

Weaver Wind Project

MDEP Site Location of Development/NRPA Combined Application

SECTION 11: SOILS

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



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December 10, 2014

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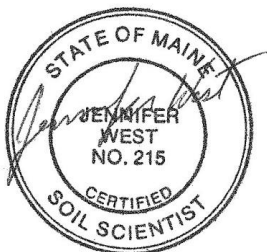


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APPENDICES

APPENDIX A-1: Map Unit Descriptions

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APPENDIX B: Soil Observation Logs

APPENDIX C-1: Class B Soil Mapping

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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.

Maine Department of Environmental Protection. 2003. Maine Erosion and Sediment Control BMPs. Bureau of Land and Water Quality, DEPL WO588. Augusta, ME.

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Society of Soil Scientists of Northern New England. 2009. Ksat Values for New Hampshire Soil. SSSNNE Special Publication #5.

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Figures

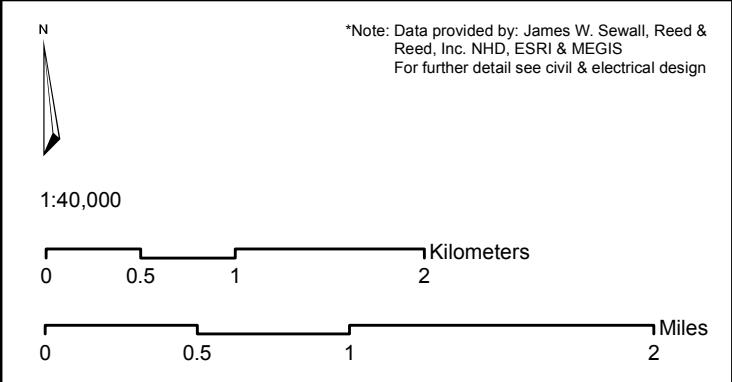
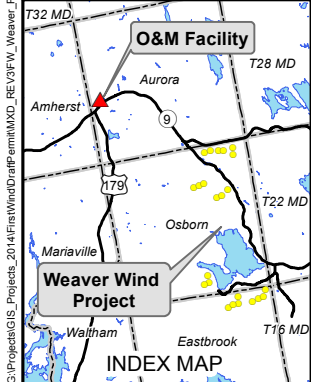
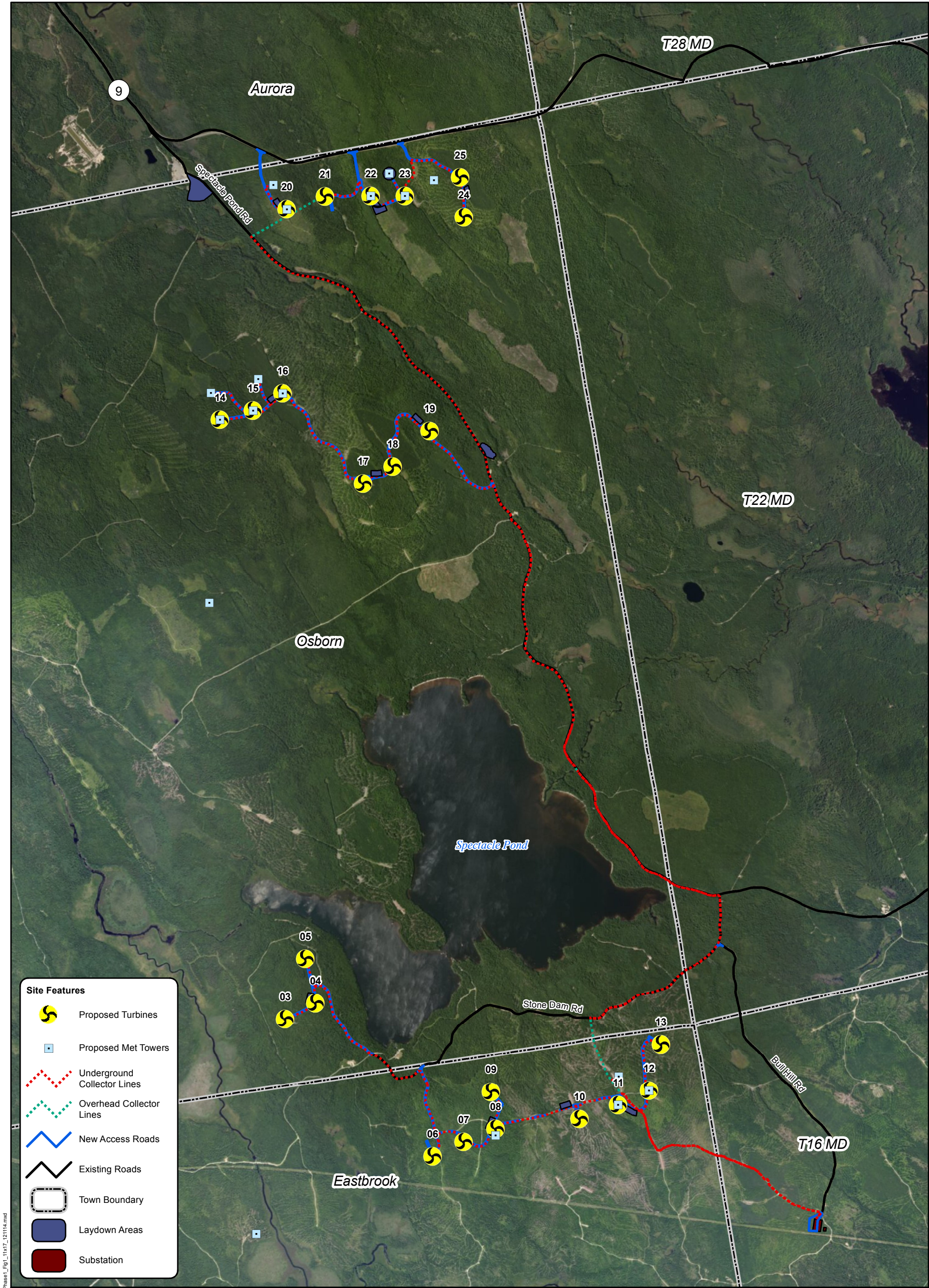
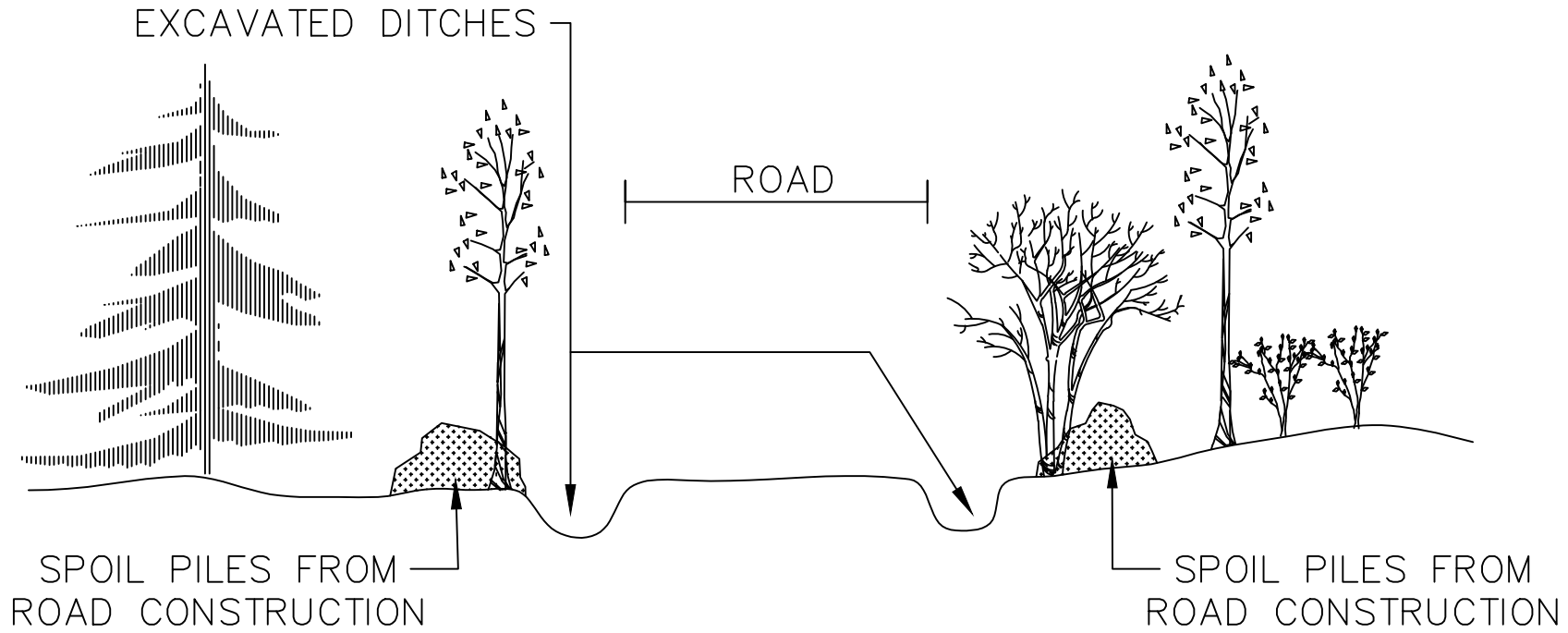


Figure 1
Site Location Map
Weaver Wind Project
Hancock County, Maine

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

DATE	DRAWN	FIELD	DRAFT	CHECKED
12.03.2014	JOB	N/A	REV1	IB

**Figure 2. TYPICAL FORESTED ROAD
CROSS-SECTION**
Hancock County, Maine



*NOTE: NOT TO SCALE

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	Slope¹	Drainage Class²	Hydrologic Group³	Range of Depth to Bedrock² (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 Oxyaquic 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, Endoaquepts, Endoaquepts 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 Aerice 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, Endoaquepts, Kinsman
Endoaquepts 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 Aerice 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, Endoaquepts,
Endoaquepts 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 Aerice 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, Endoaquepts. Endoaquepts 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

Endoaquents 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 Oxyaquic 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): Footslope

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 mapunit.

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): Footslope

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 mapunit.

Description of Colonel

Setting

Landform: Till plains

Landform position (two-dimensional): Backslope

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

Down-slope shape: Linear

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 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

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): Footslope

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 mapunit.

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 mapunit.

Description of Colonel

Setting

Landform: Till plains

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Base slope, 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 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 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

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): Footslope

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 mapunit.

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, 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 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 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

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 mapunit.

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, talf

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 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

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 mapunit.

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 mapunit.

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): Footslope

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 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: 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 mapunit.

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 mapunit.

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 mapunit.

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

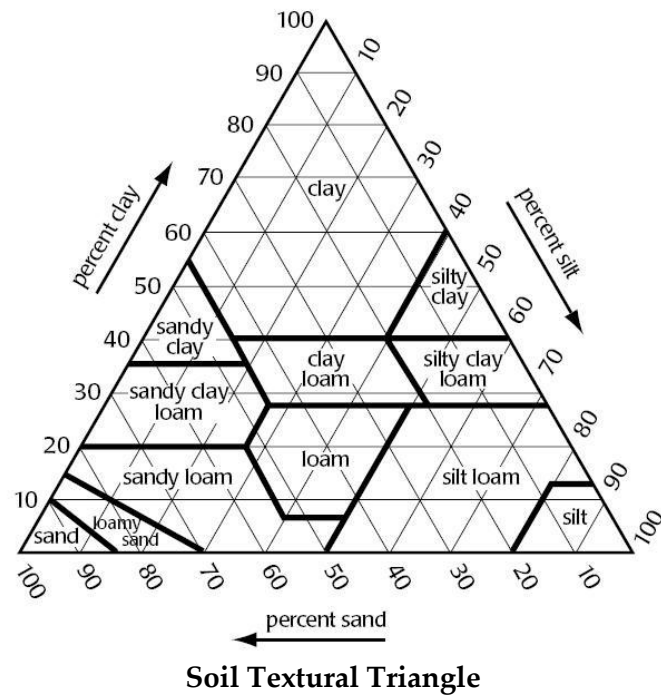
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C/D

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	
EOE			Extent of Excavation

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

Town, City, Plantation <u>Eastbrook MT 16</u>	Street, Road, Subdivision <u>Bull Hill Substation</u>	Owner or Applicant Name <u>WEAVER</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)		

Observation Hole # <u>TP-1</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring <u>1</u> " Depth of organic horizon above mineral soil				
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FSL	V. friable	10YR 7/1	none
6	FSL	friable	7.5YR 4/6	none
12	FSL	friable	10YR 5/6	none
18	A 17" redox depletion common 10YR 7/1			
24	FSL	dense	2.5Y 5/4	7.5YR 7/6 few fine
30				
36	S.L.	MISSING	2.5Y 5/4	Beds of depleted soil in this horizon
42	5% R. gravel	dense		
48	BOT @ 60"			
Soil Profile		Classification Condition	Slope ~5 Percent	Limiting Factor 17" Depth
				<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Dixfield</u>			Hydrologic Group	

Observation Hole # <u>2</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring <u>1</u> " Depth of organic horizon above mineral soil				
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FSL	V. friable	10YR 7/1	none
6	FSL	V. friable	7.5YR 4/6	none
12	S.L.	V. friable	7.5YR 5/6	none
18				
24	S.L.	friable	2.5Y 5/4	at 22" depletion coarse 10YR 7/1
30	S.L.	dense	2.5Y 5/3	
36	w/ 5% cils	dense of m-c sand		
42	fragments	at 32" (1" thick)		
48	to R. cobbles rounded			
Soil Profile		Classification Condition	Slope 22 Percent	Limiting Factor 22" Depth
				<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Dixfield</u>			Hydrologic Group	

Observation Hole # <u>3</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring <u>25</u> " Depth of organic horizon above mineral soil				
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FSL	V. friable	7.5YR 4/6	none
6	FSL	V. friable	7.5YR 5/6	none
12	FSL			
18				
24	FSL	friable	2.5Y 5/4	
30	S.L.	dense		
36	10% cils		2.5Y 6/3	at 29" redox depletion 10YR 7/1 common
42	as for gravel - 1m. cobbles			
48				
Soil Profile		Classification Condition	Slope ~5% Percent	Limiting Factor 27" Depth
				<input type="checkbox"/> Groundwater <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Dixfield</u>			Hydrologic Group	

Observation Hole # <u>4</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring <u>1</u> " Depth of organic horizon above mineral soil				
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FSL	V. friable	10YR 7/1	none
6	FSL	V. friable	7.5YR 4/6	none
12	S.L.	friable	10YR 5/6	none
18	FSL	friable	2.5Y 5/4	at 20" redox minimum 7.5YR 5/6
24	FSL	dense	2.5Y 6/3	
30	w/ 5% cils	weakly rounded		
36	fragments	Cl. sandstones & c. sand lenses in C horizon		
42	gravel			
48	Bedrock at 55" bgs mineral at 56" bgs			
Soil Profile		Classification Condition	Slope 14 Percent	Limiting Factor 20" Depth
				<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Dixfield</u>			Hydrologic Group	

Soil Scientist/Site Evaluator Signature

 305
CSS/LSE#

 11/21/14
Date

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

Observation Hole # 5 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil
2 "

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<i>f.s.l.</i>	<i>V. friable</i>	<i>10YR 4/4</i>	<i>none</i>
6	<i>f.s.l.</i>	<i>friable</i>	<i>2.5Y 5/3</i>	
12				
18				
24	<i>S.L.</i>	<i>dense</i>	<i>2.5Y 6/3</i>	
30	<i>W/ 5/0</i>			
36	<i>cl. frag.</i>			
42	<i>frag.</i>			
48				

Soil Profile	Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
		<i>36</i> Percent	<i>17</i> " Depth	

Soil Series Name: *Dixfield*

Hydrologic Group: _____

No ledge to 60" although outcrop 30' to the north

Observation Hole # 6 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil
1 "

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<i>f.s.l.</i>	<i>V. friable</i>	<i>10YR 4/4</i>	<i>none</i>
6	<i>f.s.l.</i>	<i>friable</i>	<i>2.5Y 5/3</i>	<i>none to 19</i>
12				
18				
24	<i>S.L.</i>	<i>dense</i>	<i>7.5YR 5/3</i>	
30	<i>W/ 5/0</i>			
36	<i>f. gravel</i>			
42	<i>and p.c. cobbles</i>			
48				

Soil Profile	Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
			<i>19</i> " Depth	

Soil Series Name: *Dixfield*

Hydrologic Group: _____

No rock to 72" 6q5

Observation Hole # 7 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil
_____ "

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<i>f.s.l.</i>	<i>V. friable</i>	<i>10YR 3/1</i>	<i>none</i>
6	<i>f.s.l.</i>	<i>friable</i>	<i>2.5Y 5/6</i>	<i>none</i>
12				
18				
24	<i>f.s.l.</i>	<i>dense</i>	<i>2.5Y 4/6</i>	
30				
36				
42				
48				

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
			<i>18</i> " Depth	

Soil Series Name: *Tunbridge*

Hydrologic Group: _____

Bedrock 39"

Observation Hole # 8 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil
_____ "

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<i>f.s.l.</i>	<i>V. friable</i>	<i>5YR 4/5</i>	<i>none</i>
6	<i>S.L.</i>	<i>V. friable</i>	<i>10YR 5/5</i>	<i>none</i>
12				
18	<i>S.L.</i>	<i>dense</i>		
24				
30			<i>2.5Y 5/6</i>	
36	<i>S.L. w/ V. dense</i>		<i>2.5Y 6/3</i>	
42	<i>5/0 c.f.</i>			
48	<i>as f. frag. gravel and 1/4 m cobbles</i>			

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
		<i>24</i> Percent	<i>28</i> " Depth	

Soil Series Name: *Tunbridge*

Hydrologic Group: _____

48" to bedrock

Town, City, Plantation

Street, Road, Subdivision

Owner or Applicant Name

WEBSTER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Bull Hill SS EXP

Observation Hole # 9 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Ps.L.	Variable	2.5YR 4/6 none
6	Ps.L.	V. Fine	2.5Y 5/6 (a) 10" plus are common below 10YR 5/6
12			
18			
24			
30	Ps.L.	clay	2.5Y 5/3 none
36	5% c.l.s.		
42	as gravel and cobbles		
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input checked="" type="checkbox"/> Groundwater	<input type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
			18"			

Soil Series Name

Dix field

Hydrologic Group

Observation Hole # 10 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Ps.L.	Variable	10YR 5/6
6	Ps.L.	V. Fine	2.5Y 5/4 none
12			
18			
24	S.L.	clay	2.5Y 5/3 (a) 22" common below 10YR 5/3 conc. and skeleton 3 (10YR 7/1)
30	with 5% c.l.s.		
36	as 2-m cobbles		
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
			19"			

Soil Series Name

Dix field

Hydrologic Group

Bull Hill SS EXP.

Observation Hole # 11 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Ps.L.	Variable	2.5YR 5/6 none
6	Ps.L.	Variable	2.5Y 5/6 none
12			
18			
24	S.L.	clay	2.5Y 5/3 (a) 23" no c.l.s. conc. of 2.5YR 5/6 fine and common
30	with 5% c.l.s.		
36	as gravel and cobbles		
42			
48			

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Restrictive Layer	<input type="checkbox"/> Bedrock
		24	17"			

Soil Series Name

Tunbridge

Hydrologic Group

EEN Ridge, Turbine 18

Observation Hole # 12 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	Ps.L.	Variable	10YR 5/6 none
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 checked="" type="checkbox"/> Bedrock
		23	14"			

Soil Series Name

Lyman

Hydrologic Group

Soil Scientist/Site Evaluator Signature

305
CSS/SE#

Date

11/21/14

Town, City, Plantation	Street, Road, Subdivision <u>EEN Ridge</u>	Owner or Applicant Name <u>WEAVER</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)		

Observation Hole # <u>13</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
1" Depth of organic horizon above mineral soil				
Texture	Consistency	Color	Mottling	
0	<u>PSL</u>	<u>V. Friable</u>	<u>7.5YR 4/6</u>	<u>none</u>
6	<u>PSL</u>	<u>friable</u>	<u>2.5Y 5/4</u>	<u>none</u>
12				
18	<u>PSL</u>	<u>dense</u>	<u>2.5Y 6/4</u>	<u>@ 20"</u>
24	<u>w/ 39%</u>			<u>common</u>
30	<u>cl. f. as</u>			<u>redox</u>
36	<u>f. gravel</u>			<u>conc.</u>
42	<u>and cobbles</u>			<u>at 7.5</u>
48				<u>VR 4/6</u>
Soil Series Name: <u>Tunbridge</u> Hydrologic Group: <u>3.5</u>				

Observation Hole # <u>14</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
1" Depth of organic horizon above mineral soil				
Texture	Consistency	Color	Mottling	
0	<u>PSL</u>	<u>V. Friable</u>	<u>7.5YR 4/6</u>	<u>none</u>
6	<u>PSL</u>	<u>friable</u>	<u>10YR 4/6</u>	
12				
18				<u>@ 17"</u>
24	<u>sol</u>	<u>dense</u>	<u>2.5Y 5/4</u>	<u>common</u>
30	<u>w/ 5%</u>			<u>redox</u>
36	<u>cl. f. as</u>			<u>at 7.5</u>
42	<u>gravel</u>			<u>VR 4/6</u>
48	<u>and AC</u>			<u>cobbles</u>
Soil Series Name: <u>Dixfield</u> Hydrologic Group: <u>3.2</u>				

Observation Hole # <u>15</u> <input type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
1" Depth of organic horizon above mineral soil				
Texture	Consistency	Color	Mottling	
0	<u>PSL</u>	<u>V. Friable</u>	<u>7.5YR 4/6</u>	<u>none</u>
6	<u>sol</u>	<u>friable</u>	<u>10YR 4/6</u>	<u>none</u>
12	<u>5% cl. f. as</u>			
18	<u>gravel</u>			
24	<u>and cobbles</u>			
30				
36				
42				
48				
Soil Series Name: <u>Lyman</u> Hydrologic Group: <u>3.3</u>				

Observation Hole # <u>16</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
1" Depth of organic horizon above mineral soil				
Texture	Consistency	Color	Mottling	
0	<u>PSL</u>	<u>V. Friable</u>	<u>7.5YR 4/6</u>	<u>none</u>
6	<u>PSL</u>	<u>friable</u>	<u>10YR 4/6</u>	<u>none</u>
12				
18	<u>sol</u>	<u>dense</u>	<u>2.5Y 5/4</u>	<u>@ 19"</u>
24	<u>w/ 39%</u>			<u>common</u>
30	<u>cl. f. as</u>			<u>redox</u>
36	<u>f. gravel</u>			<u>at 7.5</u>
42	<u>and cobbles</u>			<u>VR 4/6</u>
48				
Soil Series Name: <u>Tunbridge</u> Hydrologic Group: <u>3.4</u>				

