below mineral soil surface (inches)	Texture	Consistency	Color
0	Loam	Friable	10YR24/1,4/2
6			
12			7.5YR3/2
18			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope  Percent	Limiting Factor " Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Stone Branton		PD	

Observation Hole #		BT18	<input type="checkbox"/> Test Pit	<input checked="" type="checkbox"/> Boring
Depth of organic horizon above mineral soil				
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	loam	frangible	7.5YR 2/3 10YR 4/2	
6				
12			10YR 4/2	
18				
24				
30	EOD 12" strong			
36	Strong surface, pit + mound Skidders have compacted soils imperfectly permeability			
42				
48				
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater Restrictive Layer Bedrock
Soil Series Name	Hydrologic Group			
Cal-mel, SWP				

Observation Hole #		BT19	<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring
			Pit went to road	
Depth of organic horizon above mineral soil				
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
	0	VFSL	Friable	7.5YR 2.5/2
6			7.5YR 2.5/2	
12				
18			7.5YR 3/2	
24	FL gray		7.5YR 4/4	
30	EBB	28"		
36				
42				
48				
Soil Profile		Classification	Slope	Limiting Factor
			B	Groundwater
Condition		Percent	"	Restrictive Layer
			Depth	Bedrock
Soil Series Name		Hydrologic Group		
Dixfield, MWD				

Observation Hole #		BT20		<input type="checkbox"/> Test Pit	<input checked="" type="checkbox"/> Boring
		Depth of organic horizon above mineral soil			
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling	
0	Loam	Solid	Very dark	10% 5/4	
6				20% 5/4	
12				10% 5/4	
18					
24					
30					
36					
42					
48					
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock	
Soil Series Name				Hydrologic Group	
Boston, Mass					

Soil Scientist/Site Evaluator Signature

215
CSS/LSE#

Date _____

10-7-10

Town, City, Plantation
T 6 - 13Street, Road, Subdivision
10 - 7 - 14Owner or Applicant Name
Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

T8 - currently a wet tower

Observation Hole # BT21 Test Pit Boring

2	Depth of organic horizon above mineral soil		
0	Texture	Consistency	Color
6	VFSL	Friable	5YR 2.5/2
12			1.5YR 5/2, 6/1
18			E
24			7.5YR 3/2 BWS
30			7.5YR 3/3
36	EDG 16", strong		
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth
Bedrock			
Hydrologic Group			

Soil Series Name
Marlow, based on slopeObservation Hole # BT23 Test Pit Boring

2	Depth of organic horizon above mineral soil		
0	Texture	Consistency	Color
6	VFSL	Friable	7.5YR 3/3 BWS
12			1.5YR 3/3 BWS
18	Refusal at 10"		
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth
Bedrock			
Hydrologic Group			

Soil Series Name
MarlowObservation Hole # BT22 Test Pit Boring

2	Depth of organic horizon above mineral soil		
0	Texture	Consistency	Color
6	VFSL	Friable	7.5YR 4/2
12			1.5
18			7.5YR 4/3
24			BS
30			7.5YR 2.5/3
36			BS
42			7.5YR 3/3
48			3/4
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth
Bedrock			
Hydrologic Group			

Soil Series Name
MarlowObservation Hole # BT24 Test Pit Boring

2	Depth of organic horizon above mineral soil		
0	Texture	Consistency	Color
6	VFSL	Friable	7.5YR 4/2, 5/2
12			7.5YR 3/3 BWS
18			7.5YR 3/4
24			7.5YR 3/2
30	Refusal at 10"		
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth
Bedrock			
Hydrologic Group			

Soil Series Name
Dixfield*Mr. West*

Soil Scientist/Site Evaluator Signature

215 based on hummocks, ruts by skidder
10-7-18
CSS/LSE#
Date

Town, City, Plantation
T 6-13Street, Road, Subdivision
10-8-14Owner or Applicant Name
Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # <u>BT25</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring																			
3 " Depth of organic horizon above mineral soil																			
Texture	Consistency	Color	Mottling																
0	Very FSL	Friable	7.5YR 2.5/3																
			7.5YR 3/4																
6																			
12		7.5YR 3/2																	
18		Very stony at 14"	Stony																
24		Scattered surface, strong hummocks																	
30		Early successional (Frag gr., Bet gr.) Aeolic, but 211																	
36																			
42																			
48																			
<table border="1"> <tr> <td>Soil Profile</td> <td>Classification</td> <td>Slope</td> <td>Limiting Factor</td> </tr> <tr> <td></td> <td></td> <td>"</td> <td><input type="checkbox"/> Groundwater</td> </tr> <tr> <td></td> <td></td> <td></td> <td><input type="checkbox"/> Restrictive Layer</td> </tr> <tr> <td></td> <td></td> <td>Depth</td> <td><input type="checkbox"/> Bedrock</td> </tr> </table>				Soil Profile	Classification	Slope	Limiting Factor			"	<input type="checkbox"/> Groundwater				<input type="checkbox"/> Restrictive Layer			Depth	<input type="checkbox"/> Bedrock
Soil Profile	Classification	Slope	Limiting Factor																
		"	<input type="checkbox"/> Groundwater																
			<input type="checkbox"/> Restrictive Layer																
		Depth	<input type="checkbox"/> Bedrock																
Soil Series Name		Hydrologic Group																	
Marlton B/C																			

T-6

Observation Hole # <u>BT27</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring																			
2 " Depth of organic horizon above mineral soil																			
Texture	Consistency	Color	Mottling																
0	Very FSL	Friable	7.5YR 2.5/2																
			7.5YR 4/3																
6																			
12																			
18			EDE 12" very strong																
24			Frag gr., friable, Aeolic																
30			weakly successional																
36			Stony surface																
42																			
48																			
<table border="1"> <tr> <td>Soil Profile</td> <td>Classification</td> <td>Slope</td> <td>Limiting Factor</td> </tr> <tr> <td></td> <td></td> <td>"</td> <td><input type="checkbox"/> Groundwater</td> </tr> <tr> <td></td> <td></td> <td></td> <td><input type="checkbox"/> Restrictive Layer</td> </tr> <tr> <td></td> <td></td> <td>Depth</td> <td><input type="checkbox"/> Bedrock</td> </tr> </table>				Soil Profile	Classification	Slope	Limiting Factor			"	<input type="checkbox"/> Groundwater				<input type="checkbox"/> Restrictive Layer			Depth	<input type="checkbox"/> Bedrock
Soil Profile	Classification	Slope	Limiting Factor																
		"	<input type="checkbox"/> Groundwater																
			<input type="checkbox"/> Restrictive Layer																
		Depth	<input type="checkbox"/> Bedrock																
Soil Series Name		Hydrologic Group																	
Marlton B																			

Observation Hole # <u>BT26</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring																			
4 " Depth of organic horizon above mineral soil																			
Texture	Consistency	Color	Mottling																
0	Very FSL	Friable	10YR 4/2																
			10YR 4/6																
6																			
12			2.5YR 4/2																
18			Redox common																
24			reviewed pit next to road																
30			EDE 5-10"																
36			Indicated wetland																
42																			
48																			
<table border="1"> <tr> <td>Soil Profile</td> <td>Classification</td> <td>Slope</td> <td>Limiting Factor</td> </tr> <tr> <td></td> <td></td> <td>"</td> <td><input type="checkbox"/> Groundwater</td> </tr> <tr> <td></td> <td></td> <td></td> <td><input type="checkbox"/> Restrictive Layer</td> </tr> <tr> <td></td> <td></td> <td>Depth</td> <td><input type="checkbox"/> Bedrock</td> </tr> </table>				Soil Profile	Classification	Slope	Limiting Factor			"	<input type="checkbox"/> Groundwater				<input type="checkbox"/> Restrictive Layer			Depth	<input type="checkbox"/> Bedrock
Soil Profile	Classification	Slope	Limiting Factor																
		"	<input type="checkbox"/> Groundwater																
			<input type="checkbox"/> Restrictive Layer																
		Depth	<input type="checkbox"/> Bedrock																
Soil Series Name		Hydrologic Group																	
Brierton, TD																			

Observation Hole # <u>BT28</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring																			
1 " Depth of organic horizon above mineral soil																			
Texture	Consistency	Color	Mottling																
0	Very FSL	Friable	7.5YR 2.5/2 A																
			7.5YR 3/4 B/C																
6			10YR 3/4, 3/2																
12																			
18			EDE 16"																
24			Soils very dry																
30			C-shape starts approx at this point																
36			Scattered stones, occasional boulders																
42			Bet gr., Frag gr., Aeolic																
48			early successional																
<table border="1"> <tr> <td>Soil Profile</td> <td>Classification</td> <td>Slope</td> <td>Limiting Factor</td> </tr> <tr> <td></td> <td></td> <td>"</td> <td><input type="checkbox"/> Groundwater</td> </tr> <tr> <td></td> <td></td> <td></td> <td><input type="checkbox"/> Restrictive Layer</td> </tr> <tr> <td></td> <td></td> <td>Depth</td> <td><input type="checkbox"/> Bedrock</td> </tr> </table>				Soil Profile	Classification	Slope	Limiting Factor			"	<input type="checkbox"/> Groundwater				<input type="checkbox"/> Restrictive Layer			Depth	<input type="checkbox"/> Bedrock
Soil Profile	Classification	Slope	Limiting Factor																
		"	<input type="checkbox"/> Groundwater																
			<input type="checkbox"/> Restrictive Layer																
		Depth	<input type="checkbox"/> Bedrock																
Soil Series Name		Hydrologic Group																	
Marlton																			

Marlton B

Brierton, TD

Soil Scientist/Site Evaluator Signature

715
CSS/LSW#10-8-14
Date

Town, City, Plantation

T6-13

Street, Road, Subdivision

10-8-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

T6

Observation Hole # 0729 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	Loam	10YR23/2	
6			
12		7.5YR23/2	
18			
24	BOB 12" very stony		
24	Deleterious inland, appears to be rd		
24	clodder track. Map other Dixfield var.		
30	pd.?		Colored
36			
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater
		A		Restrictive Layer
				Bedrock

Soil Series Name Dixfield Variant, pd Hydrologic Group

Observation Hole # BT30 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VSCL	10YR26/1	
6			
12		10YR25/2	
18			
24	BOB 12" very stony		
24	surface v. stony + boulders		
30			
36			
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater
		B		Restrictive Layer
				Bedrock

Soil Series Name Marlton v. stony/boulders Hydrologic Group

Observation Hole # BT31 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VSCL	10YR22.5/2	
6	friable	7.5YR4/2	E
12		7.5YR23/4	
18			
24	BOB 16" stony		
30	Scattered stones on surface		
36	early successional NW		
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater
		C		Restrictive Layer
				Bedrock

Soil Series Name Marlton Hydrologic Group

Observation Hole # BT32 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	gravelly FSL	10YR3/2	
6			
12			
18			
24	BOB 12" stony		
30	Stony surface		
36	Abital, Teucan, Rital, Picnus		
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater
		B		Restrictive Layer
				Bedrock

Soil Series Name Dixfield trending to Gravel Hydrologic Group

John West

Soil Scientist/Site Evaluator Signature

215

CSS/LSCE#

10-8-14

Date

Town, City, Plantation

76-13

Street, Road, Subdivision

10-8-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # BT33 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	gravely	7.5YR2.5/1	
6		7.5YR2.5/1	
12		10YR4/2	
18		2.5Y5/2	10YR4/4
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Brayton, V. stony			

Observation Hole # Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	

Observation Hole # Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
John West			

Observation Hole # Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
215		10-8-14	

Soil Scientist/Site Evaluator Signature

CSS/LSE#

Date

Town, City, Plantation-

T6-13 access

Street, Road, Subdivision

10-8-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # <u>BL1</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
" Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VFSL	7.5YR25/3	
6	Friable	10YR2/1	
12		10YR4/2E	
18	Refracted at 10" very stony		
24	Sifted surface stones		
30			
36			
42			
48			
Soil Profile		Classification	
Condition		Slope	Limiting Factor
		Percent	<input type="checkbox"/> Groundwater
			<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
Depth		Depth	
Soil Series Name <u>Stony Marlow</u>			
Hydrologic Group			

Observation Hole # <u>BL2</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
" Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VFSL	7.5YR25/3	
6	Friable	7.5YR2/1	
12			
18	Refracted at 8", stony		
24	Surface stones, very		
30			
36			
42			
48			
Soil Profile		Classification	
Condition		Slope	Limiting Factor
		Percent	<input type="checkbox"/> Groundwater
			<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
Depth		Depth	
Soil Series Name <u>U. Stony Marlow</u>			
Hydrologic Group			

Observation Hole # <u> </u> <input type="checkbox"/> Test Pit <input type="checkbox"/> Boring			
" Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile		Classification	
Condition		Slope	Limiting Factor
		Percent	<input type="checkbox"/> Groundwater
			<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
Depth		Depth	
Soil Series Name			
Hydrologic Group			

Observation Hole # <u> </u> <input type="checkbox"/> Test Pit <input type="checkbox"/> Boring			
" Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile		Classification	
Condition		Slope	Limiting Factor
		Percent	<input type="checkbox"/> Groundwater
			<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
Depth		Depth	
Soil Series Name			
Hydrologic Group			

Soil Scientist/Site Evaluator Signature

*John Hart*215
CSS/LSE#10-8-14
Date

Town, City, Plantation-

Street, Road, Subdivision

Owner or Applicant Name

11-11-14

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # BR30 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	VFSL	7.5YR6P1/6P	
6		7.5YR4/4	
12		7.5YR3/4	
18	Frail	14" 7.5YR3/4	
24	Very Strong surface, some boulders		
30	Fragile	7.5YR3/4	BTPR
36			
42			
48			

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth Restrictive Layer Bedrock

Soil Series Name Marlton- Dixfield Hydrologic Group

Observation Hole # BR31 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	FSL	7.5YR4/2	E
6			
12			
18	revel stones 10"		
24	Very Strong, some boulders		
30	patches of extremely strong cut over		
36			
42			
48			

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth Restrictive Layer Bedrock

Soil Series Name Dixfield Hydrologic Group

Observation Hole # B32 Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Oa	10YR2/1	
6			
12	VFSL parchy	10YR4/2	
18	inorganic strenght		
24			
30	PD to VPD to extremely		
36	Very Strong, water collects around stones + boulders		
42	old skidder trail		
48			

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth Restrictive Layer Bedrock

Soil Series Name Brayton? / Cen Hydrologic Group

Observation Hole # Test Pit Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Soil Classification Slope Limiting Factor Groundwater
Profile Condition Percent Depth Restrictive Layer Bedrock

Soil Series Name Hydrologic Group

Soil Scientist/Site Evaluator Signature

John West

215

CSS/LSE#

11-11-14

Date

Town, City, Plantation
T 14 - 16Street, Road, Subdivision
10-13-14Owner or Applicant Name
Neaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # DT1 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		7.5YR4/2	
6		7.5YR3/2	
12		7.5YR3/2	
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
VSCL		C	"	Bedrock

Soil Series Name Dixfield

Hydrologic Group

Observation Hole # DT2 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		7.5YR26/2	
6		7.5YR4/4	
12		7.5YR3/4	
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
VSCL		B	"	Bedrock

Soil Series Name Dixfield

Hydrologic Group

Met Tower

Observation Hole # DT3 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		5YR4/2	R
6		5YR3/3	Bhs
12		5YR4/4, 3/4 Rhs	
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
VSCL		A	"	Bedrock

Soil Series Name Dixfield

Hydrologic Group

Observation Hole # DT4 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		10YR4/2	7.5YR3/4
6			2%, Fhs
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
VSCL		A	"	Bedrock

Soil Series Name Colonel

Hydrologic Group

Lyn West

Soil Scientist/Site Evaluator Signature

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # DT5 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	Frangible	7.5YR 2.5/2	
6		Ochreous	
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
		A		Bedrock

Soil Series Name Brayton stony

Hydrologic Group

Observation Hole # DT6 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	FSI	7.5YR 4/6	
6		10YR 4/2	7.5YR 4/4
12			5/5/5/6
18			10YR 5/3
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
		A?		Bedrock

Soil Series Name Colton

Hydrologic Group

Observation Hole # DT6 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	FSI	7.5YR 4/2	E
6		7.5YR 3/3	
12			7.5YR 4/3
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification	Slope	Limiting Factor	Groundwater
Condition		Percent	Depth	Restrictive Layer
		B		Bedrock

Soil Series Name Dixfield

Hydrologic Group

Soil Scientist/Site Evaluator Signature

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # DT8 Test Pit Boring

6 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0-6" Oe/loam	Loam	Frutile	10xR4/2
6-12"			Redox
12-24"		Loamy	
24-30"			EDE 14" stones
30-48"			pit/mound
48"			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Limiting Factor

Soil Series Name Colored Hydrologic Group

Observation Hole # _____ Test Pit Boring

6 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0"			
6"			
12"			
18"			
24"			
30"			
36"			
42"			
48"			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Limiting Factor

Soil Series Name Hydrologic Group

Observation Hole # _____ Test Pit Boring

6 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0"			
6"			
12"			
18"			
24"			
30"			
36"			
42"			
48"			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Limiting Factor

Soil Series Name Colored Hydrologic Group

Observation Hole # _____ Test Pit Boring

6 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0"			
6"			
12"			
18"			
24"			
30"			
36"			
42"			
48"			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Limiting Factor

Soil Series Name Hydrologic Group

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

T19 Access road

Observation Hole # <u>CR5</u>		<input type="checkbox"/> Test Pit	<input checked="" type="checkbox"/> Boring
Depth of organic horizon above mineral soil			
0	Texture	Consistency	Color
6			7.5YR 4/2 1/2
12			7.5YR 2.5/2
18			7.5YR 4/4
24			7.5YR 4/4
30			7.5YR 4/4
36			
42			
48			
Soil Classification		Slope	Limiting Factor
Profile	Condition	Percent	Depth
Soil Series Name		Hydrologic Group	
<u>Ma Becket / Sherry</u>			

Observation Hole # <u>CR6</u>		<input type="checkbox"/> Test Pit	<input checked="" type="checkbox"/> Boring
Depth of organic horizon above mineral soil			
0	Texture	Consistency	Color
6			7.5YR 3/2
12			7.5YR 4/2 1/2
18			7.5YR 4/4
24			7.5YR 4/4
30			
36			
42			
48			
Soil Classification		Slope	Limiting Factor
Profile	Condition	Percent	Depth
Soil Series Name		Hydrologic Group	
<u>Brayton / stony</u>			

Observation Hole # <u>CR7</u>		<input type="checkbox"/> Test Pit	<input checked="" type="checkbox"/> Boring
Depth of organic horizon above mineral soil			
0	Texture	Consistency	Color
6			7.5YR 2/1
12			7.5YR 3/4
18			7.5YR 3/4
24			7.5YR 3/4
30			
36			
42			
48			
Soil Classification		Slope	Limiting Factor
Profile	Condition	Percent	Depth
Soil Series Name		Hydrologic Group	
<u>Brayton / Colored</u>			

Observation Hole # <u>CR8</u>		<input type="checkbox"/> Test Pit	<input checked="" type="checkbox"/> Boring
Depth of organic horizon above mineral soil			
0	Texture	Consistency	Color
6			7.5YR 2/1
12			7.5YR 3/4
18			
24			7.5YR 3/4
30			7.5YR 3/4
36			
42			
48			
Soil Classification		Slope	Limiting Factor
Profile	Condition	Percent	Depth
Soil Series Name		Hydrologic Group	
<u>Brayton</u>			

Soil Scientist/Site Evaluator Signature

A. Whit

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Across road to T19

Observation Hole # CR9 Test Pit Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Very	7.5YR 3/2	
	Friable		
6		7.5YR 4/2, 5/1	
12		5YR 2/3 3/4	
18	refused 8"	Stone	
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Hydrologic Group

Soil Series Name *Dixfield*

Observation Hole # CR10 Test Pit Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Very	5YR 4/2, 5/1	
	Friable		
6		5YR 3/2	
12		5YR 4/1	
18		7.5YR 4/1	
24		FG E 16" Stone	
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Hydrologic Group

Soil Series Name *Marlboro/Dixfield Stone*

Observation Hole # CR11 Test Pit Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Very	2.5Y 4/3	10YR 4/1
	Friable		Fine 5%
6		2.5Y 6/2	
			Fine 10%
12			
18	Refused 12"		
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Hydrologic Group

Soil Series Name *Vd SWP cut*

Observation Hole # CR12 Test Pit Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Very	5YR 5/2	
	Friable		
6		5YR 3/2	
12		5YR 3/4	
18		7.5YR 4/4	
24		FG E 16" increase firmness	
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Hydrologic Group

Soil Series Name *Buckled Sherry*

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Access T16 - T17

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Proposed access from T17 to T16

Observation Hole # C51 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0-6 in 0a grgsl	Friable	10YR2/1 10YR4/2	
6-12 in		2.5Y4/2	
12-18 in			
18-24 in			
24-30 in			
30-36 in			
36-42 in			
42-48 in			
Soil Profile	Classification	Slope A Percent	Limiting Factor Groundwater Restrictive Layer Bedrock
Condition		Depth	

Soil Series Name

Breyton

Hydrologic Group

Access from T18 to T19

Observation Hole # C53 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0-6 in VFSL	Friable	Mixed 7.5YR2/6/3,5/2 7.5YR2.5/2	
6-12 in		10YR4/4	
12-18 in			
18-24 in			
24-30 in			
30-36 in			
36-42 in			
42-48 in			
Soil Profile	Classification	Slope Percent	Limiting Factor Groundwater Restrictive Layer Bedrock
Condition		Depth	

Soil Series Name

Marlow - Dixfield stony

Hydrologic Group

Observation Hole # C52 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0-6 in VFSL	Friable	7.5YR4/2 SYR2/3,3/4	
6-12 in		7.5YR3/4	
12-18 in		10YR4/4	
18-24 in			
24-30 in			
30-36 in			
36-42 in			
42-48 in			
Soil Profile	Classification	Slope B Percent	Limiting Factor Groundwater Restrictive Layer Bedrock
Condition		Depth	

Soil Series Name

Dixfield / Marlow stony

Observation Hole # C53 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0-6 in			
6-12 in			
12-18 in			
18-24 in			
24-30 in			
30-36 in			
36-42 in			
42-48 in			
Soil Profile	Classification	Slope Percent	Limiting Factor Groundwater Restrictive Layer Bedrock
Condition		Depth	

Soil Series Name

Hydrologic Group

L. West

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Turbine 21

Observation Hole # ET1 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 " FSL	Friable	7.5YR 4/2 7.5YR 4/4	
6		7.5YR 3/4	
12		10YR 2 1/4	
18			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
		B?	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
			Depth
Soil Series Name	Hydrologic Group		
Hermon?			

Observation Hole # ET2 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 " Oe	Friable	7.5YR 2 1/2	
6 " SL		10YR 4 1/2	
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
		A	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
			Depth
Soil Series Name	Hydrologic Group		
Bragg			

Turbine 21

Observation Hole # ET3 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 " Oe		7.5YR 2 1/2	
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
		B?	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
			Depth
Soil Series Name	Hydrologic Group		
Wonsqueak			

J. W. Wart

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Access to T 20

Observation Hole # ER1 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VESL	Friable	7.5YR4/2
6			7.5YR4/6
12			
18			7.5YR3/4
24			
30			EDG 16"
36			Stony surface
42			Foggy, Det all
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
		B	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name	Hydrologic Group		
Marlton/Dixfield			

Observation Hole # ET5 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VESL	Friable	7.5YR2.5/2
6			7.5YR2.5/4
12			
18			Refuse at 12", Stones
24			Stony surface
30			Foggy, Det all
36			
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
		B/C	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name	Hydrologic Group		
Marlton/Dixfield			

T 20

Observation Hole # ET6 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VESL	Friable	7.5YR3/2
6			7.5YR4/4
12			
18			Refuse 18"
24			Ex. boulders
30			Red, blue spruce, striped maple
36			Very thick -? planted?
42			
48			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
		B	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name	Hydrologic Group		
Marlton/Dixfield			

J. Went

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ET7

ER2

Town, City, Plantation

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

T21

Observation Hole # ET7 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	0e	7.5YR 2/3/2	
6	0a	7.5YR 2/3/1	
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater	Restrictive Layer	Bedrock
PD - VPD						

Hydrologic Group

Observation Hole # ET8 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	SSL	7.5YR 4/2	
6			
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater	Restrictive Layer	Bedrock
Dx field						

Hydrologic Group

T22

Observation Hole # ET9 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	Loam	10YR 2/2	
6		10YR 3/4	7.5YR 3/4
12			4/4 & 2/2
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

loam at western edge of Spruce plantation. Not as densely planted as D ridge - younger

mineral surface stones

consider mucky as Marine/Dx field

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater	Restrictive Layer	Bedrock
Dx field.						

Hydrologic Group

Observation Hole # ET10 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater	Restrictive Layer	Bedrock

Hydrologic Group

J. West

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Between T23 - T22

Observation Hole # ET10 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VS1	5SYR4/1,5/1	
6		7SYR3/3	
12		7.5YR3/4	
18			
24			
30		Stony surface, hummocky, shallow rooted	
36		DIC. sub, 25 cm	
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater	Restrictive Layer	Bedrock

Soil Series Name Dixfield Hydrologic Group

Observation Hole # ET11 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	0A	7SYR2S/2	
6		10YR2/1,4/1	
12		Loam	
18			
24		refusal at 12"	
30		STONES	
36		Colonel in pits	
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater	Restrictive Layer	Bedrock

Soil Series Name Colonel, boulders Hydrologic Group

T 22-23

Observation Hole # ET11 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	Loam	10YR4/3	7.5YR4/4
6			5/5
12		10YR5/3	↓
18			
24			
30			
36			
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater	Restrictive Layer	Bedrock

Soil Series Name Colonel, stony Hydrologic Group

Observation Hole # ET13 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	VS1	7.5YR4/4	
6	FR	7.5YR3/4	
12			
18			
24		refusal at 14" STONES	
30			
36			
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	Groundwater	Restrictive Layer	Bedrock

Soil Series Name Dixfield, stony Hydrologic Group

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

T 23

Observation Hole # ET14 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	0a	7.5YR25/2	
	Crumbly		
6	Loam	2.5YR1/2	10/2/6
			2%, Fine
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		A	<input type="checkbox"/> Groundwater
Percent			<input type="checkbox"/> Restrictive Layer
		Depth	<input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Brayton, poorly			

Depth below mineral soil surface (inches)

Notes: Saturated at surface - heavy rains last week brought water table up.

1. Stony, bouldery

Abund. Pic-rub*, Bet all

Sp. Reg. fern, pit/mound

Fluffed out land

Observation Hole # ET15 Test Pit Boring

Depth of organic horizon above mineral soil			
0	2	Color	Mottling
0	VS	7.5YR25/2	
6	Crumbly	7.5YR25/2	
12		7.5YR25/2	
18		7.5YR25/2	
24		7.5YR25/2	
30		7.5YR25/2	
36		7.5YR25/2	
42		7.5YR25/2	
48		7.5YR25/2	
Soil Profile	Classification	Slope	Limiting Factor
Condition		B	<input type="checkbox"/> Groundwater
Percent			<input type="checkbox"/> Restrictive Layer
		Depth	<input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Draxfield / Marlow			

Depth below mineral soil surface (inches)

Notes: On edge of clearing to a wet tower

10 - 29 - 14

T 25

Observation Hole # EV67 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	0a	7.5YR25/2	
	Crumbly		
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		A	<input type="checkbox"/> Groundwater
Percent			<input type="checkbox"/> Restrictive Layer
		Depth	<input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
VFD			

Depth below mineral soil surface (inches)

Notes: Fluffed due to stones

Deep sphagnum over.

Ponded water in bottoms

W. Stony

Observation Hole # ET16 Test Pit Boring

Depth of organic horizon above mineral soil			
0	1	Color	Mottling
0	VS	7.5YR25/2	
6	Crumbly	7.5YR25/2	
12		7.5YR25/2	
18		7.5YR25/2	
24		7.5YR25/2	
30		7.5YR25/2	
36		7.5YR25/2	
42		7.5YR25/2	
48		7.5YR25/2	
Soil Profile	Classification	Slope	Limiting Factor
Condition		B	<input type="checkbox"/> Groundwater
Percent			<input type="checkbox"/> Restrictive Layer
		Depth	<input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Draxfield			

Depth below mineral soil surface (inches)

Notes: Some stones

Pic-rub, Abi-bat, Bet peeps

A. W.

Soil Scientist/Site Evaluator Signature

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CSS/ES/SE#10 - 28 - 14
Date

Town, City, Plantation T20-25	Street, Road, Subdivision 10-28-14	Owner or Applicant Name Weaver
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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

T24 + T25

Observation Hole # <u>ET17</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
1 " Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 VFSL	Frangible	7.5YR 3/2	
6		7.5YR 4/4	
12	gry VFSL	10YR 2/4	
18			
24	refusal	16" stones	
30	Stony		
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Depth <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Dixfield/ Marlow			

Observation Hole # <u>ET18</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
1 " Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 VFSL	Frangible	7.5YR 2.5/3	
6		7.5Y 5/2	
12		7.5YR 3/2	
18		10YR 4/4	
24		10YR 5/3	
30		Scattered stones on surface	
36		Hummocks - Stones!	
42		Pic rub w/ few Rot pop, Heesee spruce plantation	
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Depth <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Dixfield / Marlow			

T24

Observation Hole # <u>ET19</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
2 " Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 VFSL	Frangible	7.5YR 2.5/2	
6		7.5YR 3/2	
12	gry VFSL	10YR 3/4	
18			
24		Scattered stones	
30	Frag gr., Bet all		
36	Xeric Grn		
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Depth <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Dixfield			

T25

Observation Hole # <u>ET20</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
1 " Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 VFSL	Frangible	7.5YR 4/2	
6		7.5YR 3/4	
12	gry	10YR 4/4	
18	VFSL		
24	Refusal 16"		
30		Scattered surface stones	
36	Frag rub, Rotally	Rot pop	
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Depth <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group	
Dixfield			

John Went
Soil Scientist/ Site Evaluator Signature

215
CSS/LSE#

10-28-14
Date

Town, City, Plantation

T 20 - 25

Street, Road, Subdivision

10-28-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # ET 21 Test Pit Boring

Depth of organic horizon above mineral soil

0	Texture	Consistency	Color	Mottling
0	V65L		10YR 3/2	
6	OC	Friable	10YR 3/1	Ab
12	gray		10YR 4/2	10YR 3/3
18	V65L			2% fine
24	EDE 16"			
30	Portion of wetland disturbed by shovel - reason for buried A.			
36				
42				
48				

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Hydrologic Group

Soil Series Name Brayton

Access to T 25

Observation Hole # ET 22 Test Pit Boring

Depth of organic horizon above mineral soil

0	Texture	Consistency	Color	Mottling
0	grayish	Friable	10YR 3/2	
6				
12				
18				
24				
30				
36				
42				
48				

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Hydrologic Group

Soil Series Name Colonel

Observation Hole # Test Pit Boring

Depth of organic horizon above mineral soil

0	Texture	Consistency	Color	Mottling
0				
6				
12				
18				
24				
30				
36				
42				
48				

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Hydrologic Group

Soil Series Name

Observation Hole # Test Pit Boring

Depth of organic horizon above mineral soil

0	Texture	Consistency	Color	Mottling
0				
6				
12				
18				
24				
30				
36				
42				
48				

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	Percent	Depth	Groundwater
				Restrictive Layer
				Bedrock

Hydrologic Group

Soil Series Name

John West

Soil Scientist/Site Evaluator Signature

215

CSS/LES#

10-28-14

Date

Town, City, Plantation

Street, Road, Subdivision

11-12-14

Owner or Applicant Name
Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Turbines E line

Turbine 25

Observation Hole # T23-1

 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		7.5YR2/5/2	
0E	Friable		
6		7.5YR4/2 E	
12		7.5YR3/8	
18		WVW	
18		7.5YR3/4	
18		Stony	
18		Firm	
24		WVW	
24		7.5YR3/3	
24		Stony, grt	
24		10YR4/3	
24		Some 2%	
36			
36			
42			
42			
48			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition			<input type="checkbox"/> Groundwater
Percent			<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
Depth			
Hydrologic Group			

Soil Series Name
Dix Field

Observation Hole #

 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition			<input type="checkbox"/> Groundwater
Percent			<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
Depth			
Hydrologic Group			

Soil Series Name

Soil Scientist/Site Evaluator Signature

Observation Hole # T24-1

 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0		7.5YR3/2 W	
6		7.5YR3/3 W	
12		7.5YR4/4 W	
18		10YR4/4 W	
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition			<input type="checkbox"/> Groundwater
Percent			<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
Depth			
Hydrologic Group			

Soil Series Name

Twinberry variant

Observation Hole #

 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0			
6			
12			
18			
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition			<input type="checkbox"/> Groundwater
Percent			<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock
Depth			
Hydrologic Group			

Soil Series Name

Hydrologic Group

CSS/LESE#

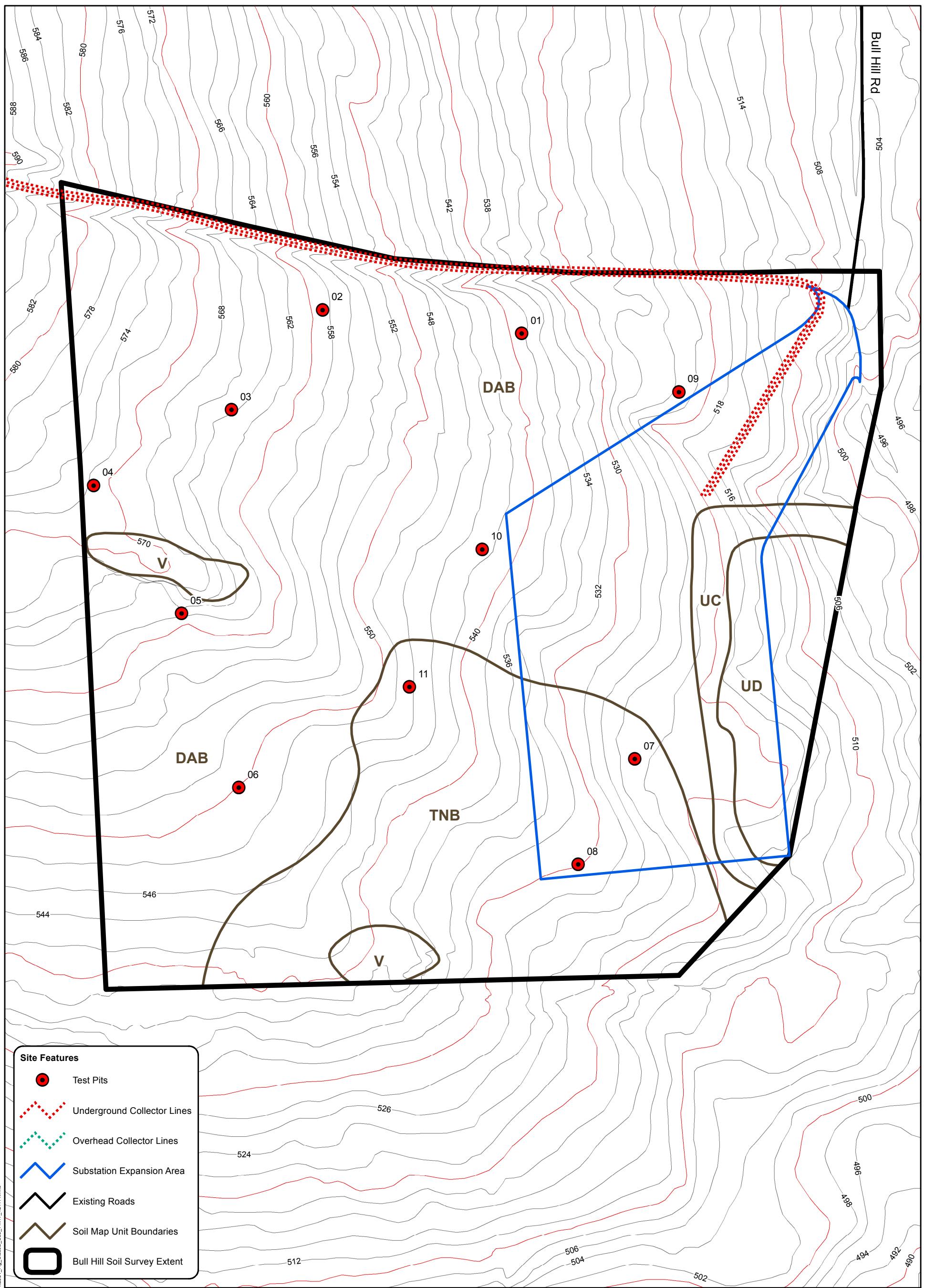
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11-12-14

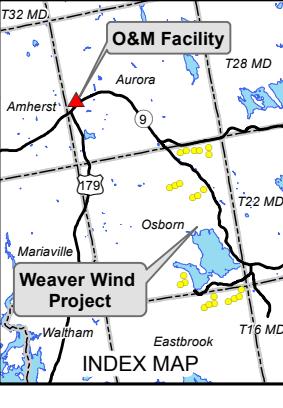
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Appendix C-1

Class B Soil Mapping



GuProjects/GIS_Projects_2014/FirstWindDraftFinalWDO_REV3/FW_WSub11x17_121114.mxd

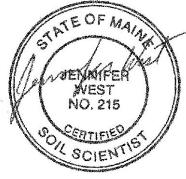


1:1,320 1 inch = 110 feet

*Note: Data provided by: Aerial Survey Co., James W. Sewall, Reed & Reed Inc., NHD, & MEGIS
For further detail see civil & electrical design
A narrative and legend accompanies this map

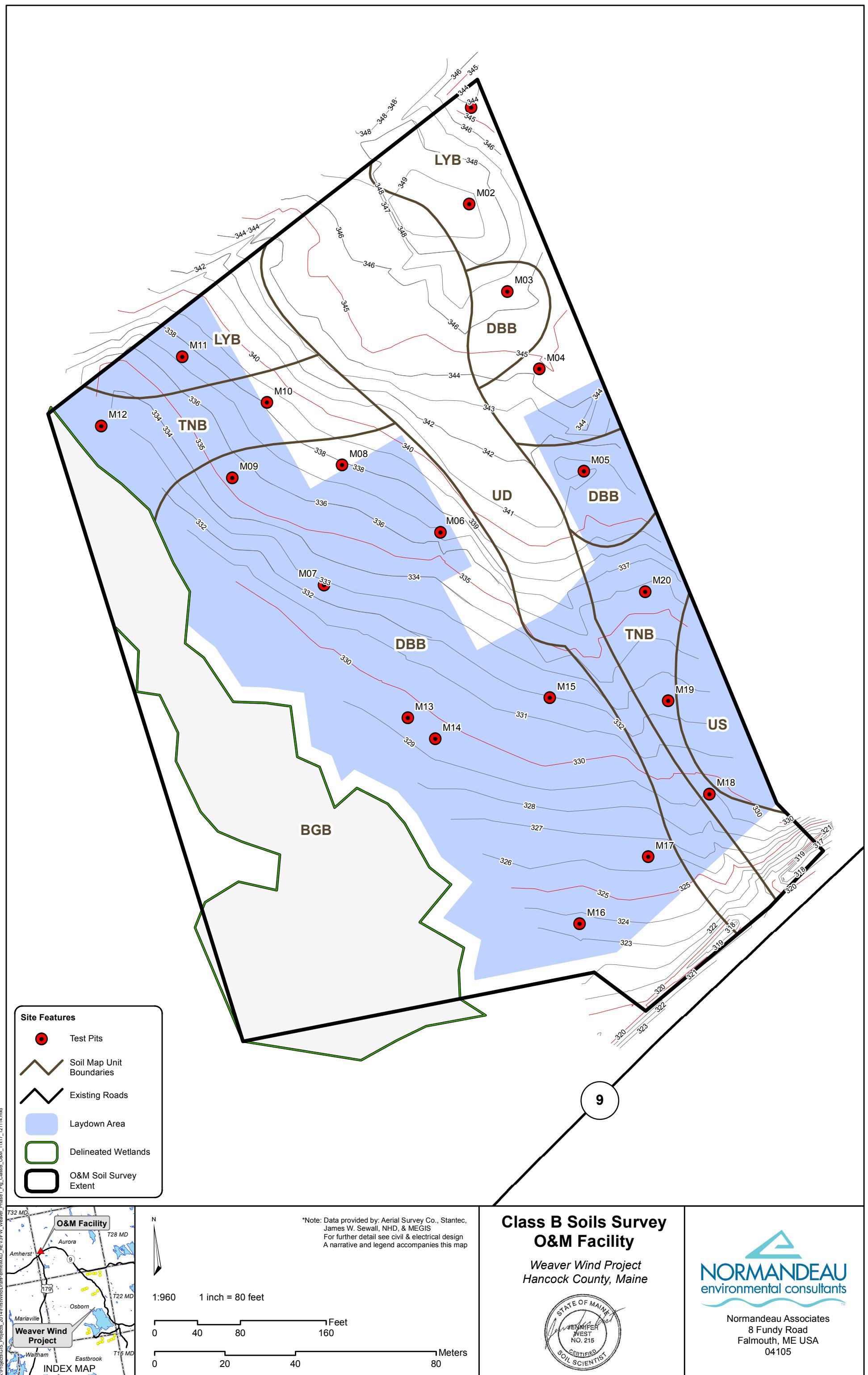
Class B Soils Survey Bull Hill Substation