Soil Scientist/Site Evaluator Signature

305
CSS/LSE#

Date

Town, City, Plantation

Street, Road, Subdivision
EEN RidgeOwner or Applicant Name
WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # 17 ☒ Test Pit ☐ Boring
1.5 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FS1	V. friable	5YR 4/6	None
6	FS1	friable	10YR 4/6	
12				
18				
24	S.L. w/ 5% cl. f. s.	clayey	2.5Y 5/4	@ 22"
30	as f.c.			common nodules 6/8
36	gravel and cobbles (rounded)			fine sand
42				
48				

Soil Classification: 24 Slope: 18 " Limiting Factor: 18 " ☐ Groundwater
 Profile Condition: 24 Percent: 18 Depth: 18 " ☐ Restrictive Layer
☐ Bedrock

Soil Series Name: Dixfield Hydrologic Group:

Observation Hole # 18 ☒ Test Pit ☐ Boring
1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FS1	V. friable	7.5YR 4/6	None
6	FS1	friable	10YR 4/4	
12				
18				
24	S.L. w/ 5% cl. f. s.	clayey	2.5Y 5/4	@ 24"
30	fine gravel and cobbles			common nodules fine sand 7.5YR 5/8
36				
42				
48				

Soil Classification: 28 Slope: 20 " Limiting Factor: 20 " ☐ Groundwater
 Profile Condition: 28 Percent: 20 Depth: 20 " ☐ Restrictive Layer
☐ Bedrock

Soil Series Name: Tunbridge Hydrologic Group:

Observation Hole # 19 ☒ Test Pit ☐ Boring
1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	FS1 (All for woods road)	friable	10YR 4/3	None
6	FS1	friable	10YR 4/4	
12	FS1 w/ 5% cl. f. s.			
18	as f.c.			
24	gravel and cobbles		2.5Y 4/3	@ 23"
30			2.5Y 4/3	common fine nodules fine sand
36				
42				
48				

Soil Classification: 25 Slope: 25 " Limiting Factor: 25 " ☐ Groundwater
 Profile Condition: 25 Percent: 25 Depth: 25 " ☐ Restrictive Layer
☐ Bedrock

Soil Series Name: Tunbridge Hydrologic Group:

Observation Hole # 20 ☒ Test Pit ☐ Boring
1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	S.L. w/ 5% cl. f. s.	friable	10YR 4/3	None
6	fine gravel and cobbles			
12	FS1	friable	10YR 4/4	None
18				
24				@ 24" common nodules fine sand
30	S.L. w/ 5% cl. f. s.	clayey	2.5Y 5/4	
36	gravel and cobbles			
42				
48				

Soil Classification: 23 Slope: 24 " Limiting Factor: 24 " ☒ Groundwater
 Profile Condition: 23 Percent: 24 Depth: 24 " ☐ Restrictive Layer
☐ Bedrock

Soil Series Name: Tunbridge Hydrologic Group:

Soil Scientist/Site Evaluator Signature

305
CSS/LSE#

Date

Town, City, Plantation

Laydown #3, small gravel pit

Street, Road, Subdivision

Owner or Applicant Name

WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # TP-21 ☒ Test Pit ☐ Boring

0 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	F-C sand	V. friable	10YR 4/4	none
6	F-C sand	loose	9.5Y 4/	
12	w/ 5% C.F.S.	S. gran.	pepper	
18	as F-M gravel			
24				
30	F-C sand	loose	9.5Y 4/	
36		S. gran.	pepper	
42				
48				

Soil Classification: Udorthents, sand + gravelly

Slope: 0 Percent

Limiting Factor: None Depth

Groundwater: ☐ Restrictive Layer: ☐ Bedrock: ☐

Hydrologic Group: Udorthents sand + gravelly

Observation Hole # TP-23 ☒ Test Pit ☐ Boring

0 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	F-C sand	V. friable	10YR 4/4	none
6	as 15% C.F.S.			
12	F-C sand	loose	9.5Y 4/	
18	S. gran.	pepper		
24	F-M sand	" "	" "	
30				
36				
42				
48				

Soil Classification: Udorthents sand + gravelly

Slope: 0 Percent

Limiting Factor: None Depth

Groundwater: ☐ Restrictive Layer: ☐ Bedrock: ☐

Hydrologic Group: Udorthents sand + gravelly

Observation Hole # TP-22 ☐ Test Pit ☐ Boring

0 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	F-C gravelly	V. friable	10YR 4/4	none
6	sand			
12	F-C gravelly sand	loose	9.5Y 4/	
18	S. gran.	pepper		
24				
30				
36				
42				
48				

Soil Classification: Udorthents sand + gravel

Slope: 0 Percent

Limiting Factor: None Depth

Groundwater: ☐ Restrictive Layer: ☐ Bedrock: ☐

Hydrologic Group: Udorthents sand + gravel

Observation Hole # TP-24 ☒ Test Pit ☐ Boring

2 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	as 10% C.F.S.	loose	10YR 4/4	none
6	F-C sand	V. friable	7.5YR 4/6	none
12	F-C sand	V. friable	10YR 5/6	none
18	F-C sand		10YR 4/3	
24	w/ 10% C.F.S.			
30	F-C gravelly sand			
36	as 10% C.F.S.			
42				
48				

Soil Classification: Udorthents sand + gravel

Slope: 0 Percent

Limiting Factor: None Depth

Groundwater: ☐ Restrictive Layer: ☐ Bedrock: ☐

Hydrologic Group: Udorthents sand + gravel

Soil Scientist/Site Evaluator Signature

305
CSS/LSE#11/21/14
Date

Town, City, Plantation

Laydown # 1, gravel pit nr. R+9

Street, Road, Subdivision

Owner or Applicant Name

WBAV BR

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # TR-25 ☒ Test Pit ☐ Boring1/2 "

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	loose	10YR 4/5	none
6	loose	5.5H/	none
12	S. graind	10YR 4/5	none
18			
24			
30			
36			
42			
48			

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	None "	<input type="checkbox"/> Restrictive Layer
			Depth	<input type="checkbox"/> Bedrock

Soil Series Name

Hydrologic Group

Udorthentic sand + gravel

Observation Hole # 27 ☒ Test Pit ☐ Boring1/2 "

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	loose	10YR 4/5	none
6	loose	10YR 4/5	none
12	S. graind	10YR 4/5	none
18			
24			
30			
36			
42			
48			

Soil	Classification	Slope	Limiting Factor	<input checked="" type="checkbox"/> Groundwater
Profile	Condition	Percent	29 "	<input type="checkbox"/> Restrictive Layer
			Depth	<input type="checkbox"/> Bedrock

Soil Series Name

Hydrologic Group

Udorthentic sand + gravel

Observation Hole # TR-26 ☒ Test Pit ☐ Boring1/2 "

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	loose	10YR 4/5	none
6			
12			
18			
24			
30			
36			
42			
48			

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	None "	<input type="checkbox"/> Restrictive Layer
			Depth	<input type="checkbox"/> Bedrock

Soil Series Name

Hydrologic Group

Udorthentic sand + gravel

Observation Hole # 28 ☒ Test Pit ☐ Boring1/2 "

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	loose	10YR 4/5	none
6	loose	10YR 4/5	none
12	S. graind	10YR 4/5	none
18			
24			
30			
36			
42			
48			

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent		<input type="checkbox"/> Restrictive Layer
			Depth	<input type="checkbox"/> Bedrock

Soil Series Name

Hydrologic Group

Udorthentic sand + gravel

Soil Scientist/Site Evaluator Signature

305
CSS/LSE#Date
11/21/14

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

☒ Test Pit ☐ Boring☐ Boring

Depth of organic horizon above mineral soil

	Texture	Consistency	Color	Mottling
0	Gravelly Br S	Firm in place	10YR3/3	
6		compacted homogeneous		
12		Massive Loose		
18				
24	Cobbles CS		color of particles	
30				
36				
42				
48				

Gravel pit excavated to subsoil
glacial outwash
EOLUS', NO bedrock

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
_____	_____	<u>A</u>	_____ "	<input type="checkbox"/> Restrictive Layer
Profile	Condition	Percent	Depth	<input type="checkbox"/> Bedrock

Soil Series Name

- ↳ Orthents, sand + gravel

Hydrologic Group

Observation Hole # SN2 ☒ Test Pit ☐ Boring

☒ Test Pit ☐ Boring☐ Boring

Depth of organic horizon above mineral soil

	Texture	Consistency	Color	Mottling
0	res Weakly	Firm blue	10 YR 3/2	
6				
12		Firm massive		
18				
24	lg gravel	massive loose	Colors of gravel	
30				
36	stones 1 sand gravel			
42	120% 72"			
48				

Soil Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile Condition	$\frac{A}{B}$ Percent	" Depth	<input type="checkbox"/> Restrictive Layer
			<input type="checkbox"/> Bedrock

Soil Series Name

Udortkents, sand + gravel

Hydrologic Group

Observation Hole # SN3 ☒ Test Pit ☐ Boring

☒ Test Pit ☐ Boring☐ Boring

Depth of organic horizon above mineral soil

	Texture	Consistency	Color	Mottling
0	V. cobbly	Firm in place	10x12 3/2	
6	gry LFS			
12	gry LFS	Loose mass	10x12 3/2, 3/3	
18				
24	med gravel cobbles		color gravel	
30	Large boulders at 48" +			
36	Some woody debris			
42	EOE 72"			
48				

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
		<u>A</u>	"	<input type="checkbox"/> Restrictive Layer
Profile	Condition	Percent	Depth	<input type="checkbox"/> Bedrock

Soil Series Name

Ud or tents, sand + gravel

Hydrologic Group

Observation Hole # SN4 ☒ Test Pit ☐ Boring

☒ Test Pit ☐ Boring☐ Boring

Depth of organic horizon above mineral soil

	Texture	Consistency	Color	Mottling
0	Gry SCL	Loose	10YR 7/3	
6	V. cobbly C. sand wavy to	massive	↓	
12	CS V. cobbly cobbles		color of gravel	
18				
24				
30				
36	EOE 72"			
42				
48				

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
_____	_____	<u>A</u>	_____ "	<input type="checkbox"/> Restrictive Layer
Profile	Condition	Percent	Depth	<input type="checkbox"/> Bedrock

Soil Series Name

Udo-then, sand + gravel

Hydrologic Group

Soil Scientist/ Site Evaluator Signature

215
CSS/LSE#

10-28-14
Date

Town, City, Plantation~~Street, Road, Subdivision~~

10-28-14

Owner or Applicant Name

never

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # <u>SN6</u> <input checked="" type="checkbox"/> Test Pit <input type="checkbox"/> Boring																																													
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Soil Series Name <u>UdoThents, sand + gravel</u>																																													
Hydrologic Group _____																																													

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

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Soil Series Name	Hydrologic Group																																																

Soil Scientist/Site Evaluator Signature

CSS/LSF#

Date _____

Town, City, Plantation

CLB1

Street, Road, Subdivision

10-2-14

Owner or Applicant Name

WEAVER

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Laydown #2 Large gravel pit

Observation Hole # CLB1 ☐ Test Pit ☒ Boring1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	gry SL	friable	7.5YR2/2	7.5YR2/3
6			7.5YR3/4	
12			10YR3/6	7.5YR3/4
18	gray ESL		10YR5/4	10YR5/2
24				
30				
36				
42				
48				

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
	Condition	Percent	Depth	<input type="checkbox"/> Restrictive Layer
				<input type="checkbox"/> Bedrock

Soil Series Name

Colonel

Hydrologic Group

Observation Hole # CLB2 ☐ Test Pit ☒ Boring5 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	LS		10YR2/1	
6			7.5YR5/1	
12			(sand grains)	
18				10YR4/2
24				few
30	Saturated to surface, free water 1"			
36	Former beaver flowage that has been drained.			
42	Extremely stony surface			
48				

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
	Condition	Percent	Depth	<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

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	HEMIC organic material		7.5YR2/2	
6				
12	SAPRIC organic material			
18				
24	VESEL to LS stony			
30				
36				
42				
48				

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
	Condition	Percent	Depth	<input type="checkbox"/> Restrictive Layer
				<input type="checkbox"/> Bedrock

Soil Series Name

Wonsqueak - vpd

Hydrologic Group

Observation Hole # CLB4 ☐ Test Pit ☒ Boring3 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	gry ES		10YR2/2	
6	LS gravel	friable	7.5YR3/3	
12			7.5YR4/4, 3/3	
18		firm		
24				
30				
36				
42				
48				

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
	Condition	Percent	Depth	<input type="checkbox"/> Restrictive Layer
				<input type="checkbox"/> Bedrock

Soil Series Name

Colonel

Hydrologic Group

Soil Scientist/Site Evaluator Signature

CSS/SE#

Date

Town, City, Plantation	Street, Road, Subdivision <u>10-1-14</u>	Owner or Applicant Name <u>Weaver</u>
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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Laydown #2 Large Gravel Pit

Observation Hole # <u>SSN1</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
4" Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
	FRABLE	10YR 2/2	
6" <u>SL, gry</u>		Broken E	
<u>cobbly</u>		7.5YR 5/1	
		7.5YR 2.5/2	
		7.5YR 3/3	
18" <u>LS</u>			
<u>V. gry</u>		10YR 4/3	
<u>V. cobbly</u>			
30"			
36" <u>Ext. gry,</u>	FIRM		
<u>cobbly</u>			
42" <u>EOESS "</u>			
48" <u>Observed road cut</u>			
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 <u>Colton</u>		Hydrologic Group	

Observation Hole # <u>SSN2</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
3" Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0" <u>V FSL</u>	FRABLE	7.5YR 2.5/3	
		4/2	
6" <u>FSL</u>	Loose	5YR 3/4	
		10YR 3/4	
12" <u>FSL</u>			
18" <u>FS</u>		10YR 4/1, 3/2, 4/2	
		sand grains	
36" <u>gry</u>	FIRM	10YR 3/2	
42" <u>FS</u>			
48" <u>cobbly S</u>	EOESS	gravel pit face	
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 <u>Colton</u>		Hydrologic Group	

Observation Hole # <u>SSN3</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
" Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0" <u>V FSL</u>	FRABLE	10YR 4/2	
6"			
12"		10YR 5/4	
18" <u>EOE 18 "</u>			
24" <u>Similar to SSN2. Undisturbed area</u>			
30" <u>with spoil piles near by.</u>			
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 <u>Colton</u>		Hydrologic Group	

Observation Hole # <u>SSN4</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
1" Depth of organic horizon above mineral soil			
Texture	Consistency	Color	Mottling
0" <u>FSL</u>	FRABLE	7.5YR 3/3	
		4/2	
6" <u>gry</u>		5YR 3/4	
		7.5YR 3/4	
12" <u>gry, cobbly</u>		10YR 3/4	
18" <u>LS</u>			
24" <u>Ext. gry S</u>	Loose		
30" <u>EOE 25 "</u>			
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 <u>Colton</u>		Hydrologic Group	

Soil Scientist/Site Evaluator Signature

CSS/SE#

Date

215

10-1-14

Town, City, Plantation	Street, Road, Subdivision <u>10-1-14</u>	Owner or Applicant Name <u>WEAVER</u>
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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # SSN 135 ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

	Texture	Consistency	Color	Mottling
0				
6	<u>VFSL</u>	<u>fricble</u>	<u>7.5YR 3/3</u>	
12	<u>lobbly</u>		<u>4/2</u>	
18				
24			<u>7.5YR 3/3</u>	
30				
36				
42				
48				

Soil Series Name
Colton

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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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

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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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

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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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

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Hydrologic Group

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

(Location of Observation Holes Shown Above)

Soil Series Name <i>Maclean</i>	Hydrologic Group
------------------------------------	------------------

Soil Series Name	Hydrologic Group
Marble-Dixfield	

Series Name	Hydrologic Group
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Soil Series Name	Hydrologic Group
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Date _____

Town, City, Plantation <u>A - Turbines 3-5</u>	Street, Road, Subdivision <u>10-9-14</u>	Owner or Applicant Name <u>Weaver</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)		

Observation Hole # <u>AT5</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
<u>2</u> " Depth of organic horizon above mineral soil				
Texture	Consistency	Color	Mottling	
0	<u>VESL</u>	<u>5YR2.5/1</u>		
6	<u>Friable</u>	<u>7.5YR3/4</u>		
12		<u>10YR4/4</u>		
18	<u>EOE 18" Refusal stones</u>			
24	<u>Scattered boulders / stones</u>			
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent <u>B</u>	Limiting Factor " Depth
				<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Dixfield stone</u>			Hydrologic Group	

Observation Hole # <u>AT6</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
<u>2</u> " Depth of organic horizon above mineral soil				
Texture	Consistency	Color	Mottling	
0	<u>VESL</u>	<u>7.5YR4/2 E</u>		
6	<u>Friable</u>	<u>7.5YR4/4</u>		
12				
18	<u>EOE 12" stones</u>			
24	<u>Scattered boulders / pebbles / stones</u>			
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent <u>C</u>	Limiting Factor " Depth
				<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Dixfield stone</u>			Hydrologic Group	

Observation Hole # <u>AT7</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
<u>2</u> " Depth of organic horizon above mineral soil				
Texture	Consistency	Color	Mottling	
0	<u>VESL</u>	<u>7.5YR4/2 E</u>		
6	<u>Friable</u>	<u>7.5YR3/2</u>		
12				
18	<u>Bedrock 16"</u>			
24				
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent <u>A</u>	Limiting Factor " Depth
				<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Lyman</u>			Hydrologic Group	

Observation Hole # <u>AT8</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
<u>2</u> " Depth of organic horizon above mineral soil				
Texture	Consistency	Color	Mottling	
0	<u>SL to</u>	<u>7.5YR3.5/1</u>		
6	<u>Loam</u>			
12		<u>10YR3/2</u>	<u>A</u>	
18	<u>EOE 11" Refusal stones</u>			
24	<u>Boulders surface, water collection hollows to a depth of 10" + based on water mark of boulders</u>			
30				
36	<u>Delineated wetland</u>			
42				
48				
Soil Profile		Classification Condition	Slope Percent <u>A</u>	Limiting Factor " Depth
				<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Brayton v. bouldery</u>			Hydrologic Group	

Jeff Hart
 Soil/Scientist/Site Evaluator Signature

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Town, City, Plantation <u>A - Turbines 3-5</u>	Street, Road, Subdivision <u>10-9-14</u>	Owner or Applicant Name <u>Weaver</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)		

Observation Hole # <u>AT9</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
	<u>VPSL</u>	<u>Frable</u>	<u>7.5YR4/2 E</u>	
6			<u>7.5YR2.5/2 Chs</u>	
			<u>7.5YR2.5/4</u>	
12			<u>10YR 3/4</u>	
18			<u>10YR 4/4</u>	
	<u>stone</u>			
24				
	<u>refused at 18"</u>			
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			<u>B</u>	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
<u>Dixfield</u>				

Observation Hole # <u>AT10</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
	<u>VPSL</u>	<u>Frable</u>	<u>7.5YR4/2 E</u>	
6			<u>7.5YR 3/4</u>	
12				
	<u>refused stone at 10"</u>			
18				
24				
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			<u>A</u>	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
<u>Dixfield</u>				

Observation Hole # _____ <input type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
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 # _____ <input type="checkbox"/> Test Pit <input type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
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	

Town, City, Plantation <u>B - Turbines 6-13-11</u>	Street, Road, Subdivision <u>10-6-14</u>	Owner or Applicant Name <u>WAWAC</u>
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	Mottling
6	<u>Loamy</u>	<u>FR</u>	<u>2.5Y4/3</u>	<u>2.5Y4/4</u> <u>Faint, few</u>
12			<u>2.5Y5/3</u>	<u>7.5YR4/4</u> <u>few</u>
18				
24	<u>EDB 12" stony</u>			
30	<u>Excavated ditch adjacent to road</u>			
36	<u>cran berries growing</u>			
42	<u>Soil very hydric / morphologic</u>			
48	<u>Colonel but chronology PD</u>			
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	
<u>Ud-wet</u>				

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	Mottling
6	<u>VFSL</u>	<u>FR</u>	<u>7.5YR3/2</u>	
12			<u>7.5YR4/4</u>	
18			<u>10YR4/3</u>	<u>7.5YR3/4</u> <u>Faint</u>
24	<u>EDB 10" stony</u>			
30	<u>Early successional forest</u>			
36	<u>Hummocks, rutted</u>			
42	<u>Few surface stones</u>			
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	
<u>Colonel SWP</u>			<u>Few stones</u>	

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	Mottling
6	<u>VFSL</u>	<u>friable</u>	<u>7.5YR2.5/2</u>	
12			<u>7.5YR3/2</u>	
18			<u>7.5YR4/2</u>	
24			<u>7.5YR3/4</u>	
30			<u>10YR3/3</u>	
36				
42			<u>stones at</u>	
48			<u>12"</u>	
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	
<u>Dix field, MWD</u>				

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	Mottling
6	<u>VFSL</u>	<u>friable</u>	<u>7.5YR3/2</u>	
12			<u>2.5/1</u>	
18			<u>7.5YR2.5/2</u>	<u>BWS</u>
24			<u>7.5YR5/2</u>	<u>E</u>
30			<u>7.5YR4/3</u>	
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	
<u>Dix field</u>			<u>MWD</u>	

Jeff Wort
 Soil Scientist / Site Evaluator Signature

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Town, City, Plantation <u>Turbines 6-13</u>	Street, Road, Subdivision <u>10-6-14</u>	Owner or Applicant Name <u>Weaver</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION		
(Location of Observation Holes Shown Above)		

Observation Hole # <u>BTS</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
	<u>Vfsl</u>	<u>Frail</u>	<u>10YR3/2</u>	
6				
			<u>7.5YR3/3</u>	
12				
		<u>Firm</u>	<u>10YR3/3</u>	
18		<u>V strong</u>		
		<u>in place</u>		
24				
30				
	<u>Rut face in skidder track</u>			
36	<u>Scattered stones on surface</u>			
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			<u>B</u>	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
<u>Dixfield</u>			<u>MWD</u>	

Observation Hole # <u>BT6</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
	<u>Loam</u>	<u>Frail</u>	<u>7.5YR3/3</u>	
6				
			<u>7.5YR4/3</u>	
12				
18	<u>EDGE 12" strong</u>			
24	<u>Strong surface</u>			
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			<u>C</u>	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
<u>Dixfield</u>			<u>MWD</u>	

Observation Hole # <u>BT7</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
	<u>Loam</u>	<u>Frail</u>	<u>7.5YR4/1</u>	
6				
	<u>Strong</u>		<u>2.5Y4/1, 31</u>	<u>10YR4/6</u> <u>2%</u>
12				
18	<u>EDGE 10" refusal stone</u>			
24				
30	<u>Strong to v. strong surface</u>			
36	<u>map show Colonel between wetlands</u> <u>strong/bouldery surface</u>			
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			<u>1-3</u>	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
<u>Brayton PD</u>				