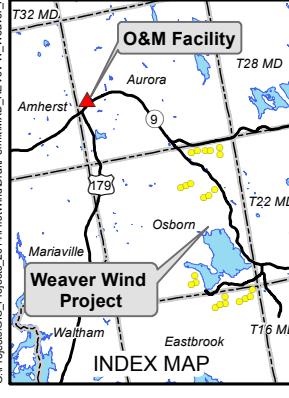
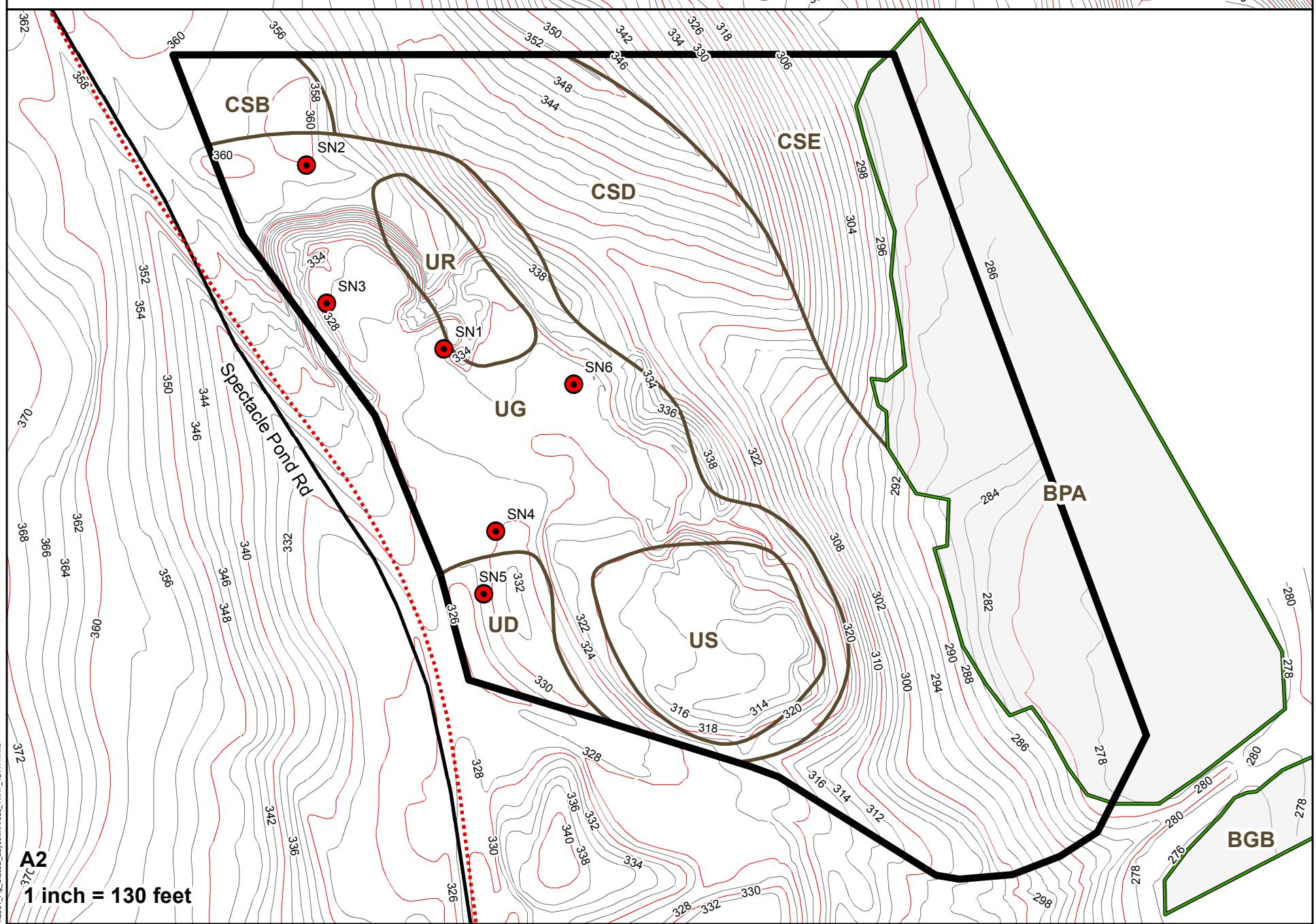
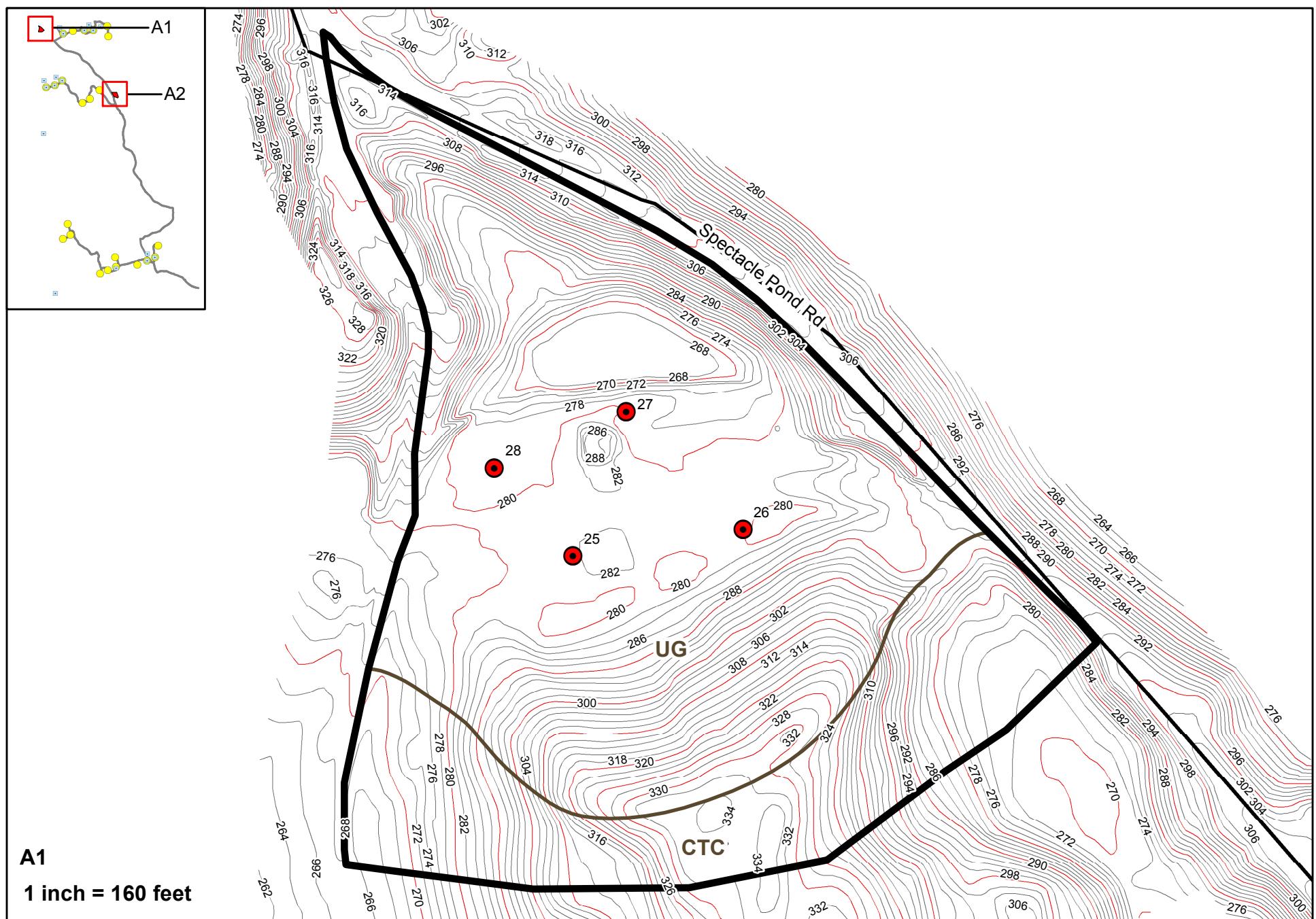
Weaver Wind Project
Hancock County, Maine



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environmental consultants

Normandeau Associates
8 Fundy Road
Falmouth, ME USA
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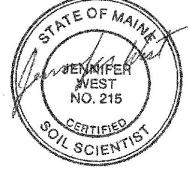




*Note: Data provided by: Stantec, James W. Sewall, Reed & Reed Inc., NHD, & MEGIS
For further detail see civil & electrical design
A narrative and legend accompanies this map

Class B Soils Survey Laydown Areas

Weaver Wind Project
Hancock County, Maine



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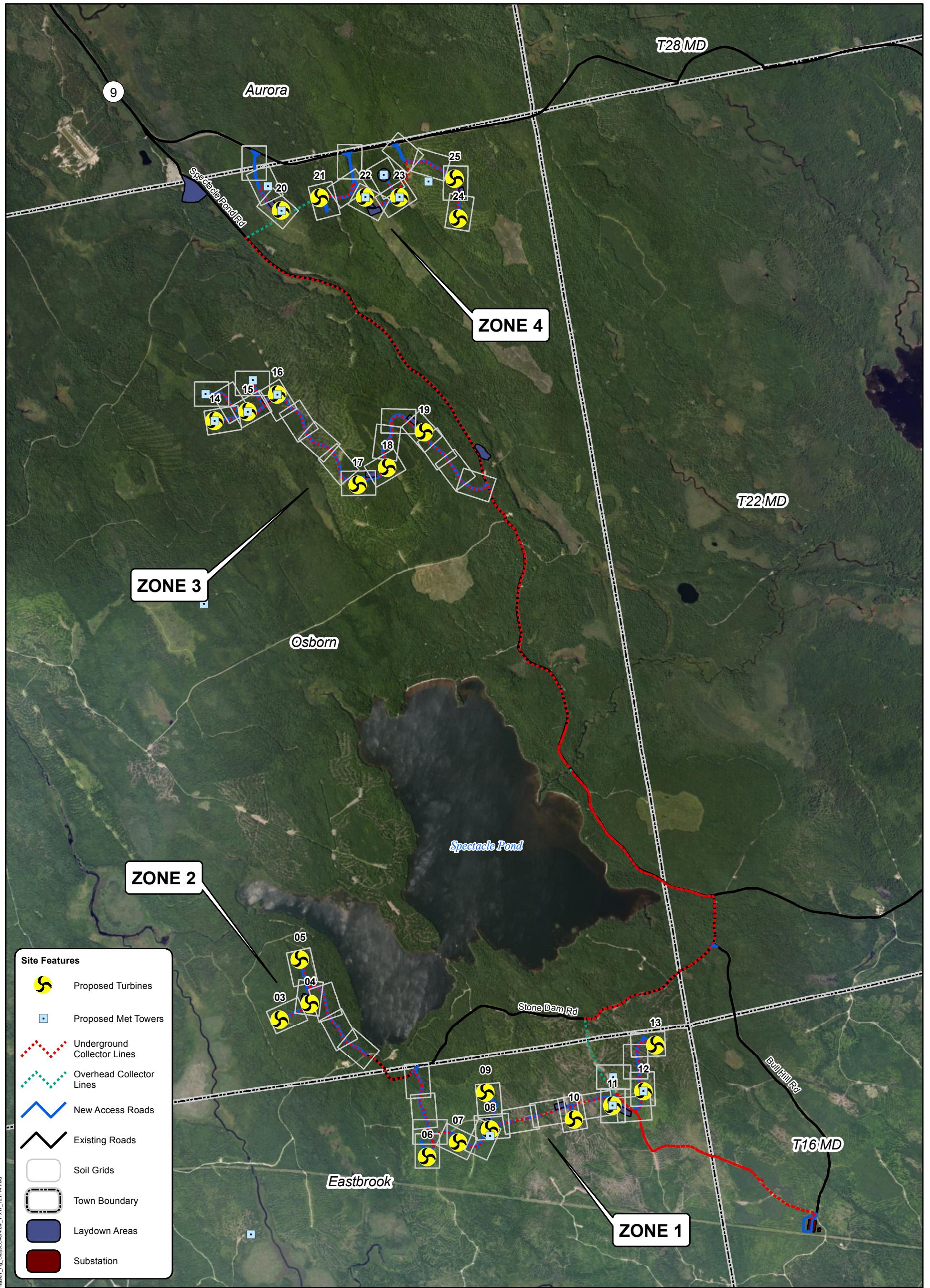
Normandeau Associates
8 Fundy Road
Falmouth, ME USA
04105

Site Features

- Test Pits
- Delineated Wetlands
- Existing Roads
- Laydown Area Soil Survey Extent
- Underground Collector Lines
- Overhead Collector Lines
- Soil Map Unit Boundaries

Appendix C-2

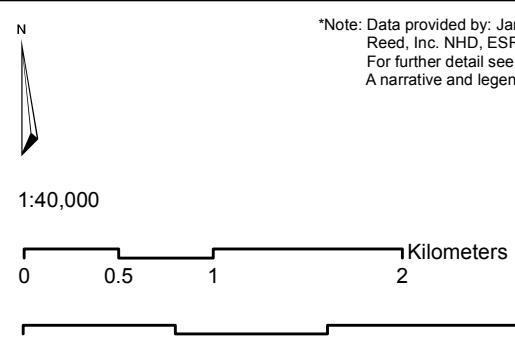
Class L Soil Mapping



GuProjectsGIS_Projects_2014\FirstWindDraft\main\WDO_REV3\FW_Wea

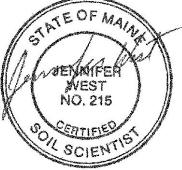


*Note: Data provided by: James W. Sewall, Reed & Reed, Inc. NHD, ESRI & MEGIS
For further detail see civil & electrical design
A narrative and legend accompanies this map



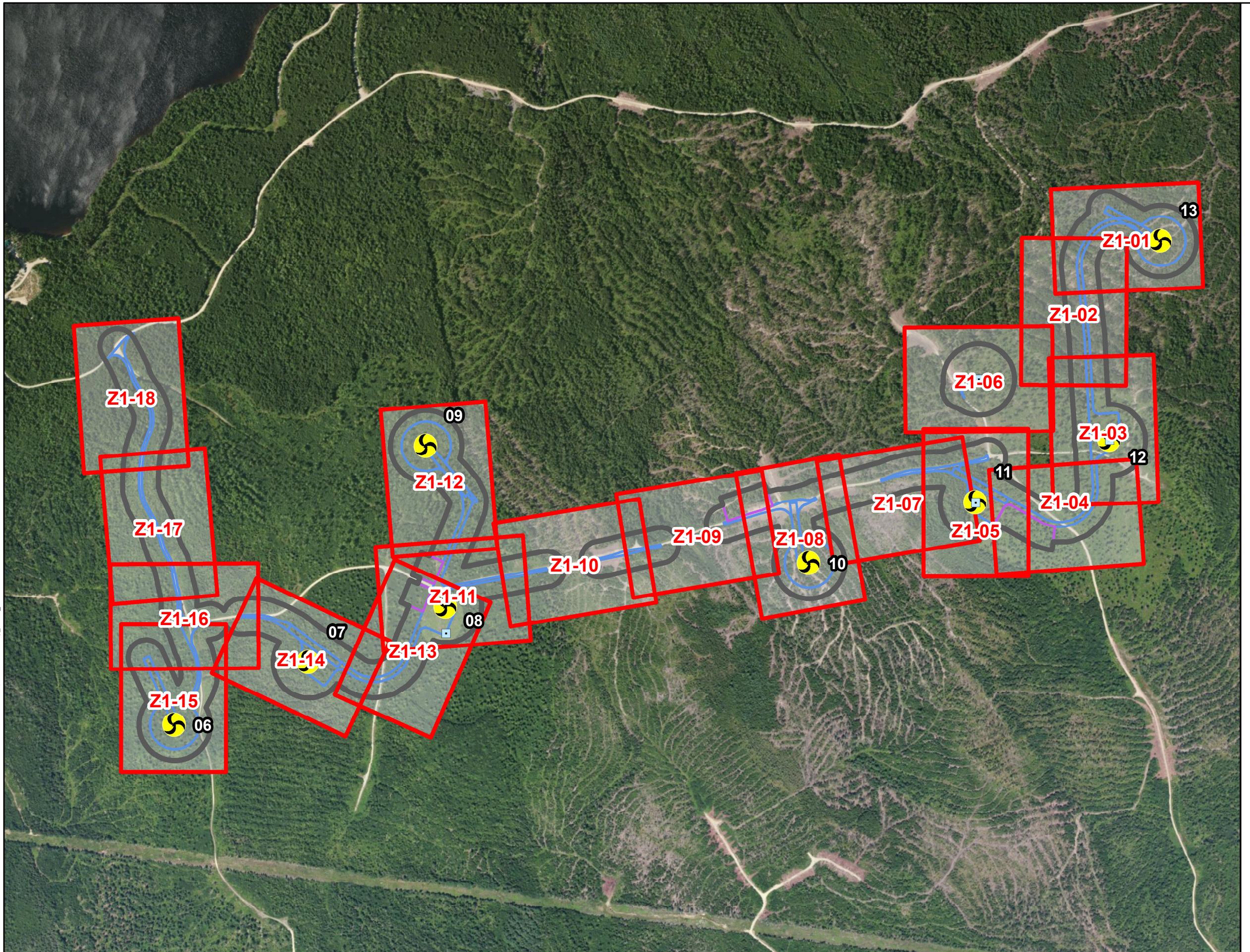
Class L Soil Zone Overview

Weaver Wind Project
Hancock County, Maine



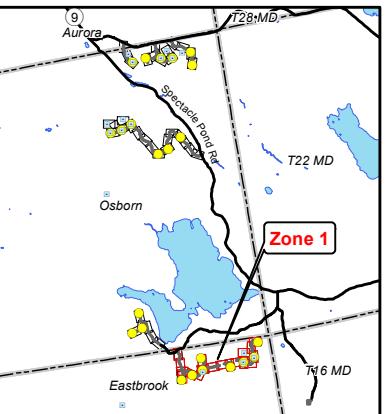
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04105



Weaver Wind Project
Class L Soils Survey
Map: Zone 1 Index Map

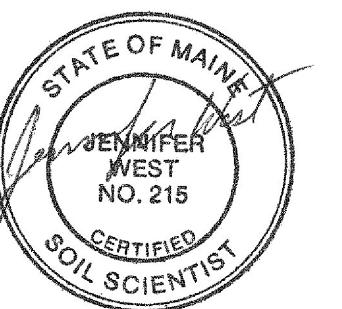
Hancock County, Maine



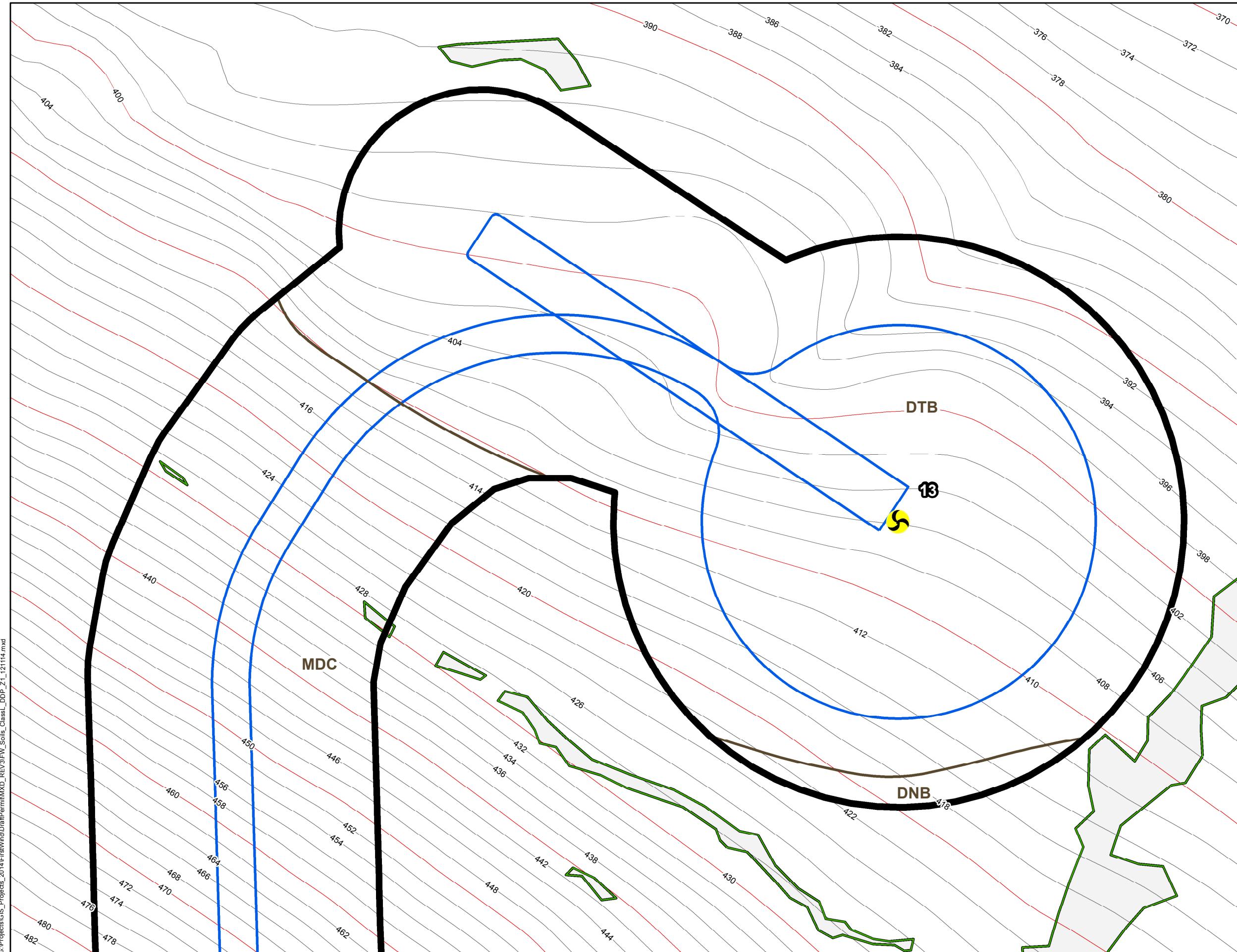
Site Features

- Proposed Turbines
- Zone 1 Grids
- Proposed Met Towers
- New Access Roads
- Class L Soil Survey Extent

*Notes: A narrative and legend accompanies this map
Data provided by: James W. Sewall, ESRI & MEGIS



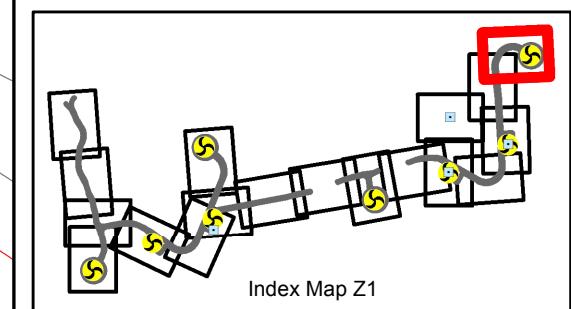
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Feet
1 inch = 800 feet



Weaver Wind Project

Class L Soils Survey
Map: Z1-01

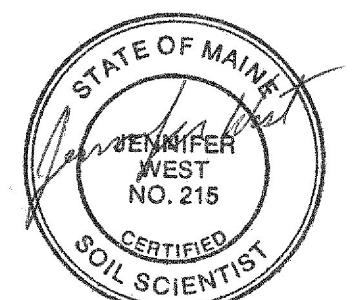
Hancock County, Maine



Site Features

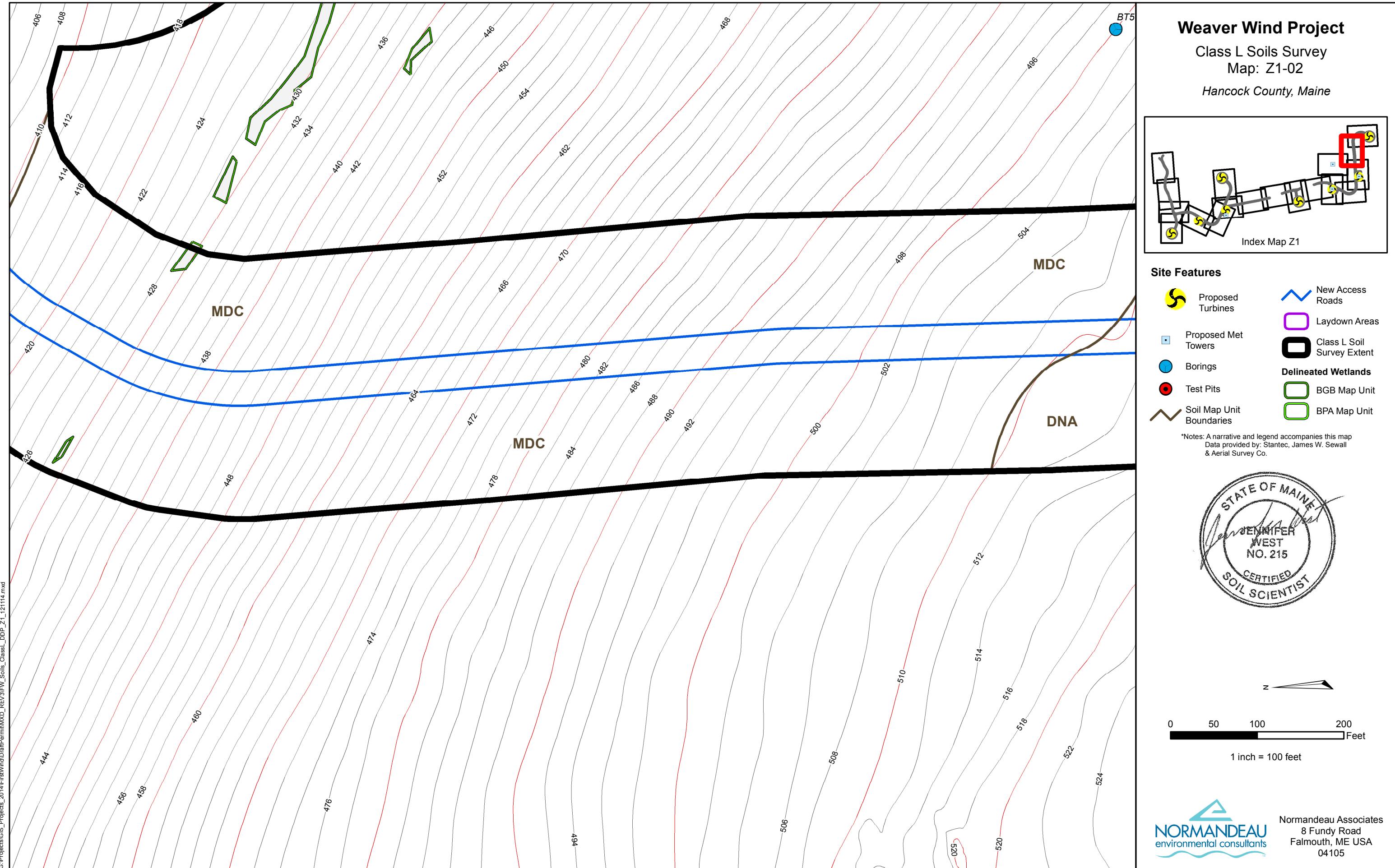
- Proposed Turbines
- Laydown Areas
- Class L Soil Survey Extent
- Delineated Wetlands
- Borings
- Test Pits
- Soil Map Unit Boundaries
- BGB Map Unit
- BPA Map Unit

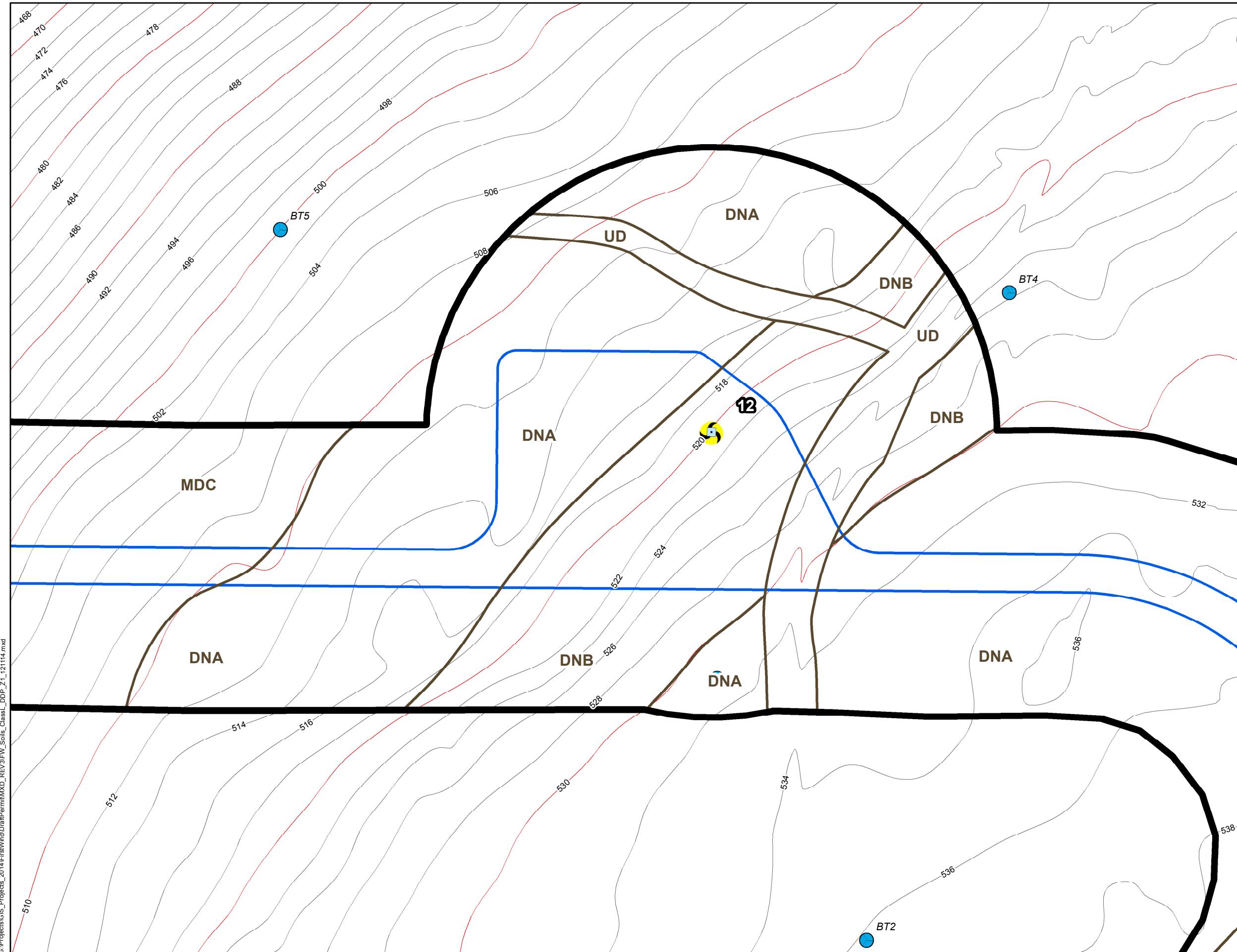
*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
Feet

1 inch = 100 feet

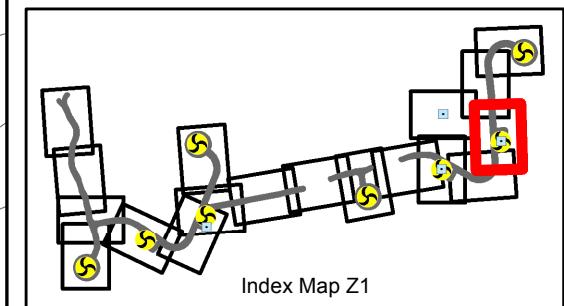




Weaver Wind Project

Class L Soils Survey
Map: Z1-03

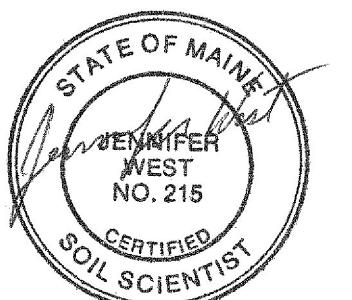
Hancock County, Maine



Site Features

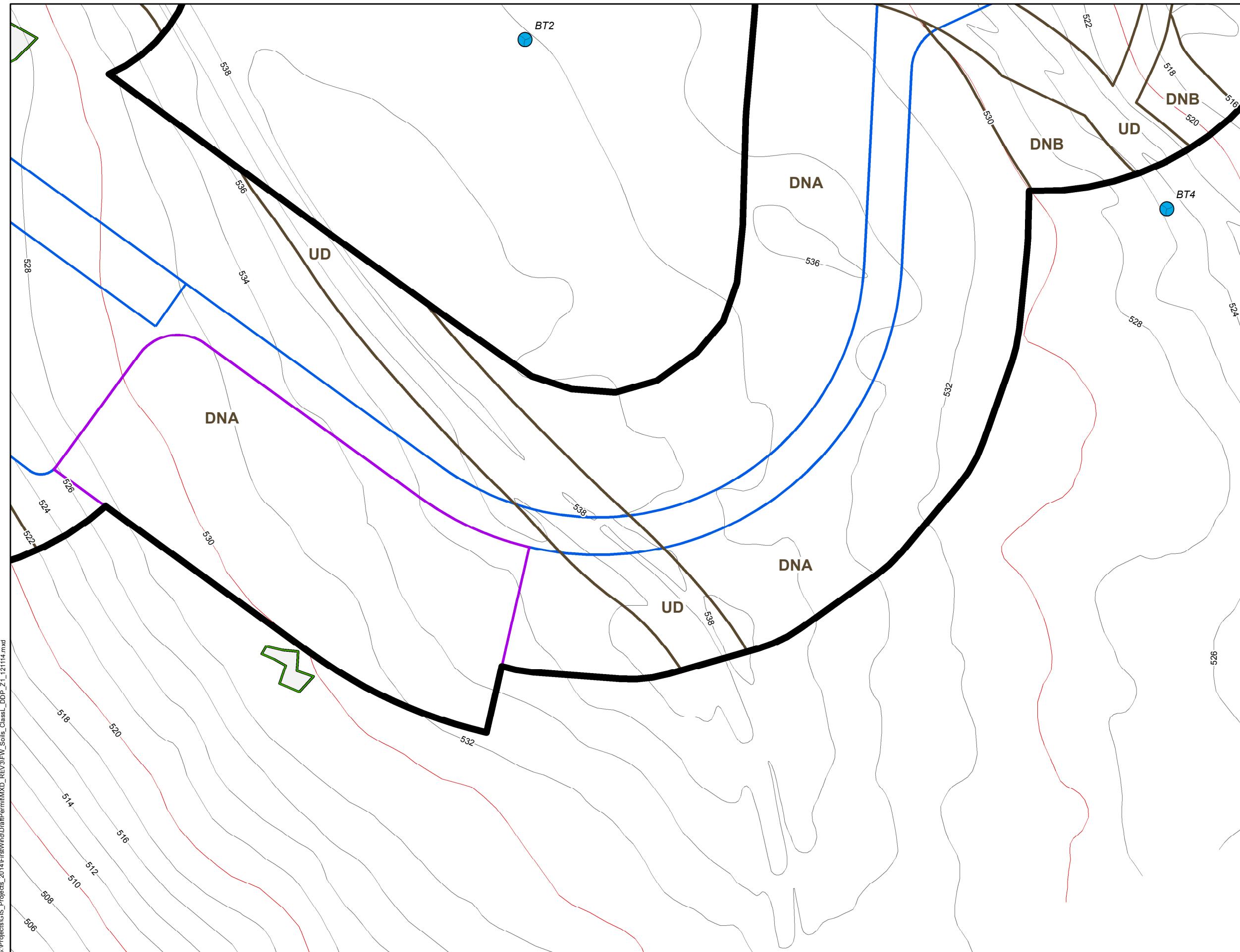
- Proposed Access Roads
- Proposed Turbines
- Proposed Met Towers
- Borings
- Test Pits
- Soil Map Unit Boundaries
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
1 inch = 100 feet

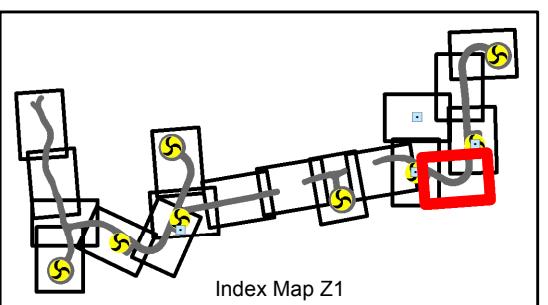
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environmental consultants
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Falmouth, ME USA
04105



Weaver Wind Project

Class L Soils Survey
Map: Z1-04

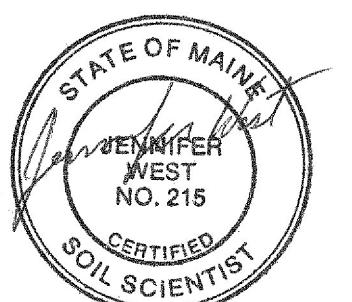
Hancock County, Maine



Site Features

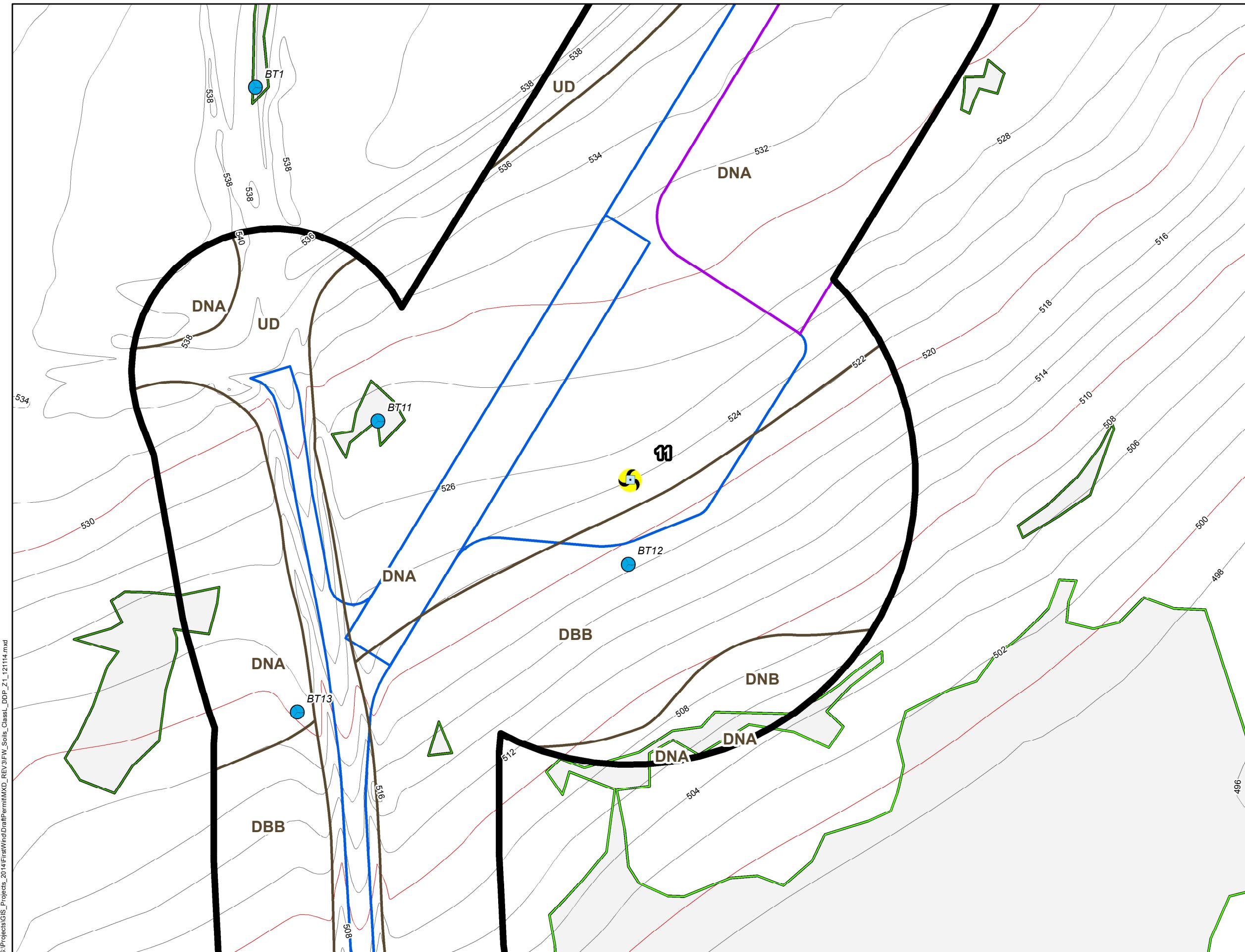
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- New Access Roads (Blue line icon)
- Laydown Areas (Purple line icon)
- Proposed Met Towers (Small square icon)
- Class L Soil Survey Extent (Black line icon)
- Delineated Wetlands (Black outline icon)
- Borings (Blue circle icon)
- Test Pits (Red circle icon)
- Soil Map Unit Boundaries (Grey line icon)
- BGB Map Unit (White box icon)
- BPA Map Unit (Green box icon)

Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
Feet

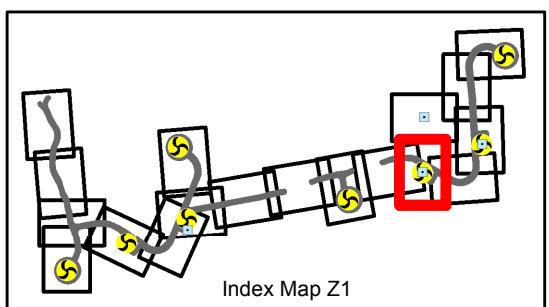
1 inch = 100 feet



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Class L Soils Survey Map: Z1-05

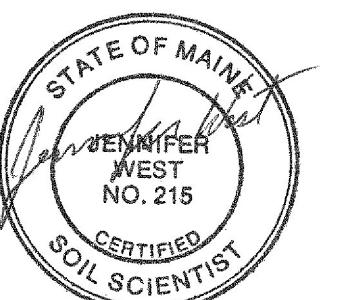
Hancock County, Maine



Site Features

-  Proposed Turbines
-  Proposed Met Towers
-  Borings
-  Test Pits
-  Soil Map Unit Boundaries
-  New Access Roads
-  Laydown Areas
-  Class L Soil Survey Extent
-  Delineated Wetlands
-  BGB Map Unit
-  BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.

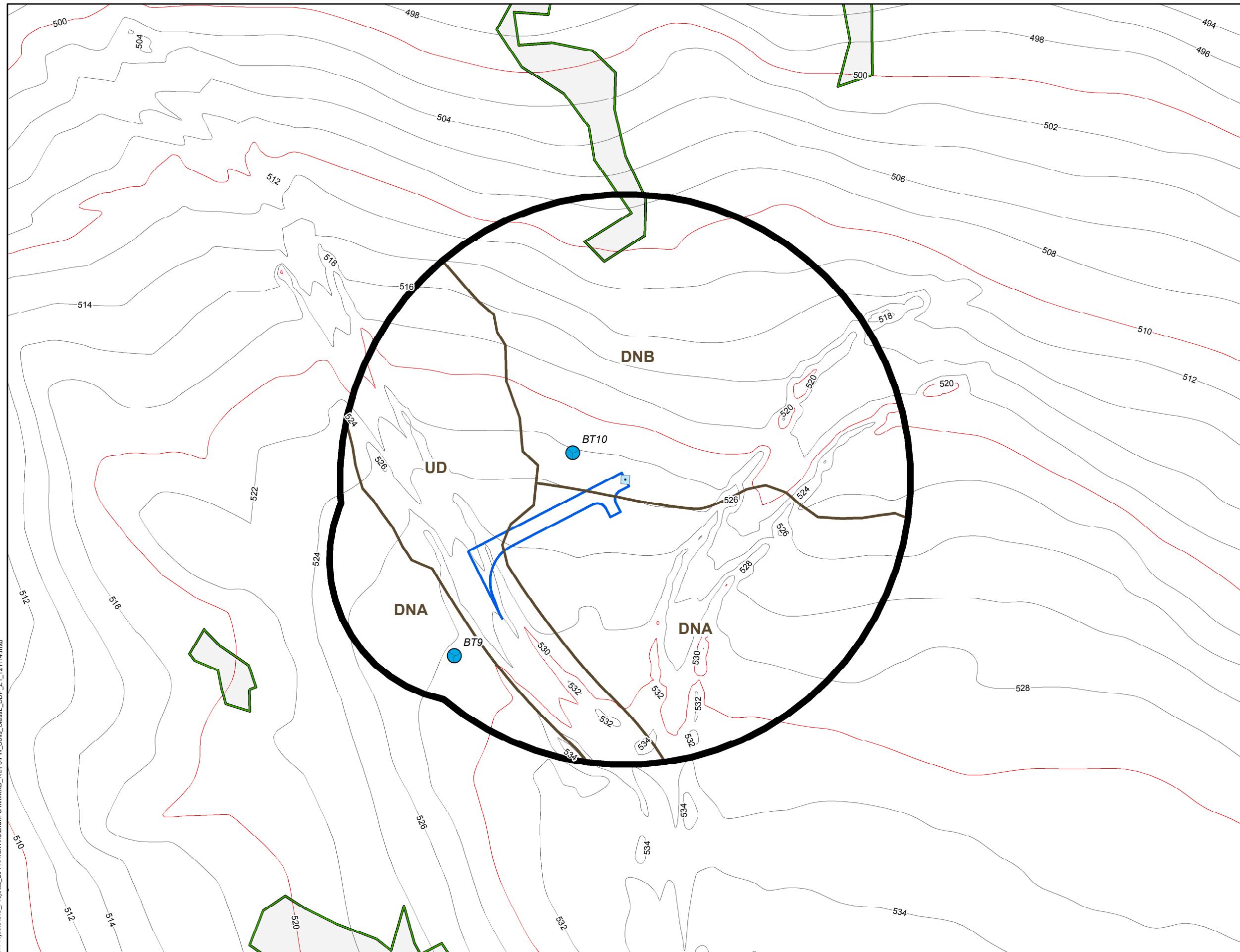


0 50 100 200

1 inch = 100 feet

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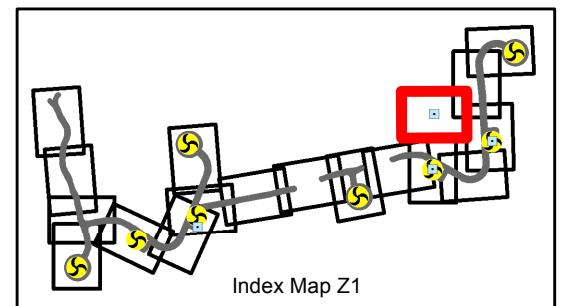
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04105



Weaver Wind Project

Class L Soils Survey
Map: Z1-06

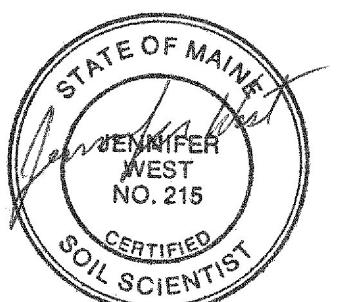
Hancock County, Maine



Site Features

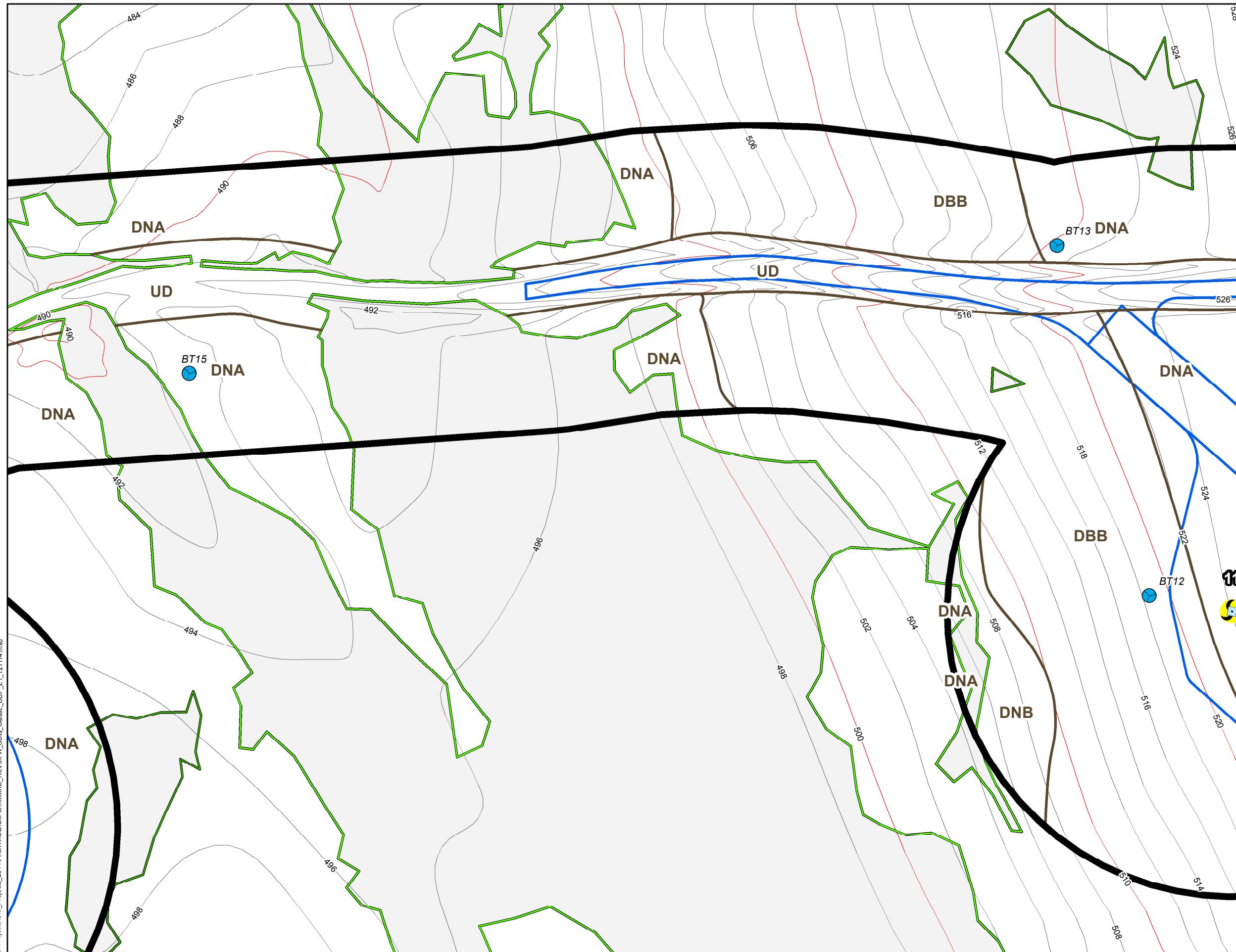
- Proposed Turbines
- New Access Roads
- Laydown Areas
- Class L Soil Survey Extent
- Delineated Wetlands
- Borings
- Test Pits
- Soil Map Unit Boundaries
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
Feet

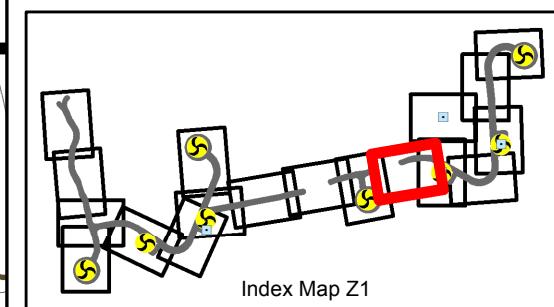
1 inch = 100 feet



Weaver Wind Project

Class L Soils Survey Map: Z1-07

Hancock County, Maine

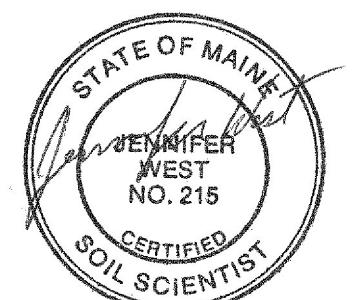


Site Features

Legend:

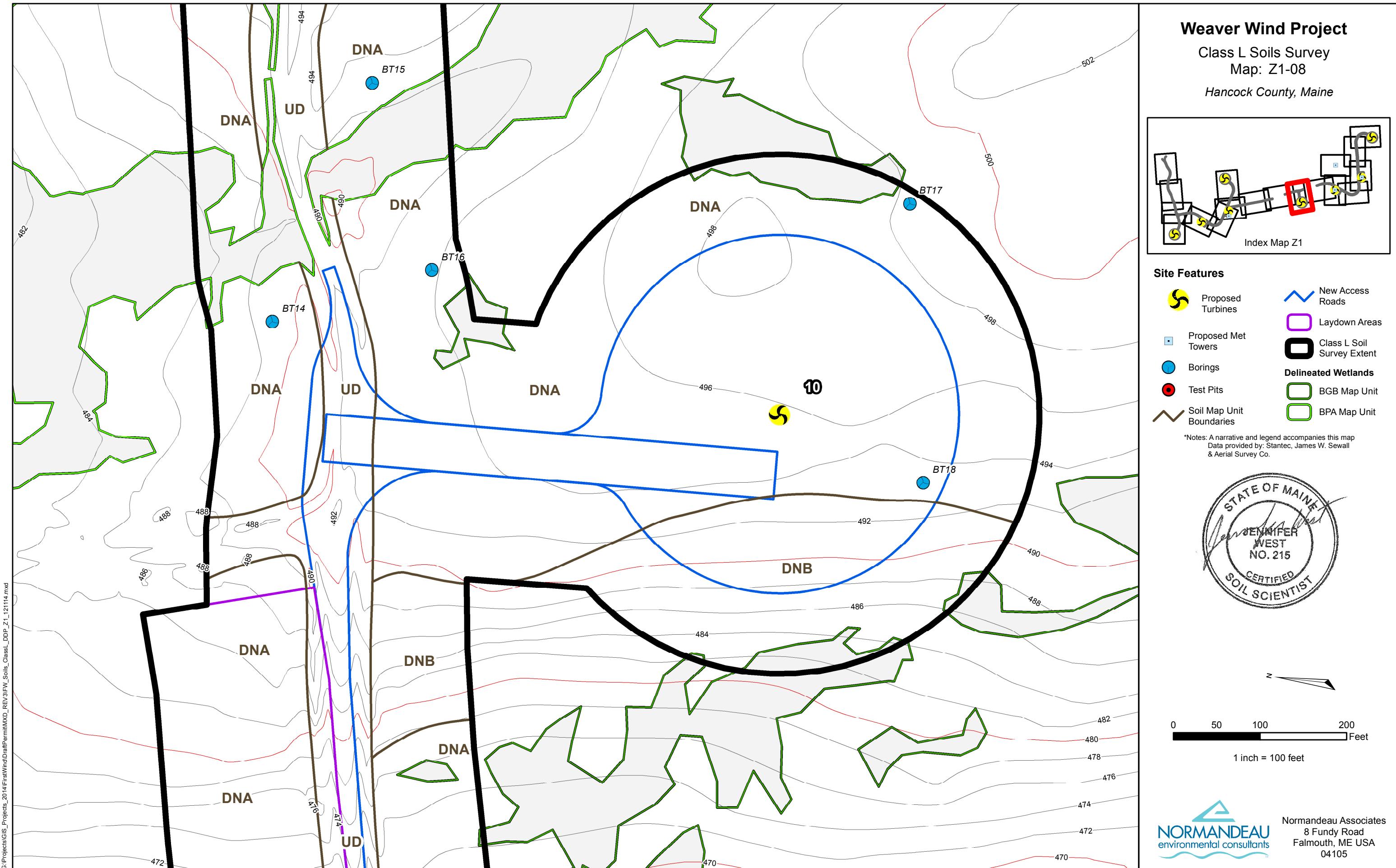
- Proposed Turbines
- Proposed Met Towers
- Borings
- Test Pits
- Soil Map Unit Boundaries
- New Access Roads
- Laydown Areas
- Class L Soil Survey Extent
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.



0 50 100 200

1 inch = 100 feet

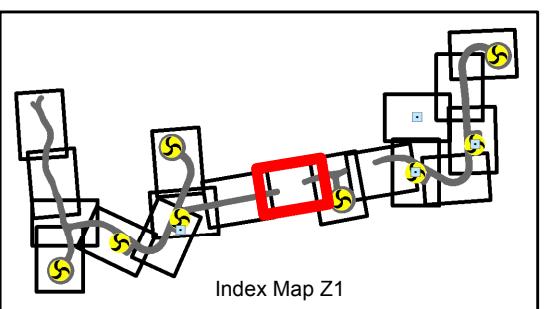


Weaver Wind Project

Class L Soils Survey

Map: Z1-09

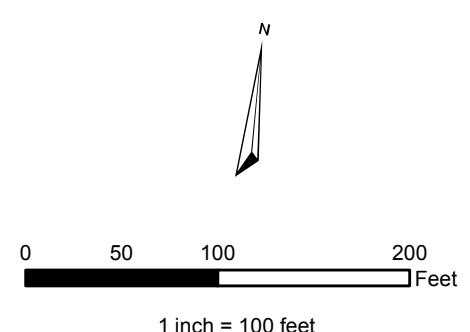
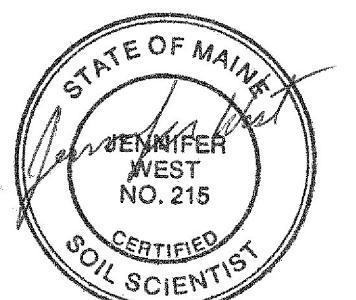
Hancock County, Maine



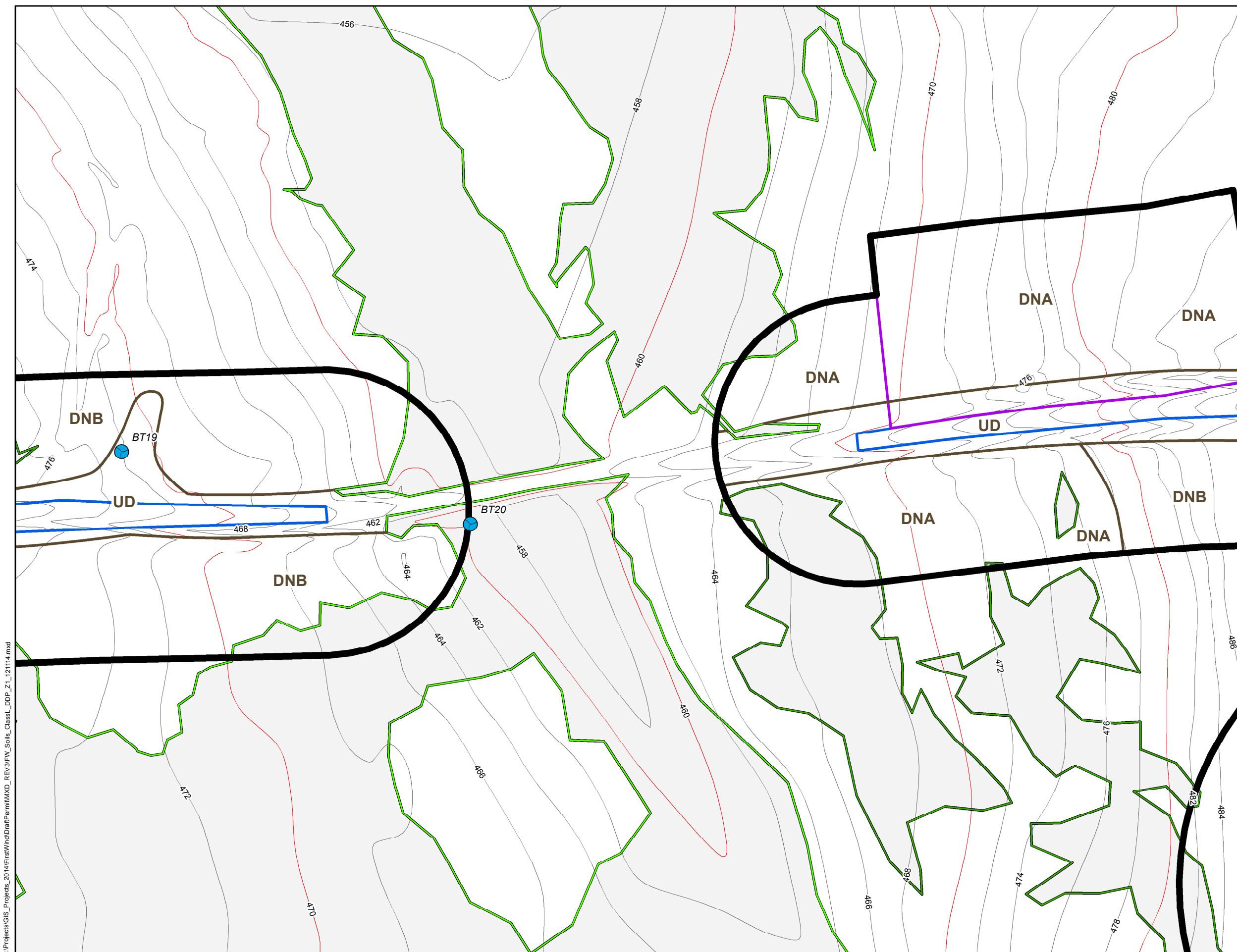
Site Features

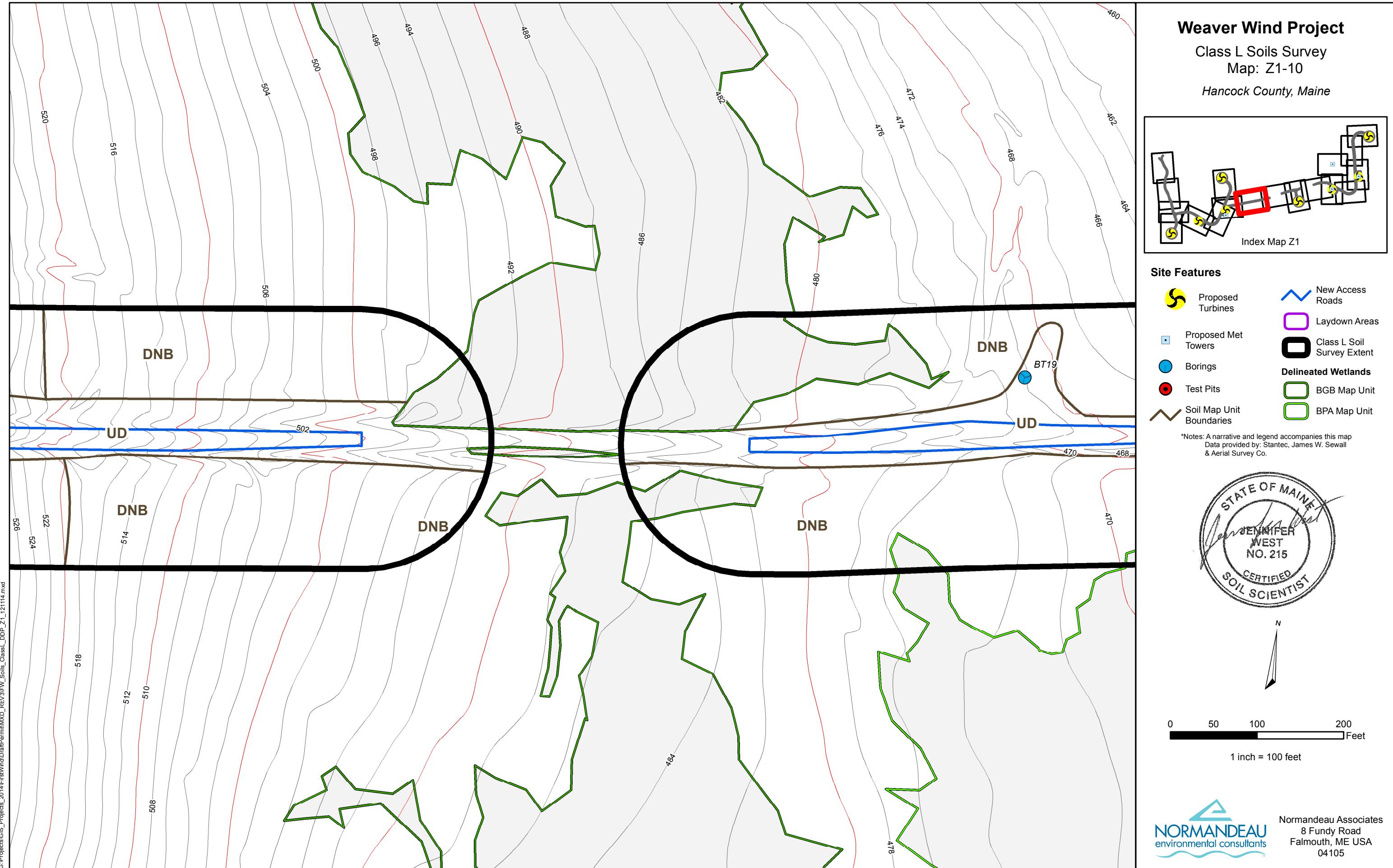
- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Test Pits
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit
- Soil Map Unit Boundaries
- Soil Map Unit
- BPA Map Unit

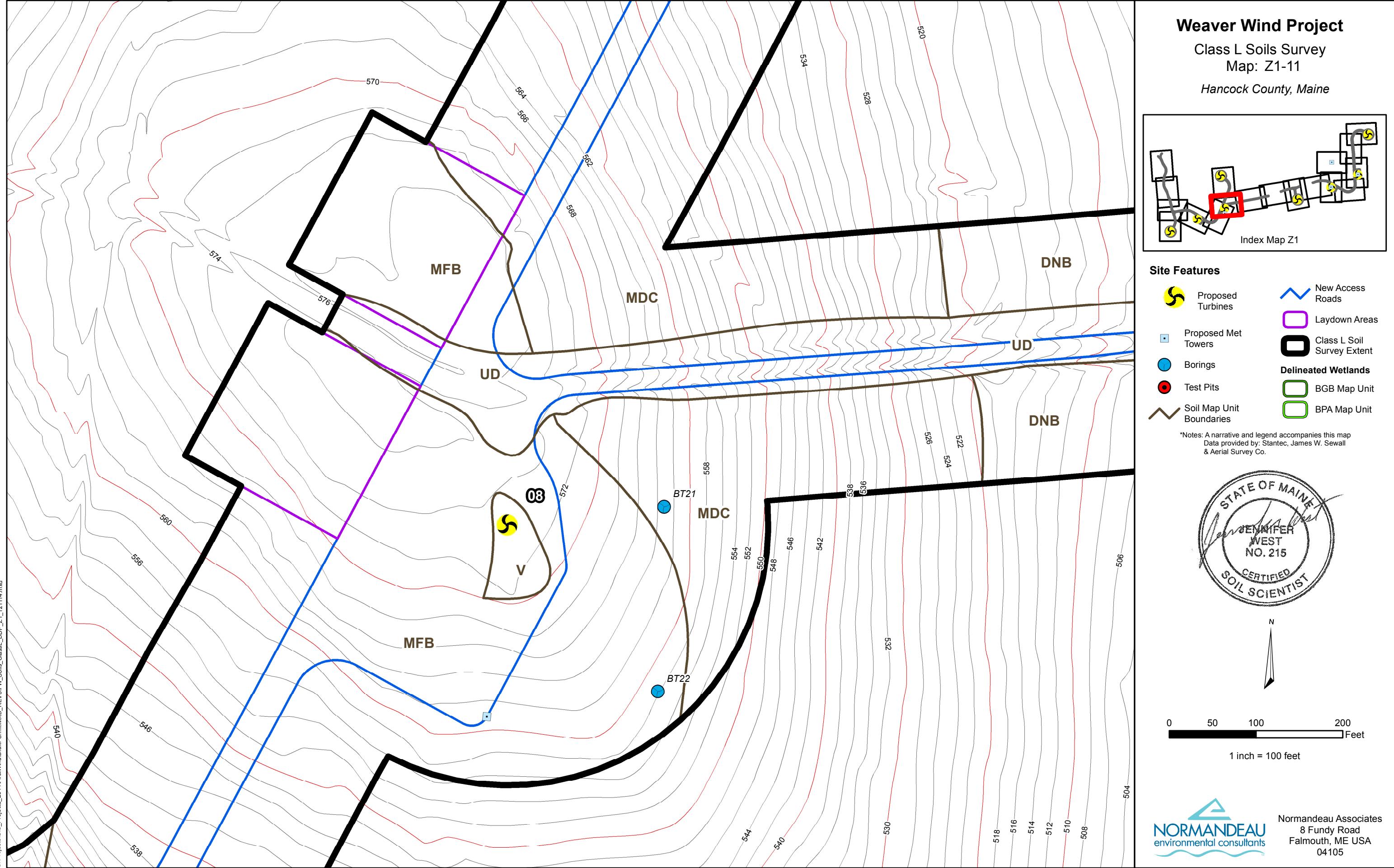
*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
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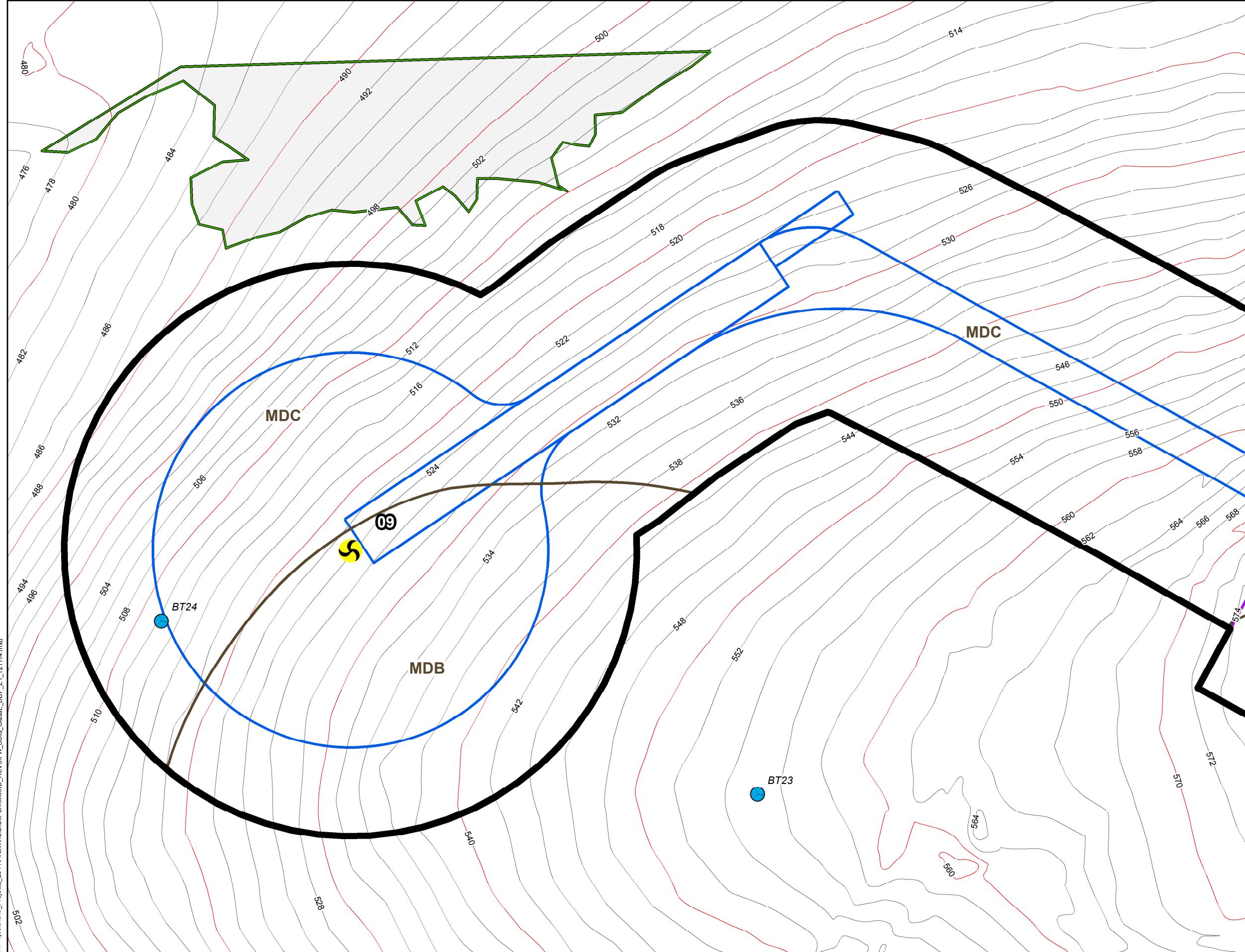


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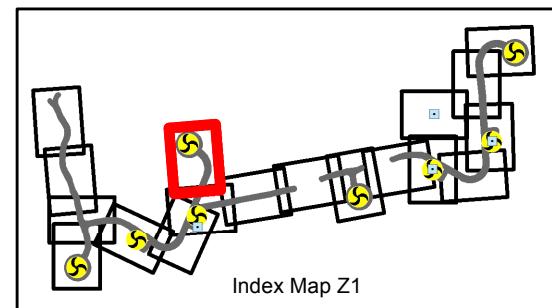


Weaver Wind Project

Class L Soils Survey

Map: Z1-12

Hancock County, Maine

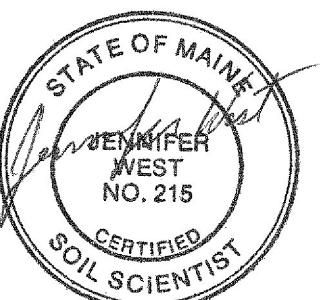


Site Features

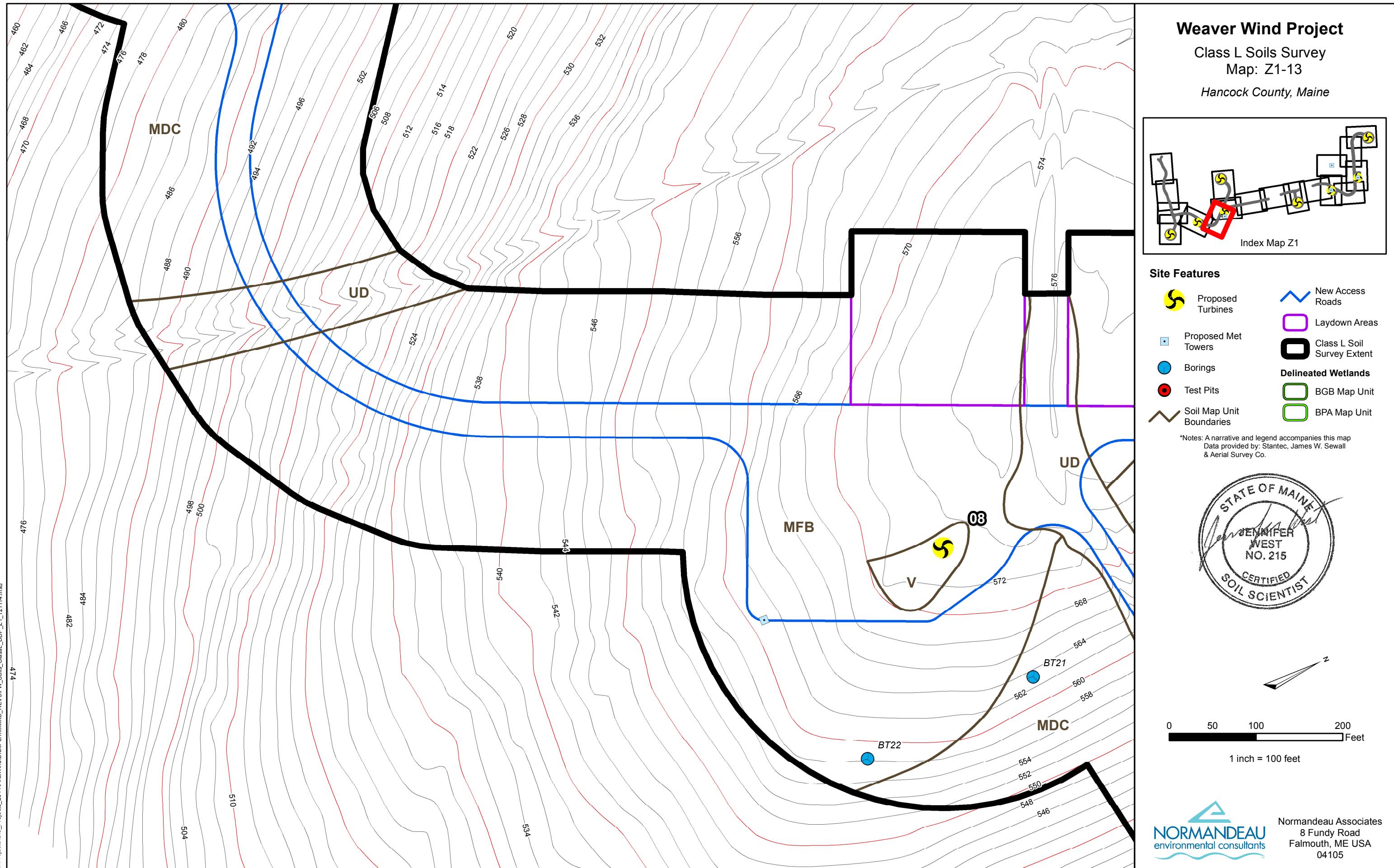
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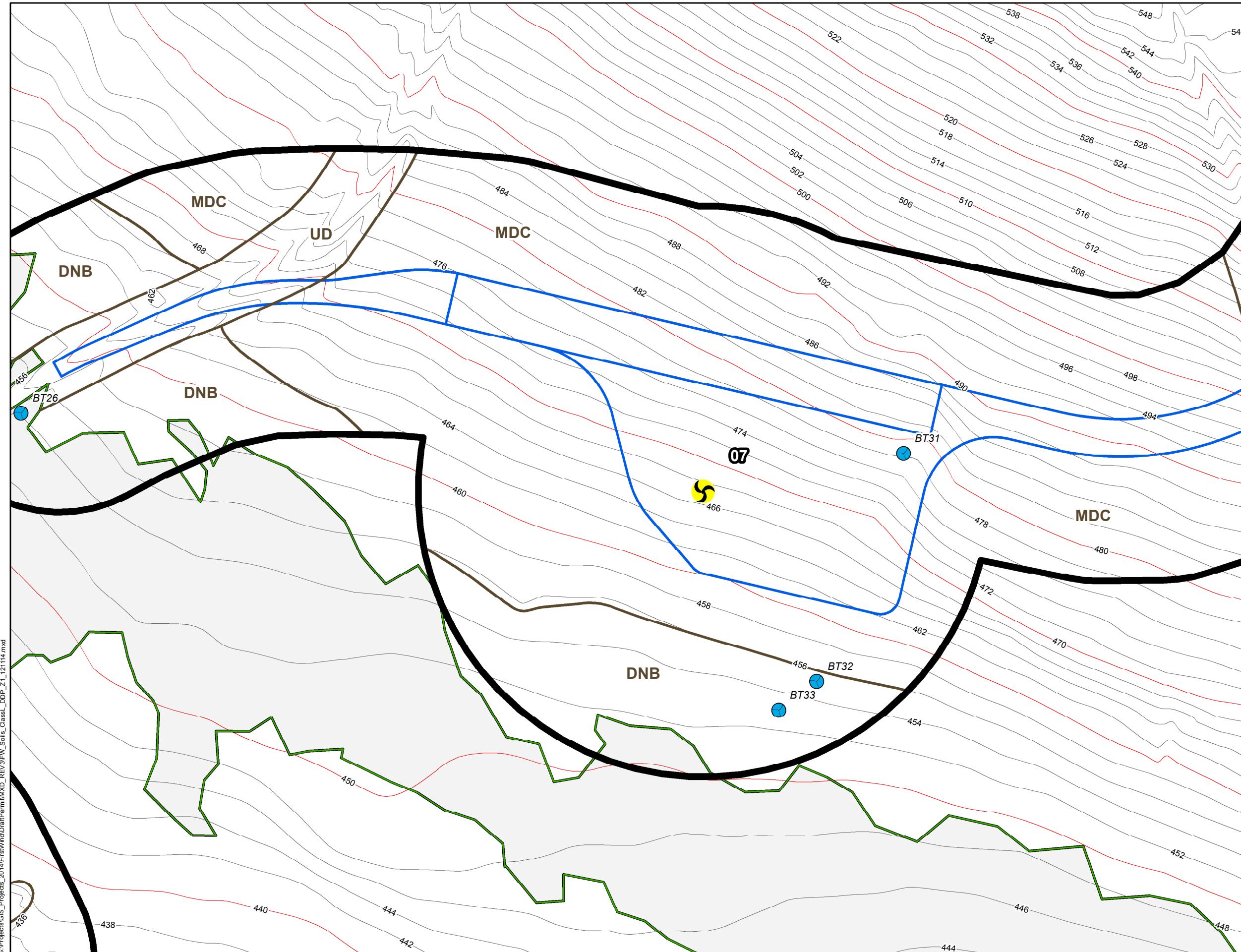
- Proposed Turbines
- Proposed Met Towers
- Borings
- Test Pits
- Soil Map Unit Boundaries
- New Access Roads
- Laydown Areas
- Class L Soil Survey Extent
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.