Observation Hole # <u>BT8</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
	<u>Vfsl</u>	<u>Frail</u>	<u>10YR3/1</u>	
6			<u>2.5Y4/1</u>	<u>10YR4/4</u> <u>2%</u>
12	<u>refusal stones 10"</u>			
18	<u>hummock surface</u>			
24	<u>Colonel/Brayton Assoc around</u> <u>mapped wetland</u>			
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			<u>1-3</u>	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
<u>Colonel-Brayton Assoc.</u>				

Jeff West
 Soil Scientist/Site Evaluator Signature

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 Date

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 # B714 ☐ Test Pit ☒ Boring
1"
Depth of organic horizon above mineral soil

	Texture	Consistency	Color	Mottling
0				
			10YR4/2	
6				
12				Redox few faint
18	EOB 14", strong			
24	Tree throw disturbed profile borders wetland.			
30				
36				
42				
48				

Soil Profile	Classification	Slope <u>A</u> Percent	Limiting Factor _____" Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Soil Series Name: Colonel SWP Hydrologic Group:

[illegible]

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Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Observation Hole # BT17 ☐ Test Pit ☐ Boring

3 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Loam	friable	10YR 4/1, 4/2	
6			7.5YR 3/3	
12				Redox
18				
24				
30				
36				
42				
48				

DOE 16" stones

Delimited with

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 Stony Bragton, PD Hydrologic Group

Observation Hole # BT18 ☐ Test Pit ☒ Boring

3 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Loam	friable	7.5YR 2.5/3	
6			10YR 4/2	
12			10YR 4/2	
18				
24				
30				
36				
42				
48				

DOE 12" stony

Strong surface, pit + mound

Skidders have compacted soils

imperfect permeability

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 Colmet, SHP Hydrologic Group

Observation Hole # BT19 ☒ Test Pit ☐ Boring

1 " Depth of organic horizon above mineral soil (fit next to road)

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	VPSL	friable	7.5YR 2.5/2	
6			7.5YR 2.5/3	
12				
18			7.5YR 3/3	
24			7.5YR 4/4	
30				
36				
42				
48				

ESL

959

DOE 28"

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 Dixfield, MWD Hydrologic Group

Observation Hole # BT20 ☐ Test Pit ☒ Boring

 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Loam	friable	10YR 4/2	
6			7.5Y 5/6	
12				
18			10YR 5/4	
24				
30				
36				
42				
48				

DOE 16"

Hummocky

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 Bragton, SHP Hydrologic Group

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SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

T8 - currently a wet tower

Observation Hole # <u>BT21</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
			<u>5YR2.5/2</u>	
6	<u>VFSL</u>	<u>Friable</u>	<u>1.5YR5/2, 6/1</u>	
			<u>E</u>	
12			<u>7.5YR3/2</u>	<u>Bhs</u>
			<u>7.5YR3/3</u>	
18				
24	<u>EDB 16", stony</u>			
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			<u>C</u>	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
<u>Marlow, based on slope</u>				

Observation Hole # <u>BT22</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
			<u>7.5YR4/2</u>	
6	<u>VFSL</u>	<u>Friable</u>	<u>E</u>	
			<u>7.5YR4/3</u>	<u>Bs</u>
12			<u>7.5YR2.5/3</u>	<u>Bhs</u>
			<u>7.5YR3/3</u>	<u>Bs</u>
18			<u>3/4</u>	
24				
30	<u>EDB 16"</u>			
36	<u>Scattered products on T8</u>			
42	<u>also, scattered stones</u>			
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			<u>C</u>	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
<u>Marlow</u>				

Observation Hole # <u>BT23</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
			<u>7.5YR3/3 Bhs</u>	
6	<u>VFSL</u>	<u>Friable</u>	<u>10YR2.5/3 Bhs</u>	
12				
18	<u>Refusal at 10"</u>			
24				
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
			<u>C</u>	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name			Hydrologic Group	
<u>Marlow</u>				

Observation Hole # <u>BT24</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
_____ " Depth of organic horizon above mineral soil				
0	Texture	Consistency	Color	Mottling
			<u>7.5YR4/2, 5/2</u>	
6	<u>VFSL</u>	<u>Friable</u>	<u>7.5YR3/3</u>	<u>Bhs</u>
			<u>7.5YR3/4</u>	
12			<u>7.5YR3/3</u>	
18	<u>Refusal at 10"</u>			
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	
<u>Dixfield</u>				

Soil Scientist/Site Evaluator Signature

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215 based on humachi, ruts by skidder
10-7-14

Town, City, Plantation <u>T-6-13</u>	Street, Road, Subdivision <u>10-8-14</u>	Owner or Applicant Name <u>Weaver</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION		(Location of Observation Holes Shown Above)

Observation Hole # BT25 ☐ Test Pit ☒ Boring

3 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<u>VFSL</u>	<u>Frangible</u>	<u>7.5YR2.5/3</u>	
6			<u>7.5YR3/4</u>	
12	<u>gray VFSL</u>		<u>7.5YR3/2</u>	
18	<u>Repaired at 14" stony</u>			
24	<u>Scattered surface stones & hum nodes</u>			
30	<u>early successional / fag gra, Bet pap, Acc sac, but all</u>			
36				
42				
48				

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Condition		Percent	Depth	

Soil Series Name Marlon O/C Hydrologic Group

Observation Hole # BT26 ☐ Test Pit ☒ Boring

4 " Depth of organic horizon above mineral soil
below sphagnum mat

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<u>gray SIL</u>	<u>Frangible</u>	<u>10YR4/2</u>	
6				
12			<u>2.5Y4/2</u>	<u>Redox common</u>
18				<u>10YR4/6</u>
24	<u>very stony, boulders</u>			
30	<u>reversed pit next to road</u>			
36	<u>EDE 20"</u>			
42	<u>delimited wetland</u>			
48				

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Condition		Percent	Depth	

Soil Series Name Brighton, TD Hydrologic Group

Observation Hole # BT27 ☐ Test Pit ☒ Boring

2 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<u>VFSL</u>	<u>Frangible</u>	<u>7.5YR2.5/2</u>	
6			<u>7.5YR4/2</u>	
12				
18	<u>EDE 12" very stony</u>			
24	<u>fag gra, fra pen, Acc sac</u>			
30	<u>early successional</u>			
36	<u>stony surface</u>			
42				
48				

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Condition		Percent	Depth	

Soil Series Name Marlon B Hydrologic Group

Observation Hole # BT28 ☐ Test Pit ☒ Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<u>VFSL</u>	<u>Frangible</u>	<u>7.5YR2.5/2 A</u>	
6			<u>7.5YR3/4</u>	<u>BL</u>
12			<u>10YR3/4, 3/3</u>	
18				
24	<u>EDE 16"</u>			
30	<u>Soils very dry</u>			
36	<u>U-shape starts approx at this point</u>			
42	<u>Scattered stones, occasional boulders</u>			
48	<u>Bet pap, fag gra, Acc sac</u>			
	<u>early successional</u>			

Soil Profile	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Condition		Percent	Depth	

Soil Series Name Marlon Hydrologic Group

Town, City, Plantation <u>T6-13</u>	Street, Road, Subdivision <u>10-8-14</u>	Owner or Applicant Name <u>Weaver</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)		

T6

Observation Hole # BT29 ☐ Test Pit ☒ Boring

____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Loam	friable	10YR2/3	
6				
12			7.5YR2/3	
18				
24	EOB 12" very stony, Delinquent wetland, appears to be old skidder track. Map shows Duxfield var. pd.?			
30				Colon
36				
42				
48				

Soil Profile	Classification	Slope <u>A</u> Percent	Limiting Factor " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Duxfield Variant, Pd</u>			Hydrologic Group	

Observation Hole # BT30 ☐ Test Pit ☒ Boring

____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	VFSL	friable	7.5YR2.5/1	
6				
12			7.5YR2.5/2	
18				
24	EOB 12" very stony surface v. stony + boulders			
30				
36				
42				
48				

Soil Profile	Classification	Slope <u>B</u> Percent	Limiting Factor " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Marion v. stony / boulders</u>			Hydrologic Group	

Observation Hole # BT31 ☐ Test Pit ☒ Boring

____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	VFSL	friable	7.5YR2.5/2	
6			7.5YR4/3	E
12			7.5YR3/4	
18			10YR4/4	
24	EOB 16" stony			
30	Scattered stones on surface			
36	Early successional HW			
42				
48				

Soil Profile	Classification	Slope <u>C</u> Percent	Limiting Factor " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Marion</u>			Hydrologic Group	

Observation Hole # BT32 ☐ Test Pit ☒ Boring

____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	granul, FSL	friable	10YR2/3	
6				
12				
18				
24	EOB 12" stony			
30	stony surface			
36	Abundant, Tru can, Bat all, Pic rub			
42				
48				

Soil Profile	Classification	Slope <u>B</u> Percent	Limiting Factor " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Duxfield trending to Colon</u>			Hydrologic Group	

John West
Soil Scientist/Site Evaluator Signature

215
CSS/LE#

10-8-14
Date

Town, City, Plantation <u>T6-13</u>	Street, Road, Subdivision <u>10-8-14</u>	Owner or Applicant Name <u>Weaver</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION		
(Location of Observation Holes Shown Above)		

Observation Hole # <u>BT33</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring					
3 " Depth of organic horizon above mineral soil					
Depth below mineral soil surface (inches)	0	Texture	Consistency	Color	Mottling
	6	gndly L	friable	7.5YR2.5/1	
	12	gry sil		7.5YR3/1	
	18			10YR4/2	
	24			2.5Y5/2	10YR4/4
	30				
	36				
	42				
	48				
	Soil Classification Slope Limiting Factor <input type="checkbox"/> Groundwater				
	Profile Condition Percent Depth <input type="checkbox"/> Restrictive Layer				
	Soil Series Name		Hydrologic Group		
Brayton, V. stony					

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

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

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

J. H. West
 Soil Scientist/Site Evaluator Signature

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10-8-14
 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 # BLL ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6	friable	7.5YR2.5/2	
12		10YR 4/2	
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	"	<input type="checkbox"/> Restrictive Layer
			Depth	<input type="checkbox"/> Bedrock

Soil Series Name

V. Stony Marlow

Hydrologic Group

Observation Hole # BL2 ☐ Test Pit ☒ Boring

" Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6	friable	7.5YR2.5/3	
12		7.5YR4/2	
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	"	<input type="checkbox"/> Restrictive Layer
			Depth	<input type="checkbox"/> Bedrock

Soil Series Name

V. Stony Marlow

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			

Depth below mineral soil surface (inches)

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	"	<input type="checkbox"/> Restrictive Layer
			Depth	<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			

Depth below mineral soil surface (inches)

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	"	<input type="checkbox"/> Restrictive Layer
			Depth	<input type="checkbox"/> Bedrock

Soil Series Name

Hydrologic Group

Soil Scientist/Site Evaluator Signature

215
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Date

Town, City, Plantation	Street, Road, Subdivision <u>11-11-14</u>	Owner or Applicant Name <u>Weaver</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION		(Location of Observation Holes Shown Above)

Observation Hole # <u>BR30</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
2" Depth of organic horizon above mineral soil				
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0			7.5YR4/1	
6			7.5YR4/1	
12			7.5YR3/1	
18	Refusal 14" stone			
24	Very strong surface, some boulders			
30	Frac. clay, Bet all, Tex can, Bet pup			
36				
42				
48				
	Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth
			C	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name <u>Murrow-Dixfield</u>			Hydrologic Group	

Observation Hole # <u>BR31</u> <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	FSL	frable	7.5YR4/2	
6			10YR3/4	
12				
18	Refusal stones 10"			
24	Very strong, some boulders			
30	patches of extremely strong			
36	cut over			
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 <u>Dixfield</u>			Hydrologic Group	

Observation Hole # <u>B32</u> <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	oa	frable	10YR3/1	
6				
12	VFSL		10YR4/2	
18	w/organic streaking			
24				
30	PD to VPD			
36	to extremely			
42	Very strong, water collects around			
48	stones + boulders			
	old skidder track			
	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 <u>Brayton? / Colrud</u>			Hydrologic Group	

Observation Hole # <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	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

Soil Scientist/Site Evaluator Signature

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11-11-14

Date

10-13-14
Date

Town, City, Plantation <u>T14-16</u>	Street, Road, Subdivision <u>10-13-14</u>	Owner or Applicant Name <u>Werner</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION		
(Location of Observation Holes Shown Above)		

Observation Hole # D15 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6	frable	7.5YR 2.5/2	
12		7.5YR 3/4	
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

depth shallow to refusal - V. strong

Detached with hard

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
		A		

Soil Series Name: Brayton stony Hydrologic Group:

Observation Hole # D16 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6	frable	7.5YR 4/6	
12		7.5YR 4/3	
18		7.5YR 4/3	
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Boe 12" stony

V. strong, hummocky, small pockets of Brayton possible. Is land between wetlands?

TSU can, Acc rob, Acc be!

Sph. Th occ?

Shedders have compacted soils = Brayton

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
		A?		

Soil Series Name: Colnet Hydrologic Group:

Observation Hole # D16 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6	frable	7.5YR 4/2	
12		7.5YR 3/4	
18			
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Boe 12"

Hardwood mixed Talcum, Pin etc, Acc sec

Pin rob, fog gra;

more open understory

some stones

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
		B		

Soil Series Name: Dixfield Hydrologic Group:

Observation Hole # D17 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6	frable	7.5YR 4/2	
12		7.5YR 3/3	
18		7.5YR 4/3	
24			
30			
36			
42			
48			

Depth below mineral soil surface (inches)

Boe 12" stony

Scattered stones

Veech has canker

fog gra, Pin rob, Acc sec, But all

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
		B		

Soil Series Name: Dixfield Hydrologic Group:

Soil Scientist/Site Evaluator Signature

CSS/LSE#

Date

Town, City, Plantation	Street, Road, Subdivision <u>10-13-14</u>	Owner or Applicant Name <u>Wearner</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION		(Location of Observation Holes Shown Above)

Observation Hole # <u>DT8</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring				
<u>6</u> " Depth of organic horizon above mineral soil				
Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
6	<u>Loam</u>	<u>frail</u>	<u>10YR 4/2</u>	
12			<u>10YR 4/3</u>	<u>Redox</u>
18				
24	<u>EDE 14" stone</u>			
30	<u>pit/mound</u>			
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
Soil Series Name <u>Colonel</u>		Hydrologic Group		

Observation Hole # _____ <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	Mottling
0				
6				
12				
18				
24				
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
Soil Series Name		Hydrologic Group		

Observation Hole # _____ <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	Mottling
0				
6				
12				
18				
24				
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
Soil Series Name		Hydrologic Group		

Observation Hole # _____ <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	Mottling
0				
6				
12				
18				
24				
30				
36				
42				
48				
Soil Profile		Classification Condition	Slope Percent	Limiting Factor Depth
Soil Series Name		Hydrologic Group		

[Signature]
Soil Scientist/Site Evaluator Signature

215
CSS/LSE#

10-13-14
Date

Town, City, Plantation

T 19

Street, Road, Subdivision

10-29-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

T19 Access road

Observation Hole # CR5 ☐ Test Pit ☒ Boring1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
v fsl	friable	7.5YR 4/2, 4/6	
6		7.5YR 2.5/2 7.5YR 4/6	
12	gry v fsl	7.5YR 4/4 7.5YR 4/6	
18			
24			
30			
36			
42			
48			

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

Soil Series Name

Becket/Sherry

Hydrologic Group

Observation Hole # CR6 ☐ Test Pit ☒ Boring0e " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
gry loam	friable	10YR 3/2	
6			
12	firm	10YR 4/2 3/4	7.5YR 3/4 fine 20/0
18			
24			
30			
36			
42			
48			

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

Soil Series Name

Brayton, Stony

Hydrologic Group

Observation Hole # CR7 ☐ Test Pit ☒ Boring3 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
muchy loam	friable	10YR 2/1	
6			
12	stony sil	10YR 2/1	7.5YR 3/4 Med, 10/0
18	stony		
24			
30			
36			
42			
48			

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

Soil Series Name

Brayton/Colonel

Hydrologic Group

Observation Hole # CR8 ☐ Test Pit ☒ Boring0a " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
0a	friable	10YR 2/1	
6			
12	loam stony		7.5YR 3/4 fine 5/0
18			
24			
30			
36			
42			
48			

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

Soil Series Name

Brayton

Hydrologic Group

Soil Scientist/Site Evaluator Signature

CSS/LSE#

Date

Town, City, Plantation

T19 access

Street, Road, Subdivision

10-29-14

Owner or Applicant Name

Waver

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		7.5YR 3/2	
6	Frable	7.5YR 4/2, 5/1	
12		5YR 2/4	
18			
24			
30			
36			
42			
48			

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

Soil Series Name

Dixfield

Hydrologic Group

Observation Hole # CT10 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		5YR 4/2, 5/1	
6	Frable	5YR 3/2	
12		5YR 4/1	
18		7.5YR 4/6	
24			
30			
36			
42			
48			

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

Soil Series Name

Marlow/Dixfield stony

Hydrologic Group

Observation Hole # CR11 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		2.5Y 4/3	10YR 4/4
6	Frable		fine 50%
12			2.5Y 5/2
18			fine 10%
24			
30			
36			
42			
48			

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

Soil Series Name

Vd SWP cut

Hydrologic Group

Observation Hole # CR12 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		5YR 5/2	
6	Frable	5YR 3/2	
12		5YR 3/4	
18		7.5YR 4/4	
24		10YR 4/4	
30			
36			
42			
48			

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

Soil Series Name

Buckled/Skerry

Hydrologic Group

Soil Scientist/Site Evaluator Signature

CSS/LSE#

Date

10-29-14

Town, City, Plantation <u>Access T16 - T17</u>	Street, Road, Subdivision <u>11-25-14</u>	Owner or Applicant Name <u>Weaver</u>
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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

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<u>OA</u>		<u>10YR2/1</u>	
6	<u>grg ssl</u>	<u>friable</u>	<u>10YR4/2</u>	
12	<u>stony</u>		<u>2.5Y4/2</u>	
18				
24	<u>EOE 16"</u>			
30	<u>Very to extremely stony surface</u>			
36				
42				
48				

Soil Profile	Classification	Slope <u>A</u> Percent	Limiting Factor ____ " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Soil Series Name: Breyton Hydrologic Group: _____

Observation Hole # C52 ☐ Test Pit ☒ Boring

____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<u>VEL</u>	<u>FRIABLE</u>	<u>7.5YR4/2</u>	
6			<u>5YR3/2, 3/4</u>	
12			<u>7.5YR3/4</u>	
18			<u>10YR4/4</u>	
24	<u>Refusal at 16"</u>			
30	<u>stone</u>			
36	<u>stony surface</u>			
42				
48				

Soil Profile	Classification	Slope <u>B</u> Percent	Limiting Factor ____ " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Soil Series Name: Dixfield / Marlow stony Hydrologic Group: _____

Access from T18 to T19

Observation Hole # C53 ☐ Test Pit ☒ Boring

____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	<u>VEL</u>	<u>Friable</u>	<u>Mixed</u>	
6			<u>7.5YR4/2, 5/2</u>	
12			<u>7.5YR2.5/2</u>	
18			<u>10YR4/4</u>	
24	<u>Refusal stone at 12"</u>			
30	<u>Dense spruce plantation</u>			
36	<u>stony surface</u>			
42				
48				

Soil Profile	Classification	Slope ____ Percent	Limiting Factor ____ " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Soil Series Name: Marlow - Dixfield stony Hydrologic Group: _____

Observation Hole # _____ ☐ Test Pit ☐ Boring

____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
6				
12				
18				
24				
30				
36				
42				
48				

Soil Profile	Classification	Slope ____ Percent	Limiting Factor ____ " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
--------------	----------------	-----------------------	---------------------------------	--

Soil Series Name: _____ Hydrologic Group: _____

Soil Scientist/Site Evaluator Signature

215
CSS/LSE#

11-25-14
Date

Town, City, Plantation <u>T 20-25</u>	Street, Road, Subdivision <u>10-14-14</u>	Owner or Applicant Name <u>Weaver</u>
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

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	VFSL	friable	7.5YR4/2	
6			7.5YR4/4	
12			7.5YR2.5/4	
18	gry FSL		10YR4/4	
24				
30	Area has been strip cut			
36	P.c. rub, P.W. str,			
42				
48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
		<u>B?</u>		

Soil Series Name Hermoy? Hydrologic Group _____

Observation Hole # ET2 ☐ Test Pit ☒ Boring

_____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Oe	friable	7.5YR2.5/2	
6	SL		10YR4/1, 9/6	
12				
18	refusal at 8"			
24	Very stony surface, hummocky delineated in place			
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
		<u>A</u>		

Soil Series Name Brayton Hydrologic Group _____

Turbine 21

Observation Hole # ET3 ☐ Test Pit ☒ Boring

_____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Oe		7.5YR2.5/2	
6				
12	Da			
18				
24	End 30" - did not go further			
30	Deep organic soil, thick sphagnum layer			
36				
42	Very stony surface			
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 Wonsquake Hydrologic Group _____

Observation Hole # ET4 ☐ Test Pit ☒ Boring

_____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0			7.5YR4/2	
6	FSL	friable		
12			7.5YR4/4	
18				
24	Refusal stones at 12"			
30	Stony, some boulders			
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
		<u>B</u>		

Soil Series Name Dixfield Hydrologic Group _____

John West
Soil Scientist/Site Evaluator Signature

215
CSS/LSE#

10-14-14
Date

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

Observation Hole # <u>ERI</u>		<input type="checkbox"/> Test Pit	<input checked="" type="checkbox"/> Boring			
" _____		Depth of organic horizon above mineral soil _____				
Depth below mineral soil surface (inches)	0	Texture	Consistency	Color	Mottling	
	6	<u>SS</u>	<u>Frictile</u>	<u>7.5YR4/2</u>		
	12			<u>7.5YR4/6</u>		
	18			<u>7.5YR3/4</u>		
	24	<u>LOE 16"</u>				
	30	<u>Stony surface</u>				
	36	<u>Fog zone, Det all</u>				
	42					
	48					
	Soil _____		Classification _____	Slope <u>B</u>	Limiting Factor _____	<input type="checkbox"/> Groundwater
	Profile _____		Condition _____	Percent _____	Depth _____	<input type="checkbox"/> Restrictive Layer
	Soil Series Name <u>Marlow/DIX field</u>				Hydrologic Group _____	<input type="checkbox"/> Bedrock

Observation Hole # <u>E75</u> <input type="checkbox"/> Test Pit <input checked="" type="checkbox"/> Boring			
" _____"	Depth of organic horizon above mineral soil		
Texture	Consistency	Color	Mottling
0	<u>VE SL</u>	<u>7.5YR 2.5/2</u>	
6	<u>fr. ble</u>	<u>7.5YR 2.5/4</u>	
12			
18	<u>Reused at 12", Stones</u>		
24	<u>Strong surface</u>		
30	<u>Fog grey, Bot all</u>		
36			
42			
48			

Soil _____	Classification _____	Slope <u>B/C</u>	Limiting Factor _____	<input type="checkbox"/> Groundwater
Profile _____	Condition _____	Percent _____	Depth _____	<input type="checkbox"/> Restrictive Layer
				<input type="checkbox"/> Bedrock

Soil Series Name <u>Marion/Dix Field</u>	Hydrologic Group
---	------------------

Observation Hole # ET6 ☐ 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)

Texture: VESL Consistency: Fr. cobb. Color: 5YR 3/2
7.5YR 4/4

refusal 14"
 Ex. boundary

Pie root, blue spruce?, striped maple
 very thick - ? plant?