1 inch = 100 feet

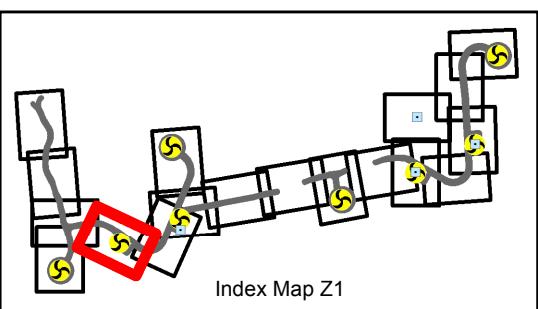




Weaver Wind Project

Class L Soils Survey
Map: Z1-14

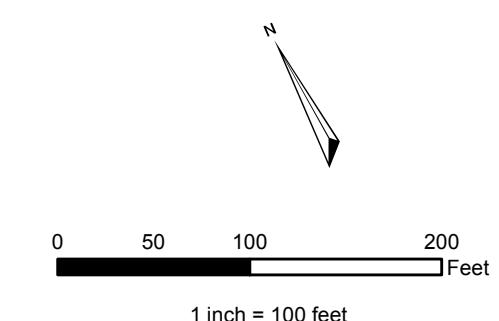
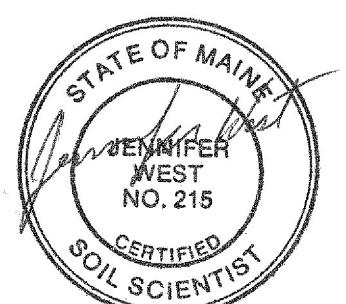
Hancock County, Maine

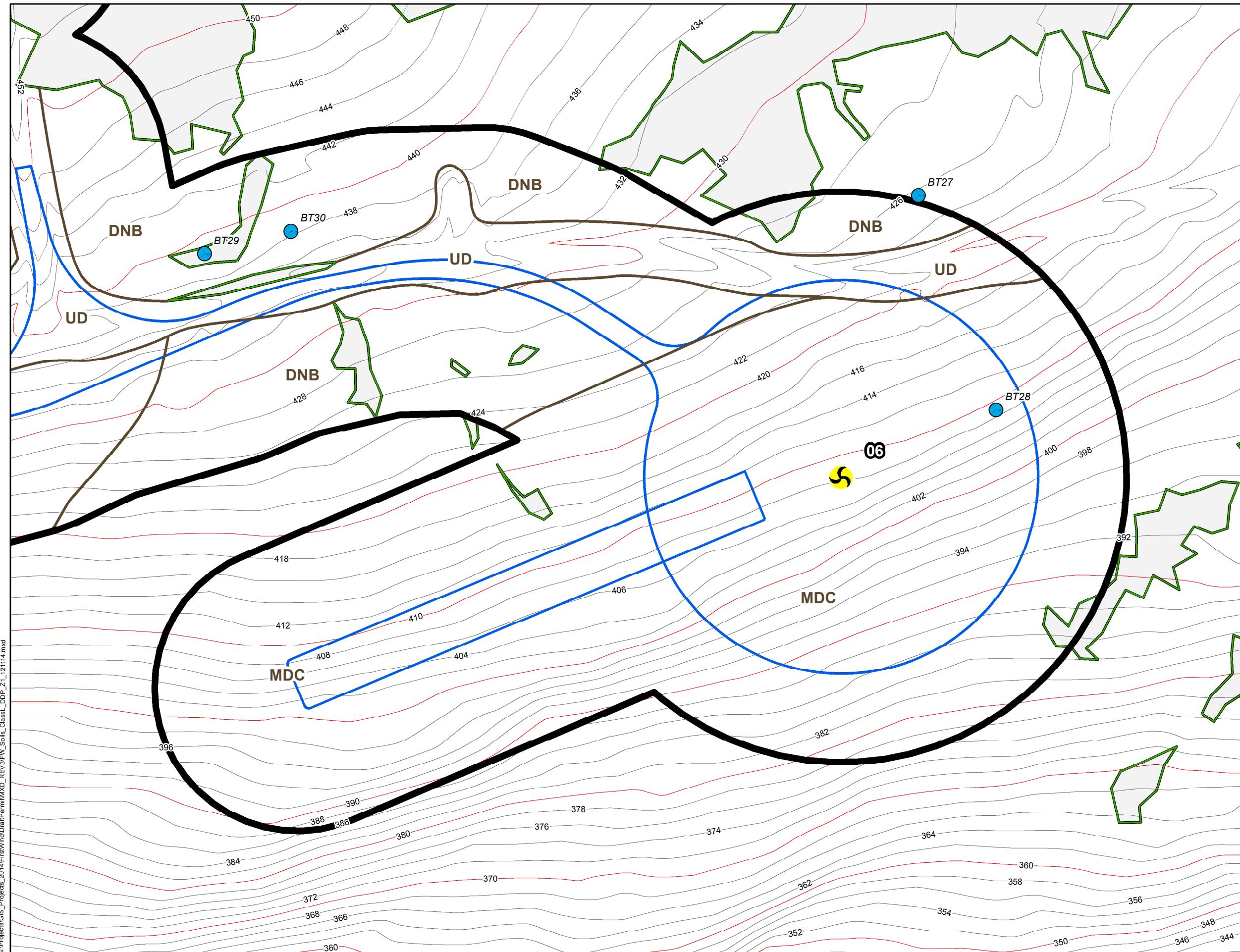


Site Features

- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Test Pits
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit
- Soil Map Unit Boundaries

*Notes: A narrative and legend accompanies this map.
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.

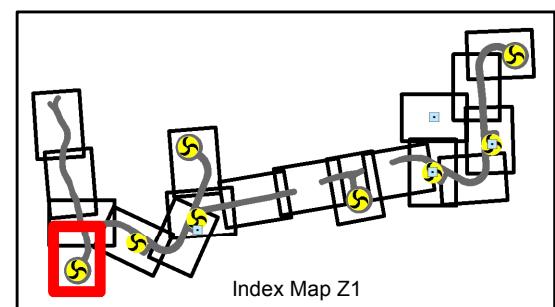




Weaver Wind Project

Class L Soils Survey
Map: Z1-15

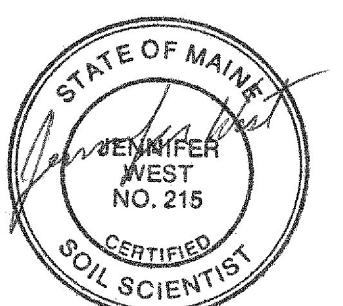
Hancock County, Maine



Site Features

- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Test Pits
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit
- Soil Map Unit Boundaries

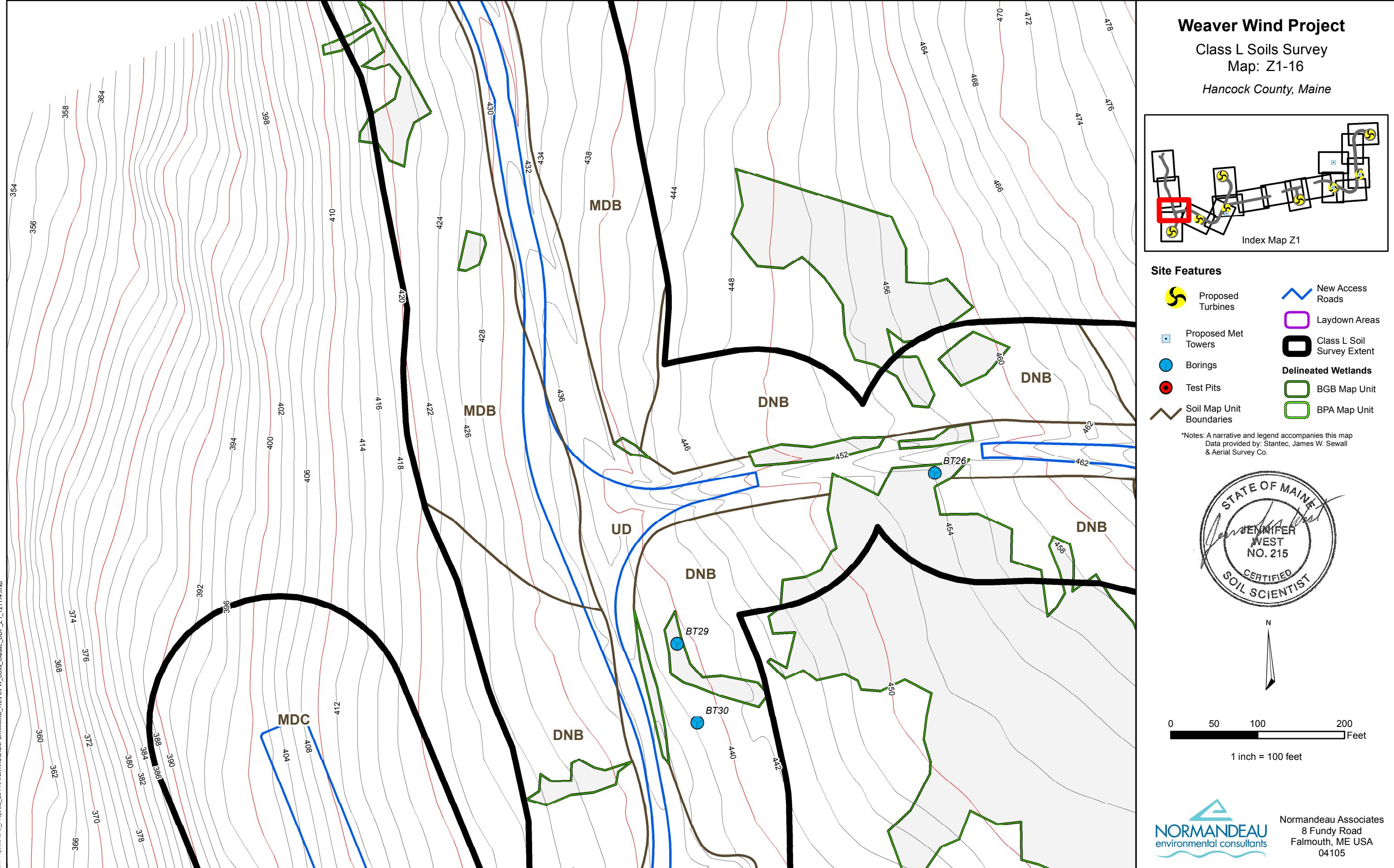
*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.

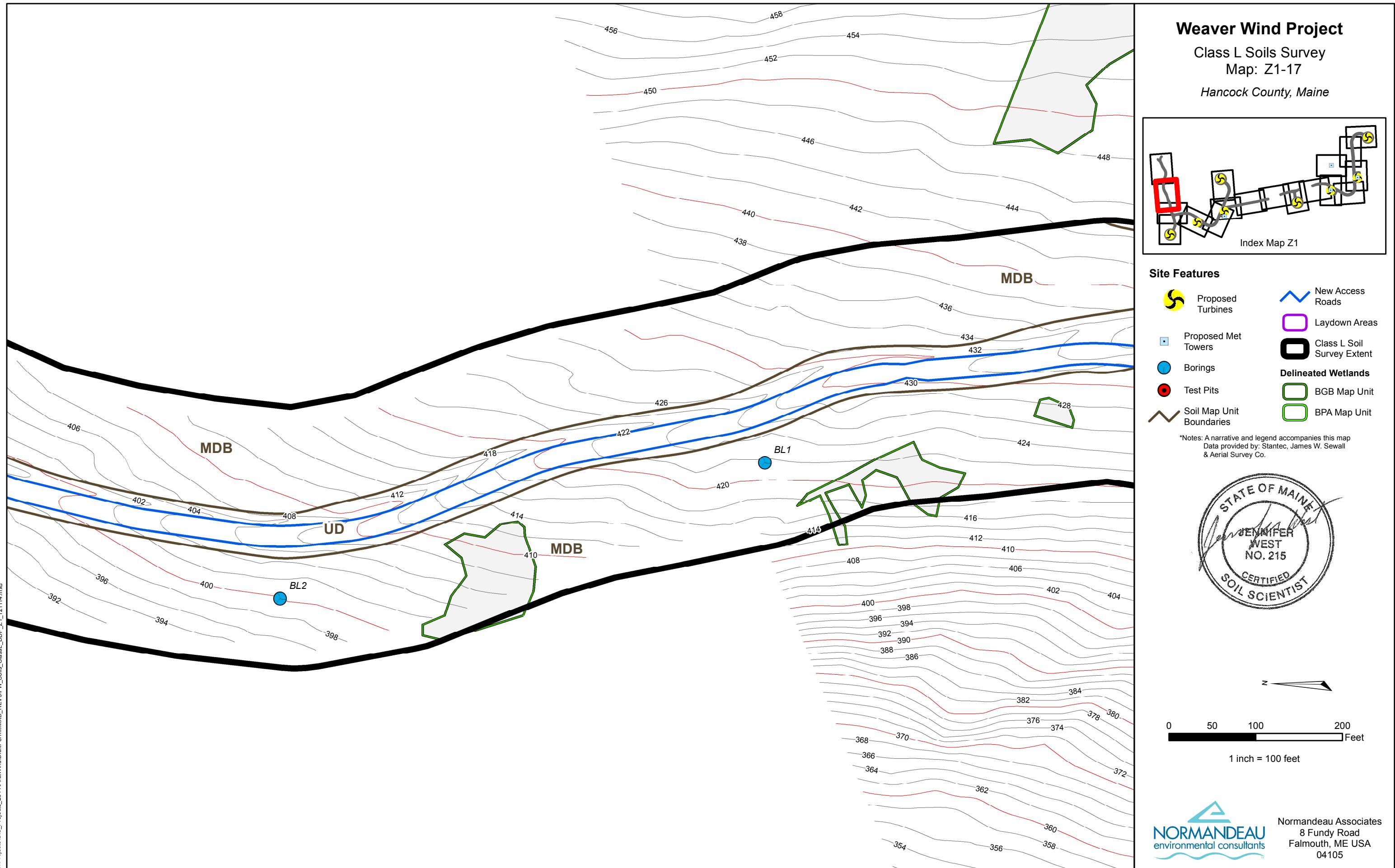


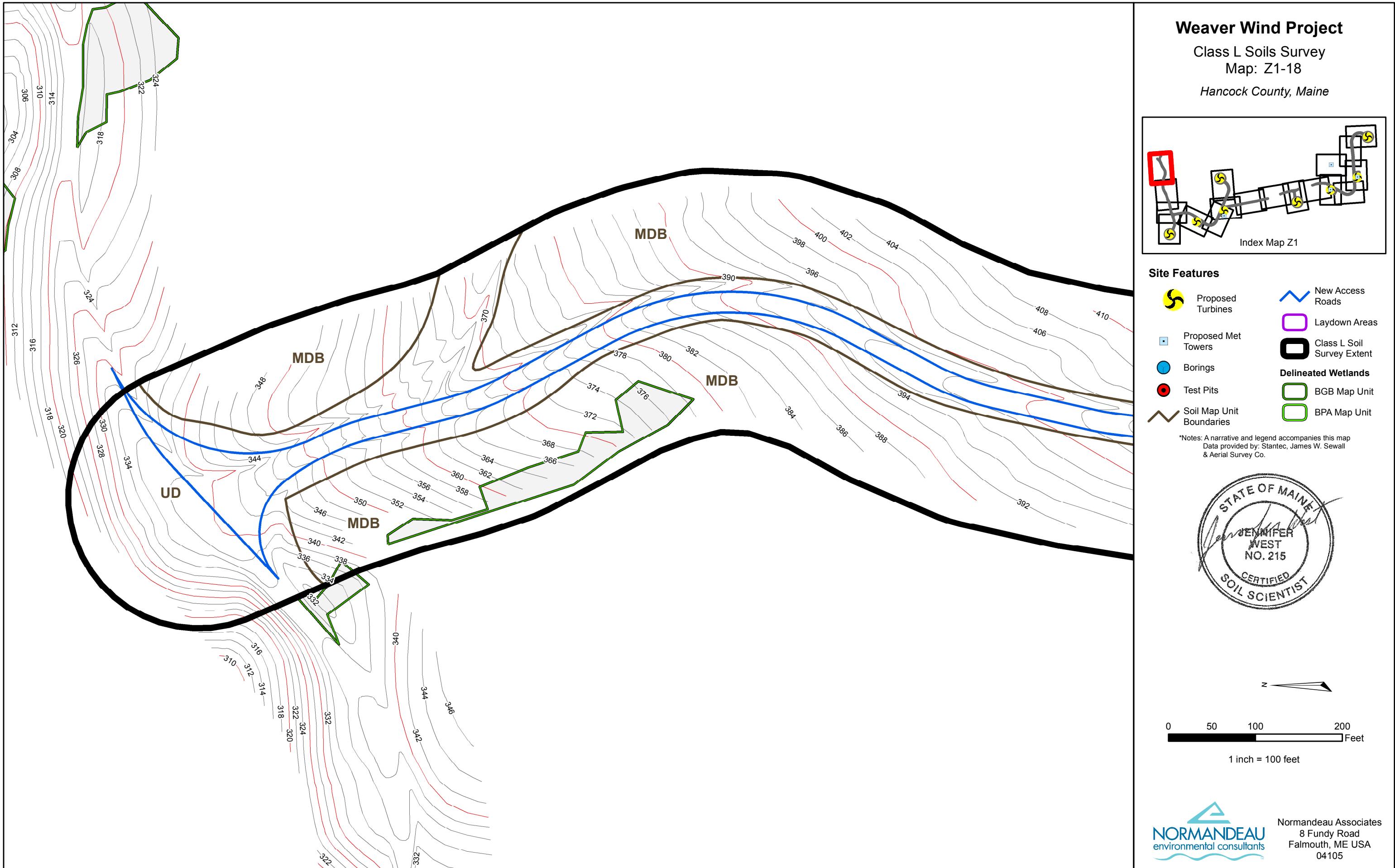
z

0 50 100 200
Feet

1 inch = 100 feet



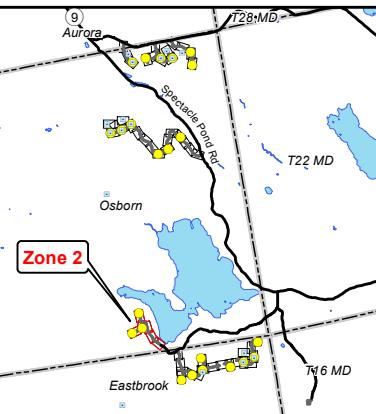






Weaver Wind Project
Class L Soils Survey
Map: Zone 2 Index Map

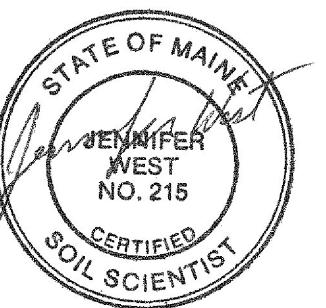
Hancock County, Maine



Site Features

- Proposed Turbines
- Laydown Areas
- Zone 2 Grids
- Proposed Met Towers
- Class L Soil Survey Extent
- New Access Roads

*Notes: A narrative and legend accompanies this map
Data provided by: James W. Sewall, ESRI & MEGIS



0 250 500 1,000
Feet

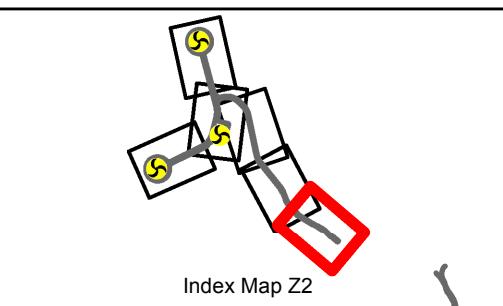
1 inch = 500 feet

Weaver Wind Project

Class L Soils Survey

Map: Z2-01

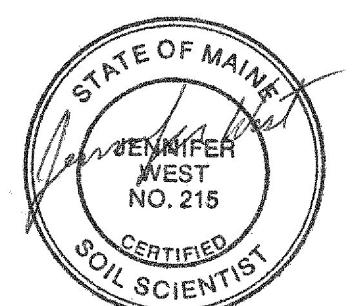
Hancock County, Maine



Site Features

- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Delineated Wetlands
- Borings
- Test Pits
- Soil Map Unit Boundaries
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.



0 50 100 200
Feet

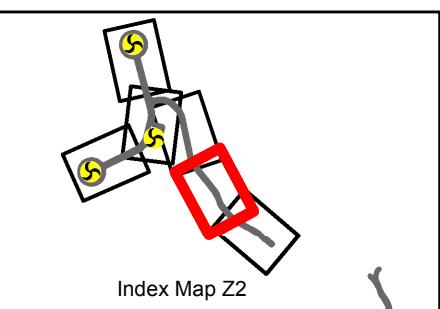
1 inch = 100 feet

Weaver Wind Project

Class L Soils Survey

Map: Z2-02

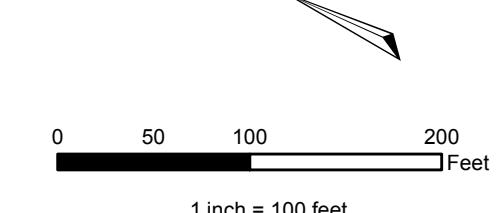
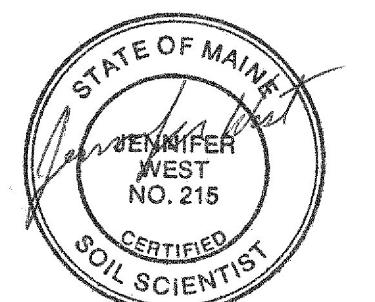
Hancock County, Maine



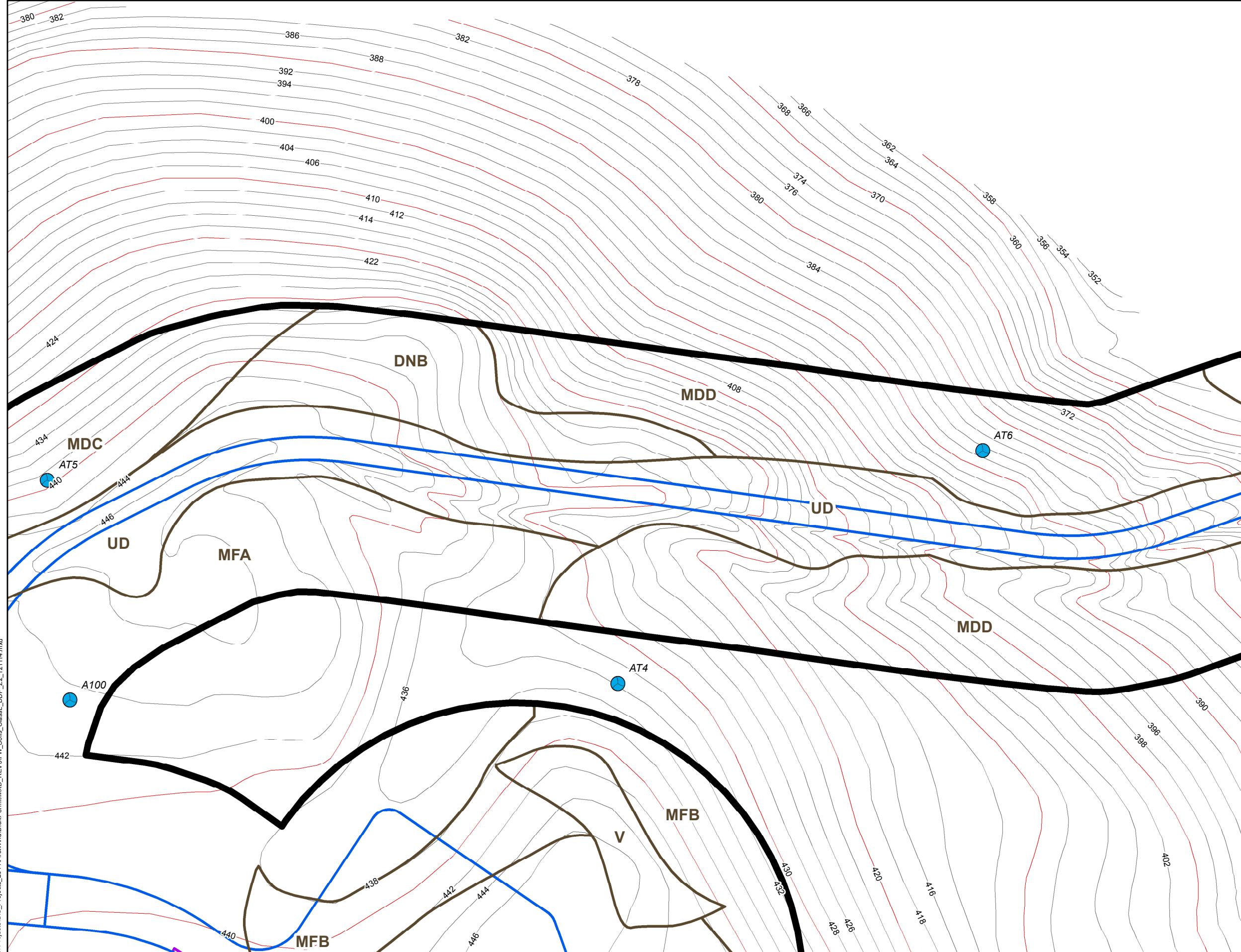
Site Features

- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Delineated Wetlands
- Borings
- Test Pits
- Soil Map Unit Boundaries
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



Normandeau Associates
8 Fundy Road
Falmouth, ME USA
04105

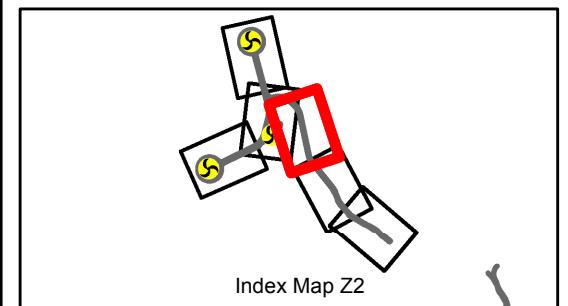


Weaver Wind Project

Class L Soils Survey

Map: Z2-03

Hancock County, Maine

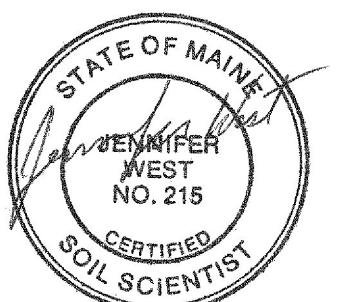


Site Features

Legend for proposed turbines, met towers, borings, test pits, and map units:

- Proposed Turbines:** Yellow circle with a black swirl.
- Proposed Met Towers:** Blue square with a white outline.
- Borings:** Blue circle with a white outline.
- Test Pits:** Red circle with a white outline.
- Soil Map Unit Boundaries:** Brown wavy line.
- New Access Roads:** Blue line with a blue arrowhead.
- Laydown Areas:** Purple rectangle.
- Class L Soil Survey Extent:** Black rectangle.
- Delineated Wetlands:** Green rectangle.
- BGB Map Unit:** Green rectangle.
- BPA Map Unit:** Green rectangle.

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.

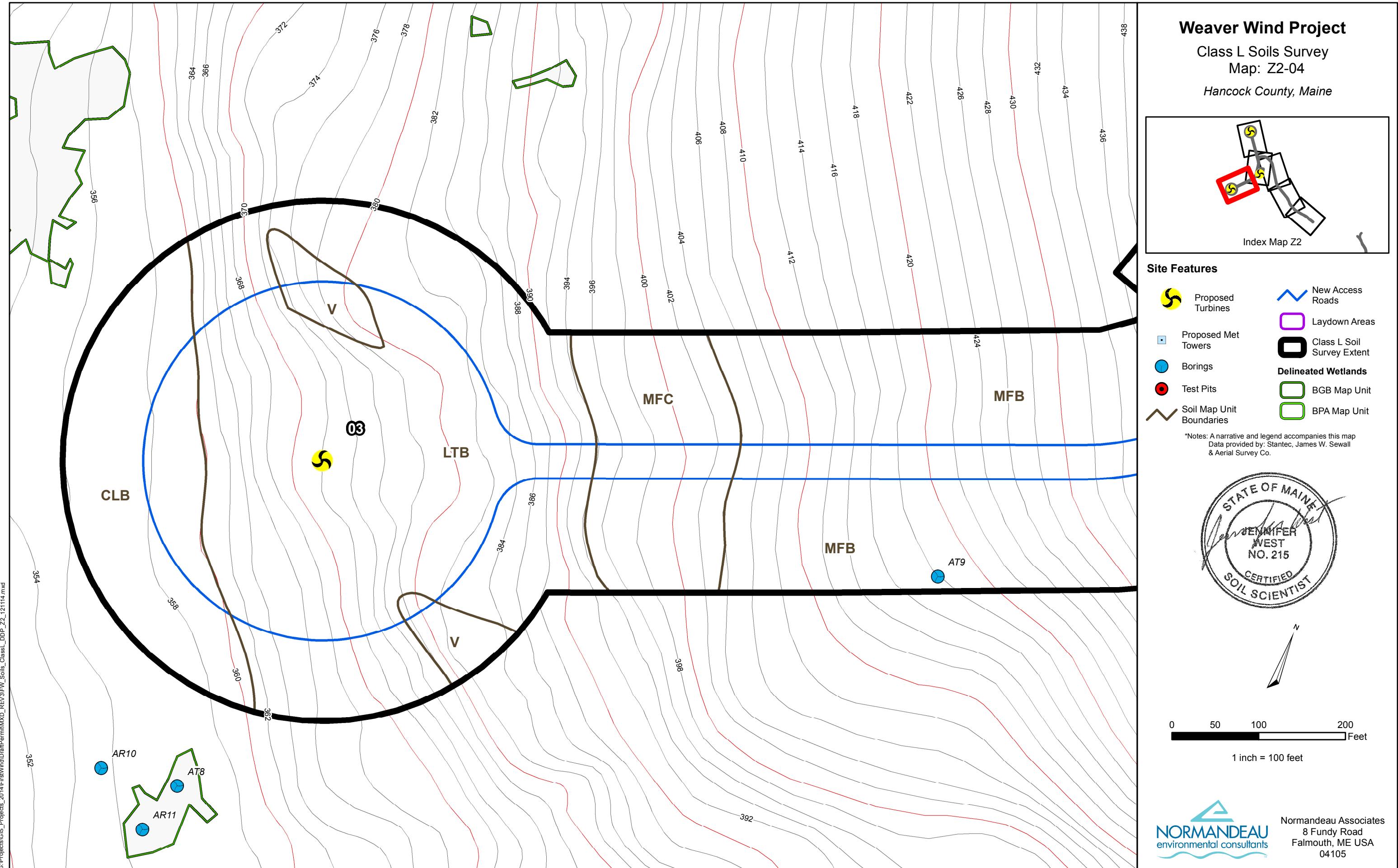


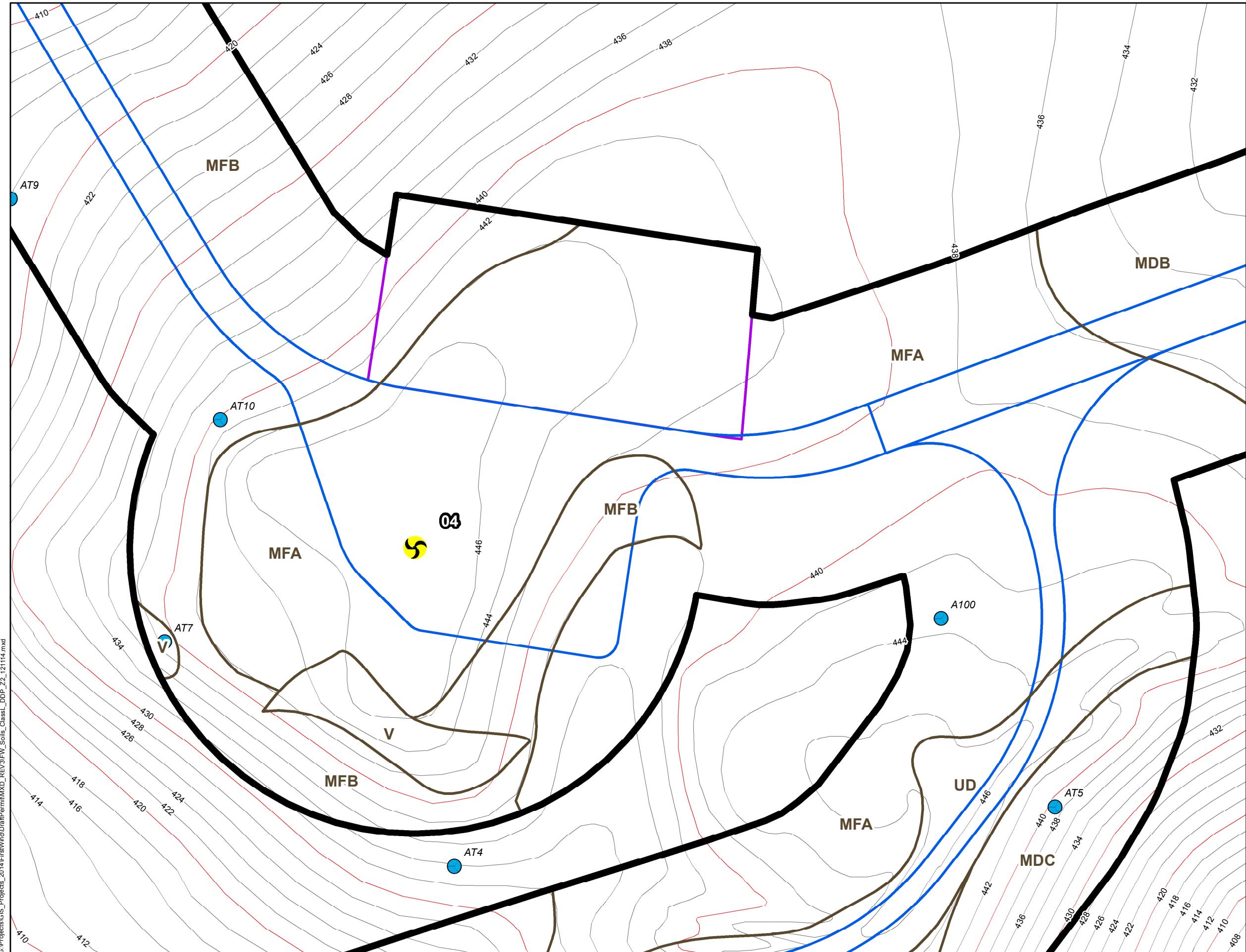
0 50 100 200

1 inch = 100 feet



Normandeau Associates
8 Fundy Road
Falmouth, ME USA
04105

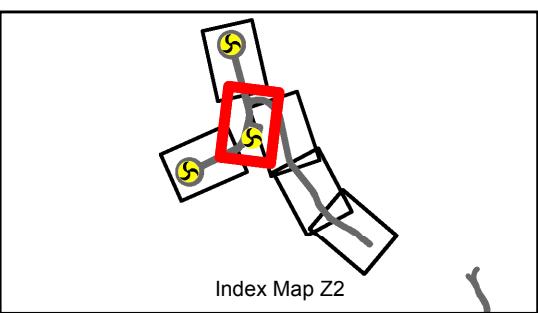




Weaver Wind Project

Class L Soils Survey
Map: Z2-05

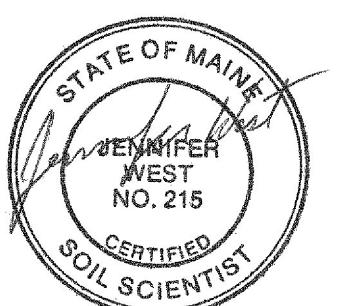
Hancock County, Maine



Site Features

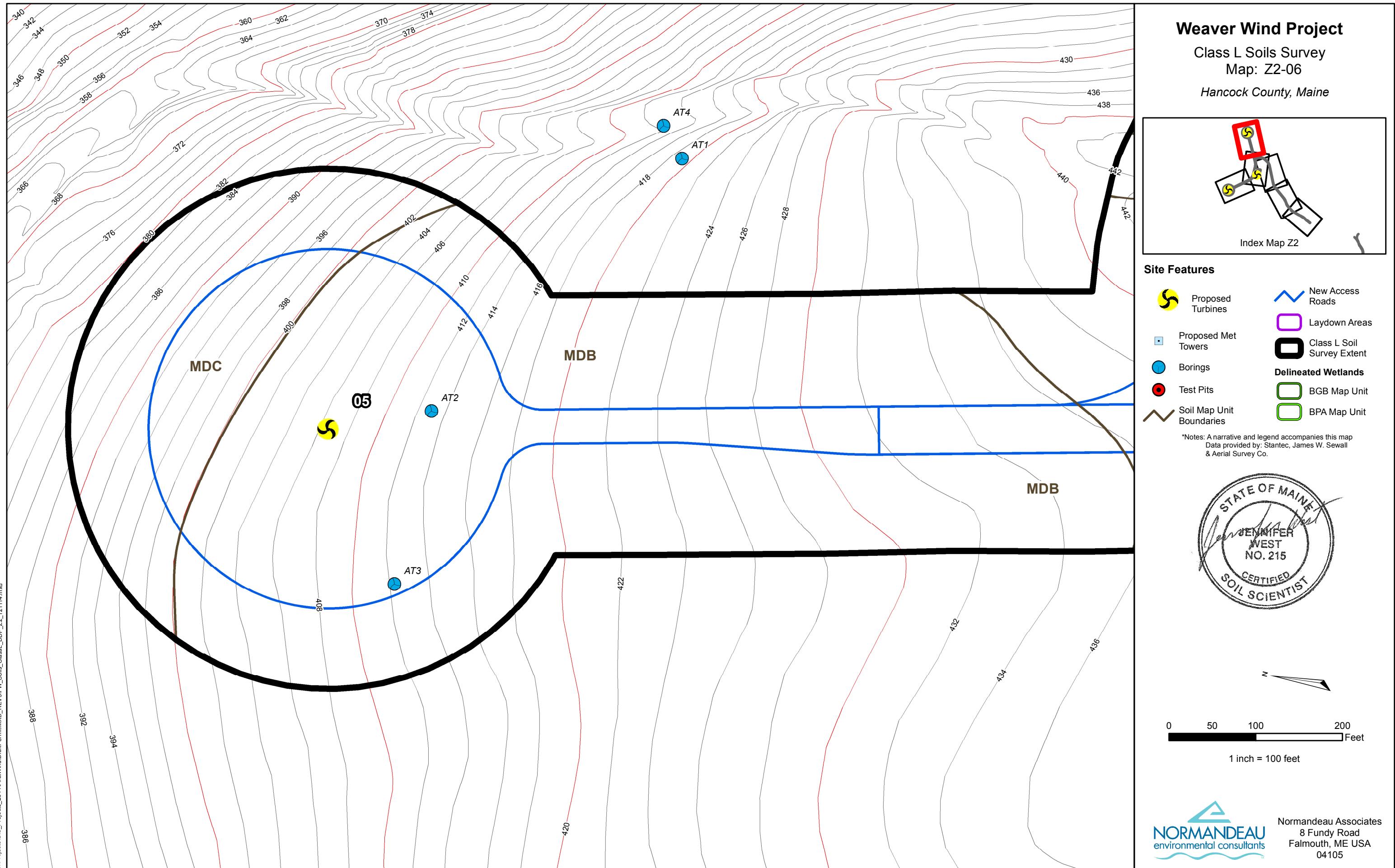
- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Delineated Wetlands
- Test Pits
- BGB Map Unit
- Soil Map Unit Boundaries
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
1 inch = 100 feet

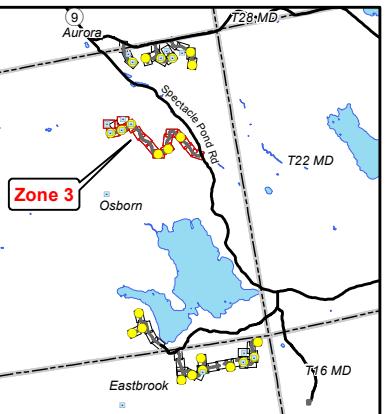
NORMANDEAU
environmental consultants
8 Fundy Road
Falmouth, ME USA
04105





Weaver Wind Project
Class L Soils Survey
Map: Zone 3 Index Map

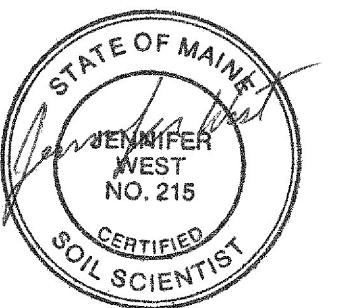
Hancock County, Maine



Site Features

- Proposed Turbines
- Zone 3 Grids
- Proposed Met Towers
- Class L Soil Survey Extent
- New Access Roads

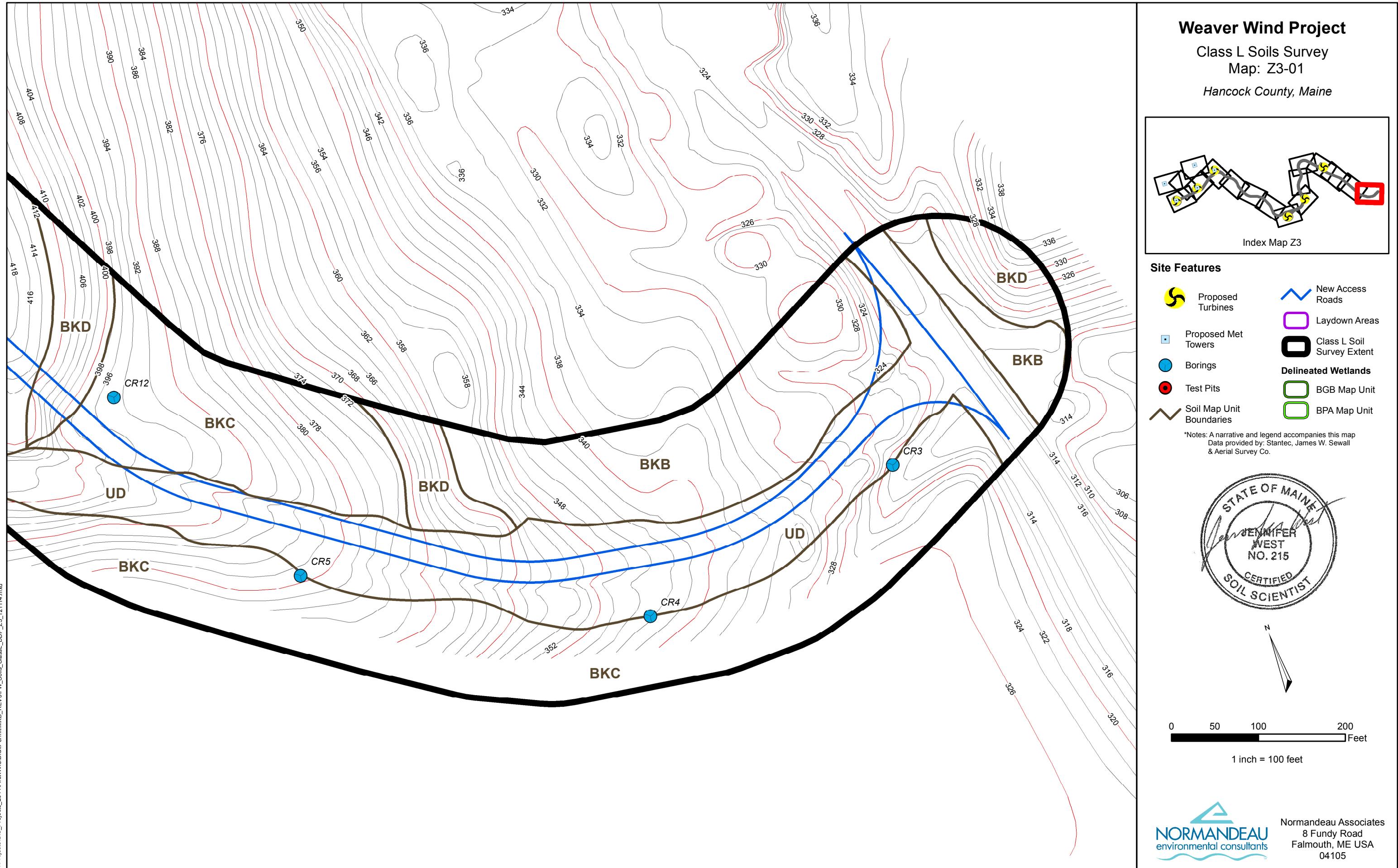
*Notes: A narrative and legend accompanies this map
 Data provided by: James W. Sewall, ESRI & MEGIS

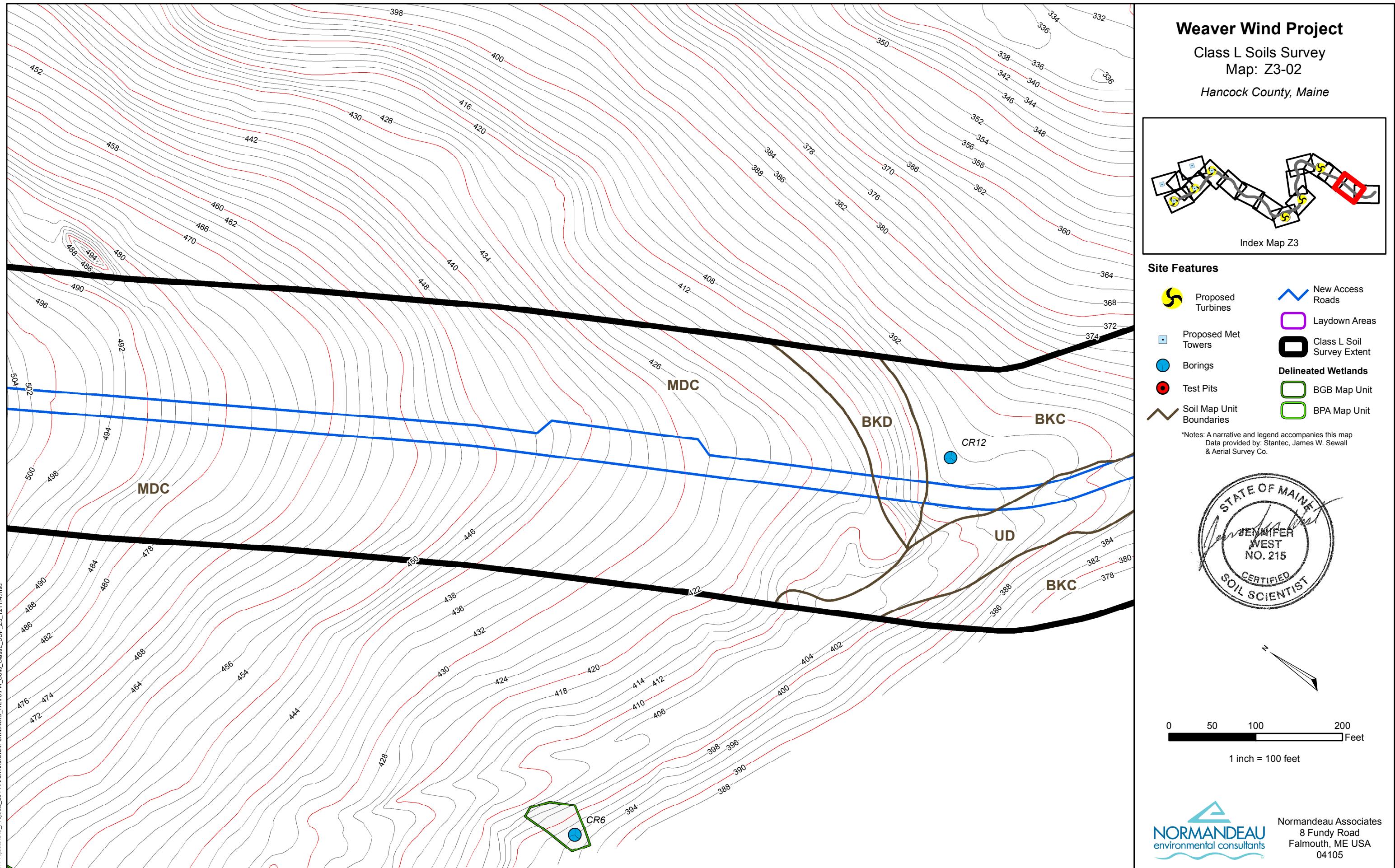


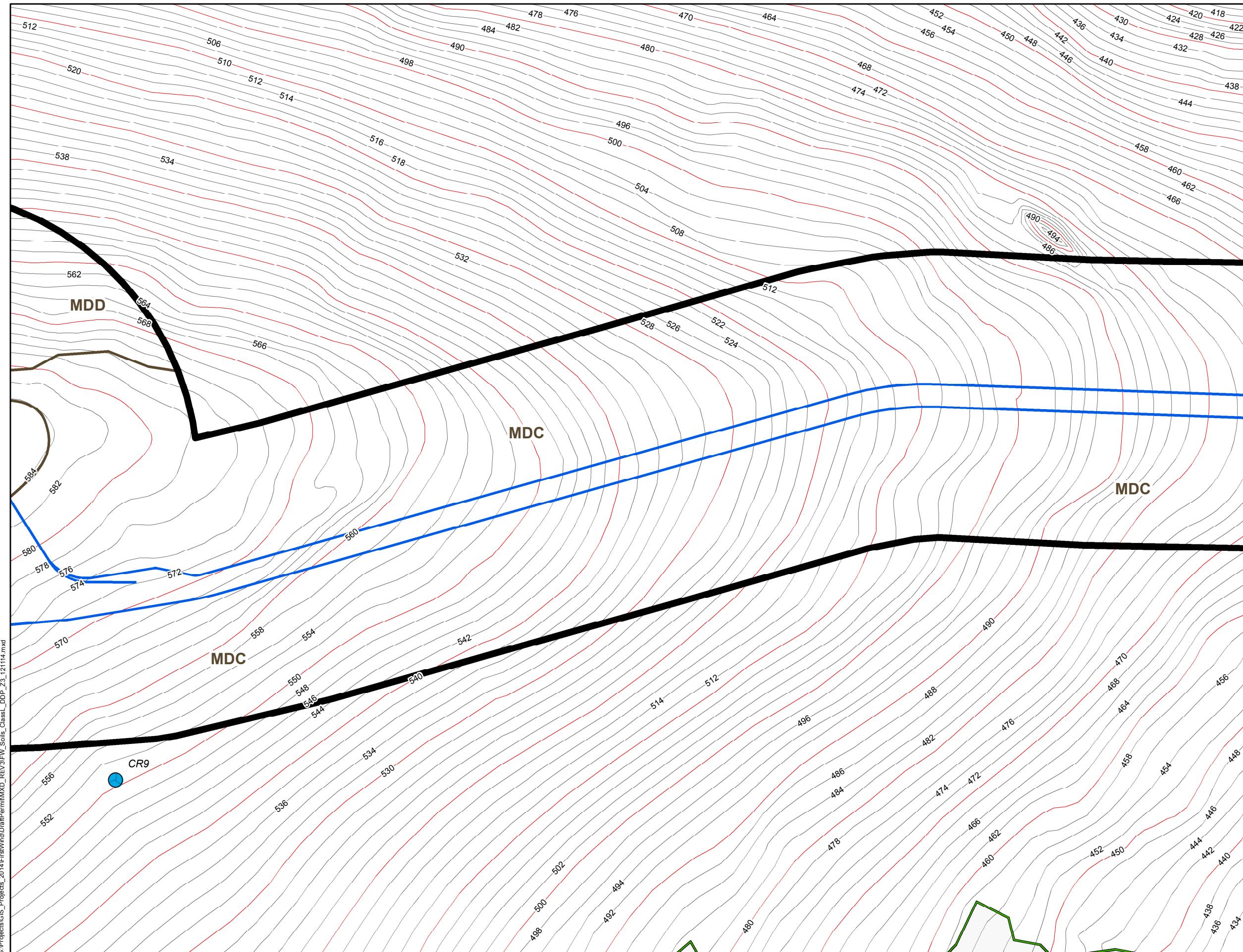
N

0 250 500 1,000 1,500
 Feet

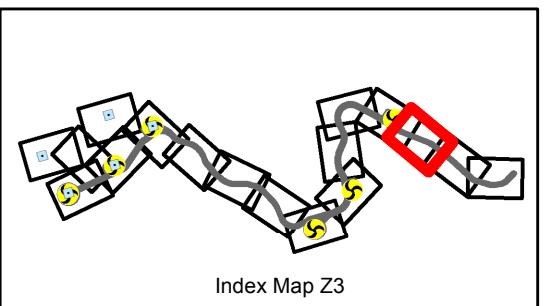
1 inch = 900 feet







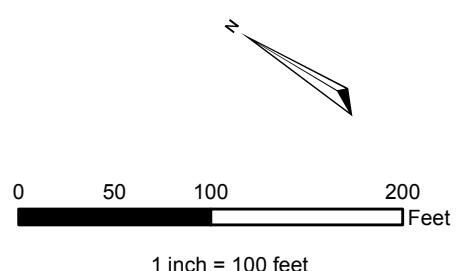
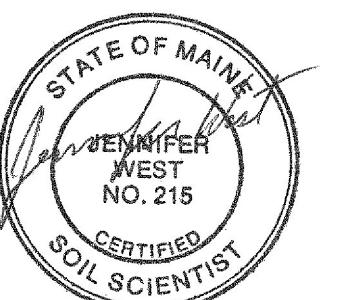
Weaver Wind Project
Class L Soils Survey
Map: Z3-03
Hancock County, Maine

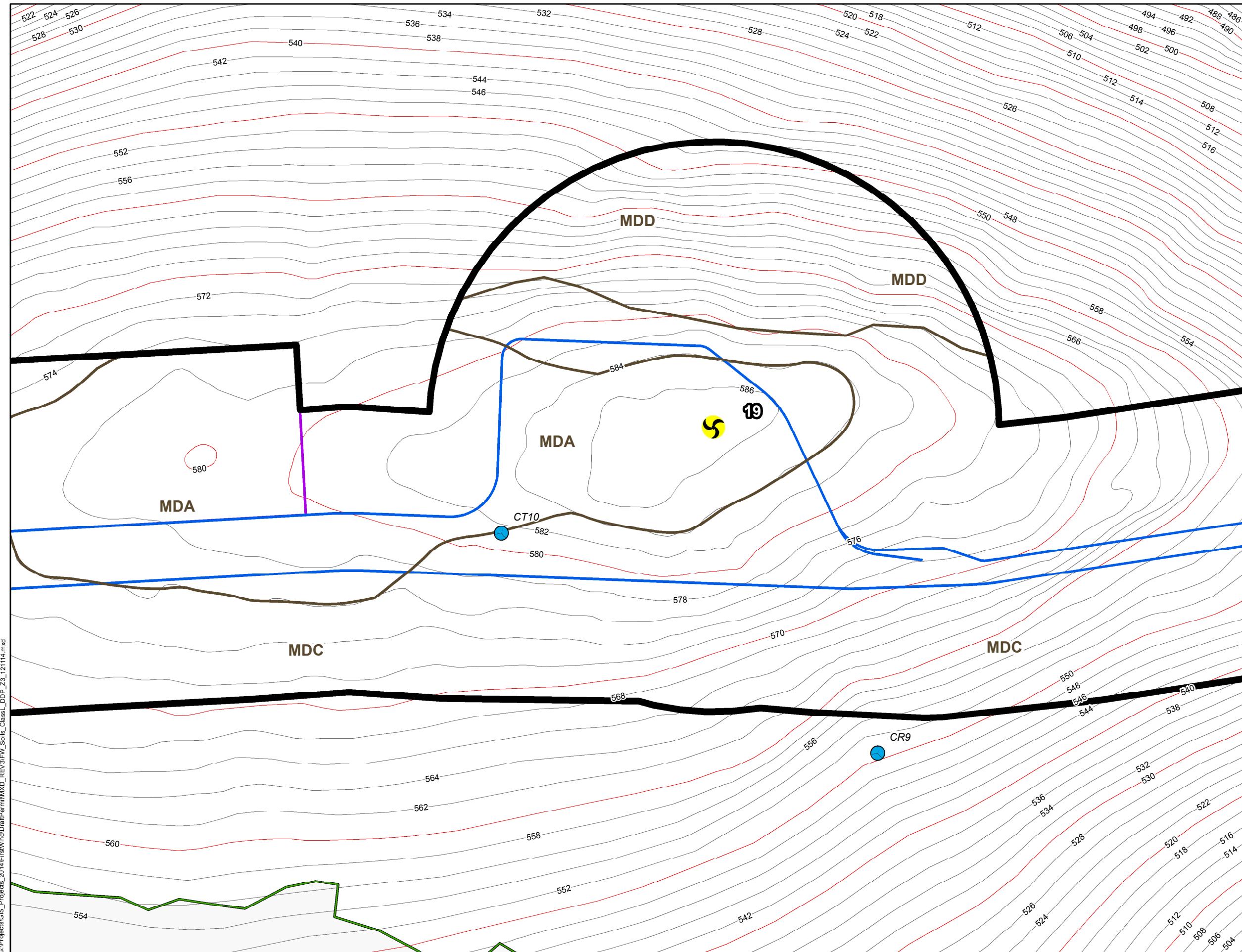


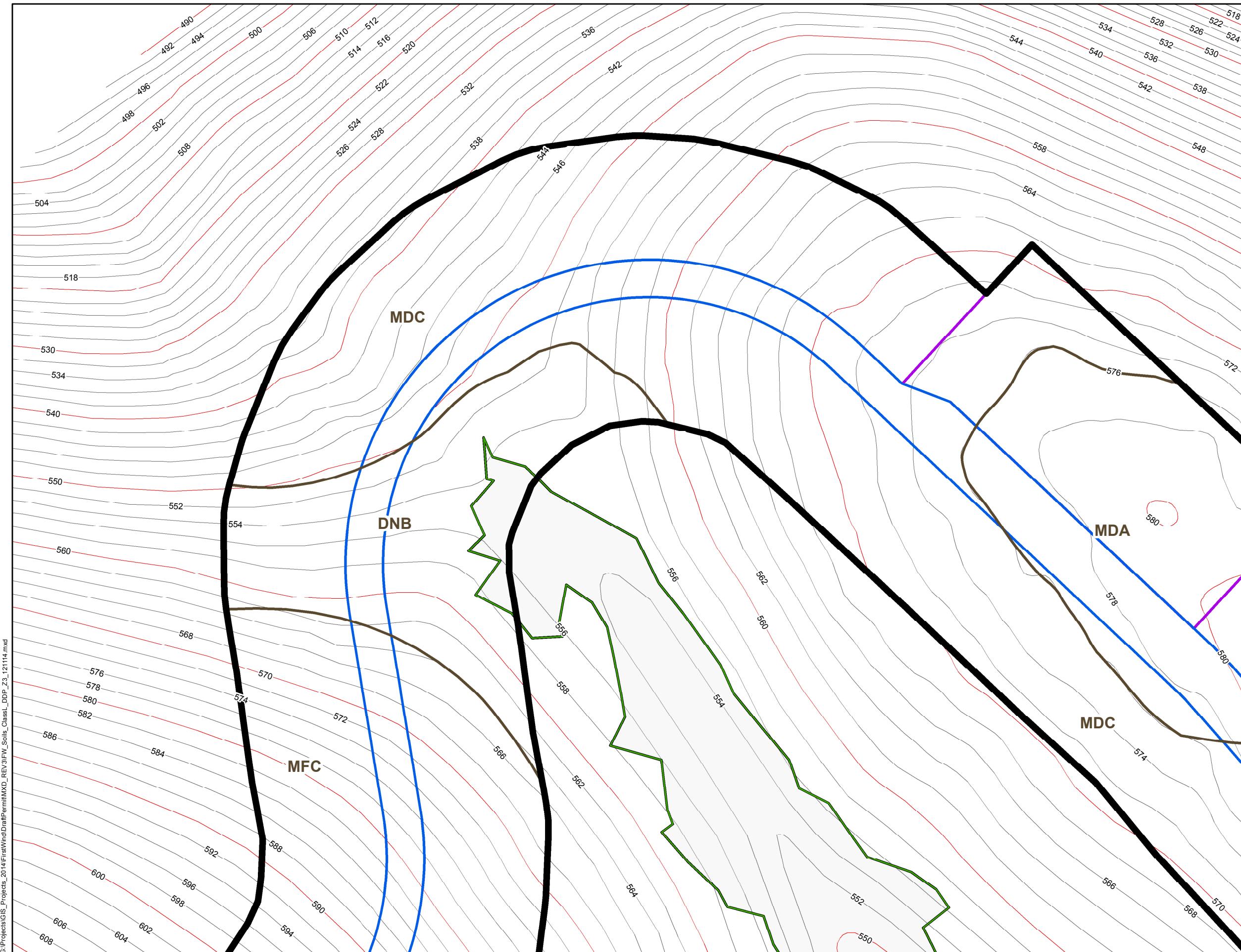
Site Features

- Proposed Turbines
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Test Pits
- Soil Map Unit Boundaries
- BGB Map Unit
- BPA Map Unit

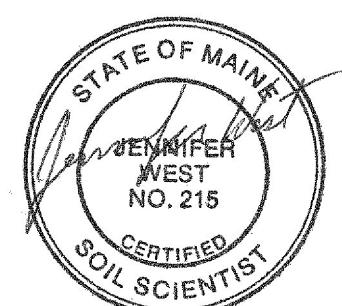
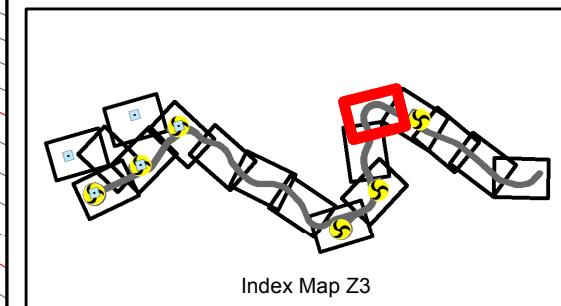
*Notes: A narrative and legend accompanies this map
 Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



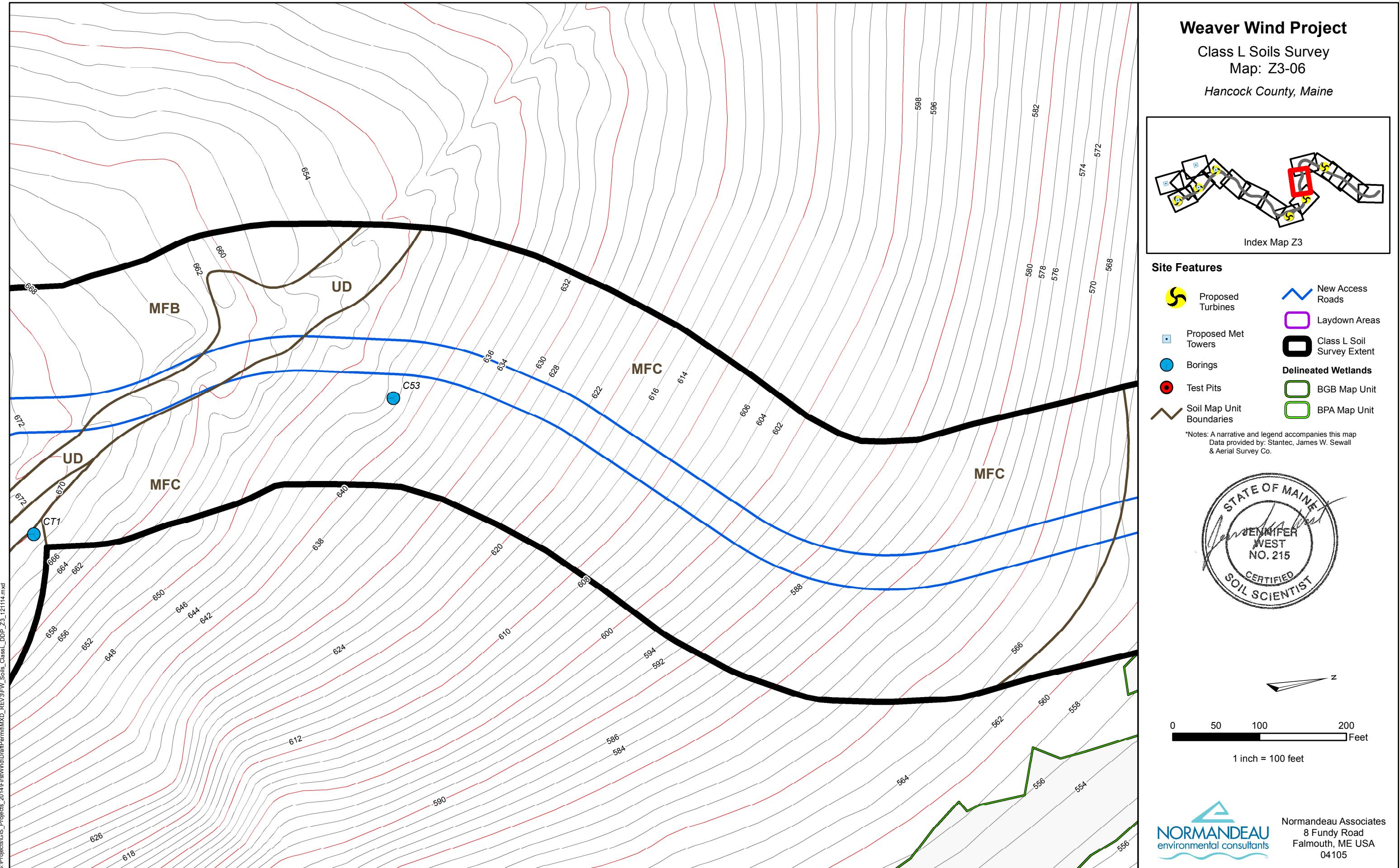


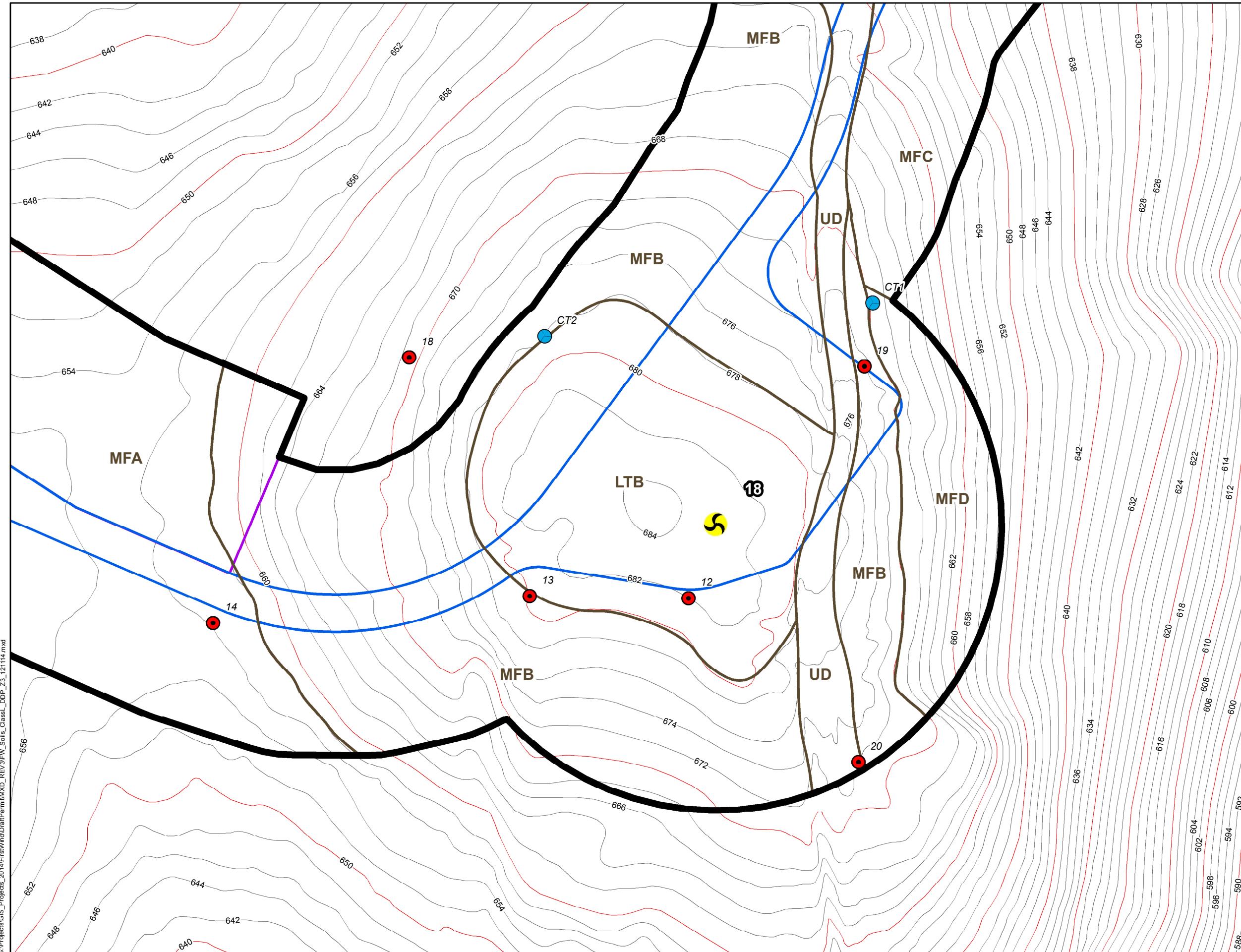


Weaver Wind Project
Class L Soils Survey
Map: Z3-05
Hancock County, Maine



Normandeau Associates
8 Fundy Road
Falmouth, ME USA
04105

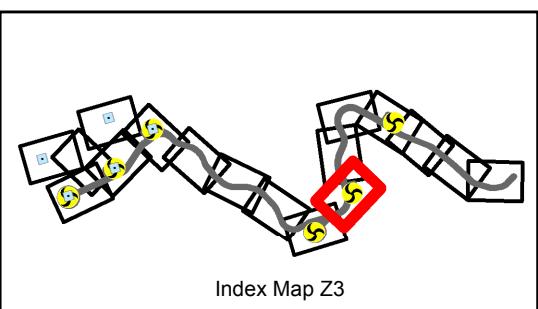




Weaver Wind Project

Class L Soils Survey
Map: Z3-07

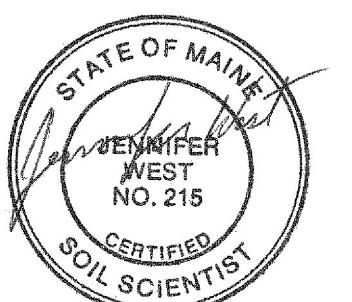
Hancock County, Maine



Site Features

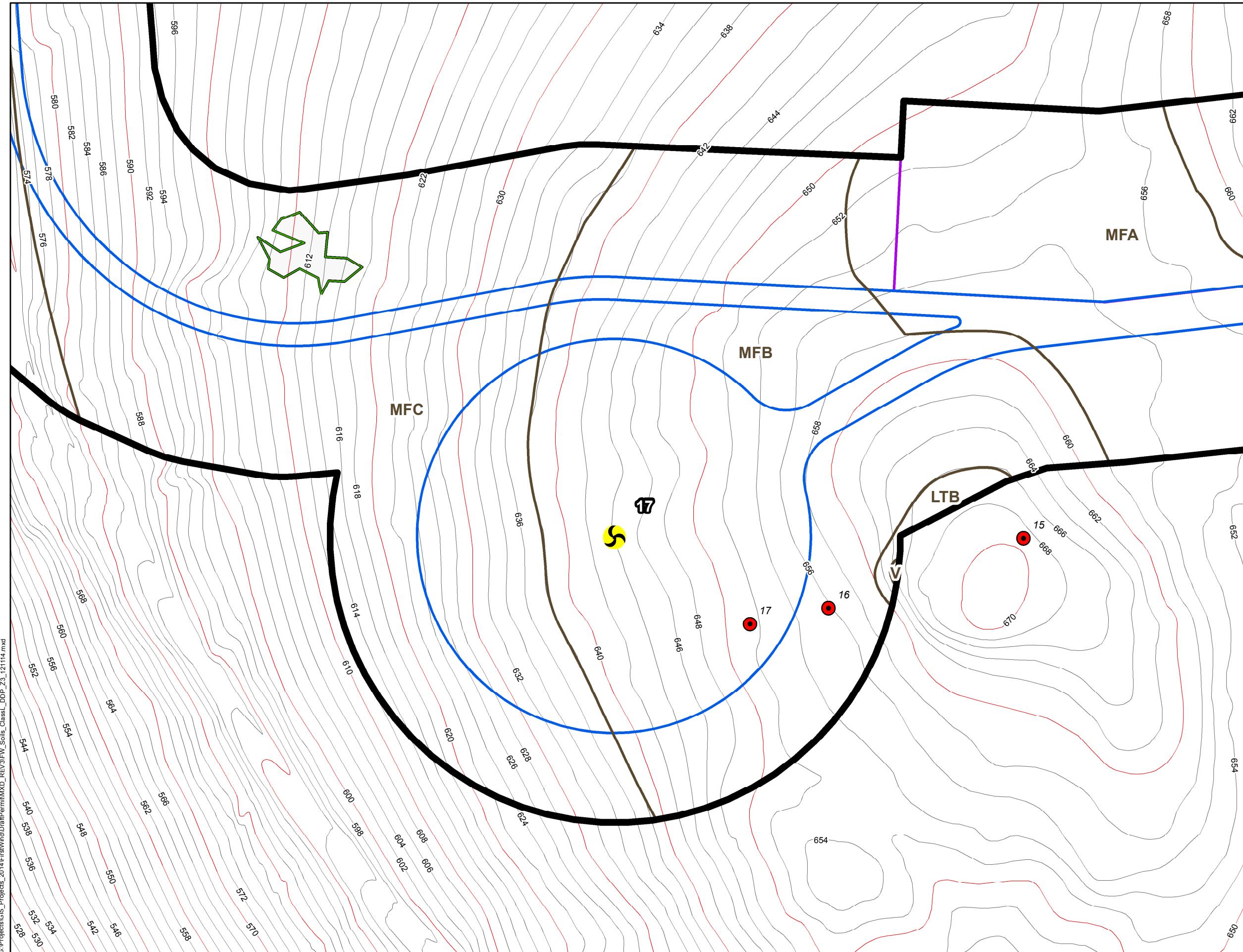
- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Borings
- Test Pits
- Class L Soil Survey Extent
- Delineated Wetlands
- Soil Map Unit Boundaries
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
Feet

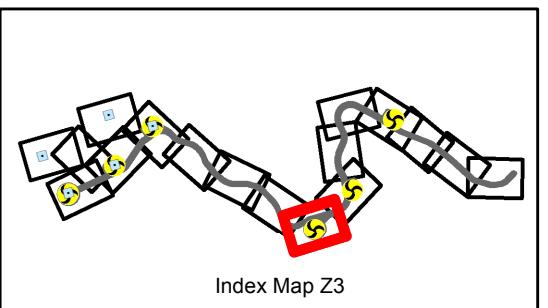
1 inch = 100 feet



Weaver Wind Project

Class L Soils Survey
Map: Z3-08

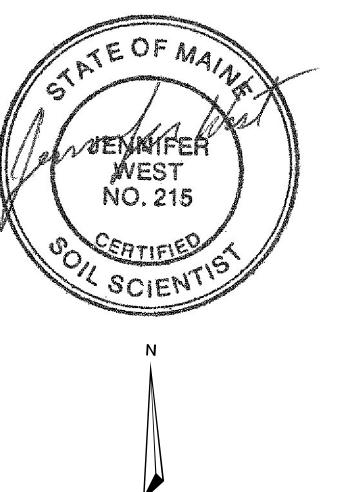
Hancock County, Maine



Site Features

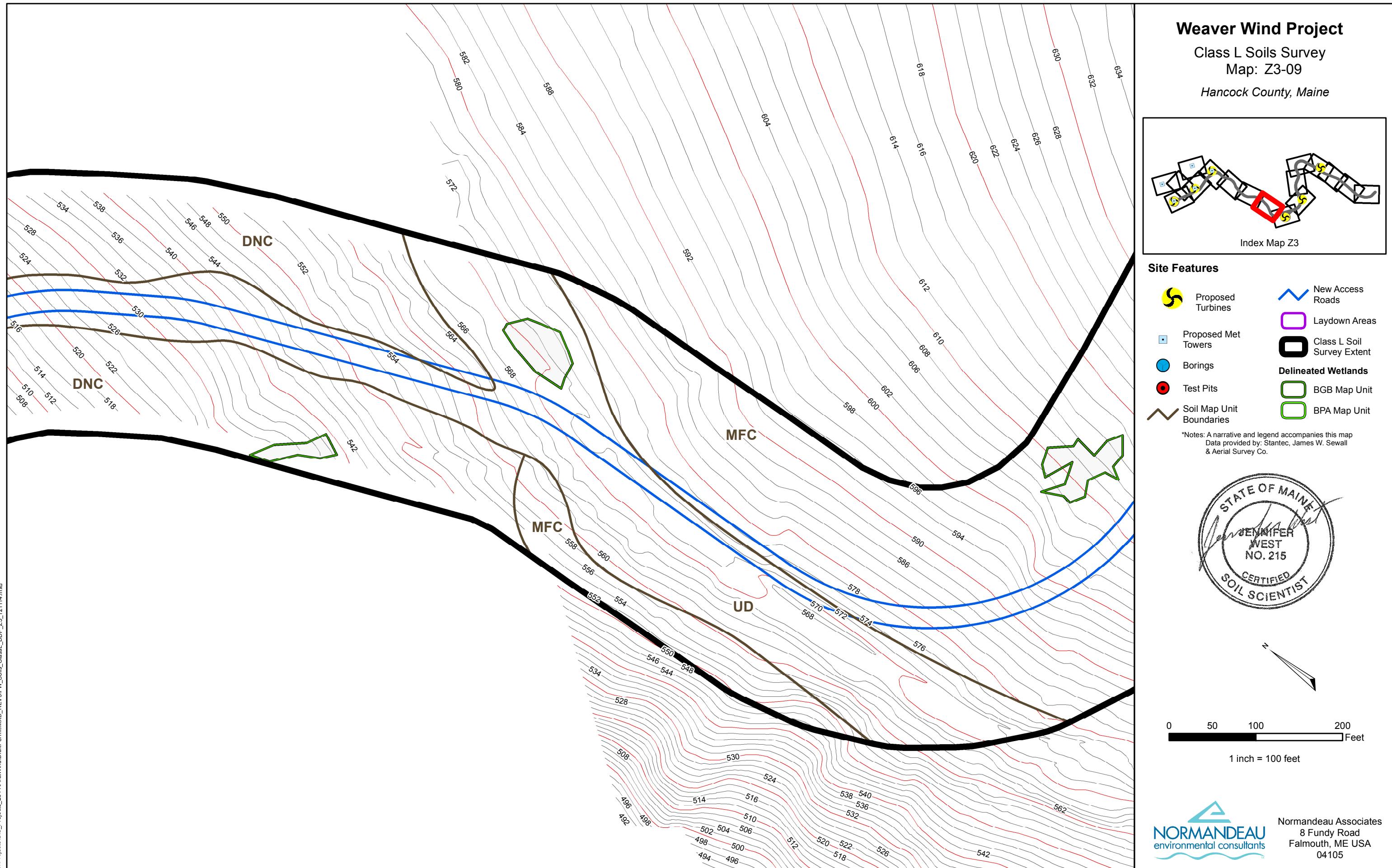
- Proposed Turbines
- New Access Roads
- Laydown Areas
- Class L Soil Survey Extent
- Delineated Wetlands
- Borings
- Test Pits
- Soil Map Unit Boundaries
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.