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
		<u>B</u>		

Soil Series Name Marble / Dixfield. Hydrologic Group _____

Observation Hole # _____ <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	Mottling
0				
6				
12				
18				
24				
30				
36				
42				
48				

Soil _____	Classification _____	Slope _____	Limiting Factor _____	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Profile _____	Condition _____	Percent _____	Depth _____	

Soil Series Name _____

Hydrologic Group _____

Soil Scientist/Site Evaluator Signature

CSS/LS#

Date _____

ET7 ER2

Town, City, Plantation <u>T20-25</u>	Street, Road, Subdivision-- <u>10th 16th</u>	Owner or Applicant Name <u>Weaver</u>
---	---	--

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 <u>De</u>		<u>7.5YR2.5/2</u>	
6 <u>De</u>		<u>7.5YR2.5/1</u>	
12			
18 <u>Refused at 8"</u>			
24 <u>pit/mineral - ext. strong</u>			
30			
36			
42			
48			

Soil Series Name PD-VPD Hydrologic Group _____

2

Observation Hole # ET8 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil _____ "

Texture	Consistency	Color	Mottling
0 <u>ESL</u>	<u>friable</u>	<u>7.5YR4/2</u>	
6		<u>5YR2.5/2</u>	
12			
18 <u>refused at 10", very strong</u>			
24 <u>strong surface</u>			
30			
36			
42			
48			

Soil Series Name Dx/field Hydrologic Group _____

T22

Observation Hole # ET9 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil _____ "

Texture	Consistency	Color	Mottling
0 <u>Loam</u>	<u>friable</u>	<u>10YR2.5/2</u>	
6		<u>10YR3/4</u>	<u>7.5YR3/4</u>
12			<u>5YR2.5/1</u>
18 <u>refused 10" strong</u>			
24 <u>located at western edge of spruce</u>			
30 <u>plantation. Not as densely planted</u>			
36 <u>as D ridge - younger</u>			
42 <u>minimal surface stones</u>			
48 <u>consider mapping as muck/Dx/field</u>			

Soil Series Name Dx/field 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 _____

Soil Scientist/Site Evaluator Signature

CSS/LSE#

Date

Town, City, Plantation

T20-25

Street, Road, Subdivision

10-27-14

Owner or Applicant Name

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Between T23 - T22

Observation Hole # ET10 ☐ Test Pit ☒ Boring1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0 VESL	friable	5YR2.4/1, 5/1	
6		7.5YR2.3/2	
12		7.5YR2.3/4	
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 # ET11 ☐ Test Pit ☒ Boring1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0 OA	FC	7.5YR2.5/2	
6 Loam		10YR2.8/1, 4/1	
12		10YR2.4/3	
18			
24			
30			
36			
42			
48			

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

Soil Series Name

Colonel, boulders

Hydrologic Group

T22-23

T23

Observation Hole # ET12 ☐ Test Pit ☒ Boring2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0 Loam	friable	10YR2.4/3	7.5YR2.4/4 fine 2.0/0
6			
12		10YR2.5/2	
18			
24			
30			
36			
42			
48			

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

Soil Series Name

Colonel Stony

Hydrologic Group

Observation Hole # ET13 ☐ Test Pit ☒ Boring1 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0 VESL	FR	7.5YR2.9/1	
6		7.5YR2.3/4	
12		10YR2.3/4	
18			
24			
30			
36			
42			
48			

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

Soil Series Name

Dixfield Stony

Hydrologic Group

Soil Scientist/Site Evaluator Signature

CSS/LSE#

Date

Town, City, Plantation

T20-25

Street, Road, Subdivision

10-29-14

Owner or Applicant Name

Weaver

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
0a	Frable	7.5YR2.5/2	
Loam		2.5Y4/2	10YR3/6
			2% Fine
refusal stones @ 10"			
Saturated at surface - heavy rains last week brought water table up.			
v. stony, boulders			
Ab. bel., Pic. rub., Bet. all			
sph., Royal Fern, pit/mound			
Flagged wetland			

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	Depth	<input type="checkbox"/> Restrictive Layer
				<input type="checkbox"/> Bedrock

Soil Series Name

Brayton, poorly

Hydrologic Group

Observation Hole # ET15 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		7.5YR2.5/2	
6	Frable	7.5YR2.5/2	
		7.5YR4/1	
		10YR3/6	
refusal stones, 12"			
On edge of clearing for Mt tower			

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	Depth	<input type="checkbox"/> Restrictive Layer
				<input type="checkbox"/> Bedrock

Soil Series Name

Dixfield/Marlow

Hydrologic Group

Observation Hole # EV67 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0a	Frable	7.5YR2.5/2	
6			
12			
18			
refusal due to stones			
dense sphagnum cover.			
pooled water in hollows			
v. stony			

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	Depth	<input type="checkbox"/> Restrictive Layer
				<input type="checkbox"/> Bedrock

Soil Series Name

VPD

Hydrologic Group

Observation Hole # ET16 ☐ Test Pit ☒ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		7.5YR2.5/2	
6	Frable	7.5YR2.5/2	
12			
refusal stones @ 10"			
some stones			
Pic. rub., Ab. bel., Bet. pap.			

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	Depth	<input type="checkbox"/> Restrictive Layer
				<input type="checkbox"/> Bedrock

Soil Series Name

Dixfield

Hydrologic Group

Soil Scientist/Site Evaluator Signature

CSS/ESE#

Date

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 # ET21 ☐ Test Pit ☒ Boring
 " Road to T23
 Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6	gru	10YR 3/2	Ab
12	gru	10YR 2/1	
18	gru	10YR 4/2	10YR 3/3
24			2% fine
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 Brayton Hydrologic Group

Access to T25
 Observation Hole # ET22 ☐ Test Pit ☒ Boring
 " Road to T23
 Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6	gru	10YR 3/2	
12		2.5Y 4/3	
18			10YR 4/4
24			5% fine
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 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			

Depth below mineral soil surface (inches)

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

Depth below mineral soil surface (inches)

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

Soil Series Name Hydrologic Group

J. West
 Soil Scientist/Site Evaluator Signature

215
 CSS/SE#

10-28-14
 Date

Road T21

Observation Hole # ER21 ☐ Test Pit ☒ Boring

2 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0	very friable	7.5YR3/3	
6		10YR4/4	
12		10YR5/4	
18	LOE 12"		
24			
30	shredder tracks cross cross site		
36	hummocky		
42			
48			

Soil	Classification	Slope	Limiting Factor	<input type="checkbox"/> Groundwater
Profile	Condition	Percent	Depth	<input type="checkbox"/> Restrictive Layer
				<input type="checkbox"/> Bedrock

Soil Series Name Hydrologic Group

Dx/c/assoc

Observation Hole # _____		<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			
6			
12			
18			
24			
30			
36			
42			
48			
	Soil _____ Profile Condition	Slope _____ Percent	Limiting Factor _____ Depth
			<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
Soil Series Name _____			Hydrologic Group _____

Date _____

Town, City, Plantation

Street, Road, Subdivision

Owner or Applicant Name

11-12-14

Weaver

SOIL PROFILE DESCRIPTION AND CLASSIFICATION

(Location of Observation Holes Shown Above)

Turbines E line

Observation Hole # T23-1 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0e	frable	7.5YR2.5/2	
6		7.5YR4/2	E
VFSL		7.5YR3/4	
12			
18		7.5YR3/4	WAVY
24			
30		10YR3/3	7.5YR3/7
36			fine 1/2" water moiré in ~ 30"
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

Dixfield

Hydrologic Group

Turbine 25

Observation Hole # T24-1 ☒ Test Pit ☐ Boring

Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0			
6		10YR3/2	W
12		7.5YR3/3	W
18		7.5YR4/4	W
24		10YR4/4	W
30			
36		2.5Y4/4	
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

Turbidity variant

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

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

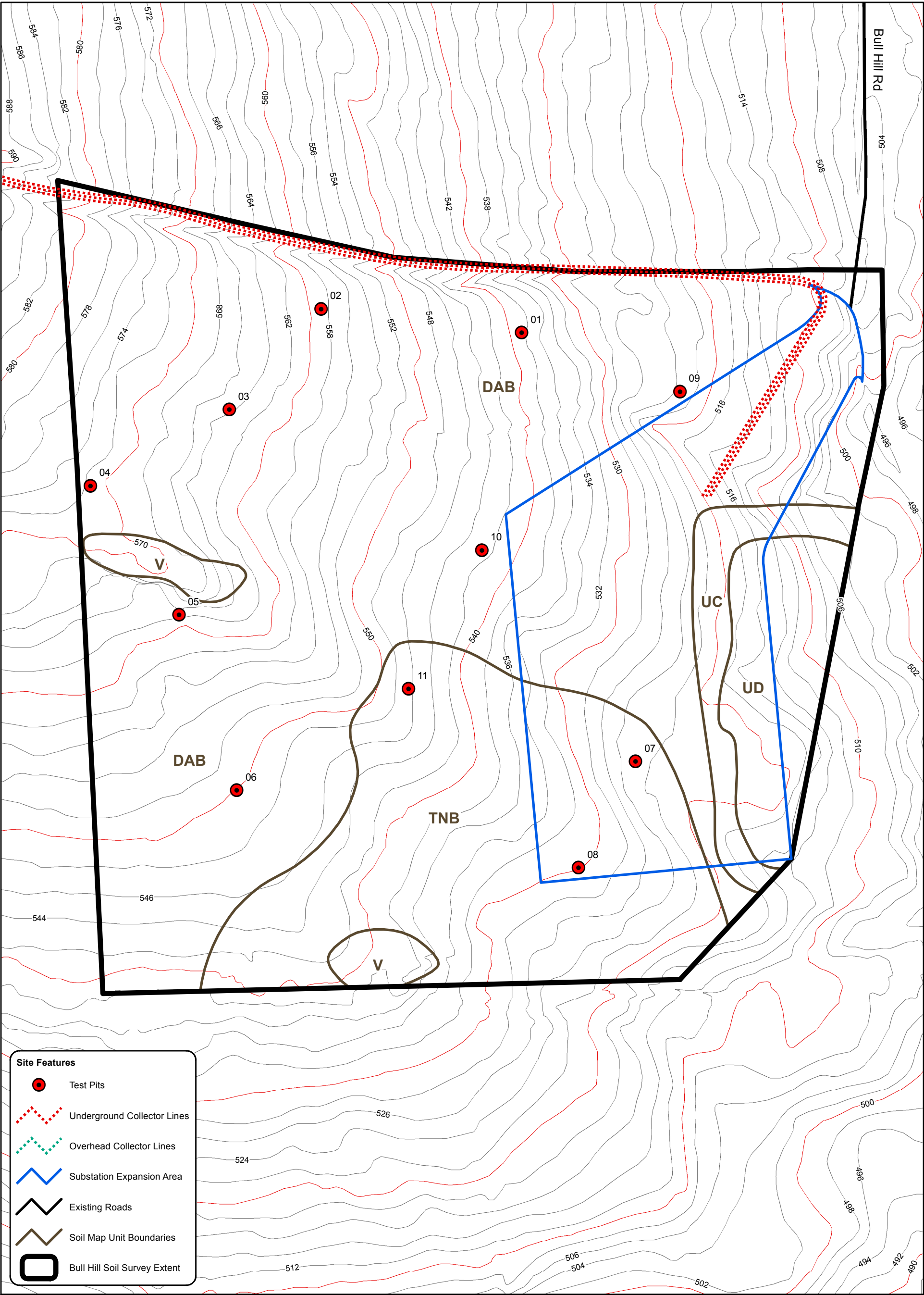
Hydrologic Group

Soil Scientist/Site Evaluator Signature

215
CSS/LSE#11-12-14
Date

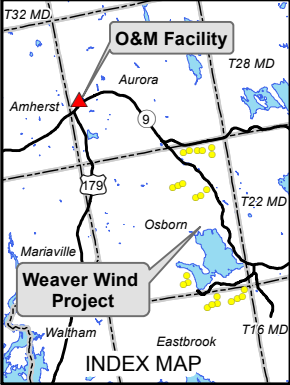
Appendix C-1

Class B Soil Mapping



Site Features

Test Pits

Underground Collector Lines

1:1,320 1 inch = 110 feet

0 50 100 200 Feet

0 25 50 100 Meters

*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

STATE OF MAINE
JENNIFER WEST
NO. 215
CERTIFIED
SOIL SCIENTIST

NORMANDEAU

environmental consultants

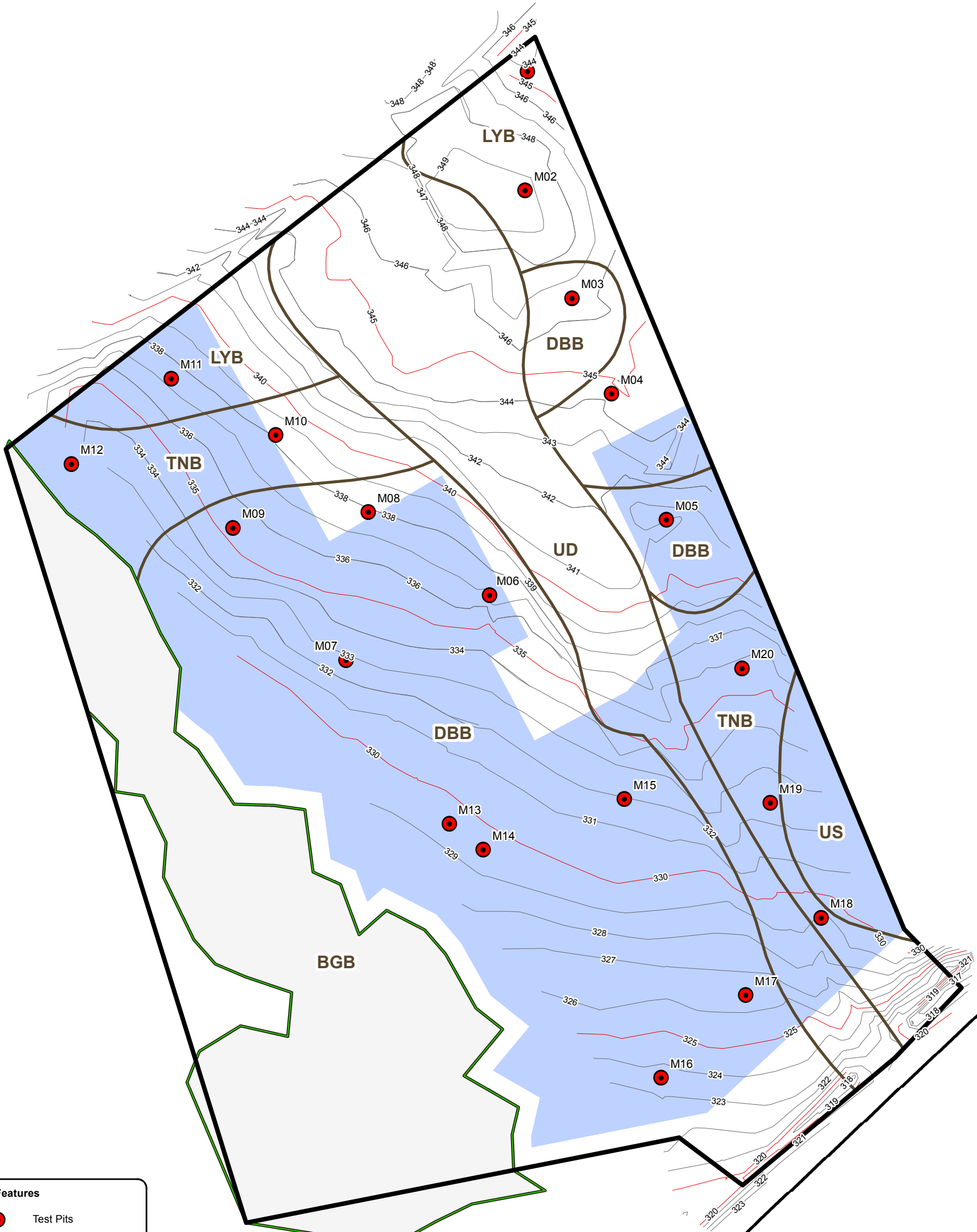
Normandeau Associates

8 Fundy Road

Falmouth, ME USA

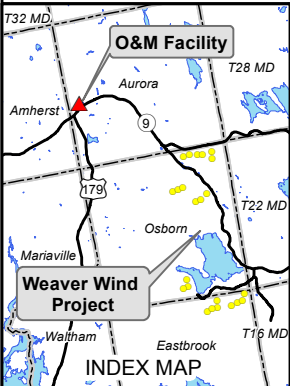
04105

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Site Features

Test Pits

Soil Map Unit Boundaries

N

1:960 1 inch = 80 feet

0

40

80

160

Feet

0

20

40

80

Meters

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

Class B Soils Survey

O&M Facility

Weaver Wind Project

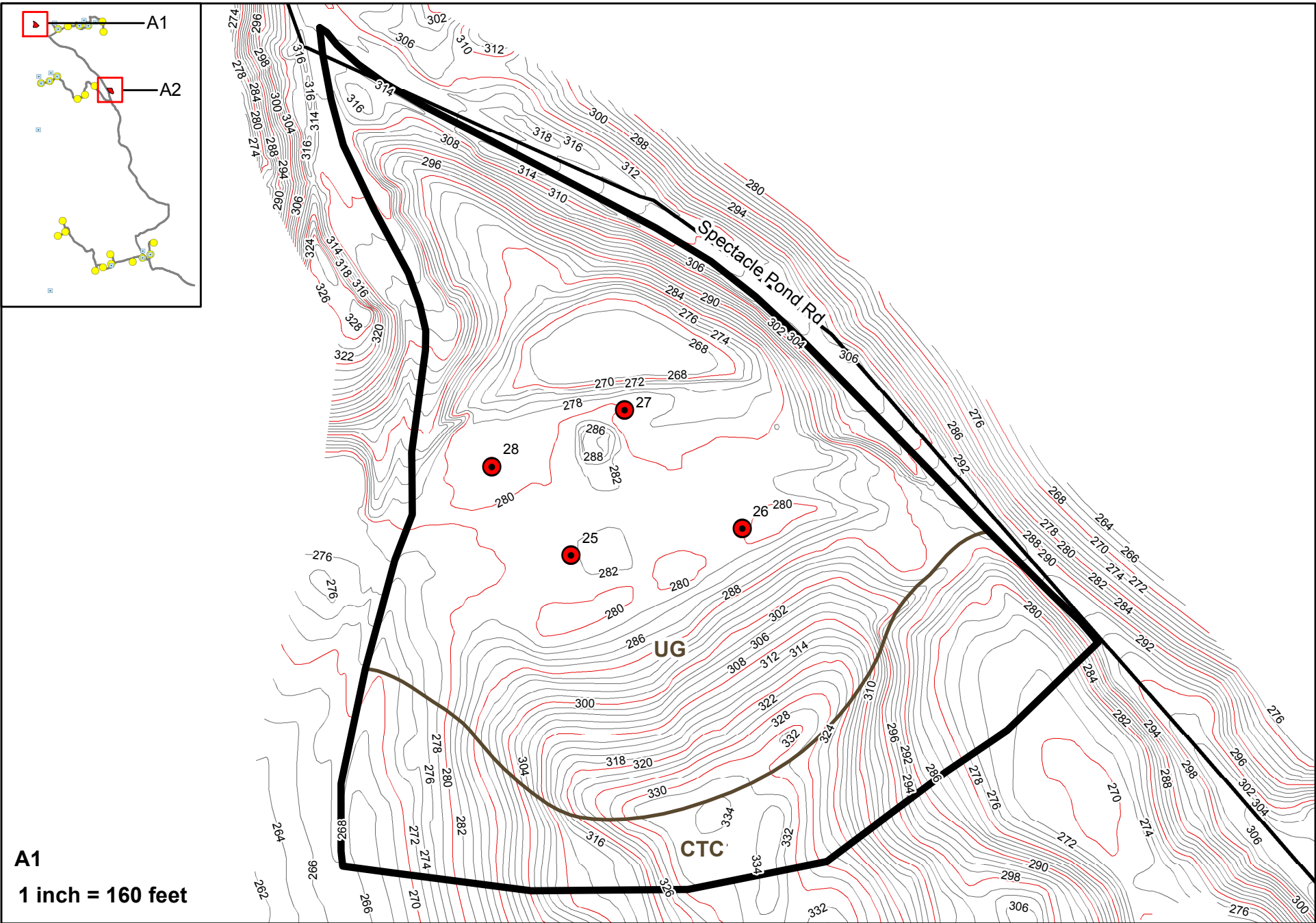
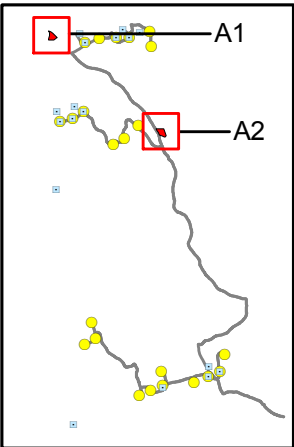
Hancock County, Maine