0 50 100 200
Feet

1 inch = 100 feet

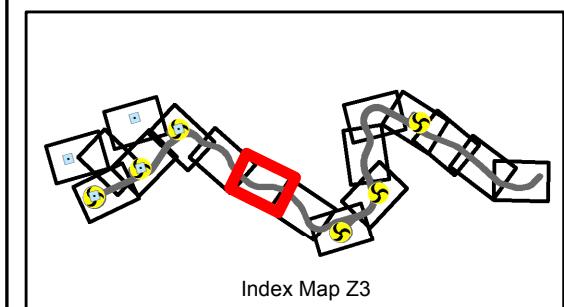


Weaver Wind Project

Class L Soils Survey

Map: Z3-10

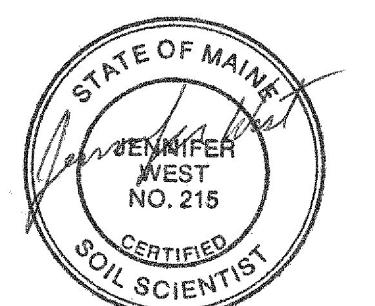
Hancock County, Maine



Site Features

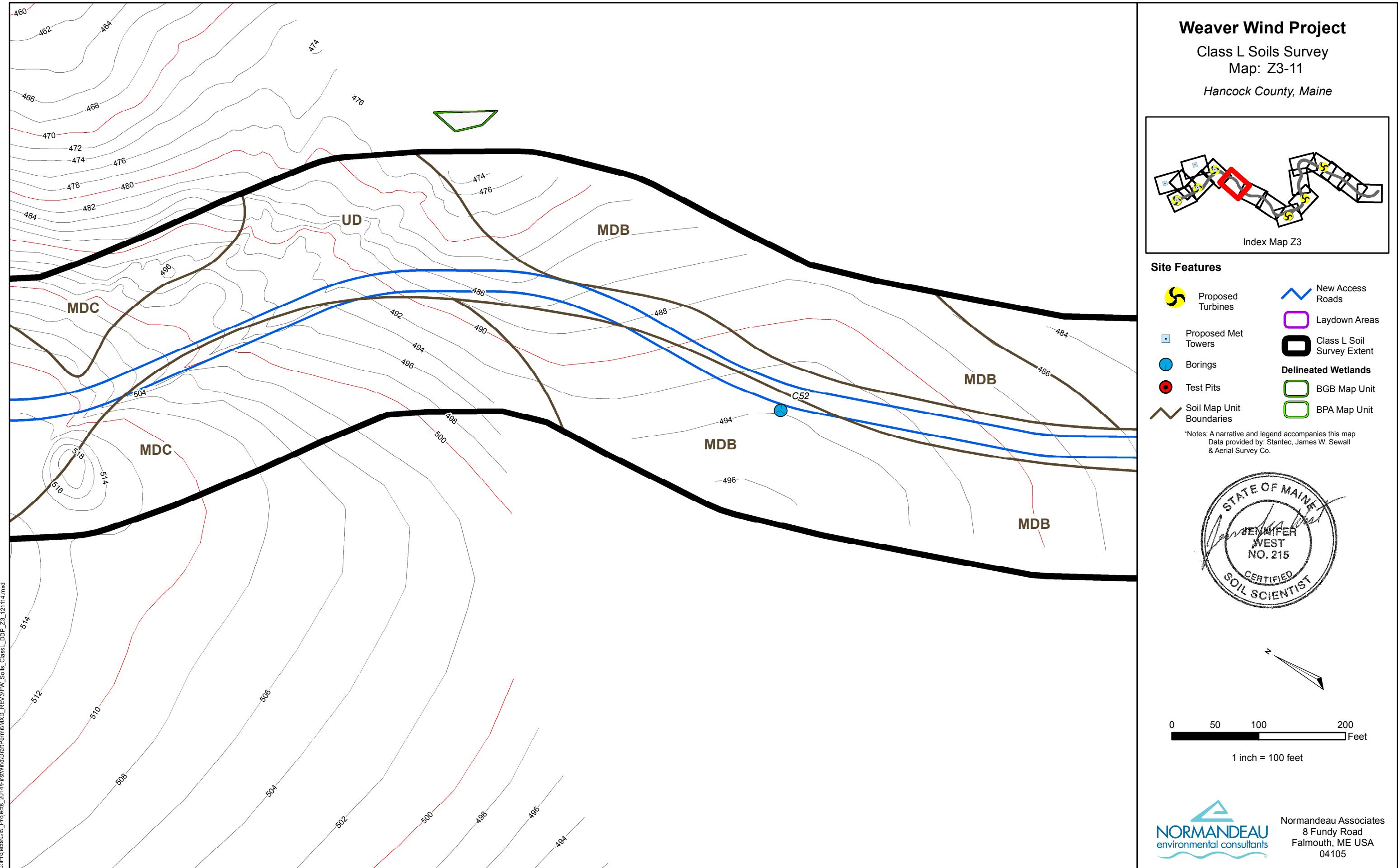
- Proposed Turbines
- New Access Roads
- Proposed Met Towers
- Laydown Areas
- Borings
- Class L Soil Survey Extent
- Delineated Wetlands
- Test Pits
- Soil Map Unit Boundaries
- BGB Map Unit
- BPA Map Unit

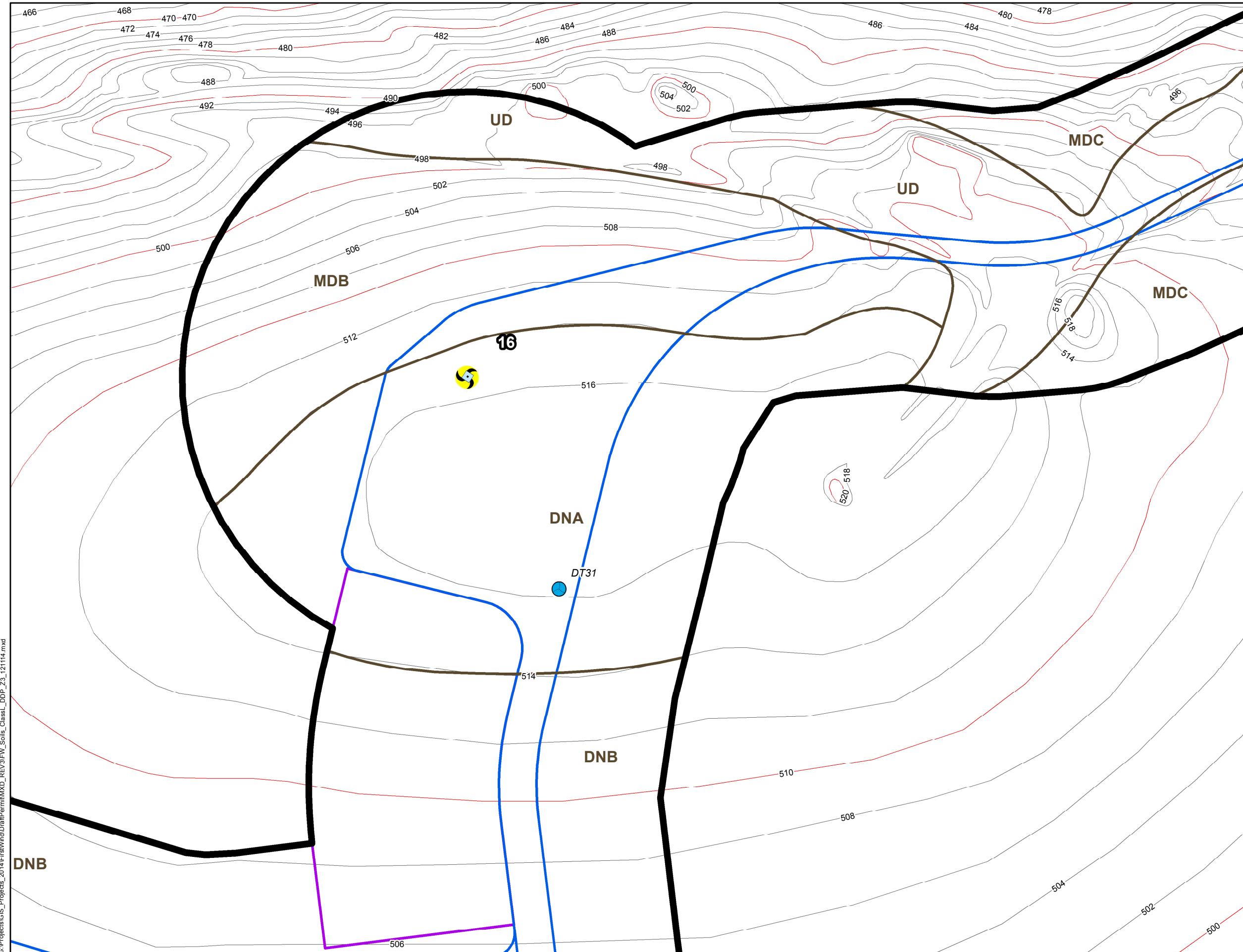
*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



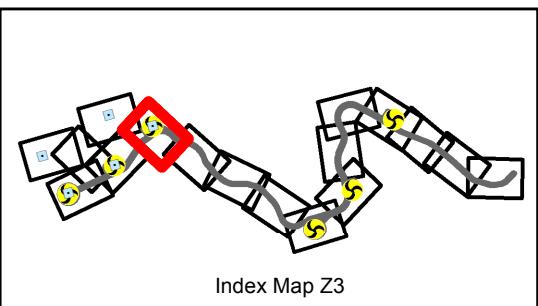
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Feet

1 inch = 100 feet





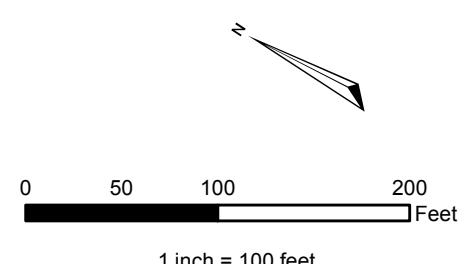
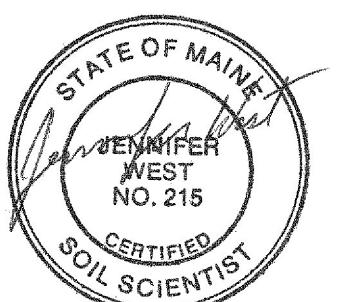
Weaver Wind Project
 Class L Soils Survey
 Map: Z3-12
 Hancock County, Maine

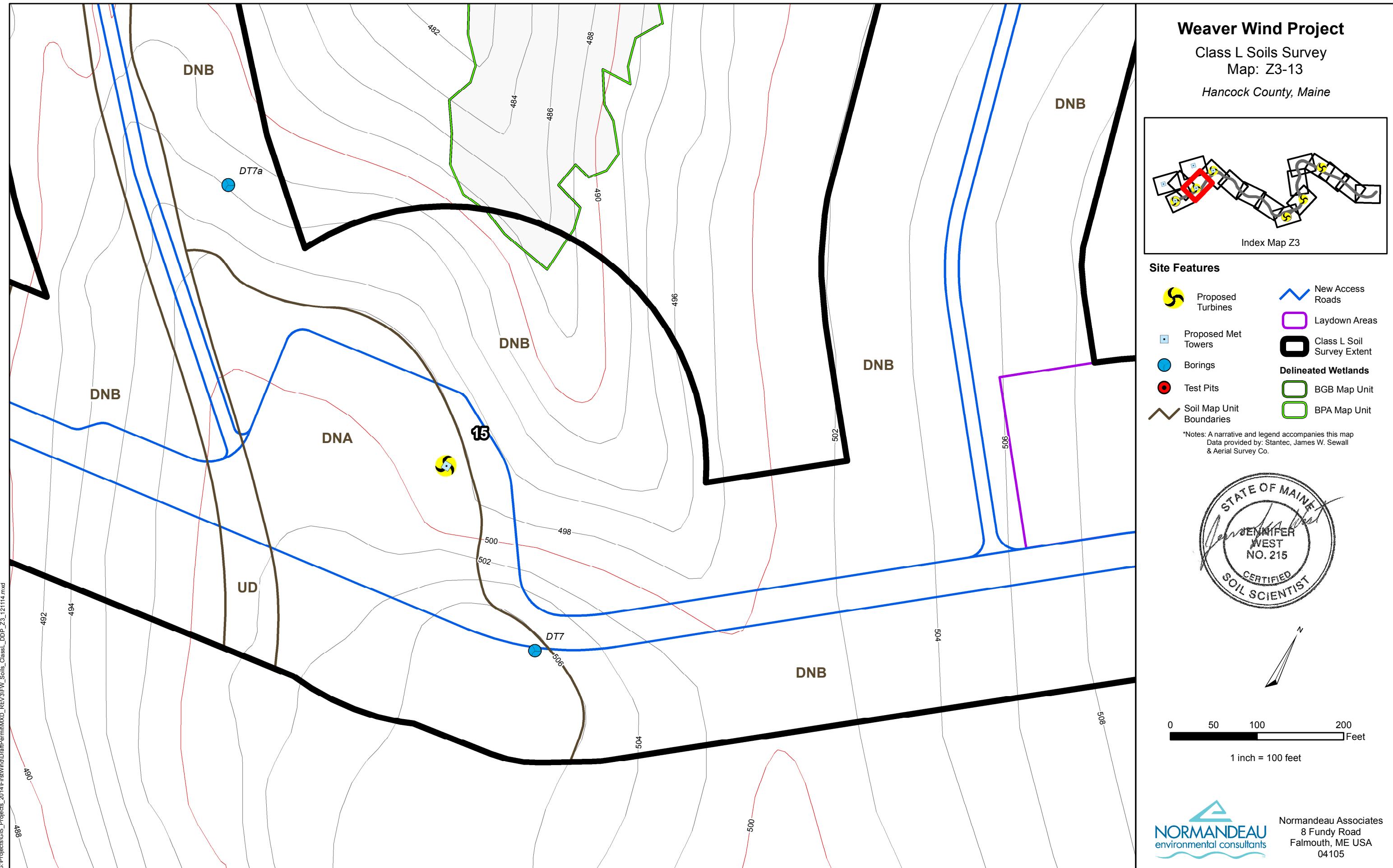


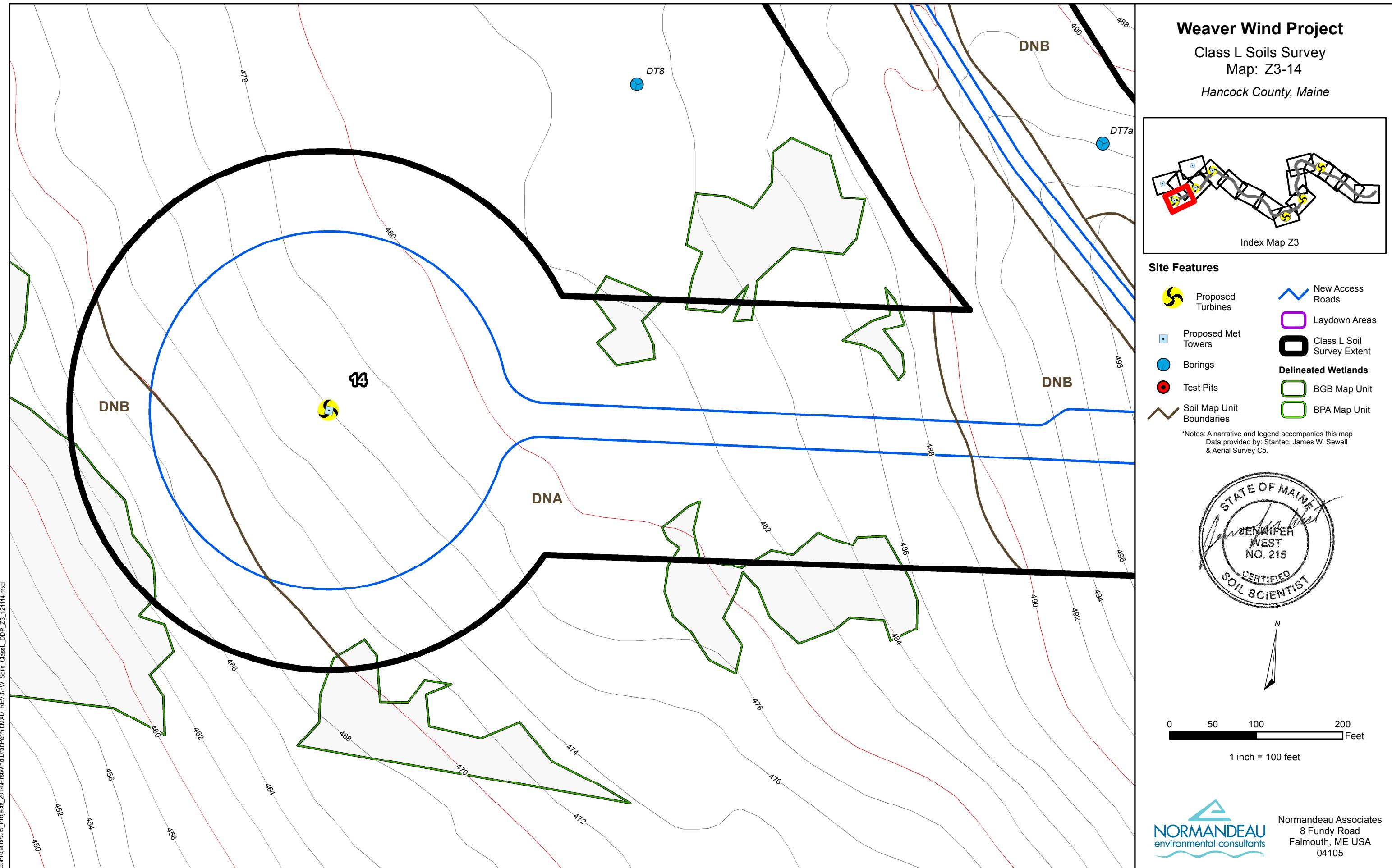
Site Features

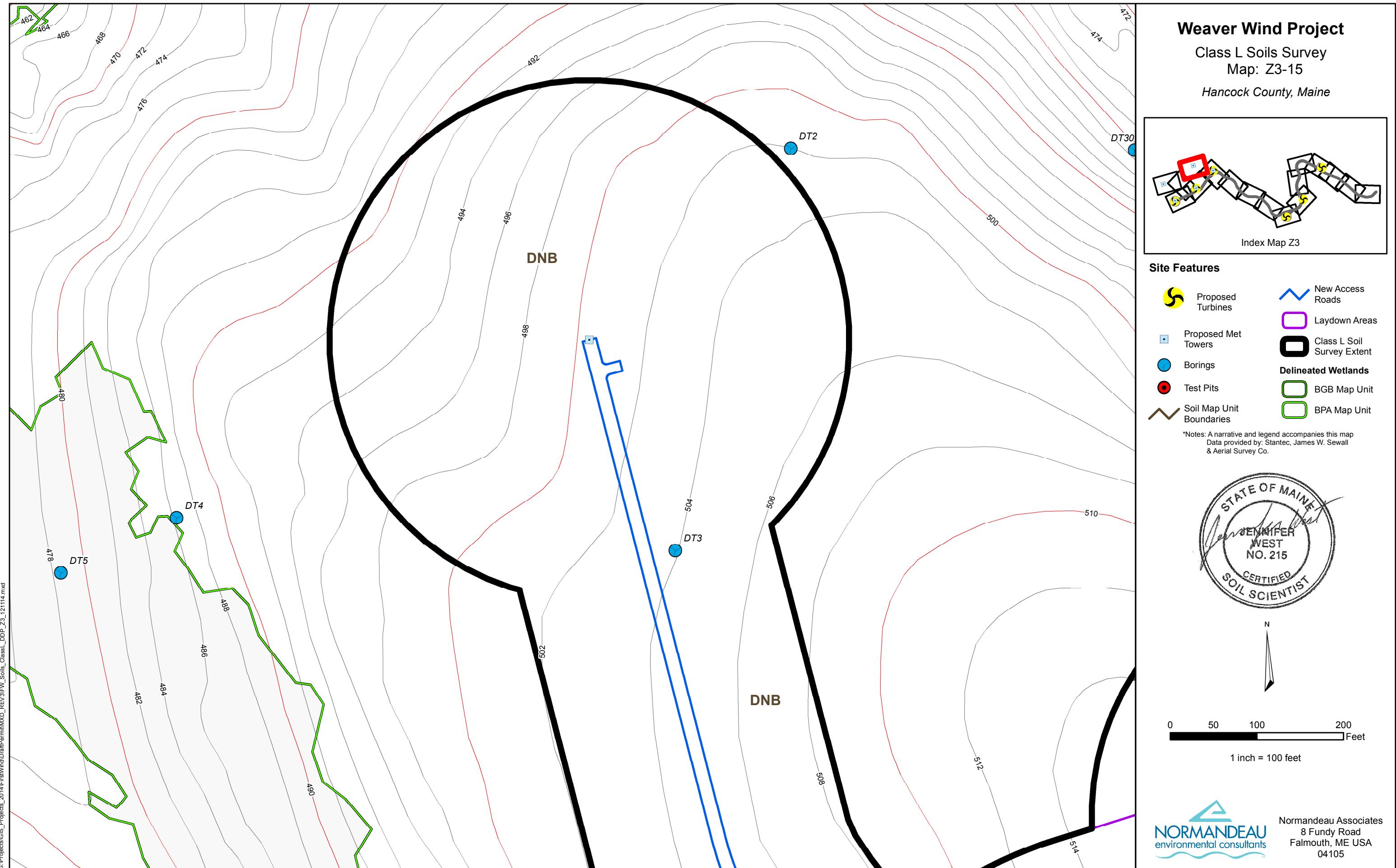
- Proposed Turbines
- Laydown Areas
- Proposed Met Towers
- Borings
- Test Pits
- Soil Map Unit Boundaries
- Class L Soil Survey Extent
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit

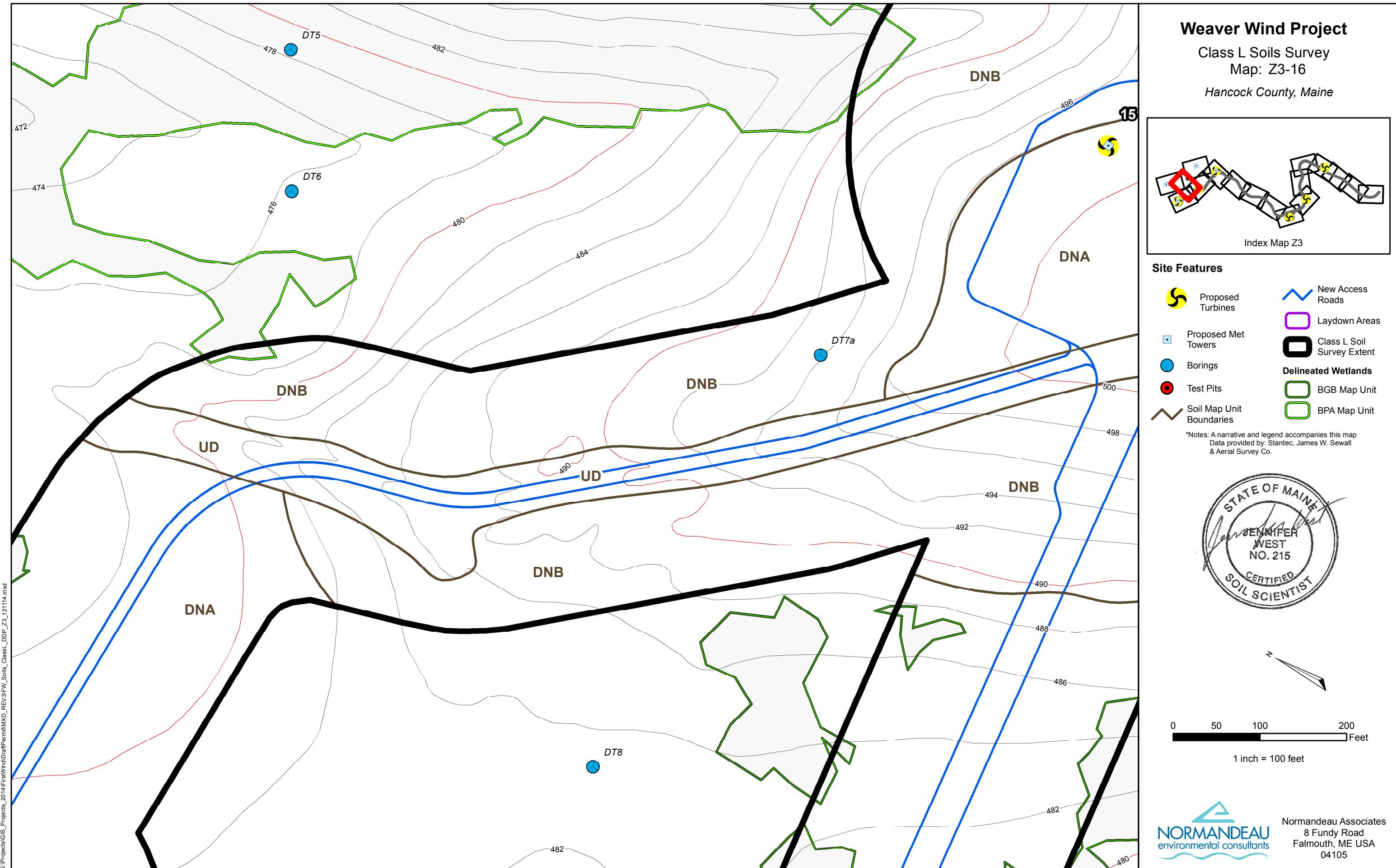
*Notes: A narrative and legend accompanies this map
 Data provided by: Stantec, James W. Sewall
 & Aerial Survey Co.









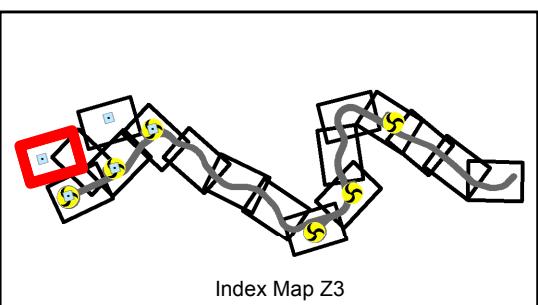


Weaver Wind Project

Class L Soils Survey

Map: Z3-17

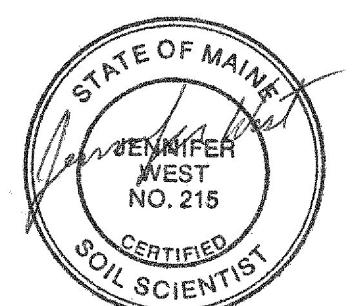
Hancock County, Maine



Site Features

- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Delineated Wetlands
- Test Pits
- Soil Map Unit Boundaries
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.



N

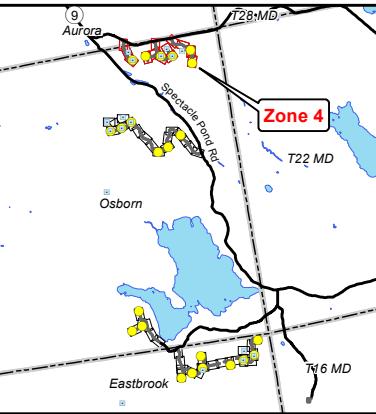
0 50 100 200
Feet

1 inch = 100 feet



Weaver Wind Project
Class L Soils Survey
Map: Zone 4 Index Map

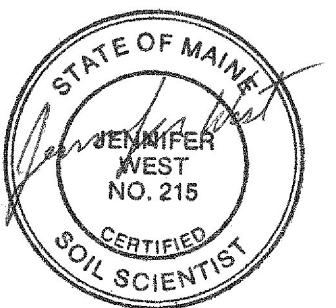
Hancock County, Maine



Site Features

- Proposed Turbines
- Zone 4 Grids
- Proposed Met Towers
- Class L Soil Survey Extent
- New Access Roads

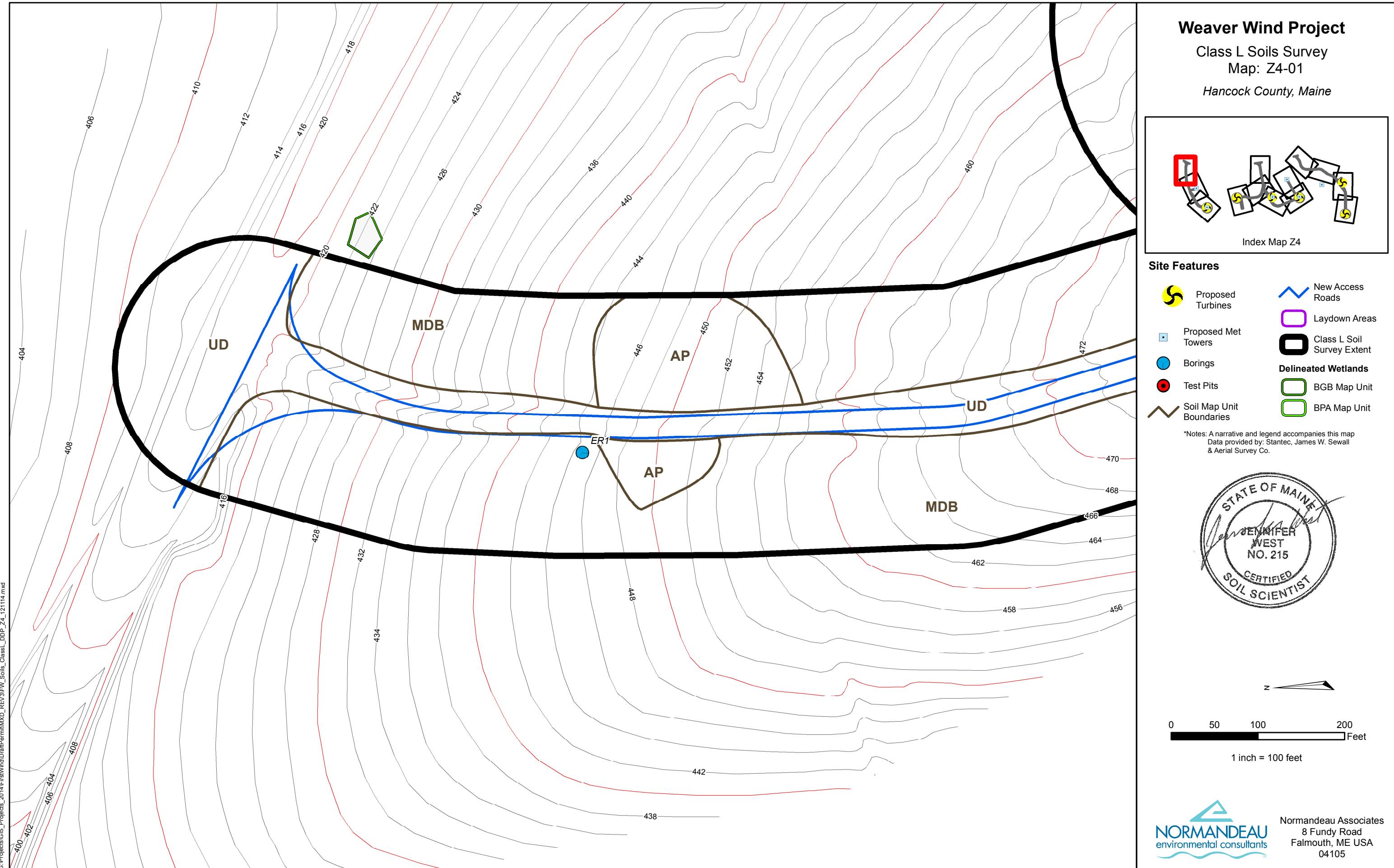
*Notes: A narrative and legend accompanies this map
 Data provided by: James W. Sewall, ESRI & MEGIS

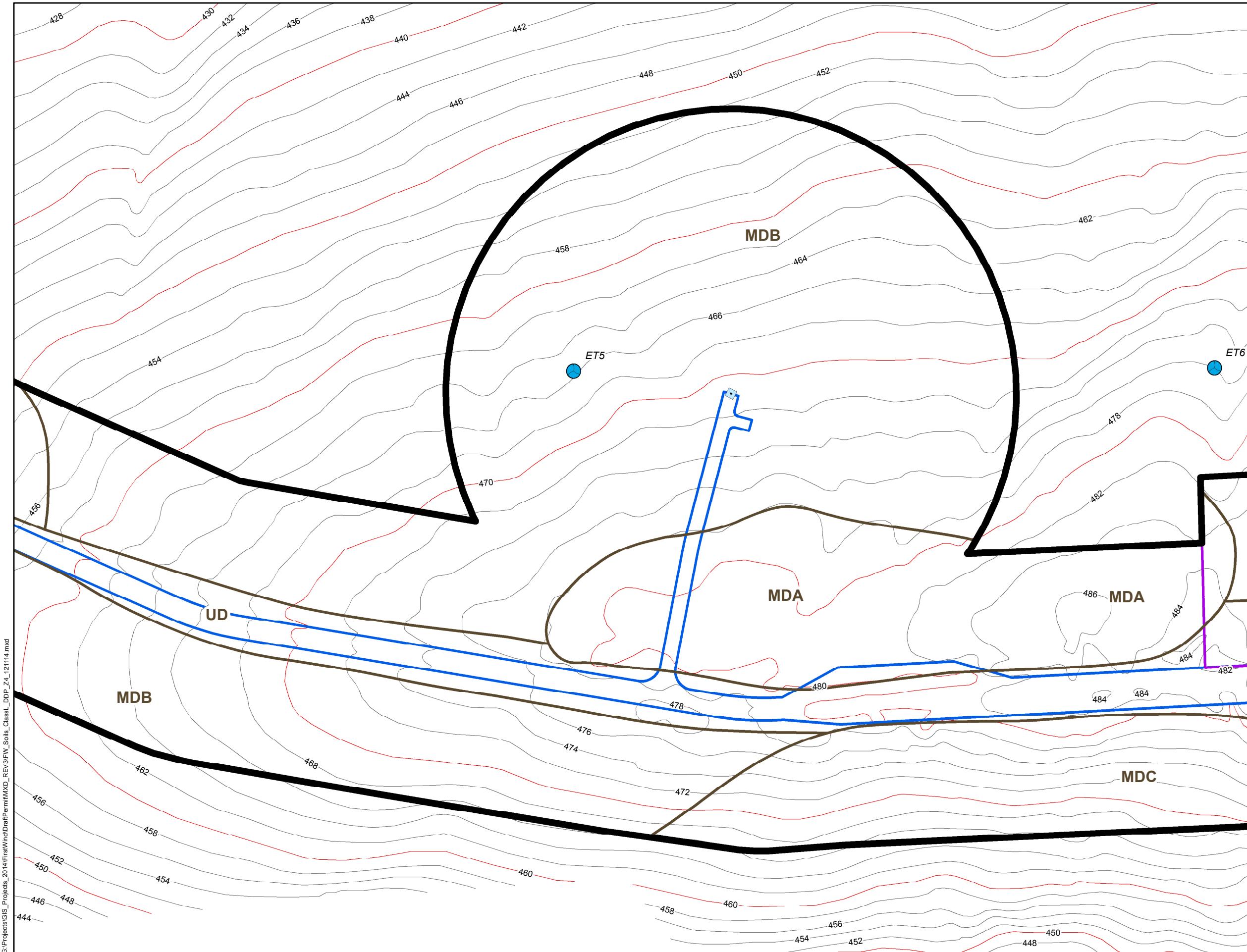


N

0 250 500 1,000 1,500 Feet

1 inch = 700 feet

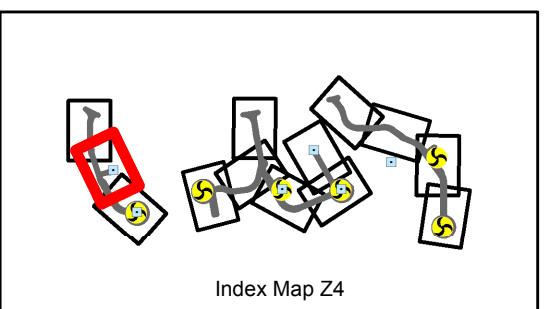




Weaver Wind Project

Class L Soils Survey
Map: Z4-02

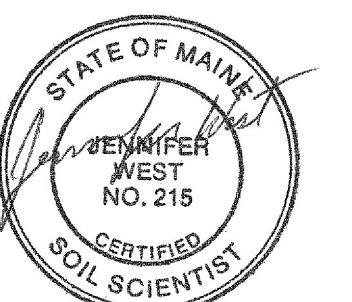
Hancock County, Maine



Site Features

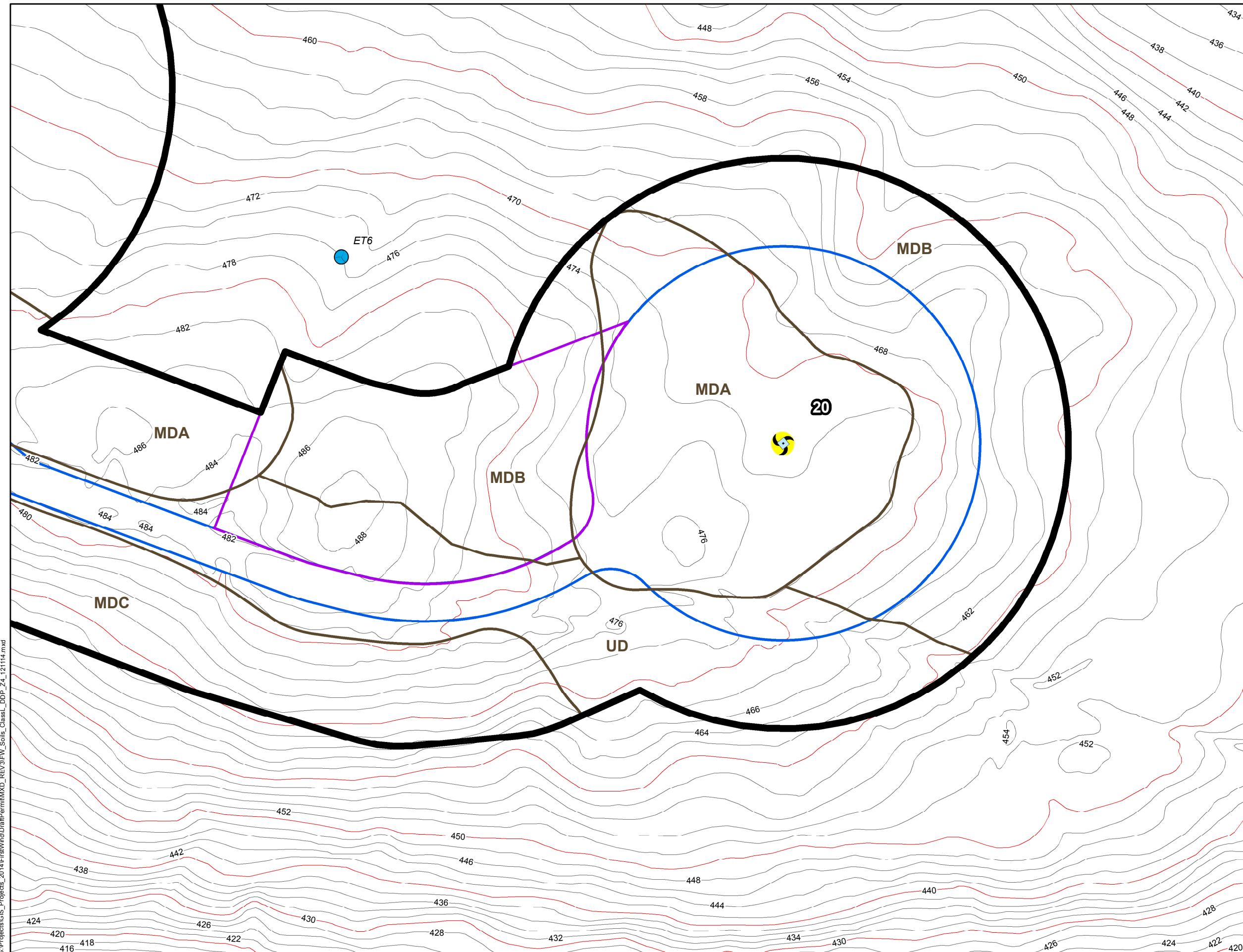
- Proposed Turbines
- New Access Roads
- Proposed Met Towers
- Laydown Areas
- Borings
- Test Pits
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit
- Soil Map Unit Boundaries

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.



0 50 100 200 Feet

1 inch = 100 feet

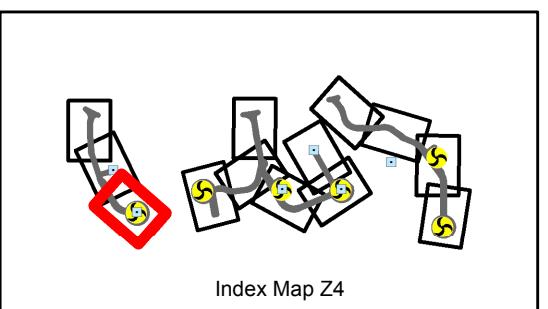


Weaver Wind Project

Class L Soils Survey

Map: Z4-03

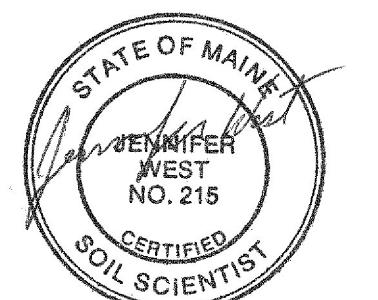
Hancock County, Maine



Site Features

- Proposed Turbines
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Test Pits
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit
- Soil Map Unit Boundaries

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
Feet

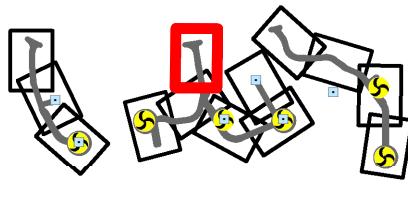
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Weaver Wind Project

Class L Soils Survey

Map: Z4-04

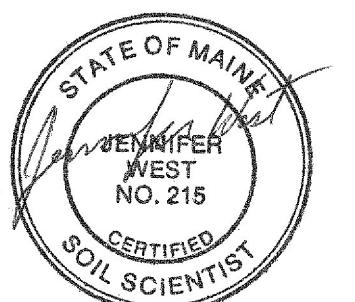
Hancock County, Maine



Site Features

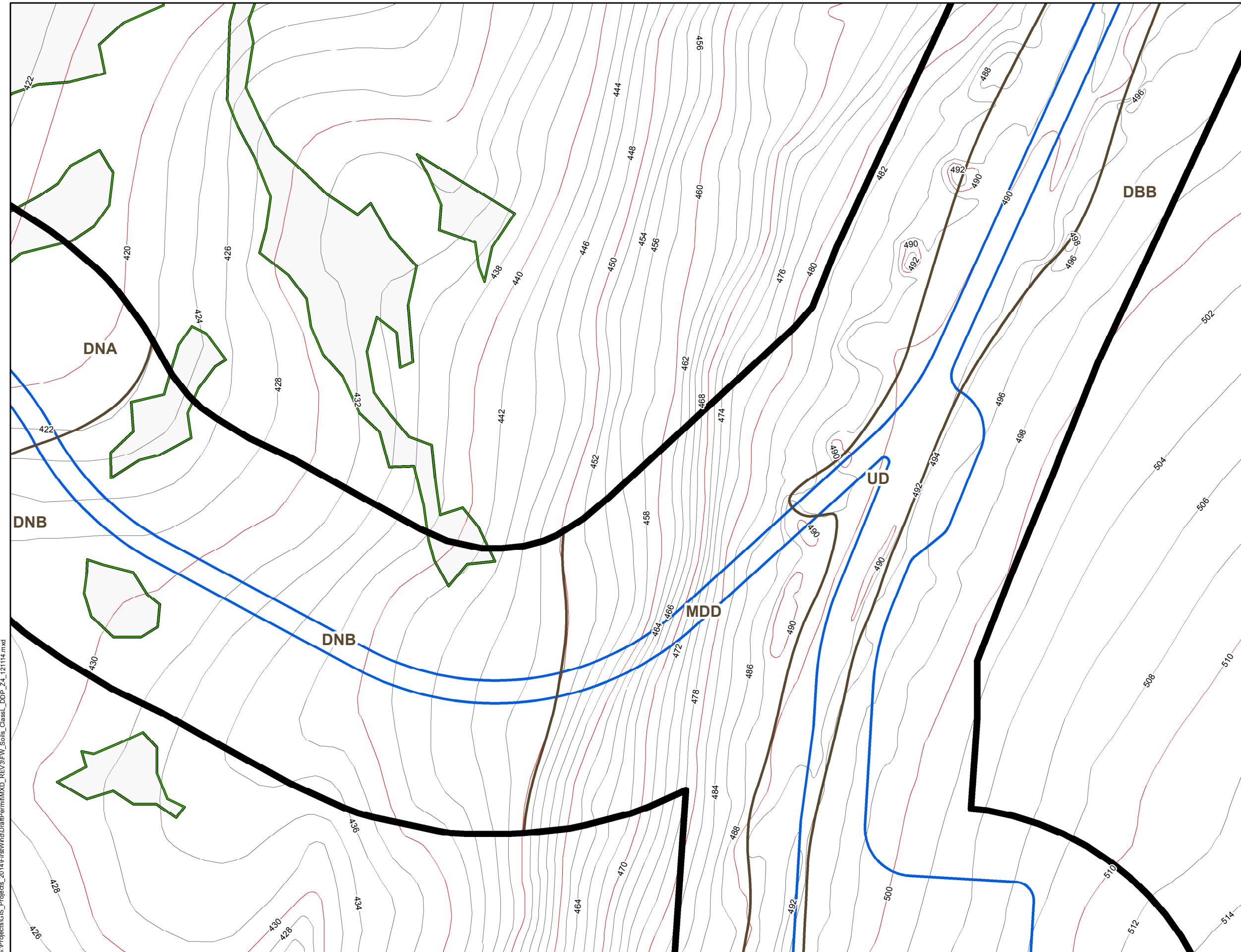
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- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Test Pits
- Soil Map Unit Boundaries
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
Feet
1 inch = 100 feet

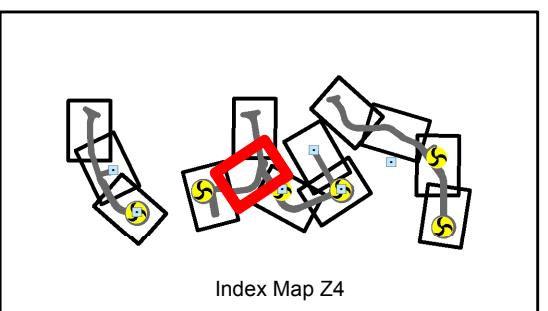

NORMANDEAU
environmental consultants
8 Fundy Road
Falmouth, ME USA
04105



Weaver Wind Project

Class L Soils Survey
Map: Z4-05

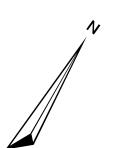
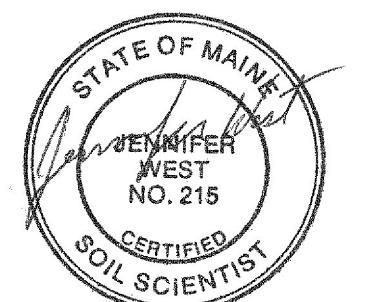
Hancock County, Maine



Site Features

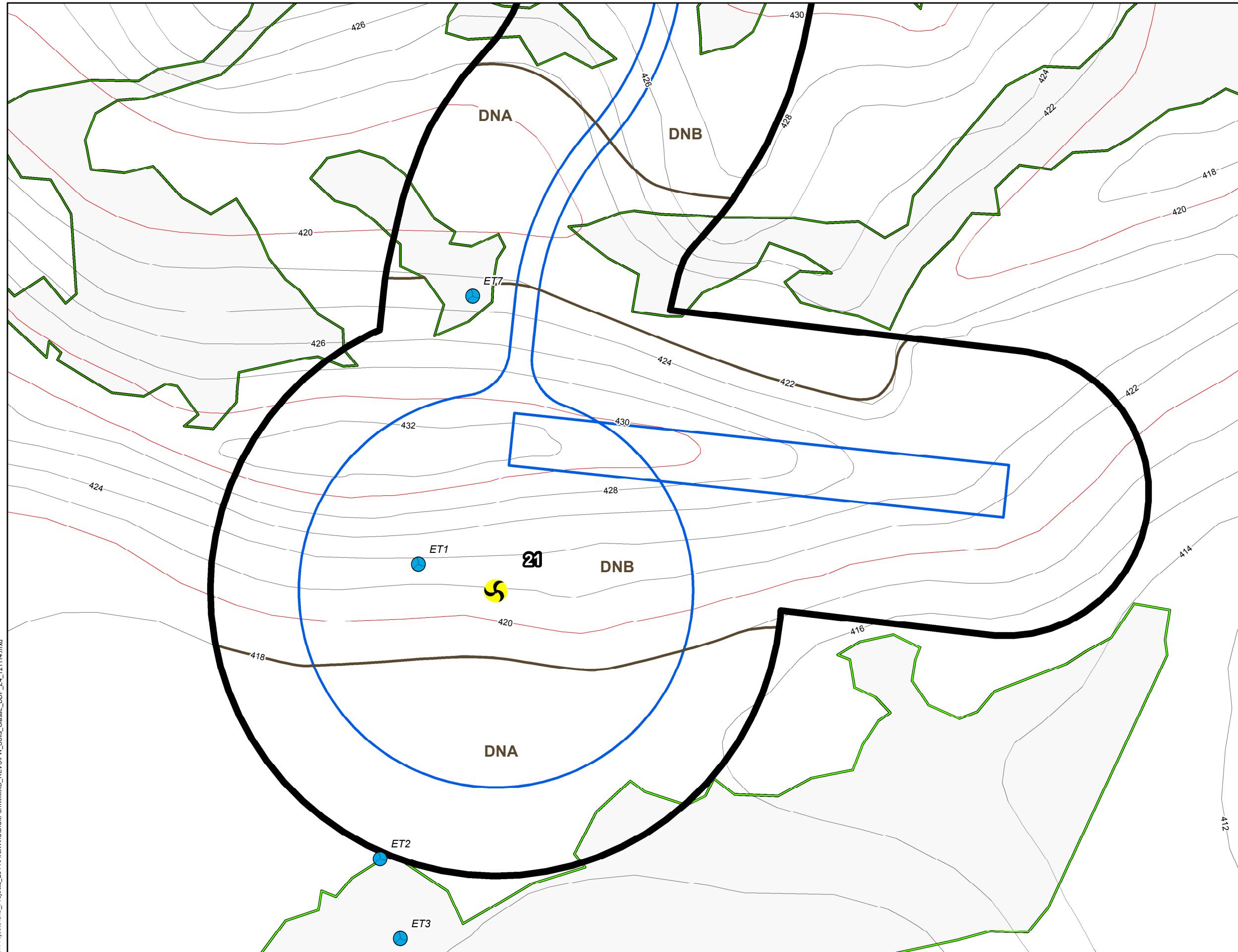
- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Test Pits
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit
- Soil Map Unit Boundaries

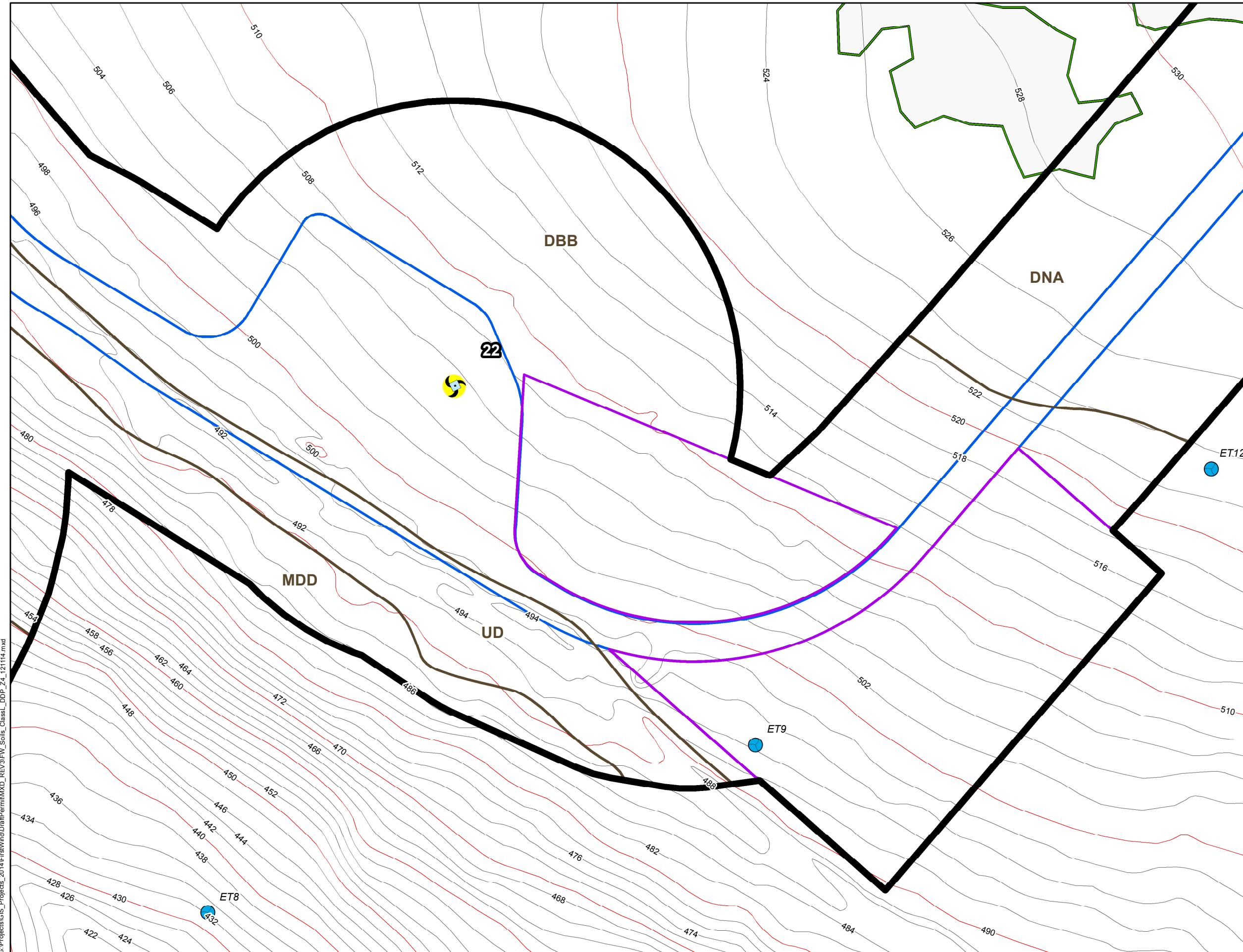
*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
Feet

1 inch = 100 feet

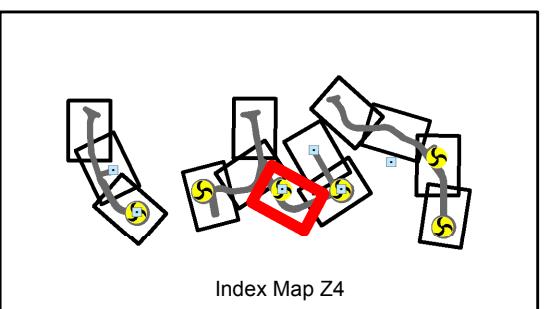




Weaver Wind Project

Class L Soils Survey
Map: Z4-07

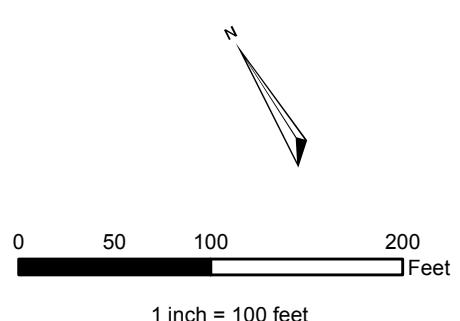
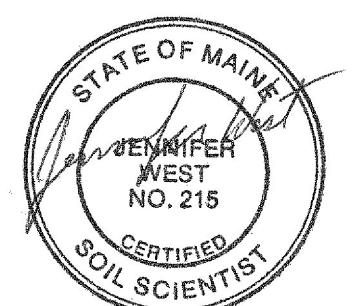
Hancock County, Maine

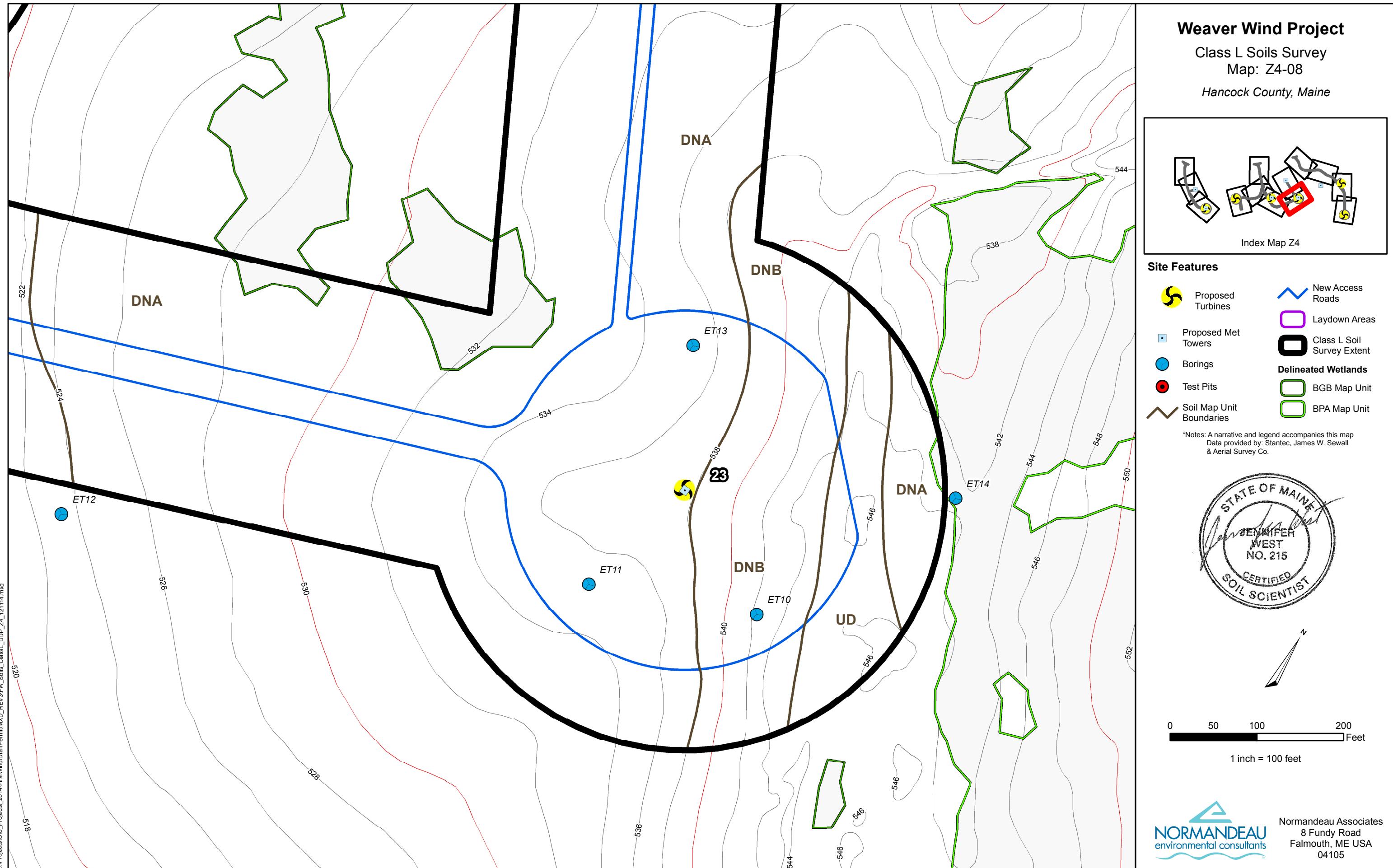


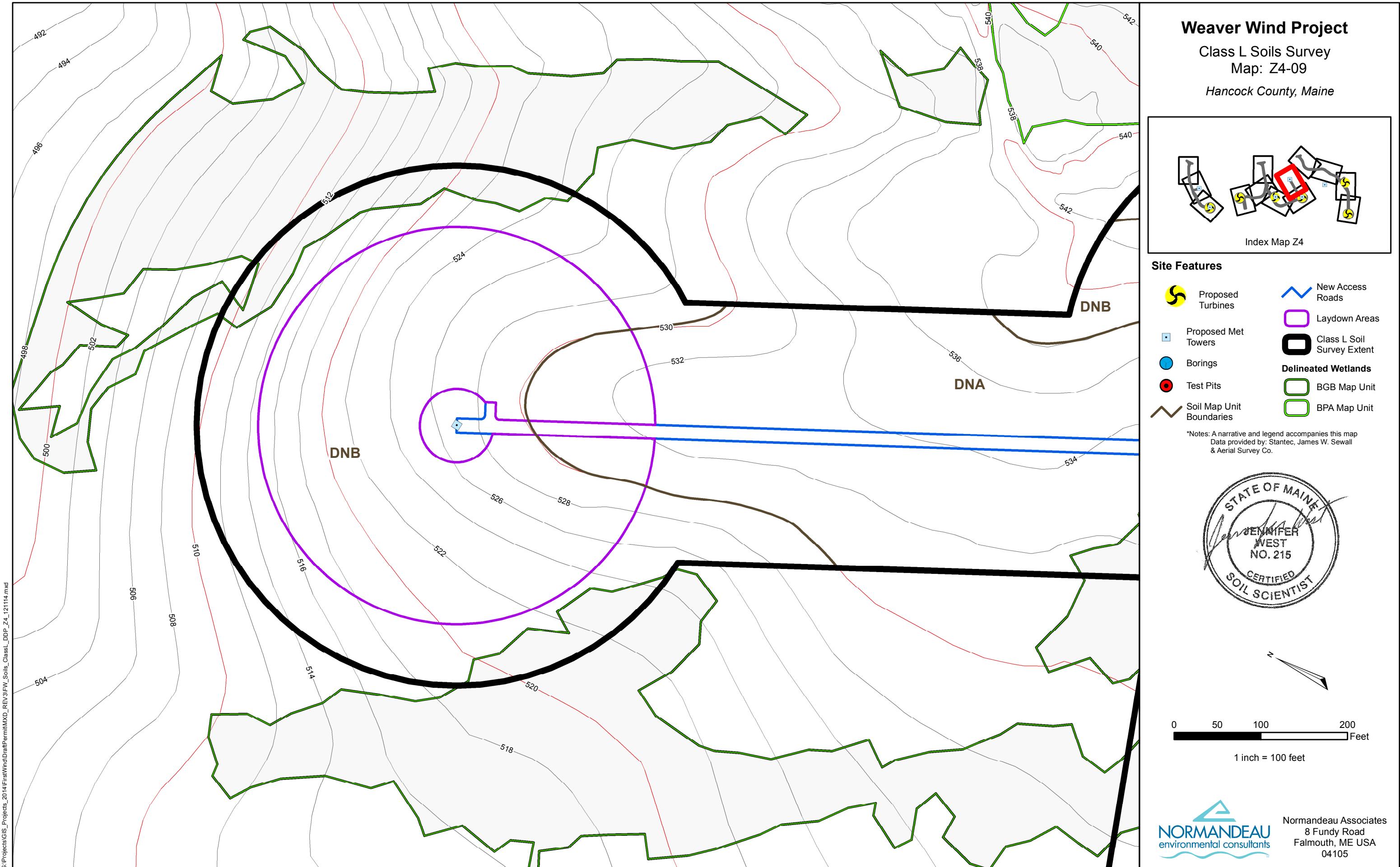
Site Features

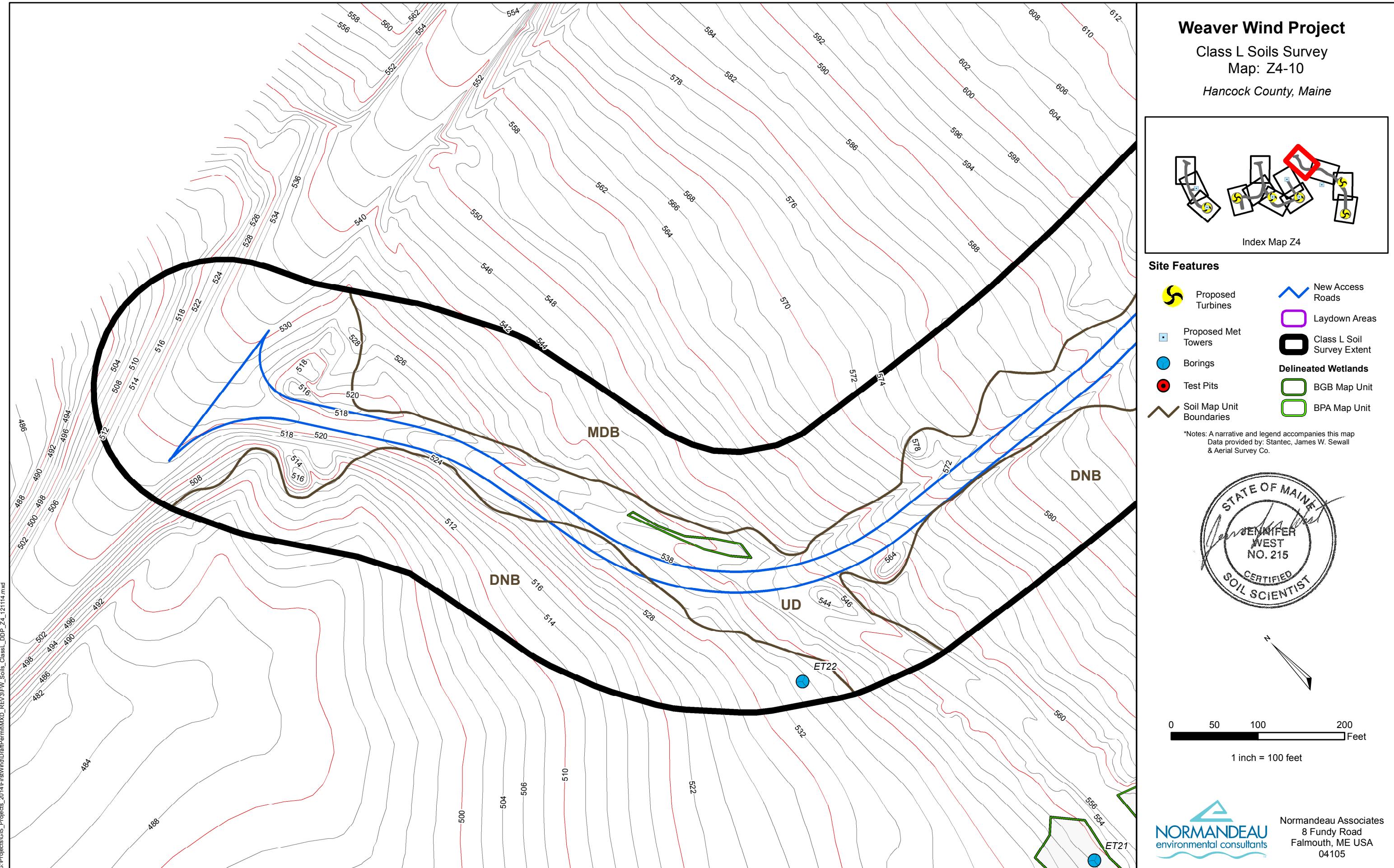
- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Borings
- Test Pits
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit
- Soil Map Unit Boundaries

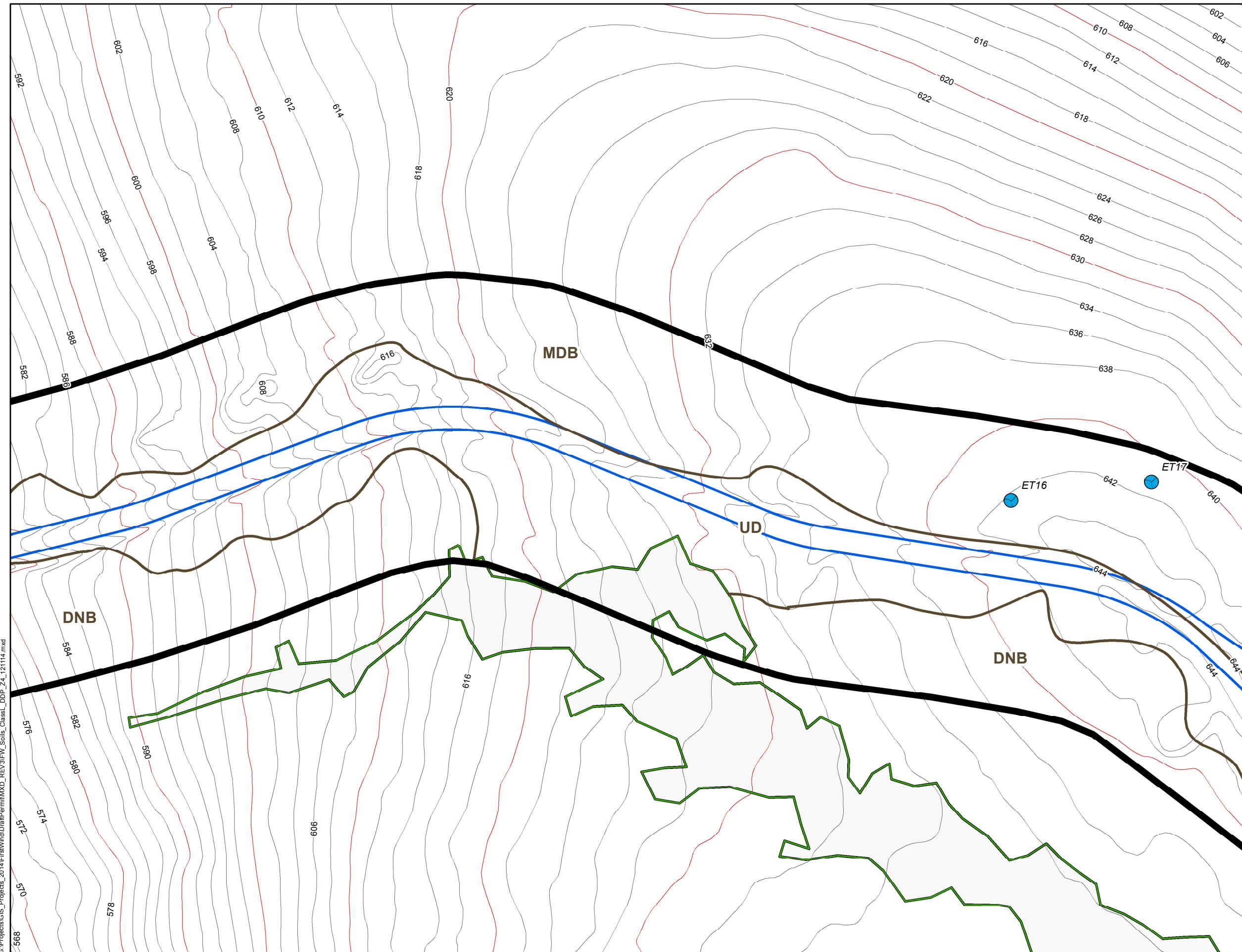
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Data provided by: Stantec, James W. Sewall & Aerial Survey Co.









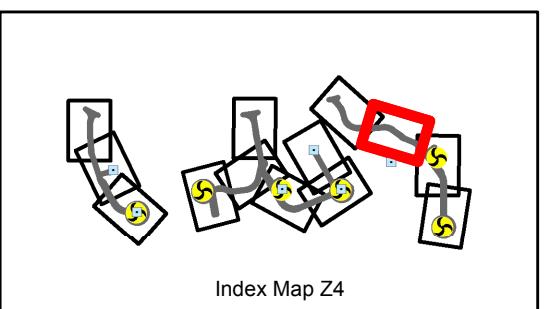


Weaver Wind Project

Class L Soils Survey

Map: Z4-11

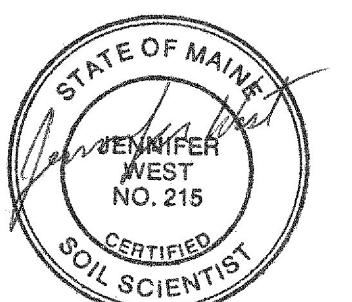
Hancock County, Maine



Site Features

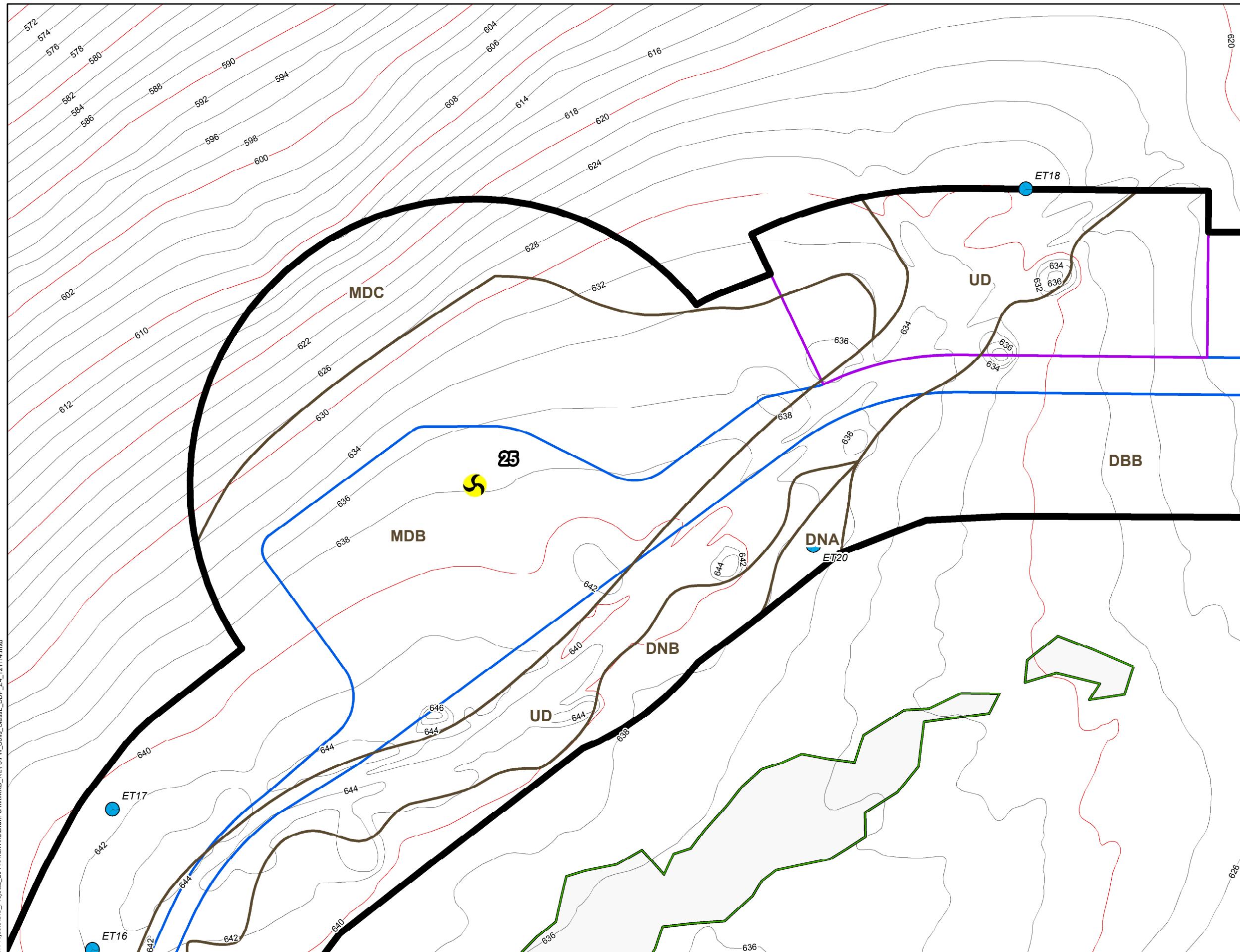
- Proposed Turbines
- New Access Roads
- Laydown Areas
- Proposed Met Towers
- Class L Soil Survey Extent
- Borings
- Test Pits
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit
- Soil Map Unit Boundaries

*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall & Aerial Survey Co.



0 50 100 200
1 inch = 100 feet

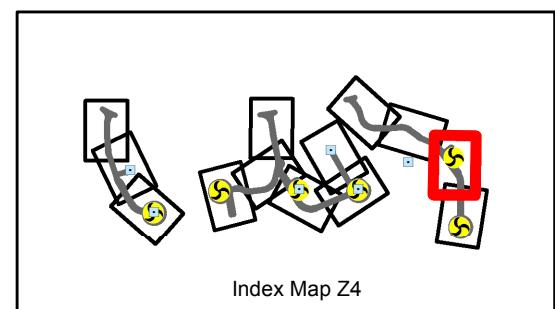

Normandeau Associates
8 Fundy Road
Falmouth, ME USA
04105



Weaver Wind Project

Class L Soils Survey Map: Z4-12

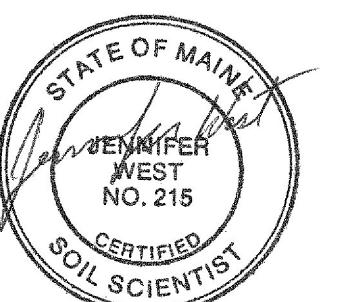
Hancock County, Maine



Site Features

-  Proposed Turbines
-  Proposed Met Towers
-  Borings
-  Test Pits
-  Soil Map Unit Boundaries
-  New Access Roads
-  Laydown Areas
-  Class L Soil Survey Extent
-  Delineated Wetlands
-  BGB Map Unit
-  BPA Map Unit

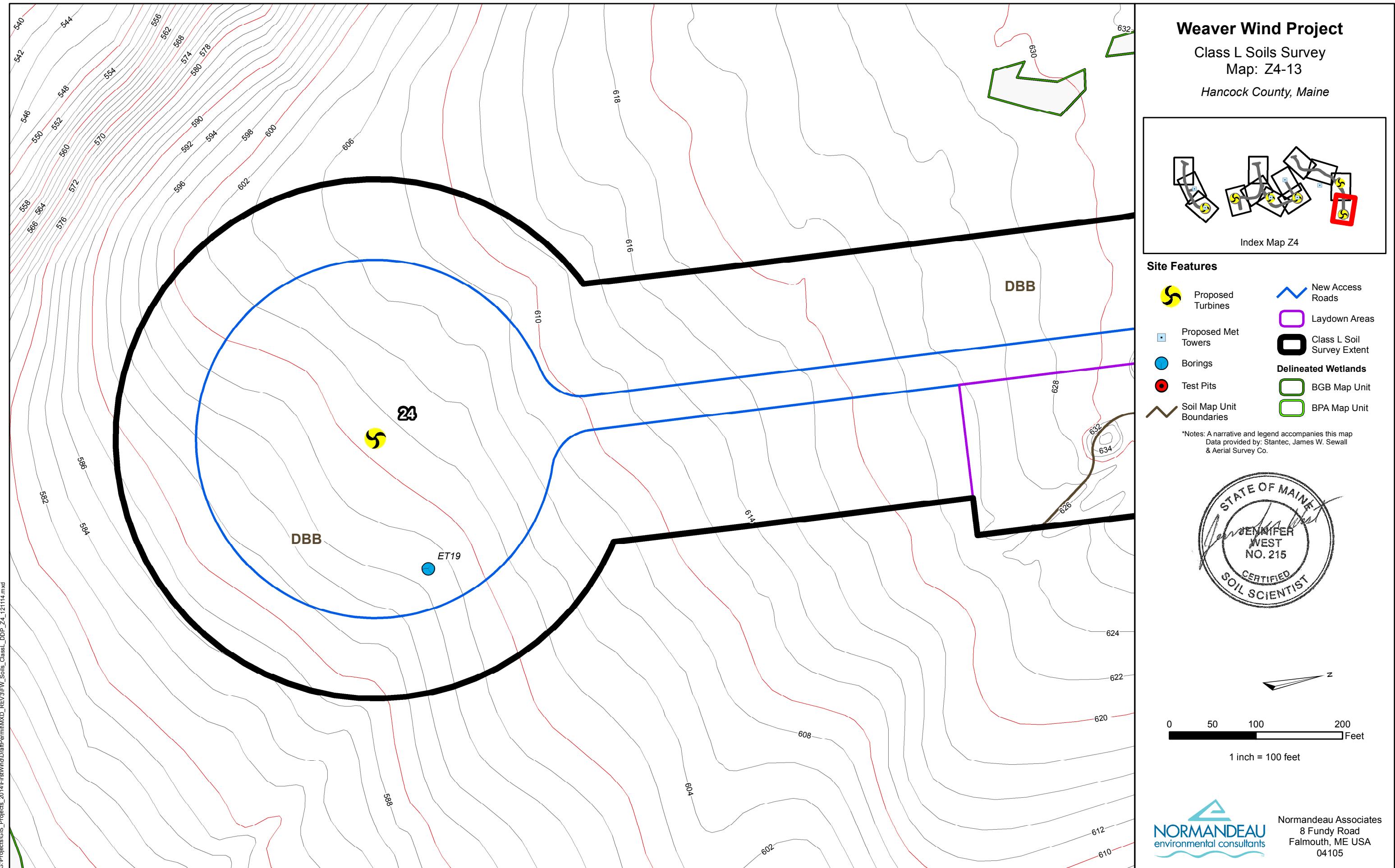
*Notes: A narrative and legend accompanies this map
Data provided by: Stantec, James W. Sewall
& Aerial Survey Co.



0 50 100 200

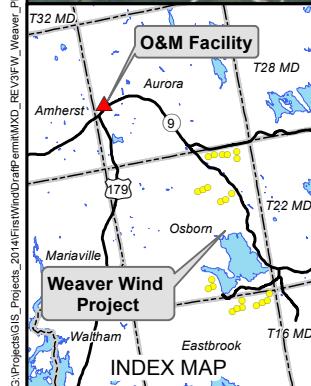
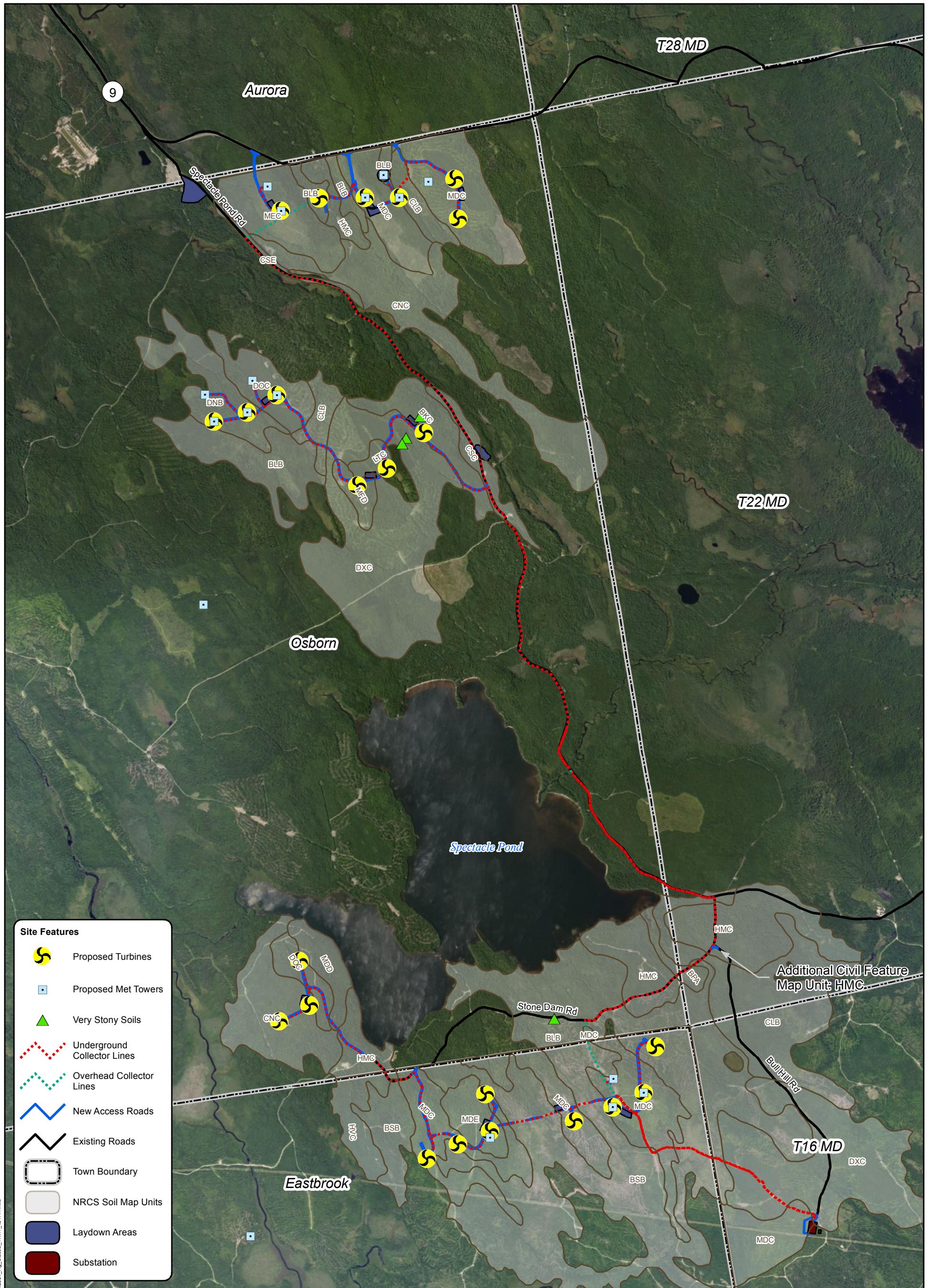
(Feet)

1 inch = 100 feet



Appendix C-3

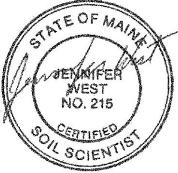
Class D Soil Mapping



*Note: Data provided by: NRCS, Reed & Reed, Inc.
NHD, ESRI & MEGIS
For further detail see civil & electrical design
A narrative and legend accompanies this map
Wetlands identified in Section 7

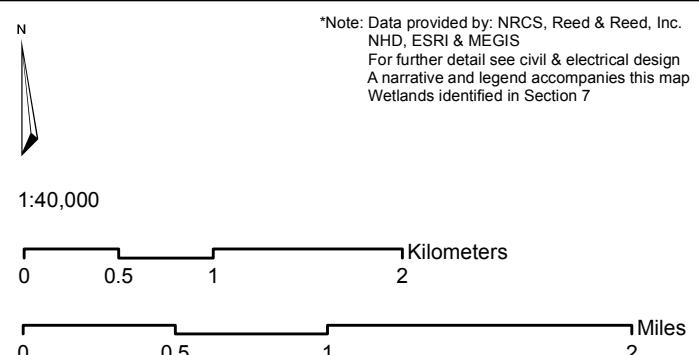
Class D Soils Survey

Weaver Wind Project
Hancock County, Maine



NORMANDEAU
environmental consultants

Normandeau Associates
8 Fundy Road
Falmouth, ME USA
04105



Appendix D

Soil Survey for Operations and Maintenance Facility

Operations and Maintenance Facility

**Subsurface Wastewater Disposal Application and
Test Pit Logs for Class B Soil Survey
(Stantec Consulting Services, Inc.)**

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services
Div of Environmental Health , 11 SHS
(207) 287-5672 Fax: (207) 287-4172

SITE EVALUATOR STATEMENT

I certify that on 12/05/12 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature

386

12/12/12

Dale F. Knapp

SE #

Date _____

Site Evaluator Name Printed

Telephone Number

E-mail Address:

Note : Changes to or deviations from the design should be confirmed with the Site Evaluators.