Normandeau Associates

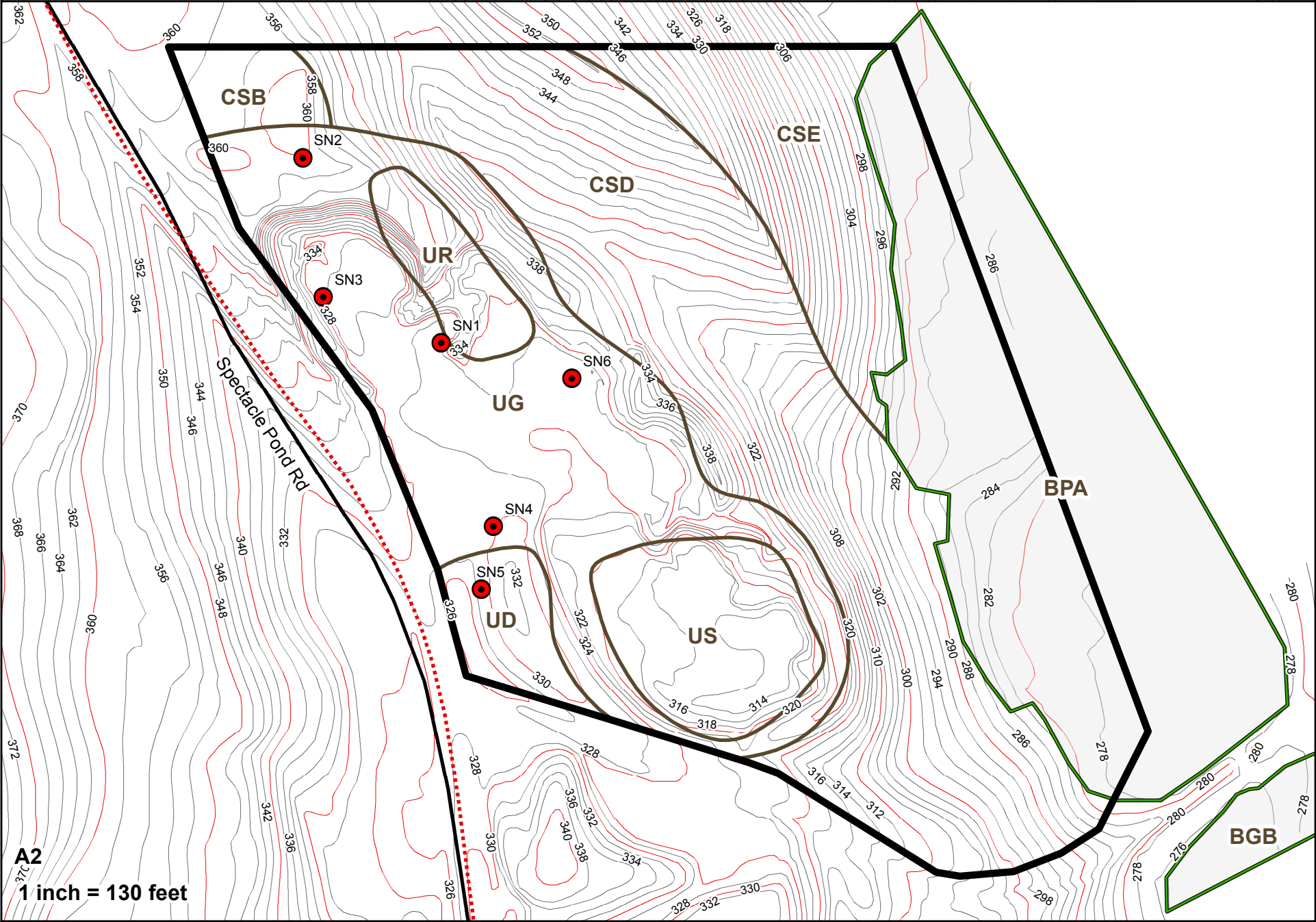
8 Fundy Road

Falmouth, ME USA

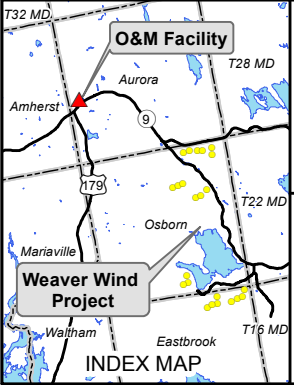
04105



A1
1 inch = 160 feet



A2
1 inch = 130 feet



*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

Site Features

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

**Class B Soils Survey
Laydown Areas**

Weaver Wind Project
Hancock County, Maine

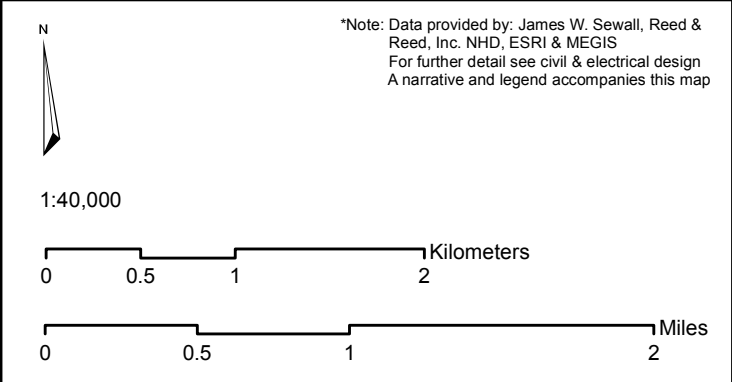
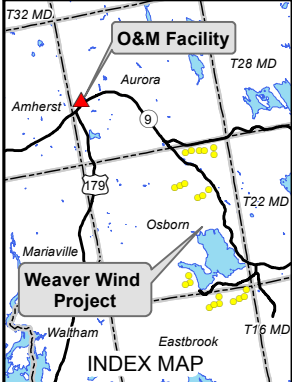
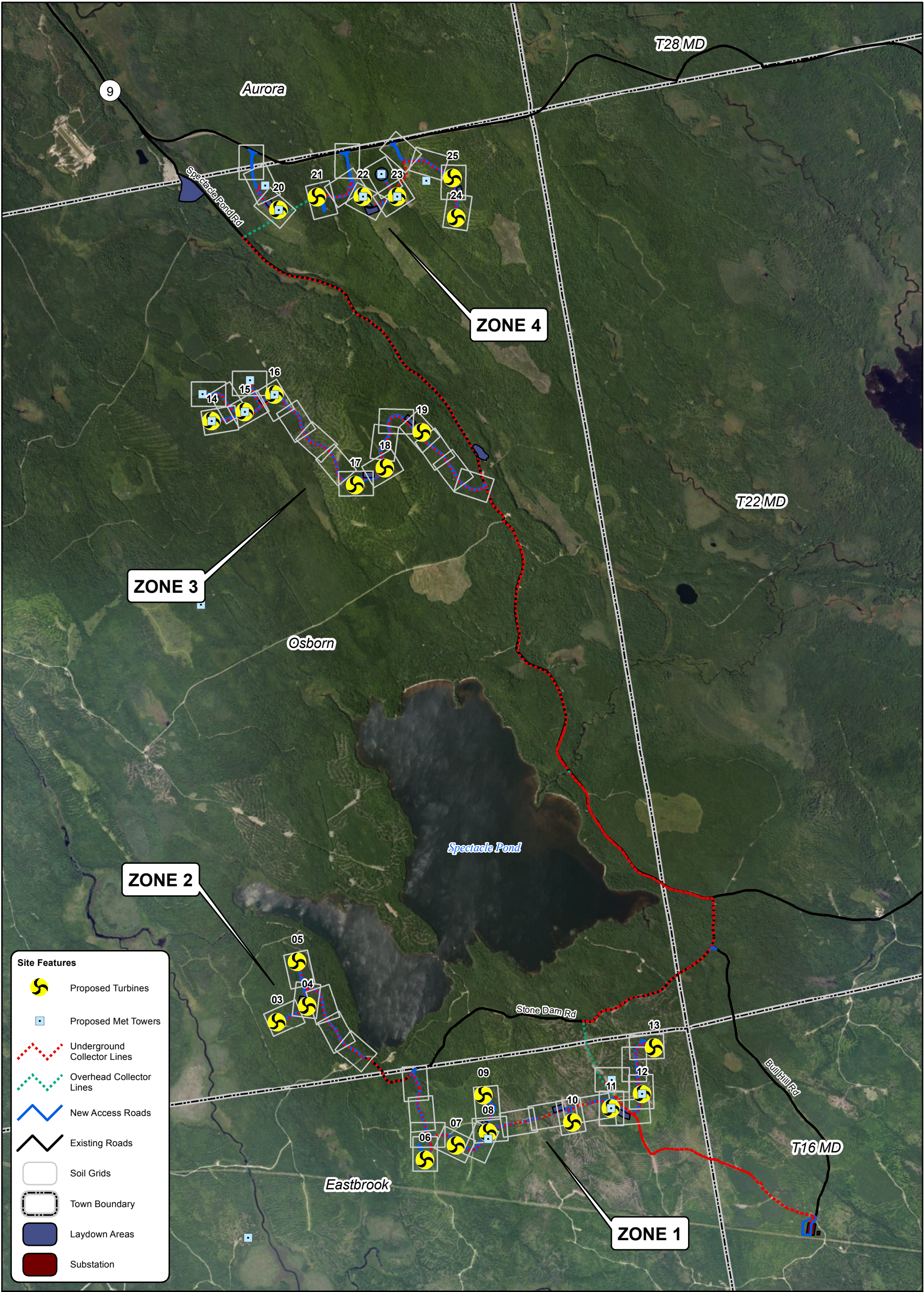
STATE OF MAINE
JENNIFER WEST
NO. 215
CERTIFIED
SOIL SCIENTIST

NORMANDEAU
environmental consultants

Normandeau Associates
8 Fundy Road
Falmouth, ME USA
04105

Appendix C-2

Class L Soil Mapping



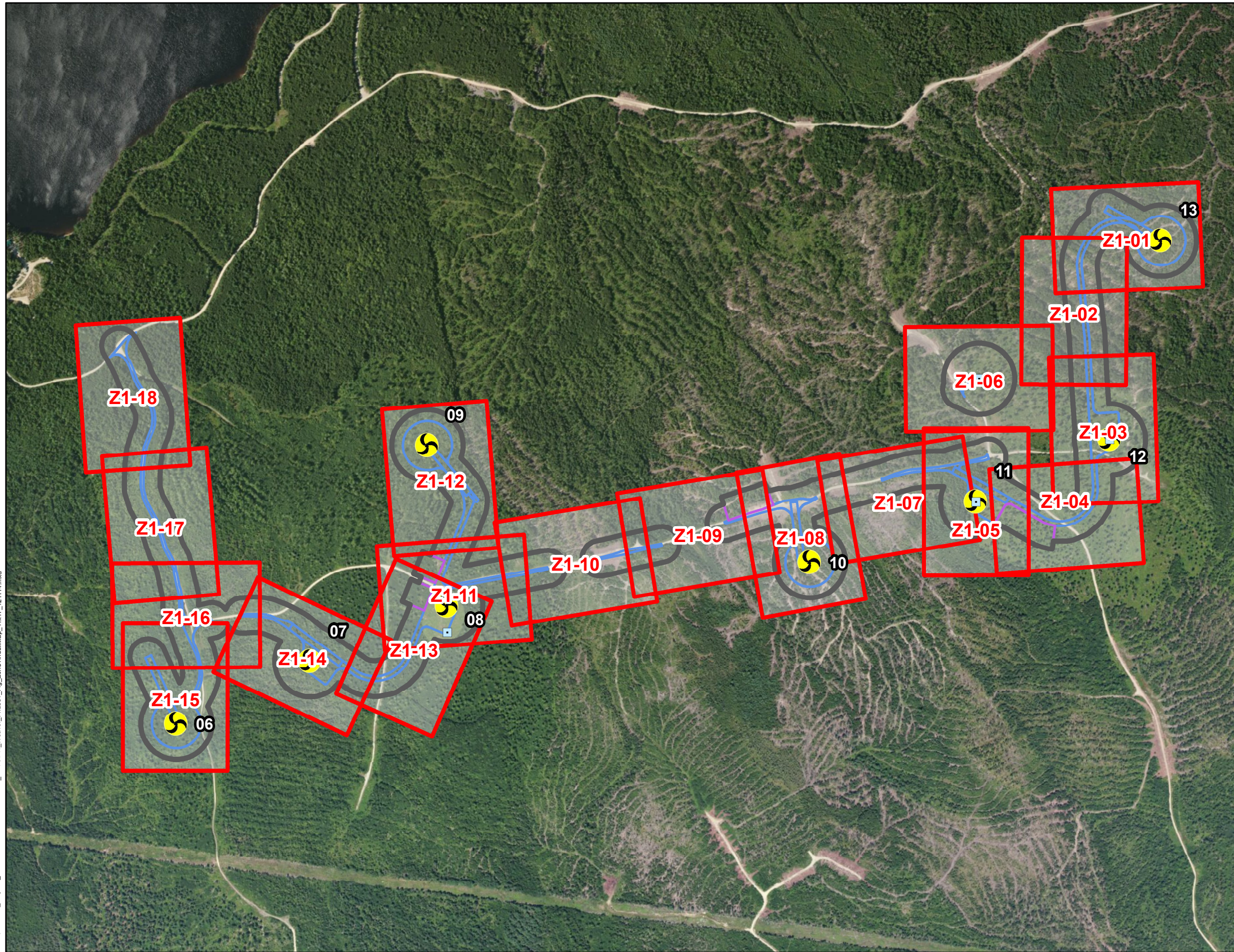
Class L Soil Zone Overview

Weaver Wind Project
Hancock County, Maine

STATE OF MAINE
JENNIFER WEST
NO. 215
CERTIFIED
SOIL SCIENTIST

Normandeau Associates
8 Fundy Road
Falmouth, ME USA
04105

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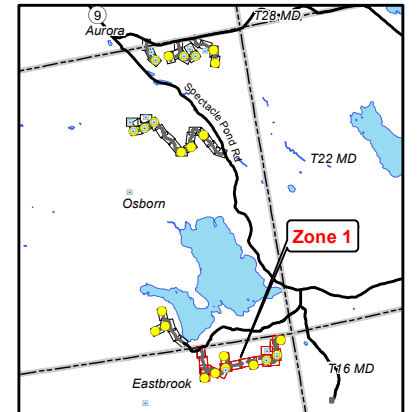


Weaver Wind Project

Class L Soils Survey

Map: Zone 1 Index Map

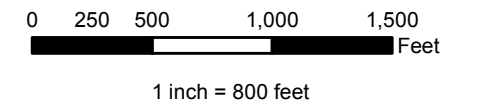
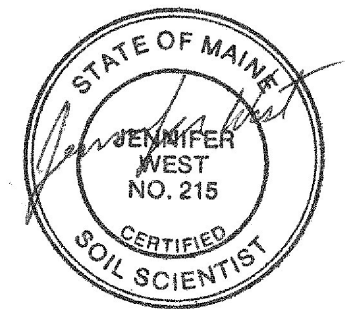
Hancock County, Maine



Site Features

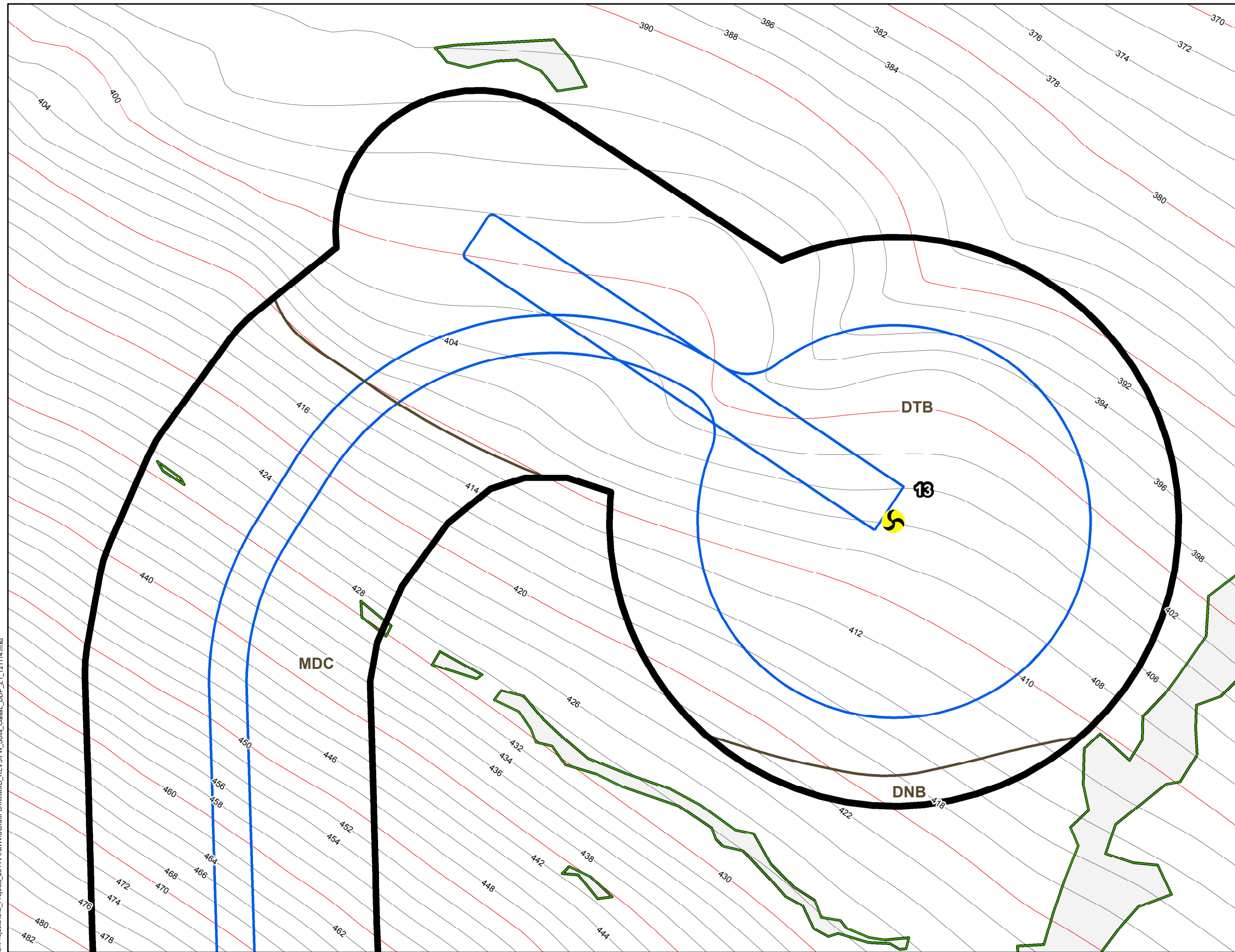
- Proposed Turbines
- Proposed Met Towers
- New Access Roads
- Laydown Areas
- Zone 1 Grids
- Class L Soil Survey Extent

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



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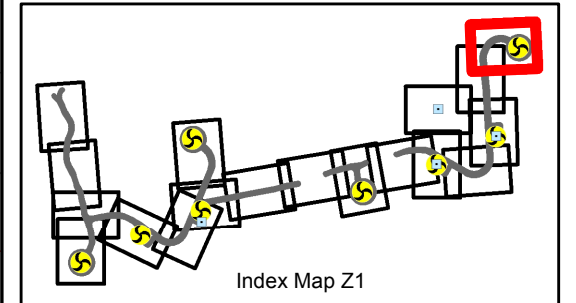


Weaver Wind Project

Class L Soils Survey

Map: Z1-01

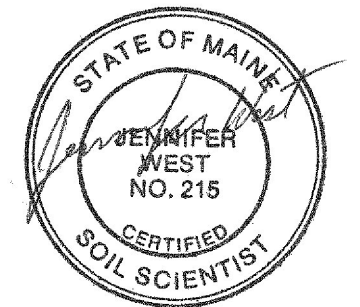
Hancock County, Maine



Site Features

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|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | 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.

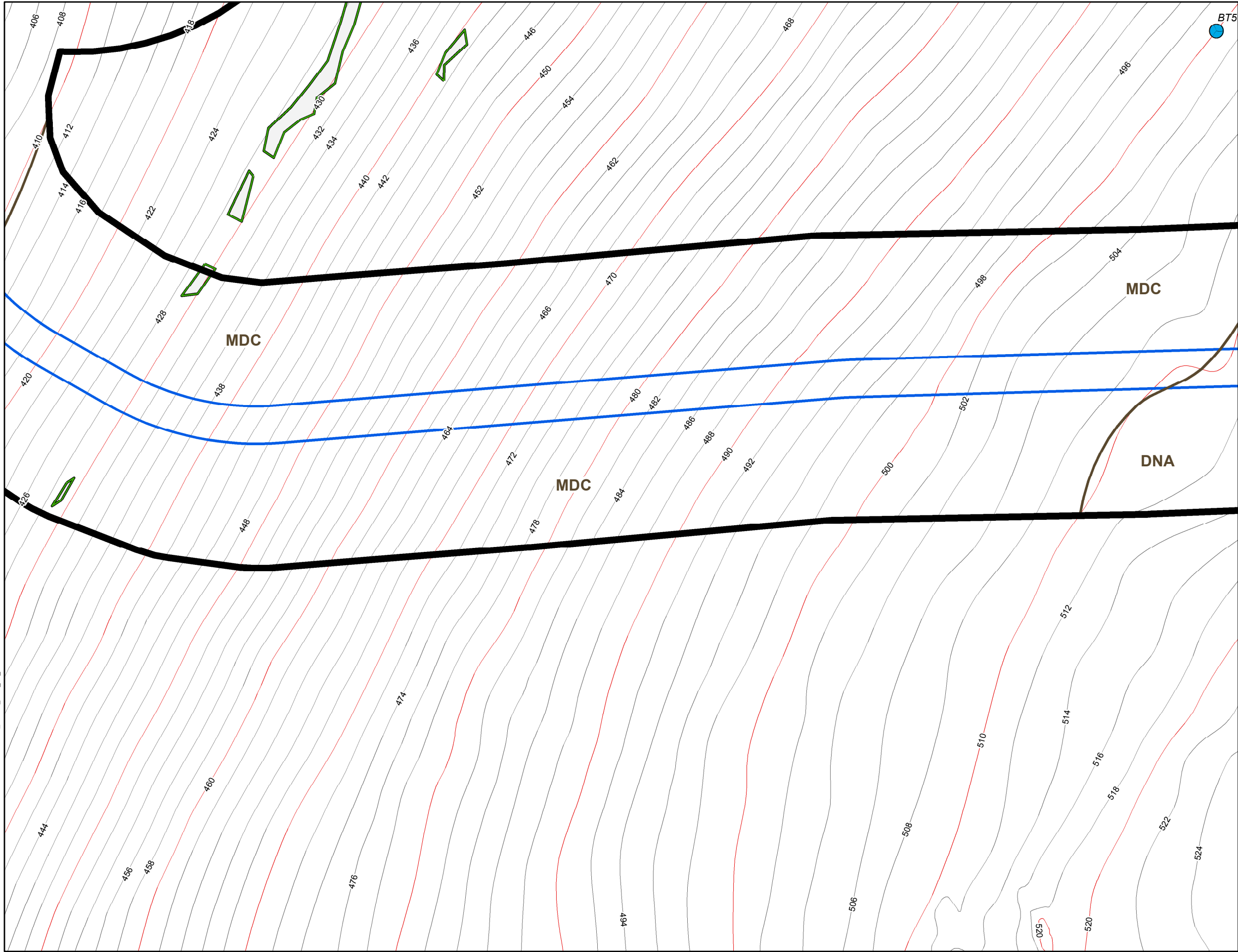


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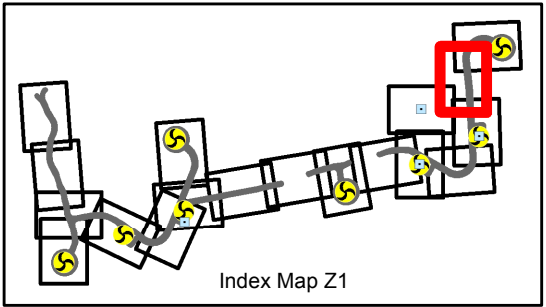