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Human Services
 Division of Health Engineering
 (207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation

Aurora

Street, Road, Subdivision

Old Airline Rd.

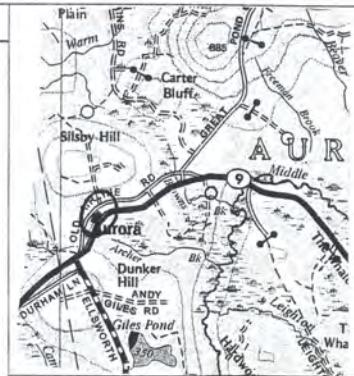
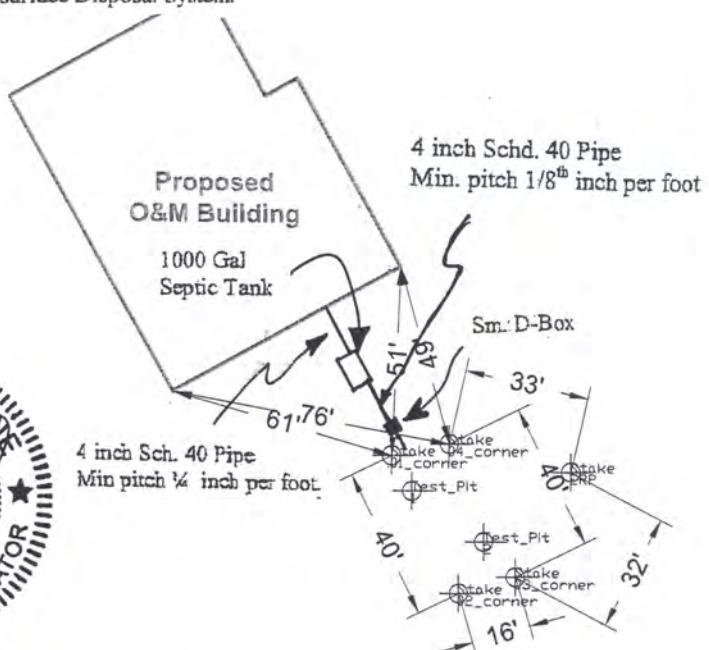
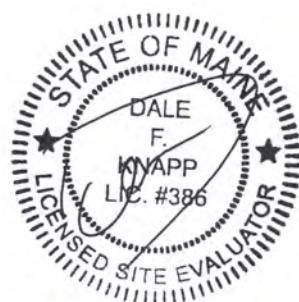
Owner's Name

Hancock Wind, LLC

SITE PLAN

Scale 1" = 50 ft. or as shown

Note: Drilled Well should be placed a minimum distance of 100 Feet from Subsurface Disposal System.



Septic Tank must be located
 Minimum of 10' from dwelling

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole 1 Test Pit Boring
 • 5 " Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
Very Fine Sandy Loam	Friable	Brown	Ø
Sandy Loam		yellow	
		Brown	
Lt. Sandy Loam		lt. yellow	
		Brown	
XX X	BED X Rock	XXX	

Note: Angled stones + cobbles present

Observation Hole 2 Test Pit Boring
 • 5 " Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
Very Fine Sandy Loam	Friable	Brown	Ø
Sandy Loam		lt. Brown	
		dk. yellow	
Lt. Sandy Loam		Brown	
XX X	BED X Rock	XXX	

Note: Angled stones + cobbles present

Soil Classification	Slope	Limiting Factor	[] Ground Water
2 AIII	0-3 %	30 "	[] Restrictive Layer <input checked="" type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth

Soil Classification	Slope	Limiting Factor	[] Ground Water
2 AIII	0-3 %	33 "	[] Restrictive Layer <input checked="" type="checkbox"/> Bedrock <input type="checkbox"/> Pit Depth

Site Evaluator Signature

386

SE #

12/11/12

Date

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services
Division of Environmental Health
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation
Aurora

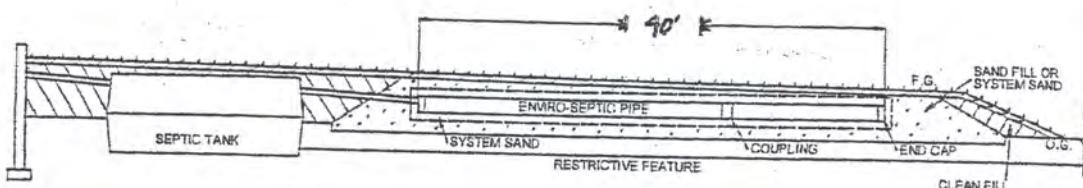
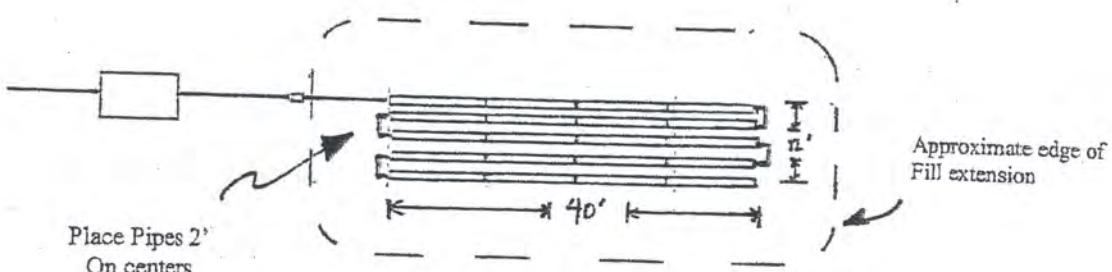
Street, Road, Subdivision
Old Airline Rd.

Owner's Name
Hancock Wind, LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.

200 Linear feet
Enviro-Septic® Pipe



Note: Tank location may vary.

FILL REQUIREMENTS

Depth of Fill (Upslope) 18"

CONSTRUCTION ELEVATIONS

Finished Grade Elevation

-98"

ELEVATION REFERENCE POINT

Location & Description: *ERP Top of Stake @ 46" Above ground*

Depth of Fill (Downslope) 18"

Top of Distribution Pipe or Proprietary Device

-59"

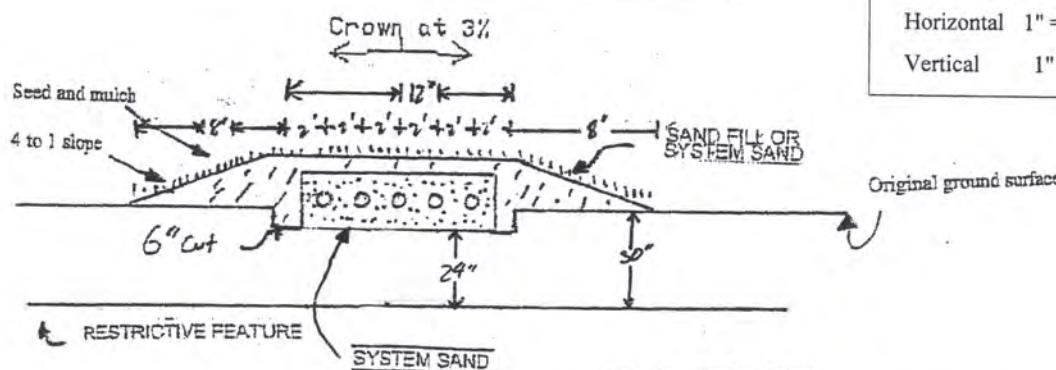
Reference Elevation:

0.00"

Bottom of Disposal Area

-72"

DISPOSAL AREA CROSS SECTION



Scale

Horizontal 1" = 10 ft.

Vertical 1" = 5 ft.

All configurations of Enviro-Septic® require a minimum of 6" of system sand surrounding the circumference of the pipe. This sand, typically gravelly coarse sand, must adhere to the following percentage and quality restrictions.

Percentage Restrictions

25% or less of the total sand may be gravel.

40%-90% of the total sand is to be coarse and very coarse sand.

Gravel Quality Restrictions

No gravel is to exceed $\frac{1}{2}$ " in diameter.

No gravel is smaller than 2mm/.0787" in diameter. (It must not pass through a #10 sieve.)

Coarse Sand Quality Restrictions

No coarse sand is smaller than 0.5mm/.0196" in diameter. (It must not pass through a #35 sieve.)

Fines Quality Restrictions

No more than 2% of the total sand may pass through a #200 sieve.

ASTM Standard: C-33 (concrete sand) meets the above requirements.

[Signature]
Site Evaluator Signature

386

12/12/12

SE #

Date



Dale F. Knapp, LSE #386
Stantec Consulting
30 Park Drive
Topsham, Maine 04086

TOWN: Aurora LOCATION: Old Airline Rd. APPLICANT'S NAME: Hancock Wind, LLC

1. The Plumbing and Subsurface Wastewater Disposal Rules adopted by the State of Maine, Department of Human Services pursuant to 22 M.R.S.A. §42 (the "Rules") are incorporated herein by reference and made a part of this application and shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system Installer will contact Dale Knapp (207-729-1199) if there are any questions regarding materials, procedures, or designs. The system installer shall be solely responsible for compliance with the Rules and with state and municipal laws and ordinances pertaining to the permitting, inspection, and construction of subsurface wastewater disposal systems.
2. This application is intended to represent facts pertinent to the Rules only. The owner/applicant, system installer and/or building contractor is responsible for determining compliance with and to obtain permits under applicable local, state and/or federal laws and regulations (including, but not necessarily limited to, the Maine Natural Resources Protection Act, Town specific wetland regulations, Town zoning and subdivision ordinances, Maine Site Location of Development Act and Maine Minimum Lot Size Laws) before installing this system or considering the property on which the system is to be installed a "buildable" lot.

Prior to the commencement of construction and system installation, the local plumbing inspector shall inform the owner/applicant and the site evaluator of any local ordinances, which are more restrictive than the Rules in order that the design may be amended. All designs are subject to review by local, state and/or federal authorities. The site evaluator's liability shall be limited to revisions required by regulatory agencies pursuant to laws or regulations in effect at the time of preparation of this application.

3. All information shown on this application relating to property lines, well locations, structures and underground facilities (such as utility lines, drains, existing septic systems, water lines, etc.) are based solely upon information provided by the owner/applicant and has been relied upon by the site evaluator preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information.
4. Installation of a garbage (grinder) disposal is not recommended. If one is installed, an additional 1000-gallon septic tank or a septic tank filter should be connected in series to the proposed septic tank.

5. The system user shall avoid introducing kitchen grease or fats into this system. Chemicals such as septic tank cleaners and/or chlorine (such as from water treatment) and controlled or hazardous substances shall not be disposed of in this system.
6. The septic tank should be pumped within two years of installation and subsequently as recommended by the pump service, but in no event should the septic tank be pumped less often than once every three years.
7. The actual water flow or number of bedrooms shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed.
8. The general minimum setback between a well and septic system serving a single-family residence is 100-300 feet, unless the local municipality has a more restricting regulation. A well installed by an abutting property owner within the minimum setback distances prior to the issuance of a permit for the proposed disposal system will void this design.
9. When a gravity system is proposed, before construction begins, the system installer or building contractor shall review the elevations of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum slope requirements. In gravity systems, the invert of the septic tank outlet shall be at least four inches above the invert of the distribution box outlet at the disposal area. When an effluent pump is required, provisions shall be made to make certain that surface ground water does not enter the septic tank or pump station. An alarm device warning of a pump failure shall be installed. Insulate gravity pipes, pump lines, and the distribution box as necessary to prevent freezing.
10. For construction, remove the vegetation; organic duff and old fill material from under the disposal area; and any fill extension. On sites where the proposed system is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soils by roto-tilling to a depth of at least eight inches over the entire disposal and fill extension area to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper than eight inches and compact thoroughly before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage). Do not use wheeled equipment on the scarified soil area until after 12 inches of fill is in place. Keep equipment off plastic chambers, leaching pipe, or in-drains. Divert the surface water away from the disposal area by ditching or shallow swales.
11. Unless otherwise noted, fill shall be gravelly coarse sand, which contains no more than five percent fines (silt and clay).
12. Do not install systems on loamy, silty, or clayey soils during wet periods since soil smearing/glazing may seal off the soil interface.
13. Seed all filled and disturbed surfaces with perennial grass seed, then mulch with hay or equivalent material to prevent erosion.
14. Stantec Consulting recommends using a certified installer; a list can be found at http://www.maine.gov/dhhs/eng/plumb/lists/installers_07_2006.xls

Town, City, Plantation

AURORA, MAINE

Street, Road, Subdivision

HANCOCK OIM SITE

Owner or Applicant Name

HANCOCK WIND, LLC

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # TP 1 Test Pit Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
SANDY	FRIABLE	DARK YELLOWISH BROWN	NONE
LOAM		10yr 3/4	
BROWN			
XXXXX X BEDROCK XXXXXXXX XXXXX			
12			
18			
24			
30			
36			
42			
48			

Soil Classification Slope Limiting Factor

Profile	Condition	0-3 Percent	14 " Depth	<input type="checkbox"/> Groundwater
				<input type="checkbox"/> Restrictive Layer
				<input checked="" type="checkbox"/> Bedrock

Soil Series Name **Lyman** Hydrologic group **D**

Observation Hole # TP 2 Test Pit Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
SANDY	FRIABLE	DARK BROWN	NONE
LOAM		7.5yr 3/3	
XXXXX X BEDROCK XXXXXXXX XXXXX			
12			
18			
24			
30			
36			
42			
48			

Soil Classification Slope Limiting Factor

Profile	Condition	0-3 Percent	10 " Depth	<input type="checkbox"/> Groundwater
				<input type="checkbox"/> Restrictive Layer
				<input checked="" type="checkbox"/> Bedrock

Soil Series Name **Lyman** Hydrologic group **D**

Observation Hole # TP 3 Test Pit Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
SANDY	FRIABLE	DARK BROWN	NONE
LOAM		7.5yr 3/4	
STRONG BROWN			
LOAM		7.5yr 4/6	
7.5yr 5/4			
YELLISH BROWN			
10yr 5/4			
TEST PIT LIMIT X X X			
12			
18			
24			
30			
36			
42			
48			

Soil Classification Slope Limiting Factor

Profile	Condition	0-3 Percent	32 " Depth	<input type="checkbox"/> Groundwater
				<input type="checkbox"/> Restrictive Layer
				<input checked="" type="checkbox"/> Bedrock

Soil Series Name **DIXFIELD** Hydrologic group **C**

[Handwritten signature]

Soil Scientist/Site Evaluator Signature

Observation Hole # TP 4 Test Pit Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
SANDY	FRIABLE	DARK BROWN	NONE
LOAM		7.5yr 3/4	
LOAM		BROWN	
XXXXX X BEDROCK XXXXXXXX XXXXX			
12			
18			
24			
30			
36			
42			
48			

Soil Classification Slope Limiting Factor

Profile	Condition	0-3 Percent	13 " Depth	<input type="checkbox"/> Groundwater
				<input type="checkbox"/> Restrictive Layer
				<input checked="" type="checkbox"/> Bedrock

Soil Series Name **Lyman** Hydrologic group **D**

479 / 386

CSS/LSE #

12/12/12

Date

Edits by Jennifer West,
ME CSS #215

Town, City, Plantation

AURORA, MAINE

Street, Road, Subdivision

HANCOCK O&M SITE

Owner or Applicant Name

HANCOCK WIND, LLC

SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole # TP 5 Test Pit Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
SANDY LOAM	FRIABLE	DARK BROWN	NONE
		7.5YR 3/4	
		STRONG BROWN	
		7.5YR 4/6	
Loam			
		YELLOWSH BROWN	
		10YR 5/4	
TEST PIT LIMIT X X X X			
0	6	12	18
24	30	36	42
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	0-3 Percent	32 Depth	<input type="checkbox"/> Groundwater <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
---------	-----------	-------------	----------	---

Hydrologic group C

Soil Series Name DIXFIELD

Observation Hole # TP 6 Test Pit Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
FINE SANDY LOAM	FRIABLE	DARK Yellow Brown	NONE
		10YR 3/4	
Loam		Dark Yellow Brown	
X X X TEST PIT	LIMIT X X X X		
		10YR 4/4	

Depth below mineral soil surface (inches)

NOTE: Refusal at large stone

Soil Classification Slope Limiting Factor

Profile	Condition	0-3 Percent	14 Depth	<input type="checkbox"/> Groundwater <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Hydrologic group C

Soil Series Name DIXFIELD

Observation Hole # TP 7 Test Pit Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
SANDY		DARK BROWN	NONE
Loam	FRIABLE	7.5YR 3/4	
		STRONG	
		BROWN	
SAND		7.5YR 4/6	
		Grayish Brown	Fine
SAND		10YR 5/2	Faint
X X X X TEST PIT	LIMIT X X X X		
0	6	12	18
24	30	36	42
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	0-3 Percent	None Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Hydrologic group C

Soil Series Name DIXFIELD

Observation Hole # TP 8 Test Pit Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
SANDY	FRIABLE	DARK BROWN	NONE
Loam		7.5YR 3/4	
		Loamy	
		SAND	
		7.5YR 4/6	
SAND		Grayish Brown	FINE FAINT
		10YR 5/2	
X X X X TEST PIT	LIMIT X X X X		
0	6	12	18
24	30	36	42
48			

Depth below mineral soil surface (inches)

Soil Classification Slope Limiting Factor

Profile	Condition	0-3 Percent	None Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
---------	-----------	-------------	------------	--

Hydrologic group C

Soil Series Name DIXFIELD

Soil Scientist/Site Evaluator Signature

47a/386

CSS/LSE #

12/12/12

Date

Town, City, Plantation

AURORA, ME

Street, Road, Subdivision

HANCOCK 0 1/2 M SITE

Owner or Applicant Name

HANCOCK WIND, LLC

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # TP 9 Test Pit Boring

O " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	NONE
		10 YR 3/4	
LOAM		BROWN	
		10 YR 5/3	
XXX TEST PIT LIMIT XXX XXX XXX			
NOTE: REFUSAL @ LARGE STONE			
0	6	12	18
24	30	36	42
36	42	48	
Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 14 Depth
			□ Groundwater ■ Restrictive Layer □ Bedrock

Soil Series Name DIXFIELD VARIANT Hydrologic group C

Observation Hole # TP 10 Test Pit Boring

O " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	NONE
		10 YR 3/4	
LOAM			
		YELLOWISH BROWN	
		10 YR 5/6	
XXXXX BEDROCK XXXXXXXX XXXX XXXX			
0	6	12	18
24	30	36	42
36	42	48	
Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 34 Depth
			□ Groundwater □ Restrictive Layer ■ Bedrock

Soil Series Name Tunbridge Hydrologic group B

Observation Hole # TP 11 Test Pit Boring

O " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	NONE
LOAM		Yellow Brown	
		10 YR 5/4	
XXXXX BEDROCK XXXXXXXX XXXX XXXX			
0	6	12	18
24	30	36	42
36	42	48	
Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 16 Depth
			□ Groundwater □ Restrictive Layer ■ Bedrock

Soil Series Name Lyman Hydrologic group D

Soil Scientist/Site Evaluator Signature

Edits by Jennifer West,
ME CSS #215

Observation Hole # TP 12 Test Pit Boring

O " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
FINE SANDY LOAM	FRIABLE	DARK YELLOWISH BROWN	
LOAM		Yellow Brown	Few
		10 YR 5/4	Faint
XXX TEST PIT LIMIT XXX XXX XXX			
0	6	12	18
24	30	36	42
36	42	48	
Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 16 Depth
			□ Groundwater □ Restrictive Layer ■ Bedrock

Soil Series Name MARLOW Hydrologic group C

479/386

CSS/LSE #

12/12/12

Date

Operations and Maintenance Facility

Test Pit Logs for Class B Soil Survey
(Normandeau Associates, Inc.)

Town, City, Plantation
AuroraStreet, Road, Subdivision
11-24-14Owner or Applicant Name
WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Proposed 0 + M

Observation Hole # M13 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 VFSL	FRIABLE	7.5 YR 2/2	
6			
12		10 YR 4/4	
18		2.5 Y 4/3	
24	↓	↓	
30 gravelly	FIRM	2.5 Y 5/3	
36 VFSL			
42	↓		
48 Extent of Excavation - EOE - 100 "		Rotted Rock	
		100 Firm bedrock	
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth
			Groundwater
			Restrictive Layer
			Bedrock

Soil Series Name Dixfield Hydrologic GroupObservation Hole # M14 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0	Similar to M13		
6	Large boulder encountered		
12	no bedrock		
18			
24			
30			
36			
42			
48			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth
			Groundwater
			Restrictive Layer
			Bedrock

Soil Series Name Dixfield Hydrologic GroupObservation Hole # M15 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 VFSL	FRIABLE	7.5 YR 2/2	
6			
12		7.5 YR 2/4	
18		10 YR 4/4	
24	↓	↓	
30 gravelly	FIRM	2.5 Y 5/3	10 YR 5/6
36 VFSL			few, fine
42			
48 EOE 72" No bedrock			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth
			Groundwater
			Restrictive Layer
			Bedrock

Soil Series Name Dixfield Hydrologic GroupObservation Hole # M16 Test Pit Boring

Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0 VFSL	FRIABLE	7.5 YR 2/2	
6			
12		7.5 YR 2/4	
18	gravelly VFSL	2.5 Y 5/3	
24	Very gravelly VFSL	FIRM	2.5 Y 4/4
30			Redox
36			clay
42			garnet
48 EOE 68" No bedrock			
Soil Profile	Classification	Slope	Limiting Factor
Condition		Percent	Depth
			Groundwater
			Restrictive Layer
			Bedrock

Soil Series Name Dixfield Hydrologic GroupSoil Scientist/Site Evaluator Signature Jennifer West

215

CSS/LSE#

11-24-14

Date

Town, City, Plantation
Aurora

~~Street, Road, Subdivision~~

Owner or Applicant Name

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Proposed Oct 11

Observation Hole # M17 Test Pit Boring

Observation Hole # M18

Test Pit

Test Pit Boring

Depth of organic horizon above mineral soil				
Texture	Consistency	Color	Mottling	
0	VS/SL	ERIABLE	7-5YR 2 1/2	
6			10 YR 3 1/4	
12				
18	Loam			
24			2-5Y 5 1/3	
30				
36				
42				
48	Bedrock at 48 "			
	1 1 1 1 2 2 1 2 2 2 2 1 2 1 1 1 1 1 1			
Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
Tunbridge				

Observation Hole # M19

Test Pit Boring

Depth below mineral soil surface (inches)

Observation Hole # <u>M19</u>		<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring	
Depth below mineral soil surface (inches)	Depth of organic horizon above mineral soil			
	Texture	Consistency	Color	Mottling
0	VFSL	FRIABLE		
6			7.5 YR 2.5/2	
12				10 YR 4/4
18	gravelly Loam	↓		10 YR 4/4
24			2.5 YR 5/3	few, fine
30				
36				
42			Rotten Rock at 50"	
48			Bedrock at 55"	
Soil Profile		Slope	Limiting Factor	Groundwater
Condition	Percent	"	Depth	Restrictive Layer
Hydrologic Group	Bedrock			

Observation Hole # M20

Test Pit

Test Pit Boring

Observation Hole # <u>M 20</u>		<input checked="" type="checkbox"/> Test Pit	<input type="checkbox"/> Boring	
Depth below mineral soil surface (inches)	"	Depth of organic horizon above mineral soil		
0	Texture	Consistency	Color	Mottling
6	Very gravelly HS	FRIMBLE	7.5YR 2.5/2	
12				
18			10YR 3/3	
24	gravel		7.5YR 2/4	
30		FIRM	color of rock fragments	
36				
42	Bedrock at 40"			
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
				<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name		Hydrologic Group		

Longsjo
Mad. Ward

Soil Scientist/Site Evaluator Signature

± 315

► CSS/LSE#

11-24-14

Date _____

Summary of MDEP Requested Test Pits
Weaver Wind, LLC

Test Pit	Depth to bedrock (from g.s.)	Test Pit Log
1	>5.0	x
2	2' 4"	x
3	3' 2"	x
4	3' 4"	
5	1' 11.5"	
6	>5.0	
7	>5.0	
8	4' 9"	
9	>5.0	
10	>5.0	
11	>5.0	
12	4' 10"	
13	>5.0	
14	>5.0	
15	>5.0	
16	>5.0	
17	>5.0	x
18	>5.0	x
19	>5.0	x
20	>5.0	x
21	>5.0	x
22	>5.0	x
23	4' 8"	
24	>5.0	
25	4' 7"	
26	1'	
27	4' 8"	
28	3' 4.5"	
29	1' 10"	
30	>5.0	
31	>5.0	x
32	>5.0	x
33	>5.0	x
34	>5.0	x
35	>5.0	x
36	3' 4"	x
37	>5.0	x
38	>5.0	x
39	>5.0	x
40	4' 7.5"	
41	2' 7"	
42	5' 6"	
43	3' 7"	
44	2' 4"	

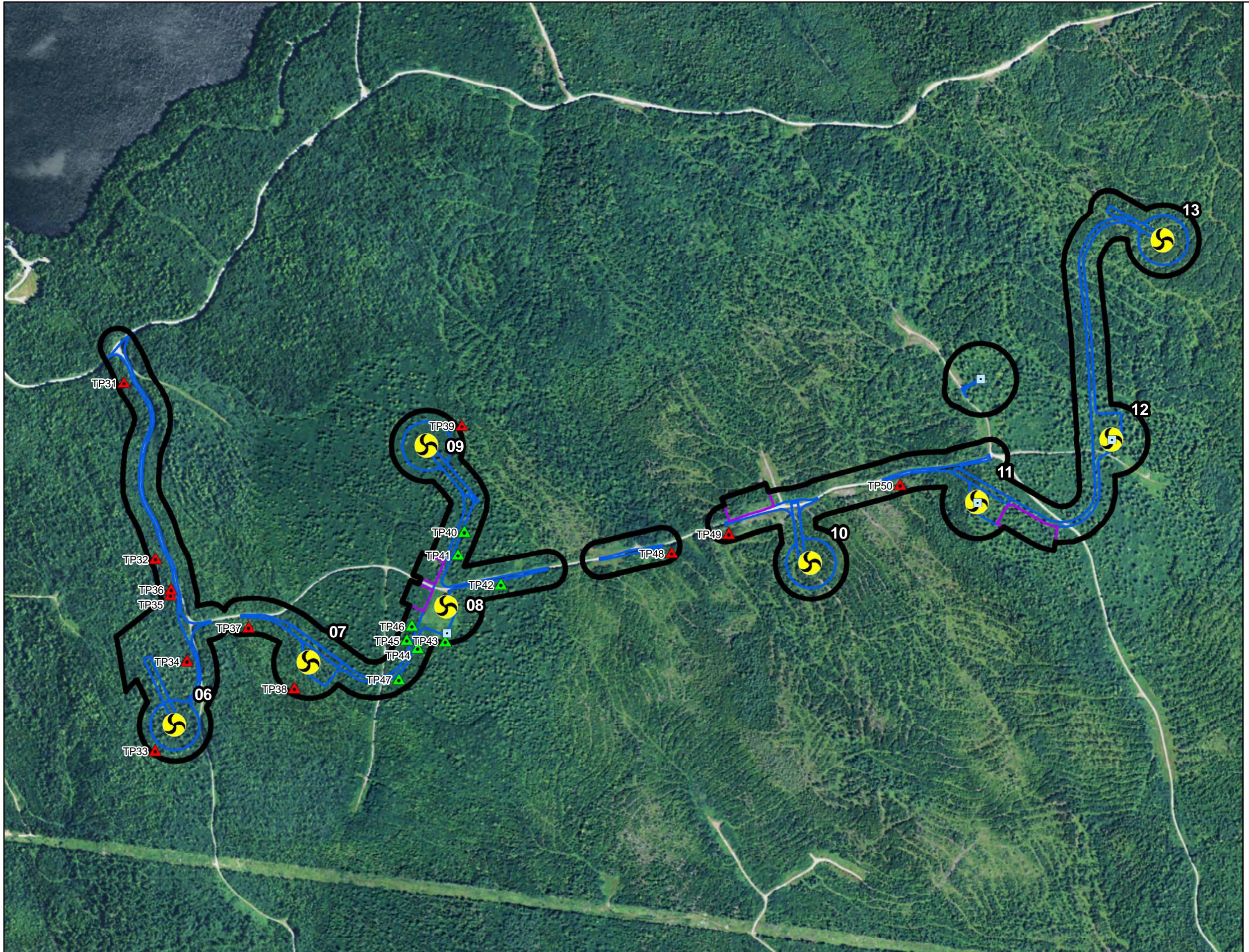
Suspected refusal on boulder

Suspected refusal on boulder

Summary of MDEP Requested Test Pits
Weaver Wind, LLC

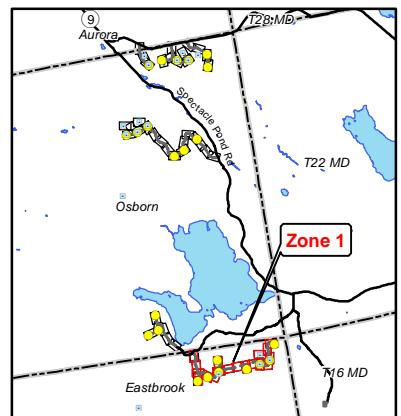
Test Pit	Depth to bedrock (from g.s.)	Test Pit Log
45	>5.0	
46	3' 4"	
47	>5.0	
48	>5.0	x
49	>5.0	x
50	>5.0	x

g.s.= ground surface



**MDEP Requested Test Pits
Weaver Wind Project
Map: Zone 1 Index Map**

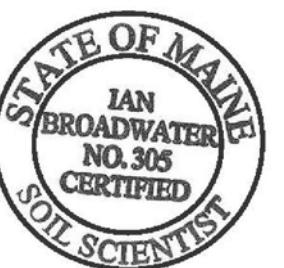
Hancock County, Maine



Site Features

- Proposed Turbines
- Laydown Areas
- Class L Soil Survey Extent
- Proposed Met Towers
- New Access Roads
- ▲ Ledge/Outcrop Check
- ▲ Need Test Pit

Data provided by: James W. Sewall, ESRI, NHD & MEGIS



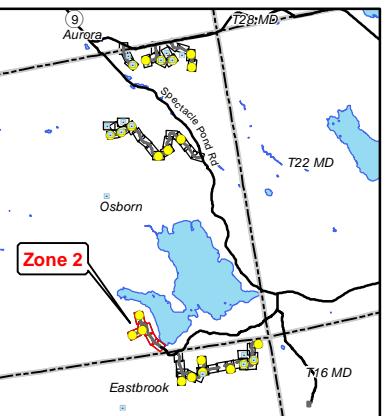
0 250 500 1,000 1,500
Feet

1 inch = 800 feet



**MDEP Requested Test Pits
Weaver Wind Project
Map: Zone 2 Index Map**

Hancock County, Maine

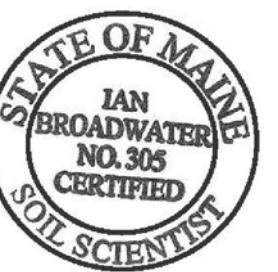


Site Features

- Observed Bedrock Outcrop
- Laydown Areas
- Proposed Turbines
- Class L Soil Survey Extent
- Proposed Met Towers
- New Access Roads
- Ledge/Outcrop Check
- Need Test Pit

Maine DEP Request

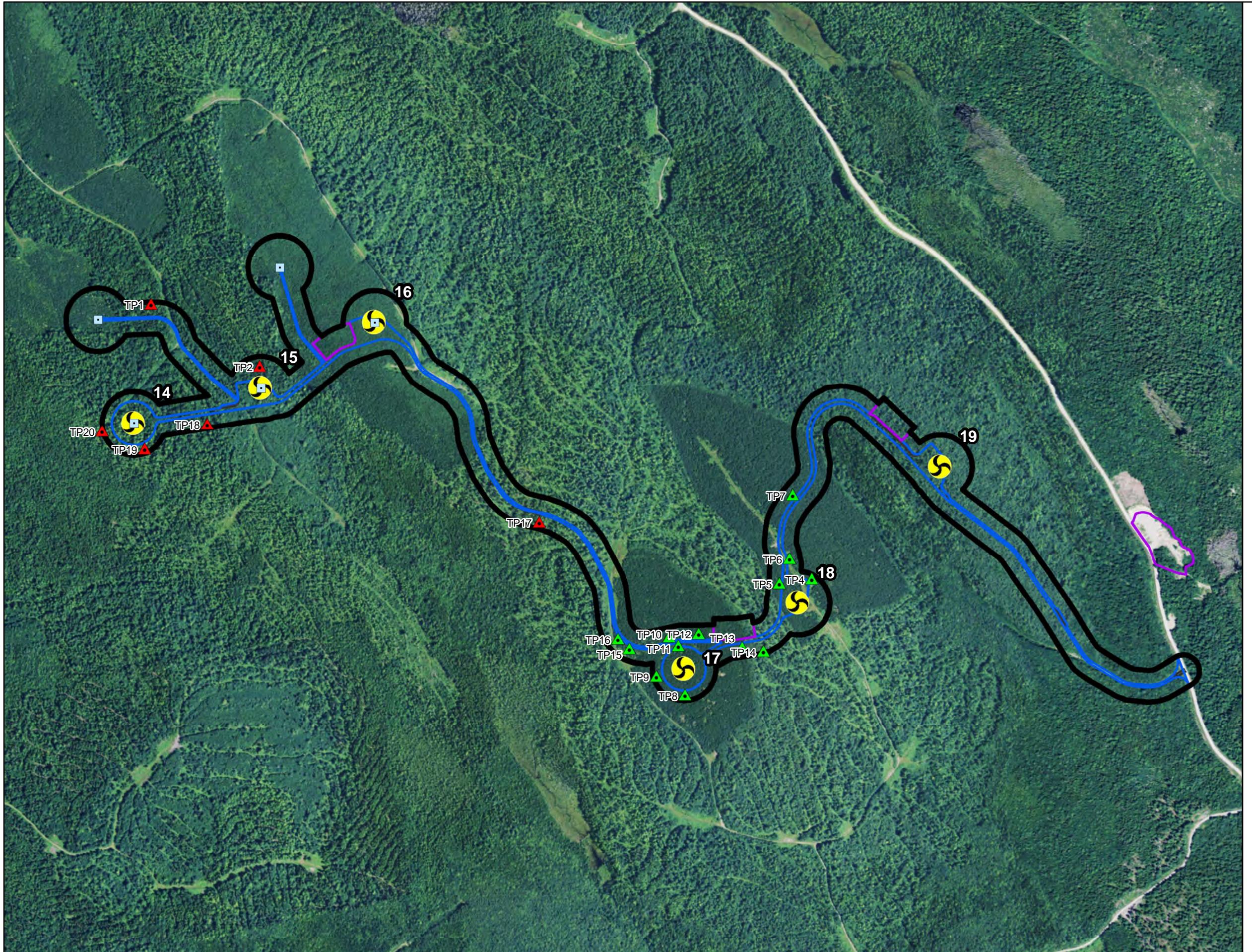
Data provided by: James W. Sewall, ESRI, NHD & MEGIS



N

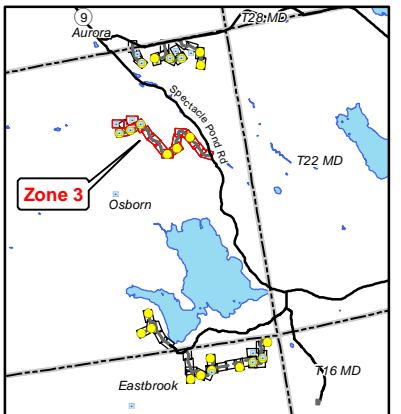
0 250 500 1,000
Feet

1 inch = 487 feet



**MDEP Requested Test Pits
Weaver Wind Project
Map: Zone 3 Index Map**

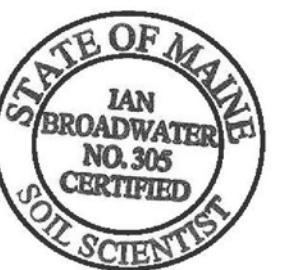
Hancock County, Maine



Site Features

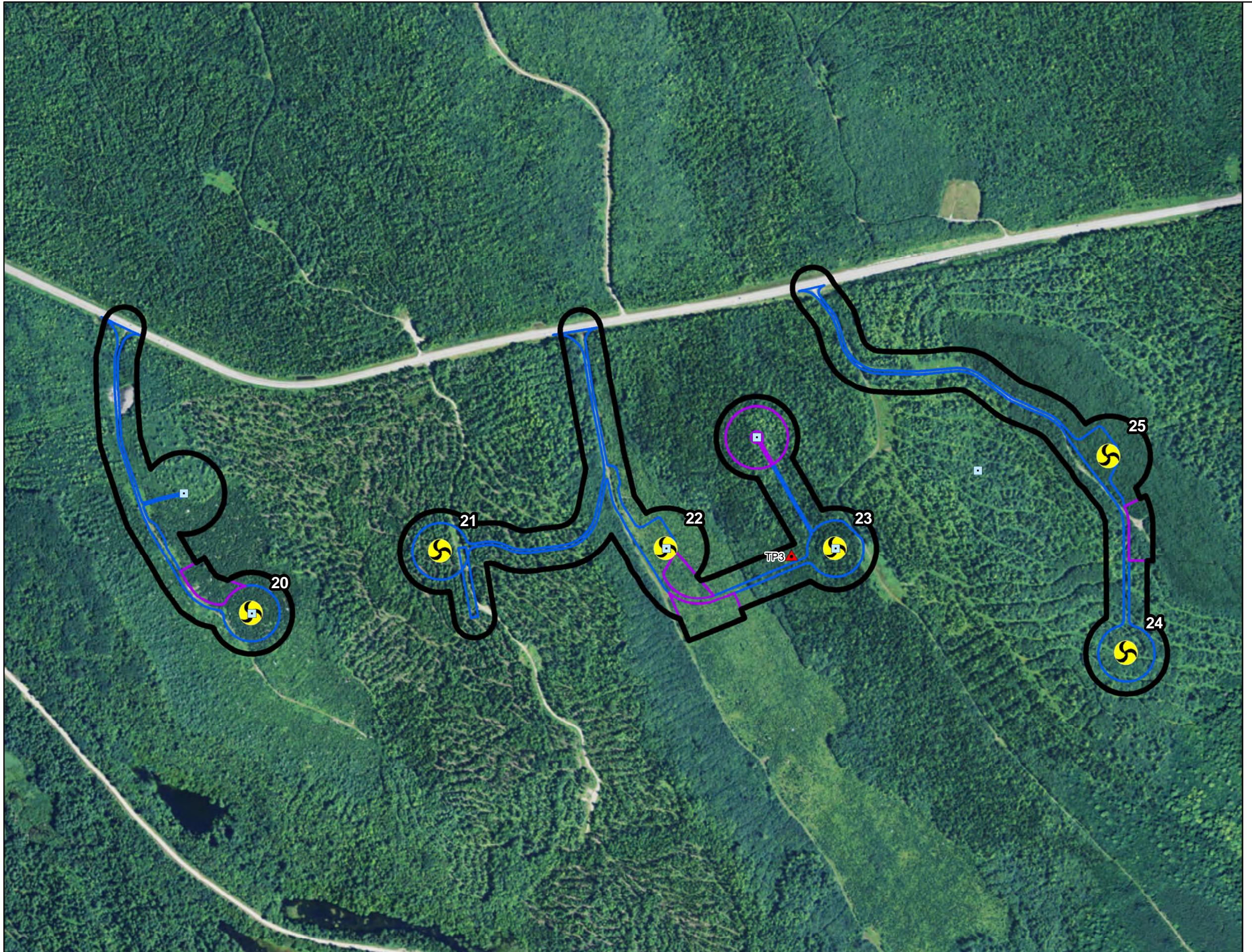
- Proposed Turbines
- Laydown Areas
- Class L Soil Survey Extent
- Proposed Met Towers
- New Access Roads
- Maine DEP Request
- Ledge/Outcrop Check
- Need Test Pit

Data provided by: James W. Sewall, ESRI, NHD & MEGIS



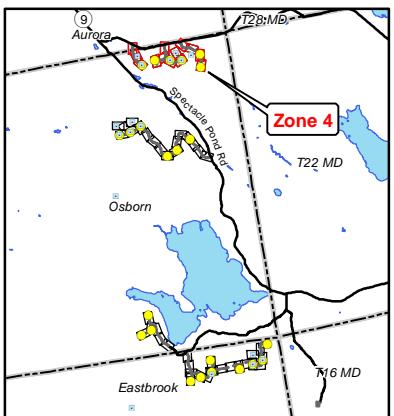
0 250 500 1,000 1,500
Feet

1 inch = 900 feet



**MDEP Requested Test Pits
Weaver Wind Project
Map: Zone 4 Index Map**

Hancock County, Maine



Site Features

- Proposed Turbines
- Laydown Areas
- Class L Soil Survey Extent
- Proposed Met Towers
- New Access Roads
- Maine DEP Request
- Ledge/Outcrop Check
- Need Test Pit

Data provided by: James W. Sewall, ESRI, NHD & MEGIS



N

0 250 500 1,000 1,500
Feet

1 inch = 700 feet



Normandeau Associates
550 Forest Ave., Suite 201
Portland, ME USA
04101