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
Class L Soils Survey

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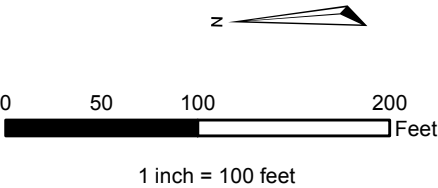
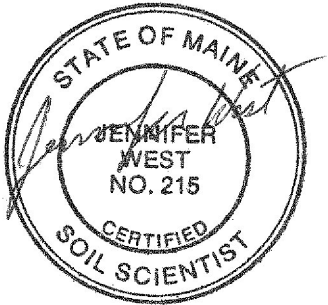
Hancock County, Maine



Site Features

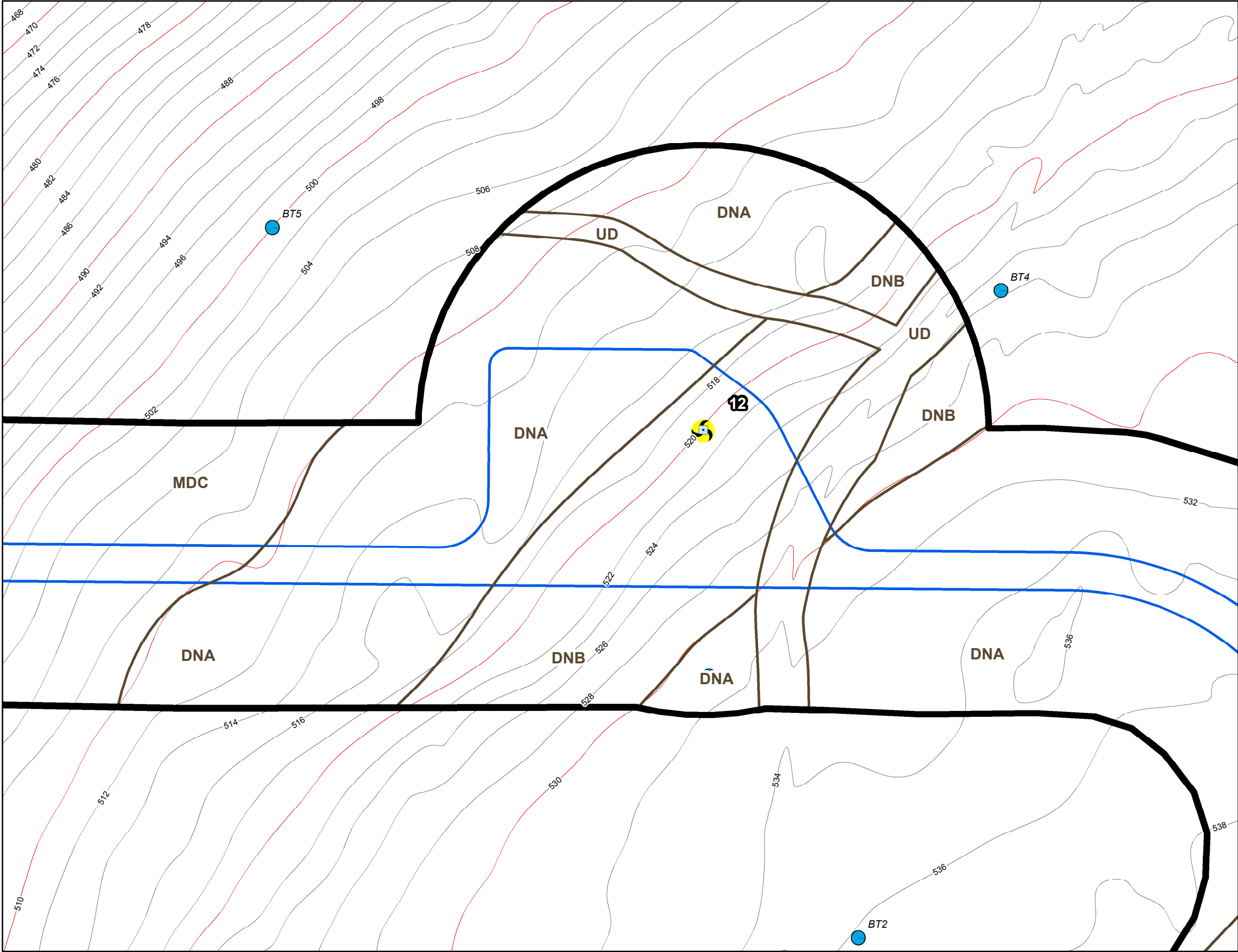
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|  | Proposed Met Towers |  | Laydown Areas |
|  | Borings |  | Class L Soil Survey Extent |
|  | Test Pits | Delineated Wetlands | |
|  | Soil Map Unit Boundaries |  | BGB Map Unit |
| | |  | BPA Map Unit |

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



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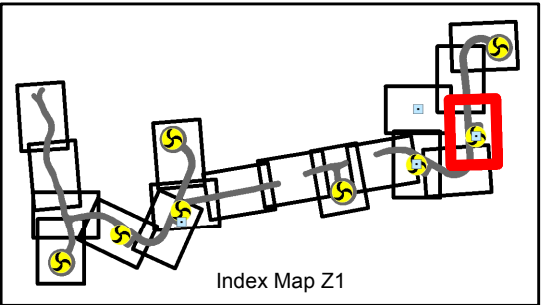


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Class L Soils Survey

Map: Z1-03

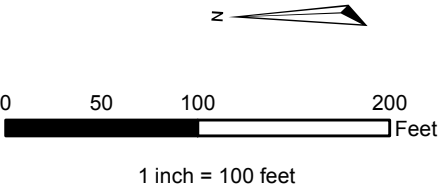
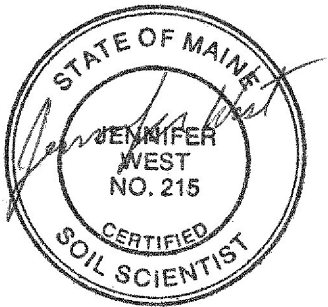
Hancock County, Maine



Site Features

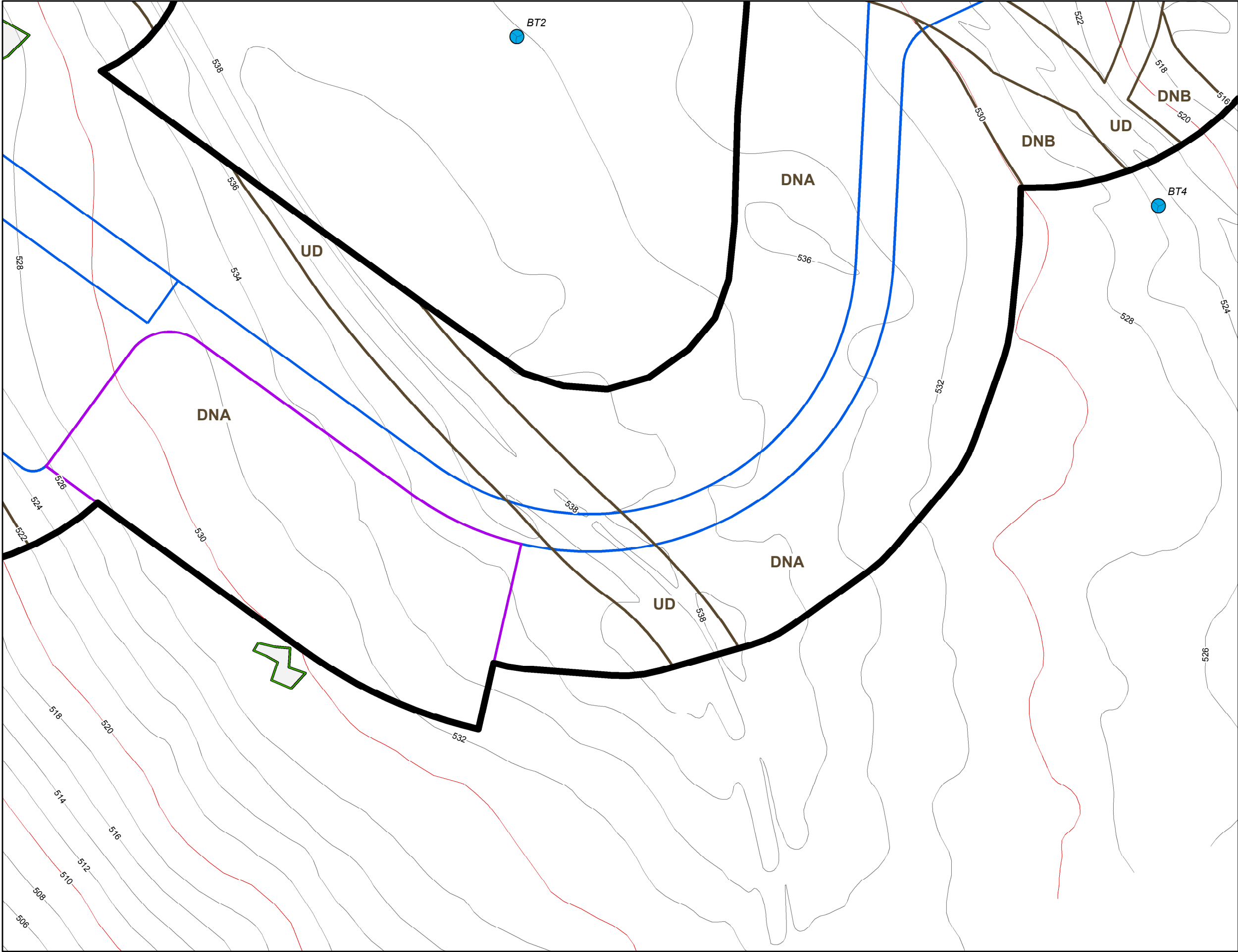
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|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | Delineated Wetlands |
|  Soil Map Unit Boundaries |  BGB Map Unit |
| |  BPA Map Unit |

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



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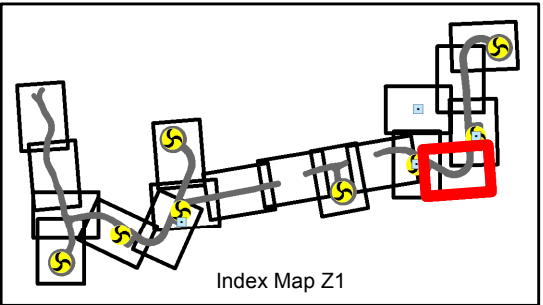


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Class L Soils Survey

Map: Z1-04

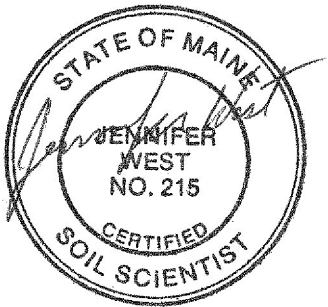
Hancock County, Maine



Site Features

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| | Proposed Turbines | | New Access Roads |
| | Proposed Met Towers | | Laydown Areas |
| | Borings | | Class L Soil Survey Extent |
| | Test Pits | 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.

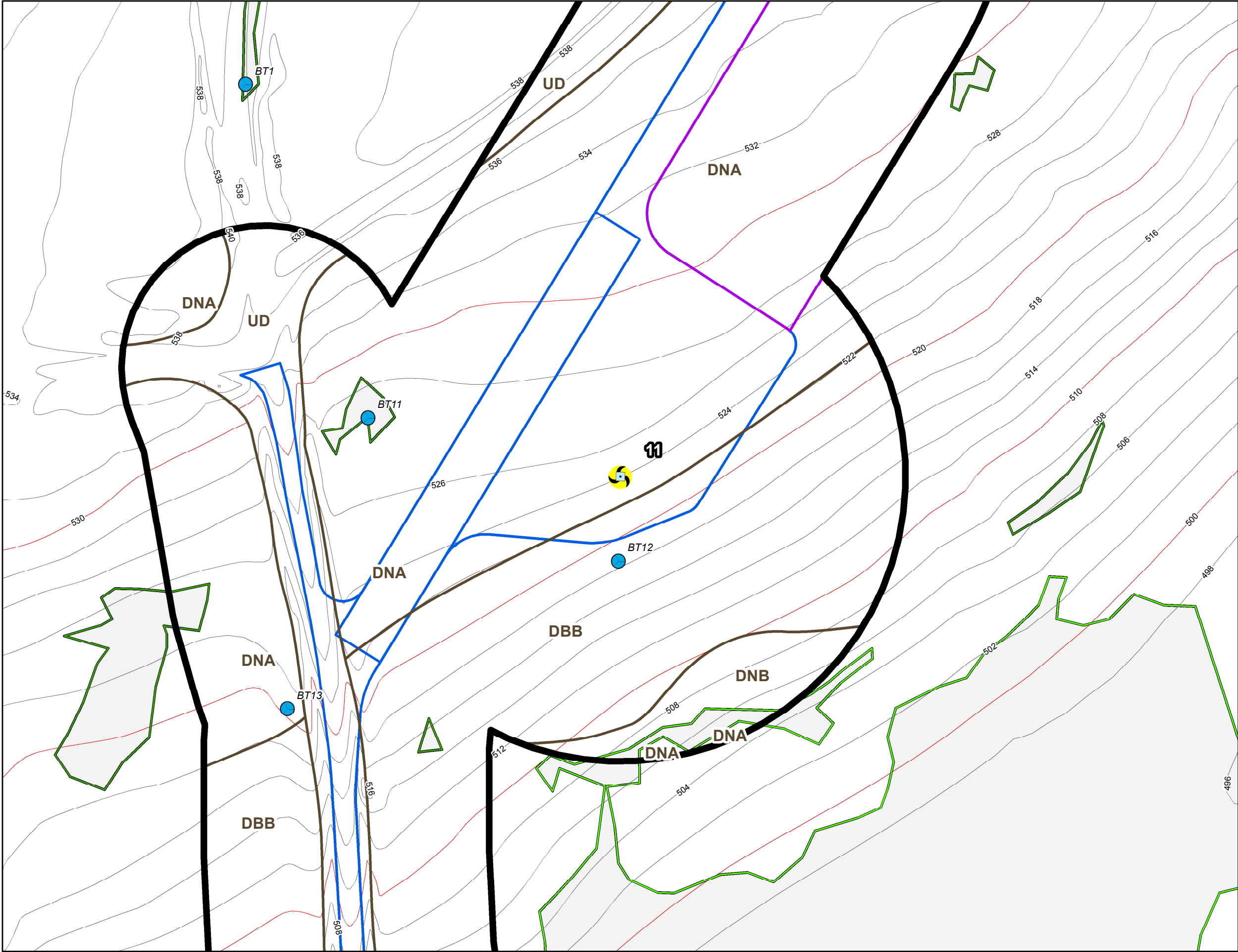


0 50 100 200 Feet
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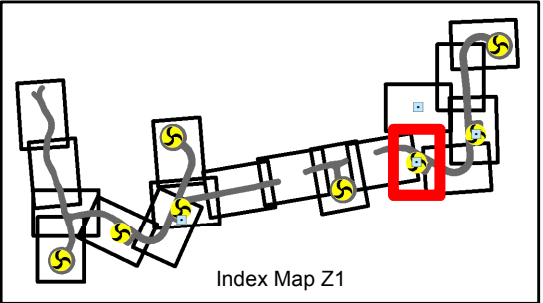


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Class L Soils Survey

Map: Z1-05

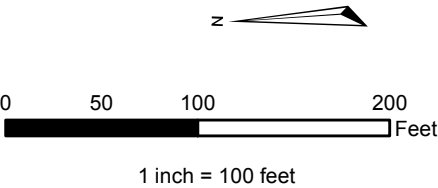
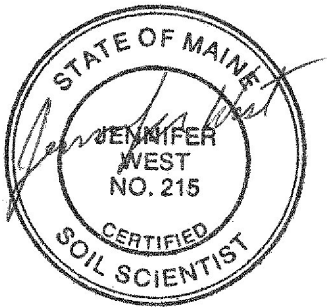
Hancock County, Maine



Site Features

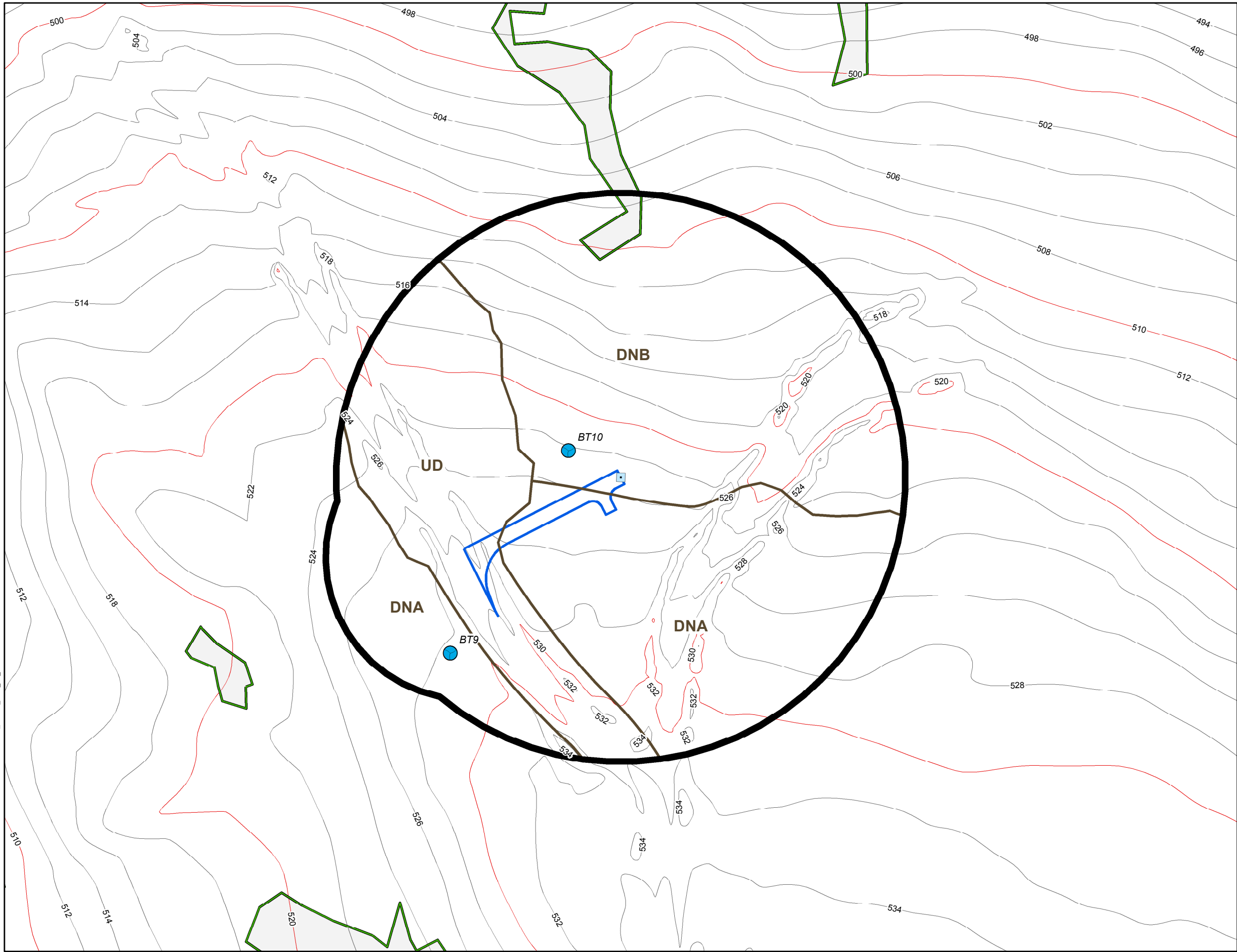
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|  | Proposed Turbines |  | New Access Roads |
|  | Proposed Met Towers |  | Laydown Areas |
|  | Borings |  | Class L Soil Survey Extent |
|  | Test Pits | Delineated Wetlands | |
|  | Soil Map Unit Boundaries |  | BGB Map Unit |
| | |  | BPA Map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

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



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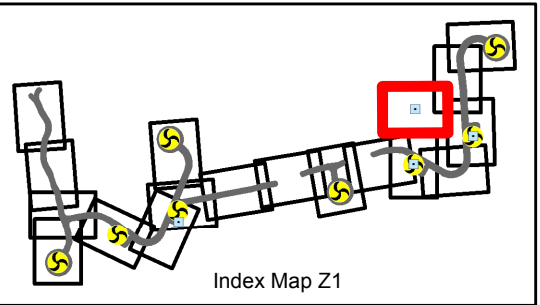


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Class L Soils Survey

Map: Z1-06

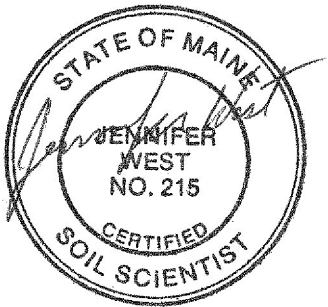
Hancock County, Maine



Site Features

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

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



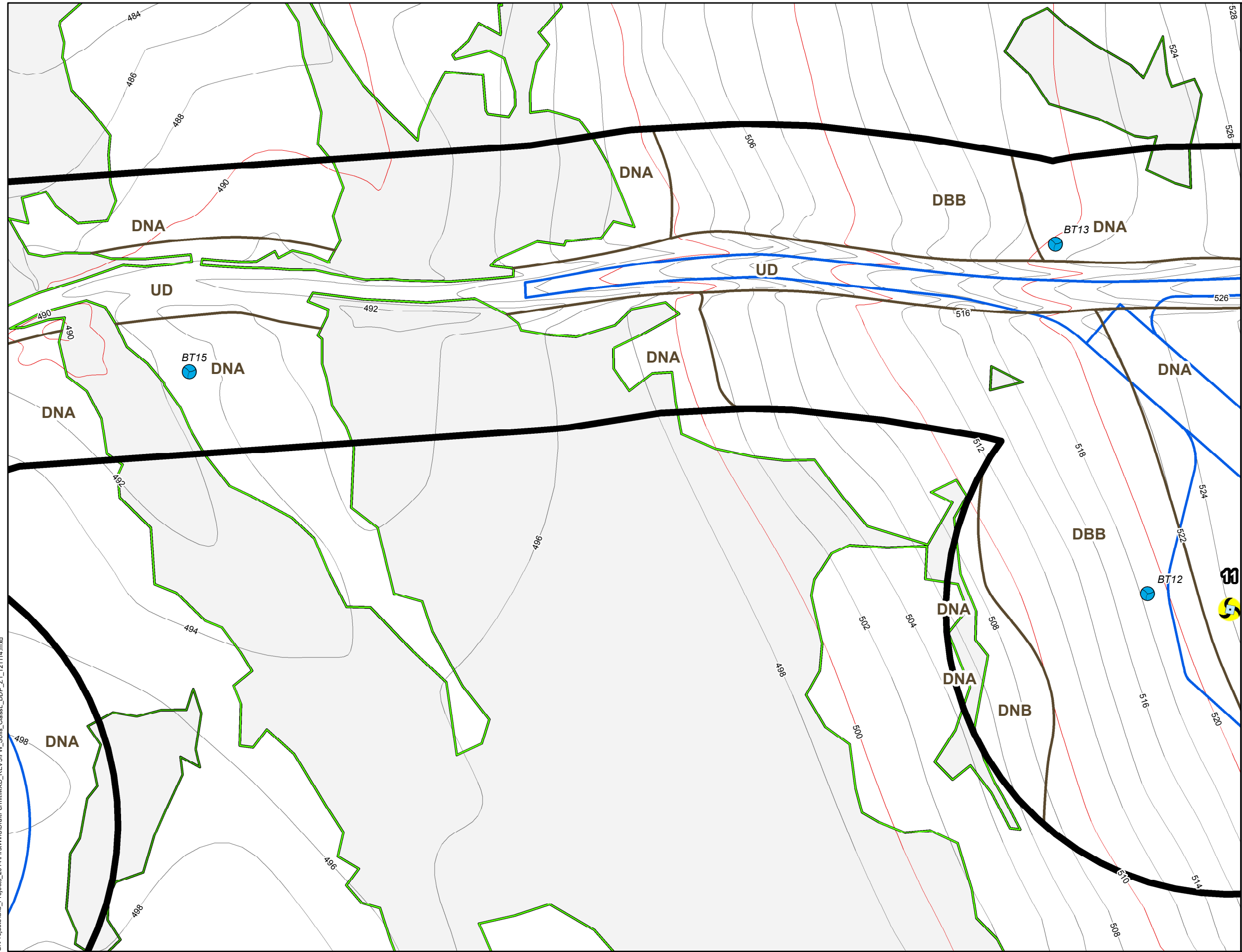
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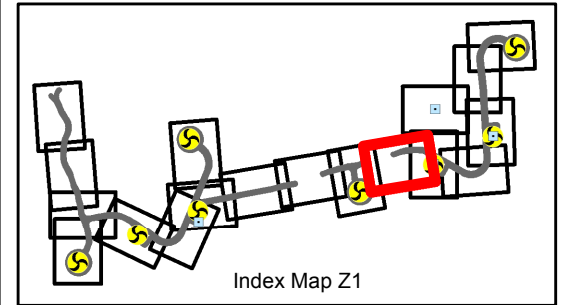


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Class L Soils Survey

Map: Z1-07

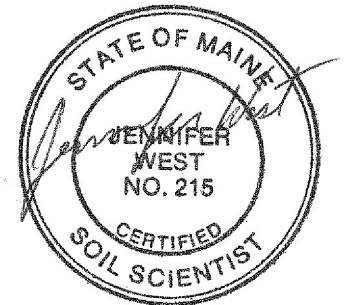
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Site Features

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|  | Proposed Turbines |  | New Access Roads |
|  | Proposed Met Towers |  | Laydown Areas |
|  | Borings |  | Class L Soil Survey Extent |
|  | Test Pits | 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.

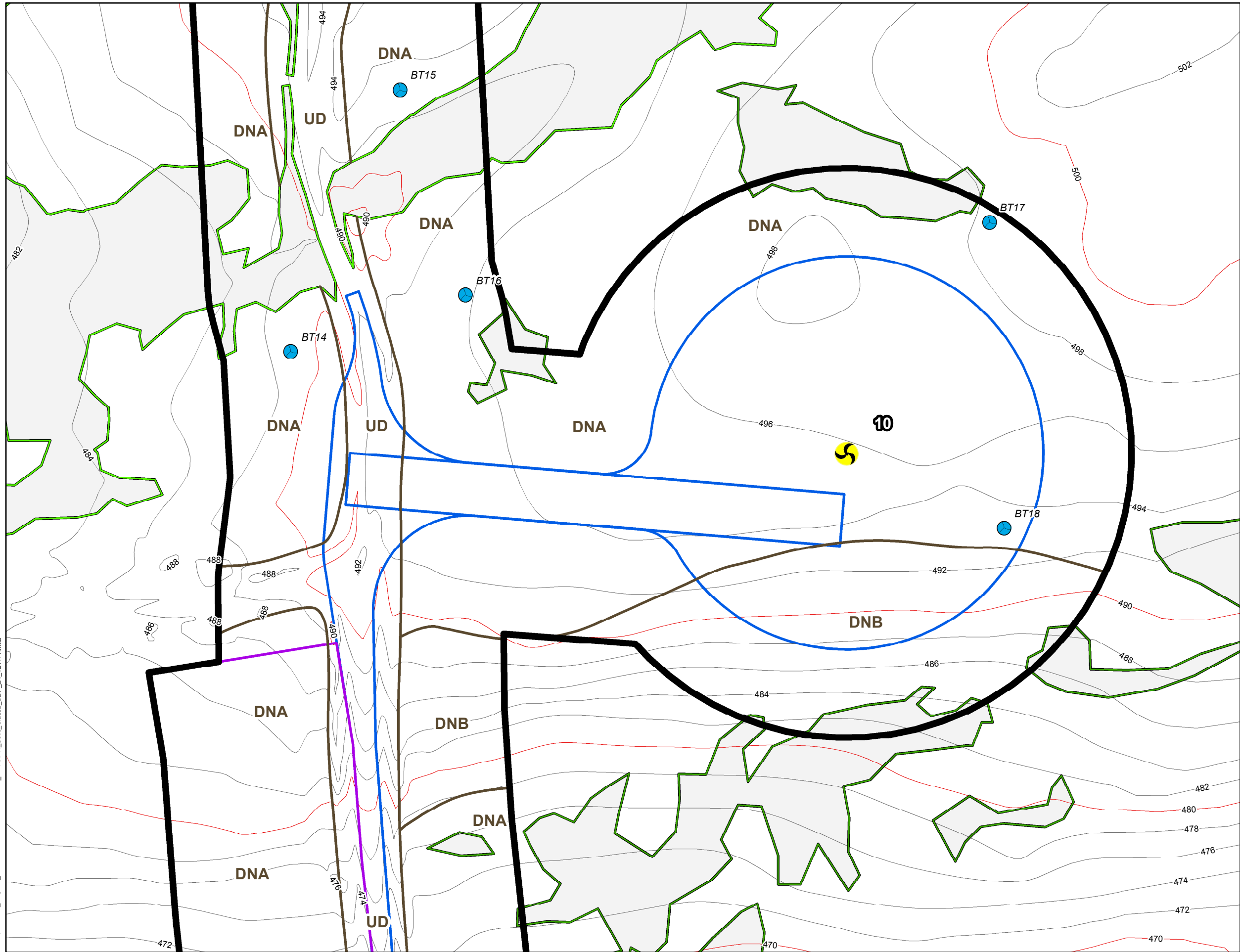


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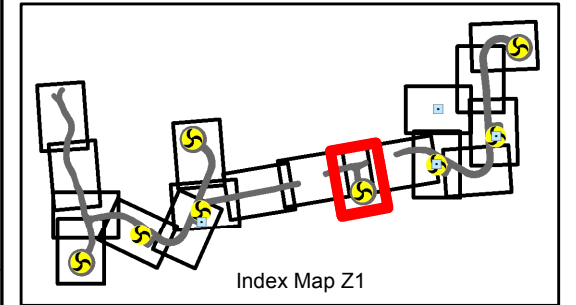


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







Class L Soils Survey

Map: Z1-08

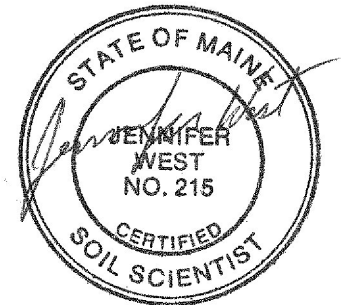
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Site Features

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|  Proposed Turbines |  New Access Roads |
|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | 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.

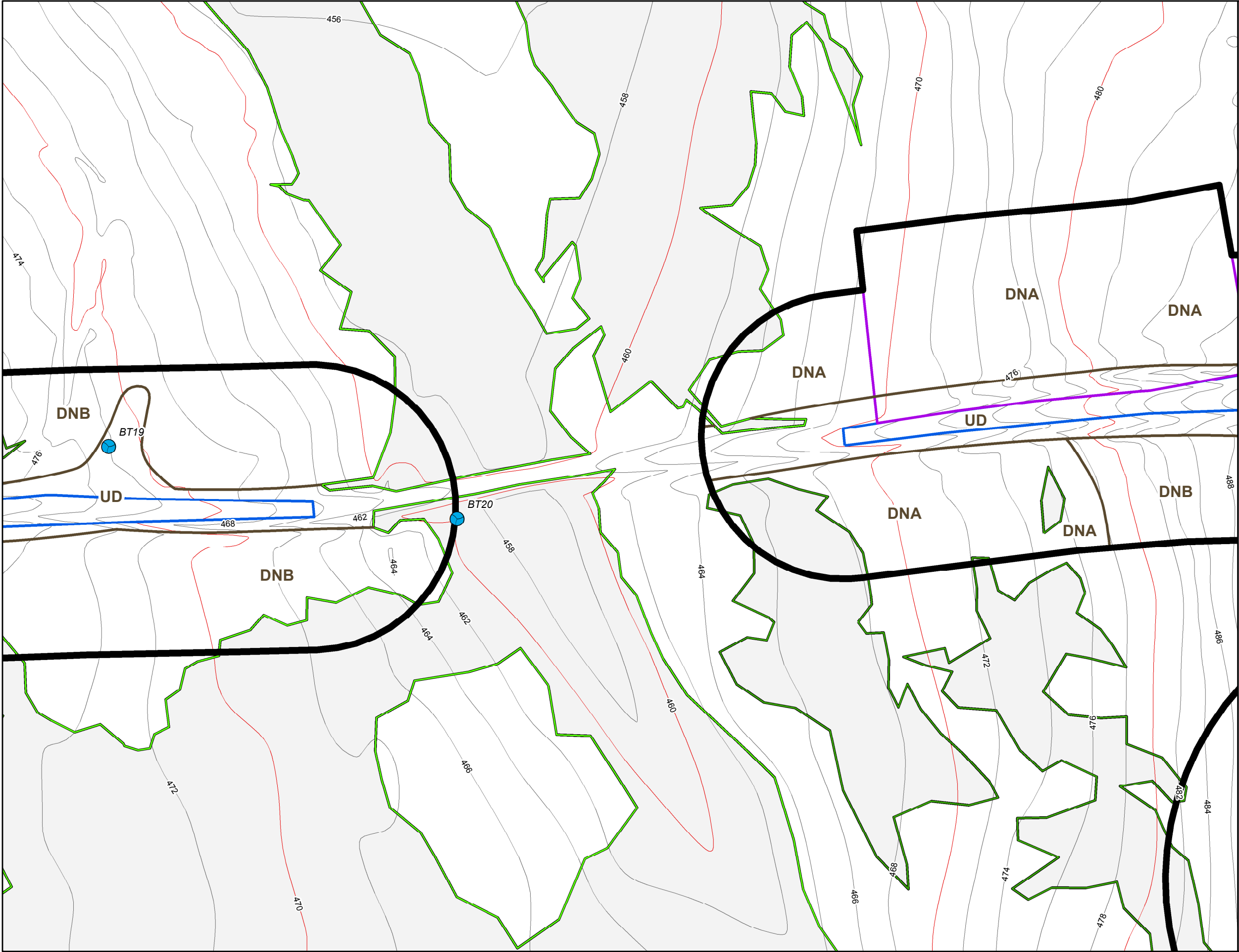


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Class L Soils Survey

Map: Z1-09

Hancock County, Maine

Index Map Z1

Site Features

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

*Notes: A narrative and legend accompanies this map
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SOIL SCIENTIST

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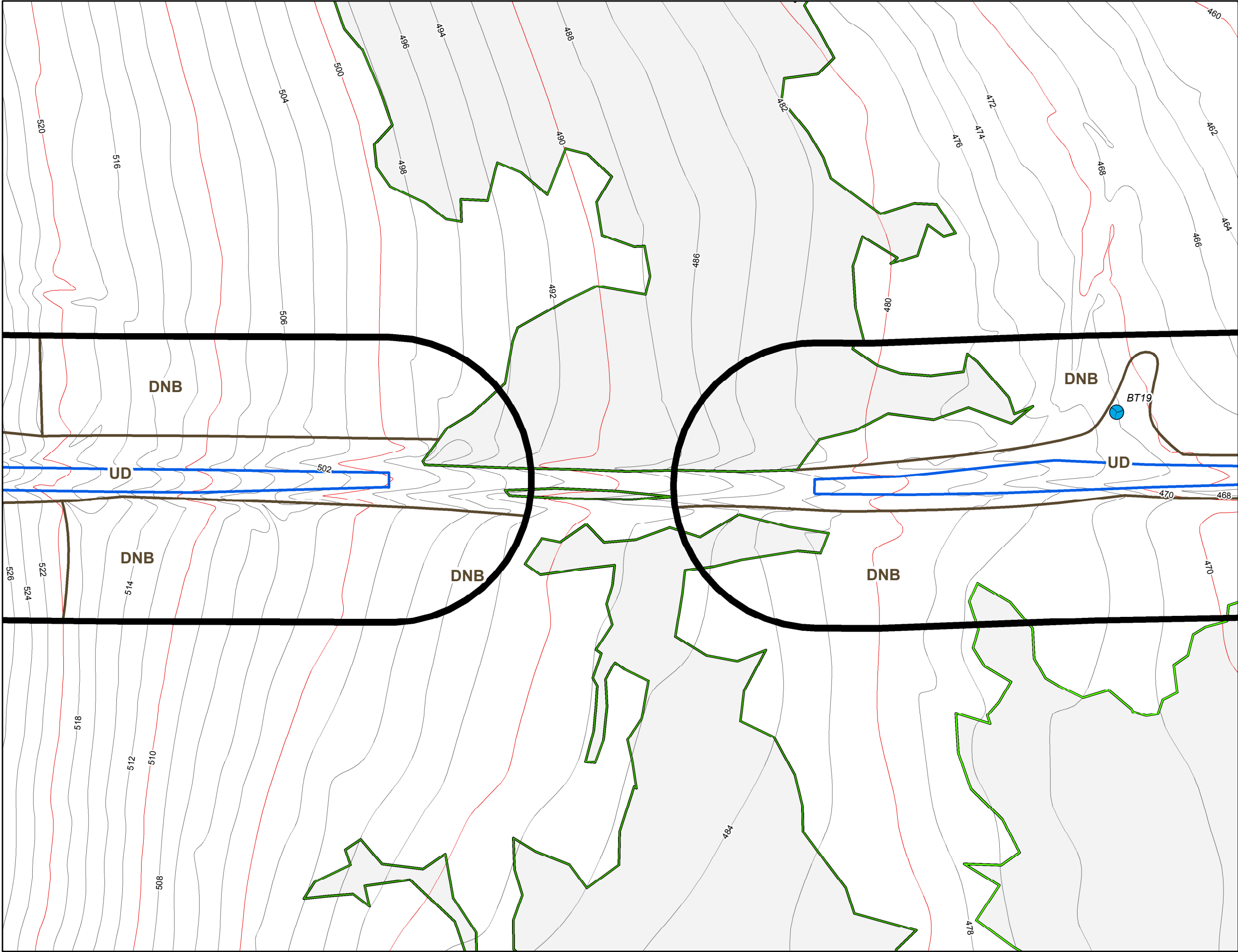
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environmental consultants

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Class L Soils Survey

Map: Z1-10

Hancock County, Maine

Index Map Z1

Site Features

Proposed Turbines	New Access Roads
Proposed Met Towers	Laydown Areas
Borings	Class L Soil Survey Extent
Test Pits	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.

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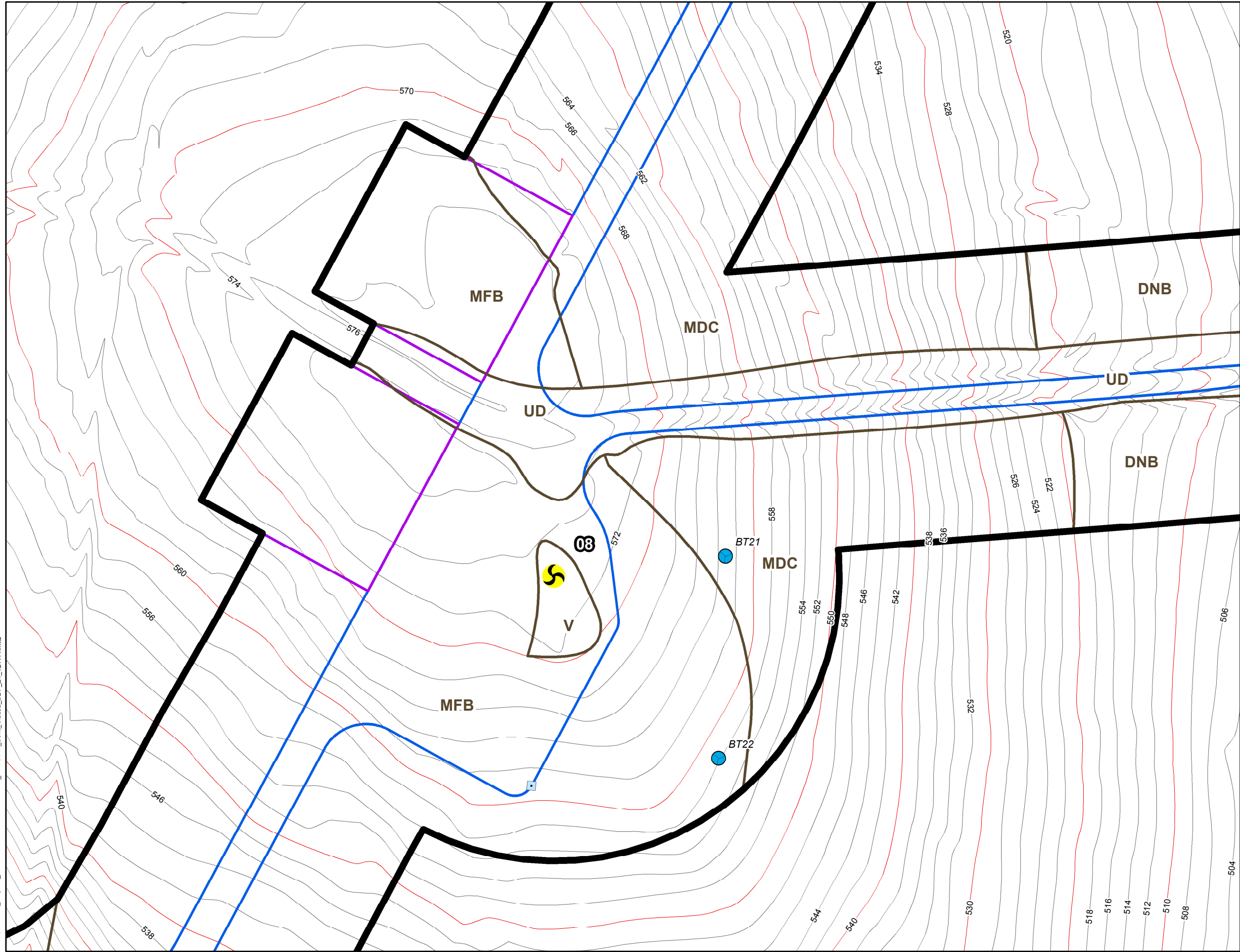
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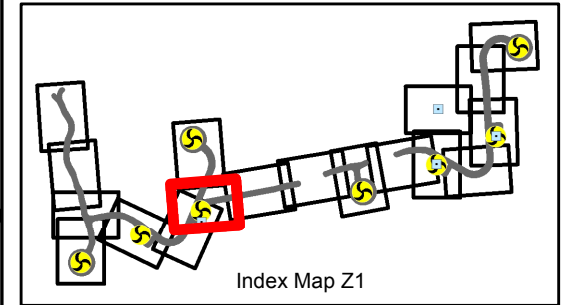


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Class L Soils Survey

Map: Z1-11

Hancock County, Maine

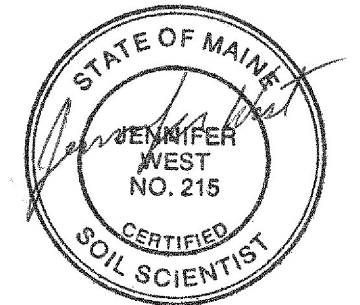


Index Map Z1

Site Features

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|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | 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.

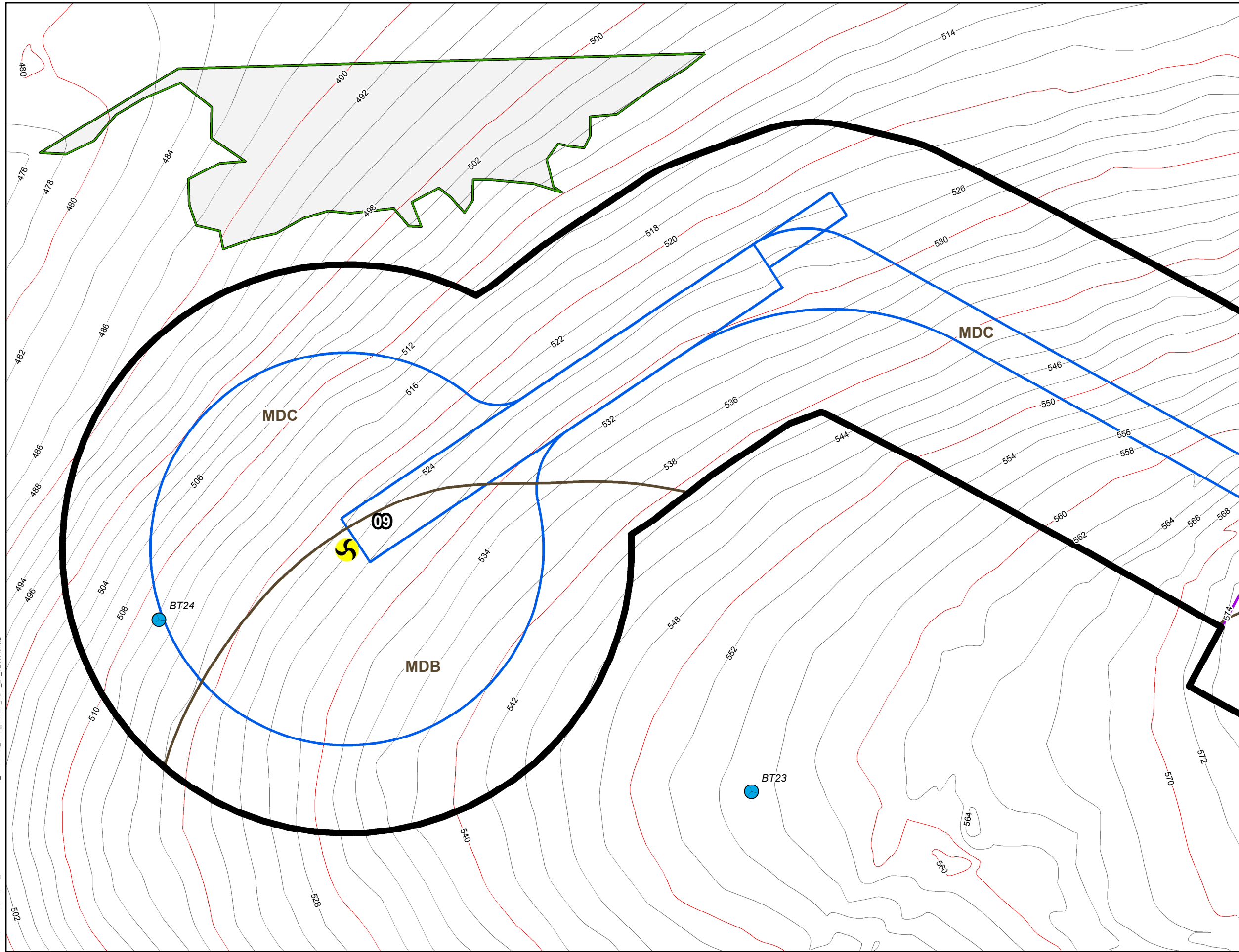


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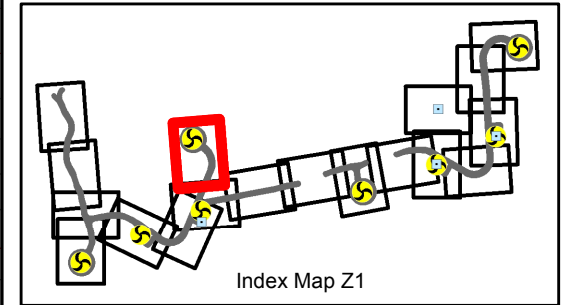


Weaver Wind Project











Class L Soils Survey

Map: Z1-12

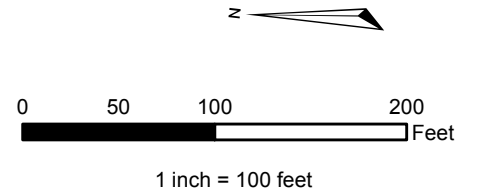
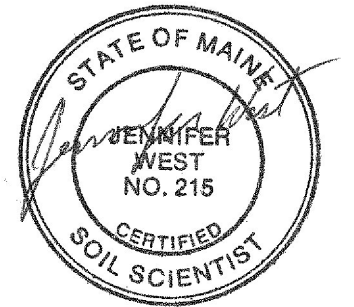
Hancock County, Maine



Site Features

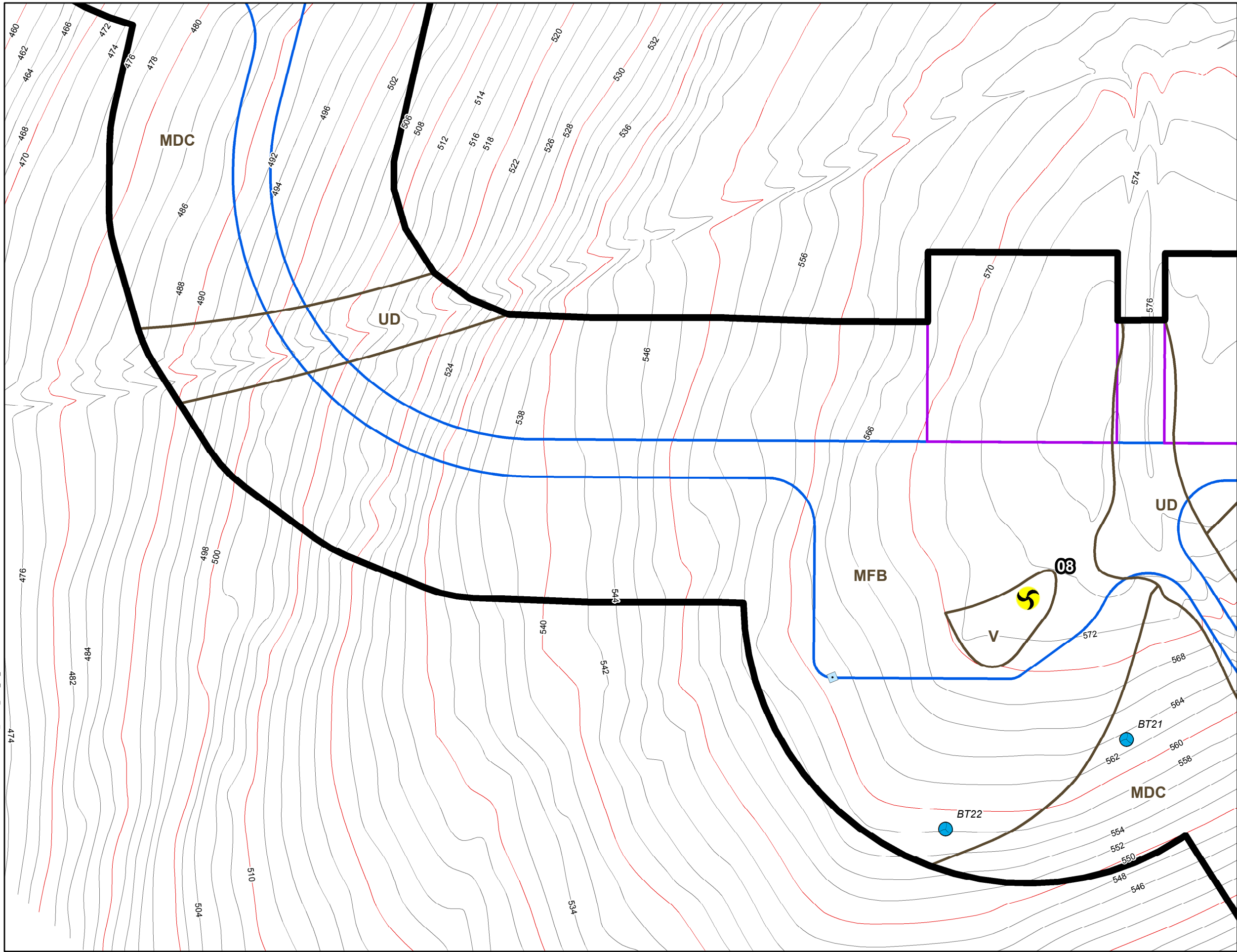
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|  Proposed Turbines |  New Access Roads |
|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | Delineated Wetlands |
|  Soil Map Unit Boundaries |  BGB Map Unit |
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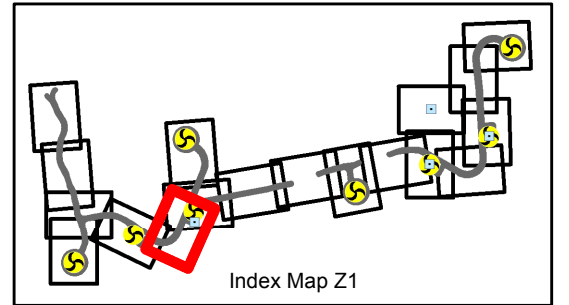


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Class L Soils Survey

Map: Z1-13

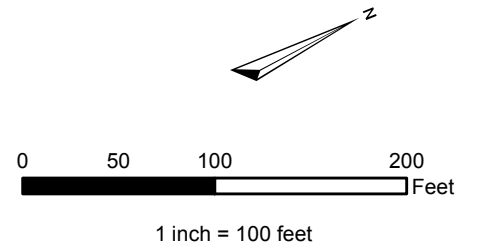
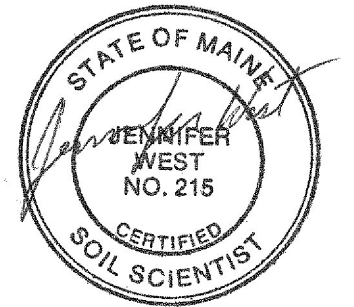
Hancock County, Maine



Site Features

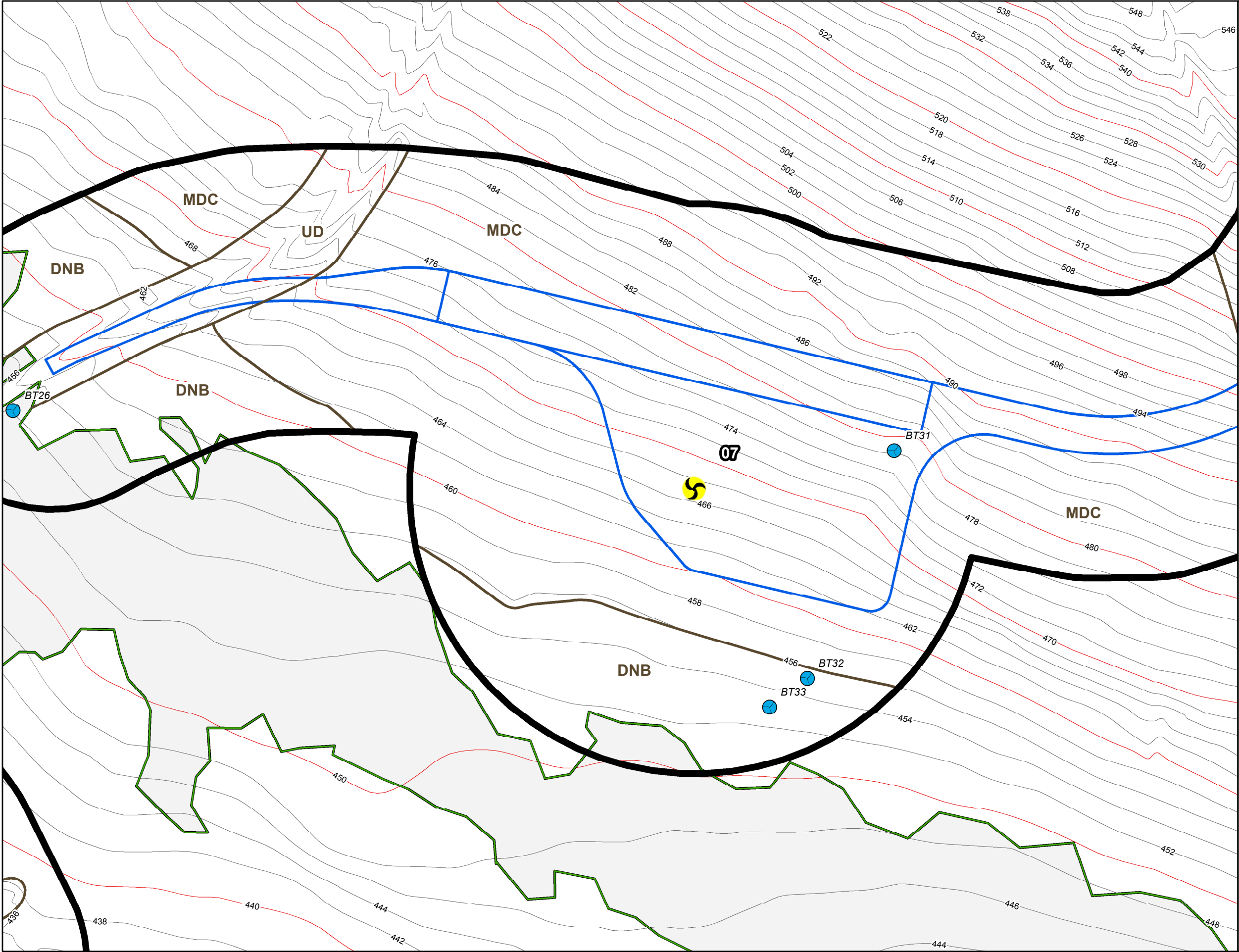
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|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | Delineated Wetlands |
| Soil Map Unit Boundaries | BGB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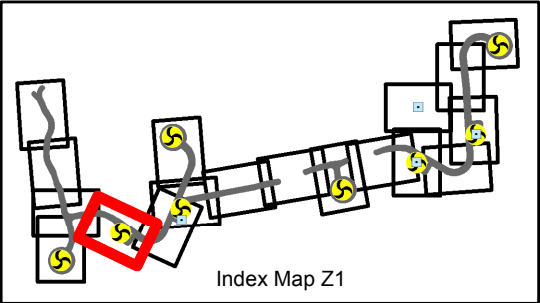


Weaver Wind Project

Class L Soils Survey

Map: Z1-14

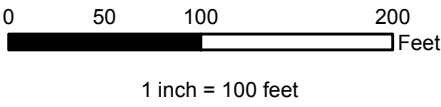
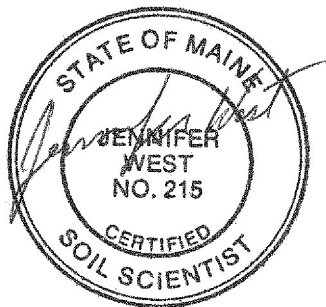
Hancock County, Maine



Site Features

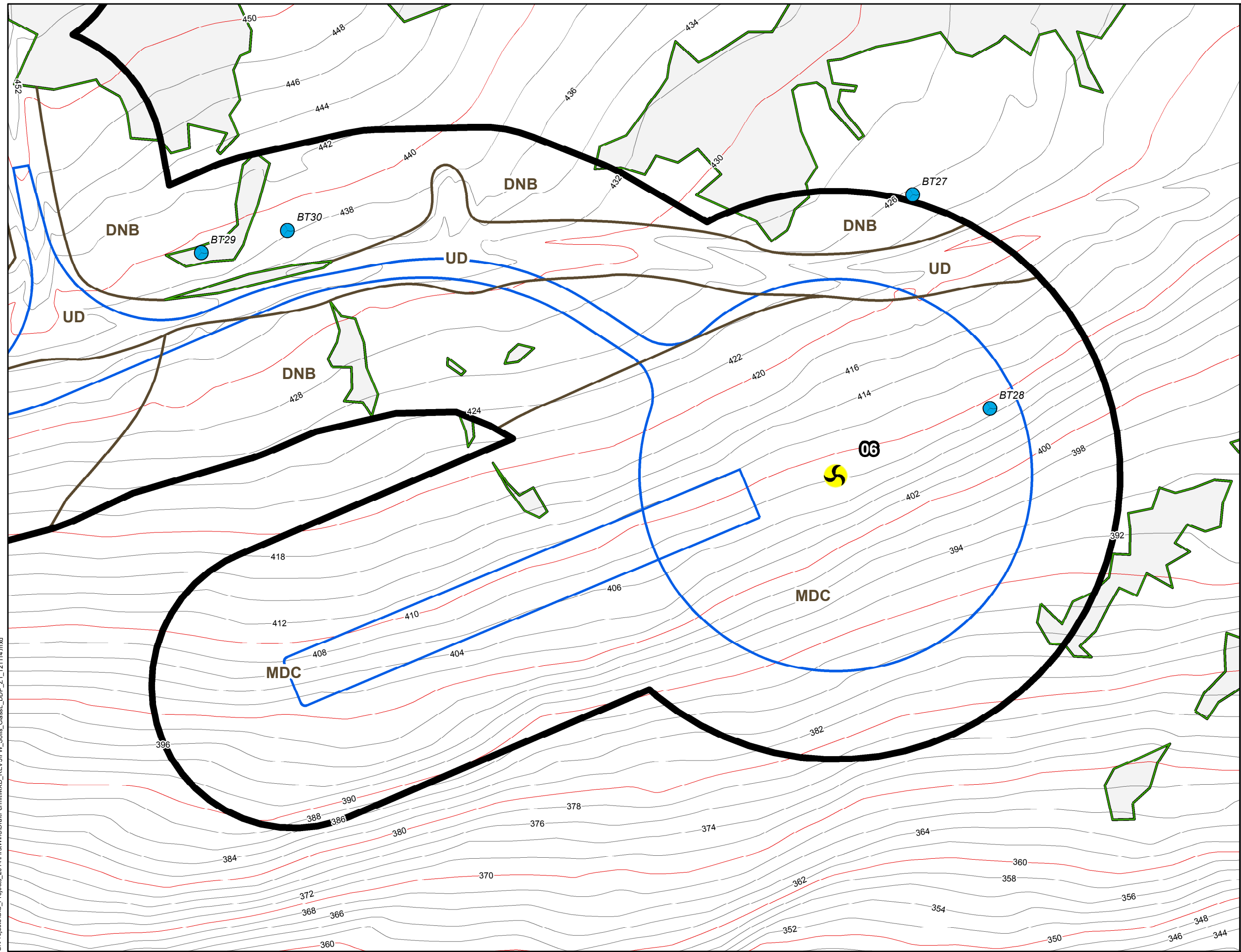
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|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | Delineated Wetlands |
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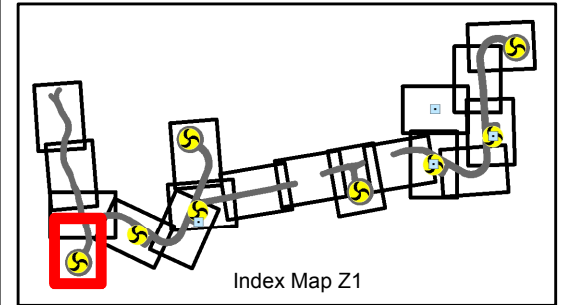


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Class L Soils Survey











Map: Z1-15

Hancock County, Maine

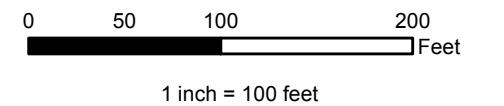
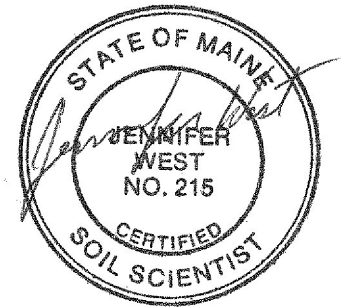


Index Map Z1

Site Features

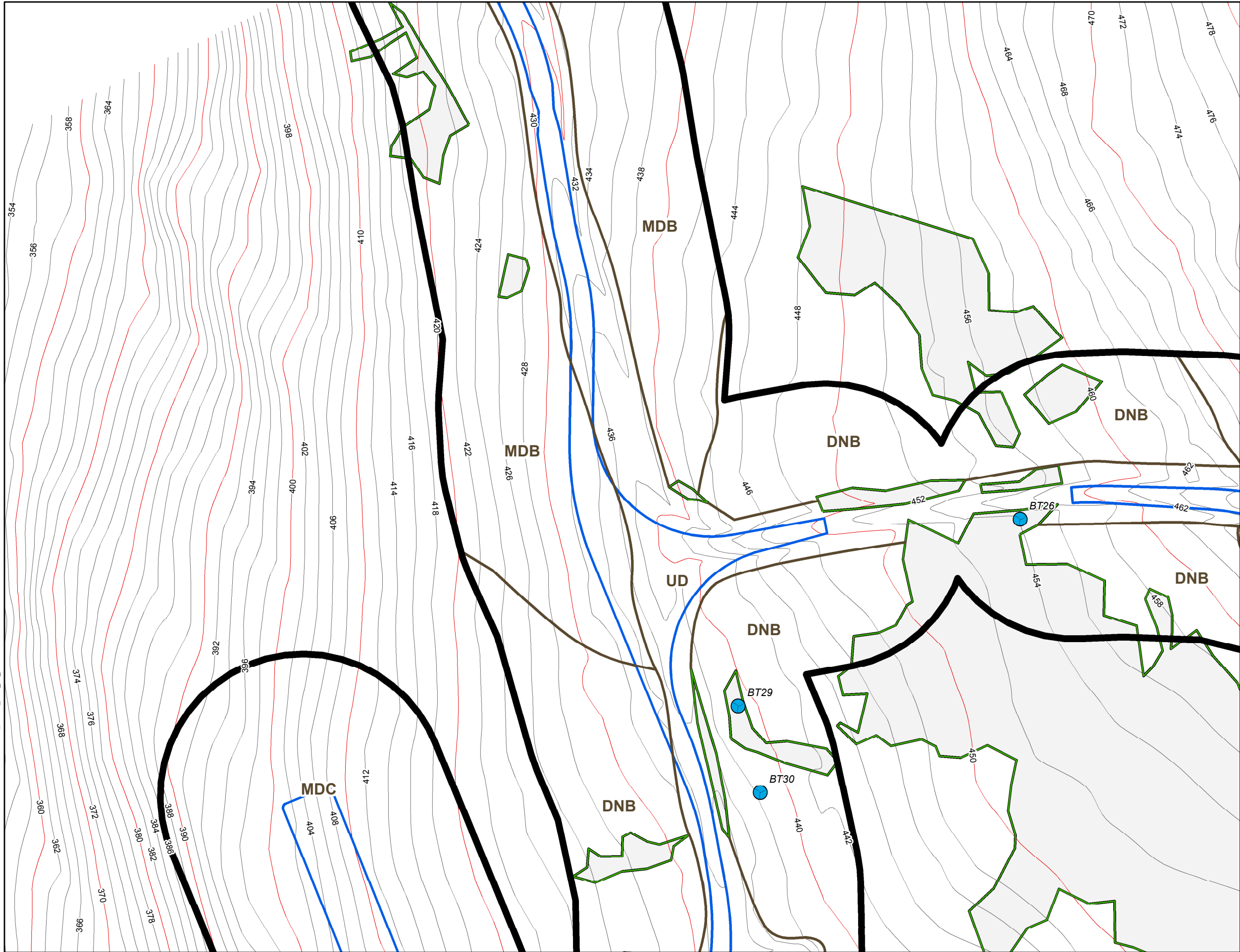
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|---|--|
|  Proposed Turbines |  New Access Roads |
|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | Delineated Wetlands |
|  Soil Map Unit Boundaries |  BGB Map Unit |
| |  BPA Map Unit |

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



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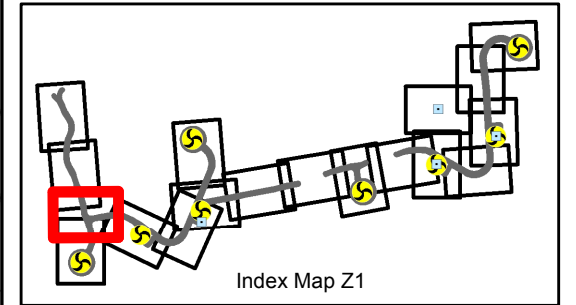


Weaver Wind Project

Class L Soils Survey

Map: Z1-16

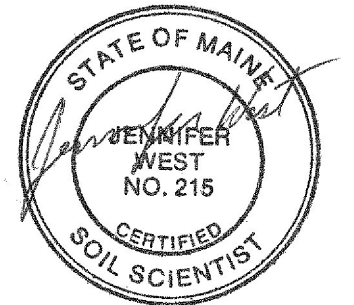
Hancock County, Maine



Site Features

- | | |
|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | 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.

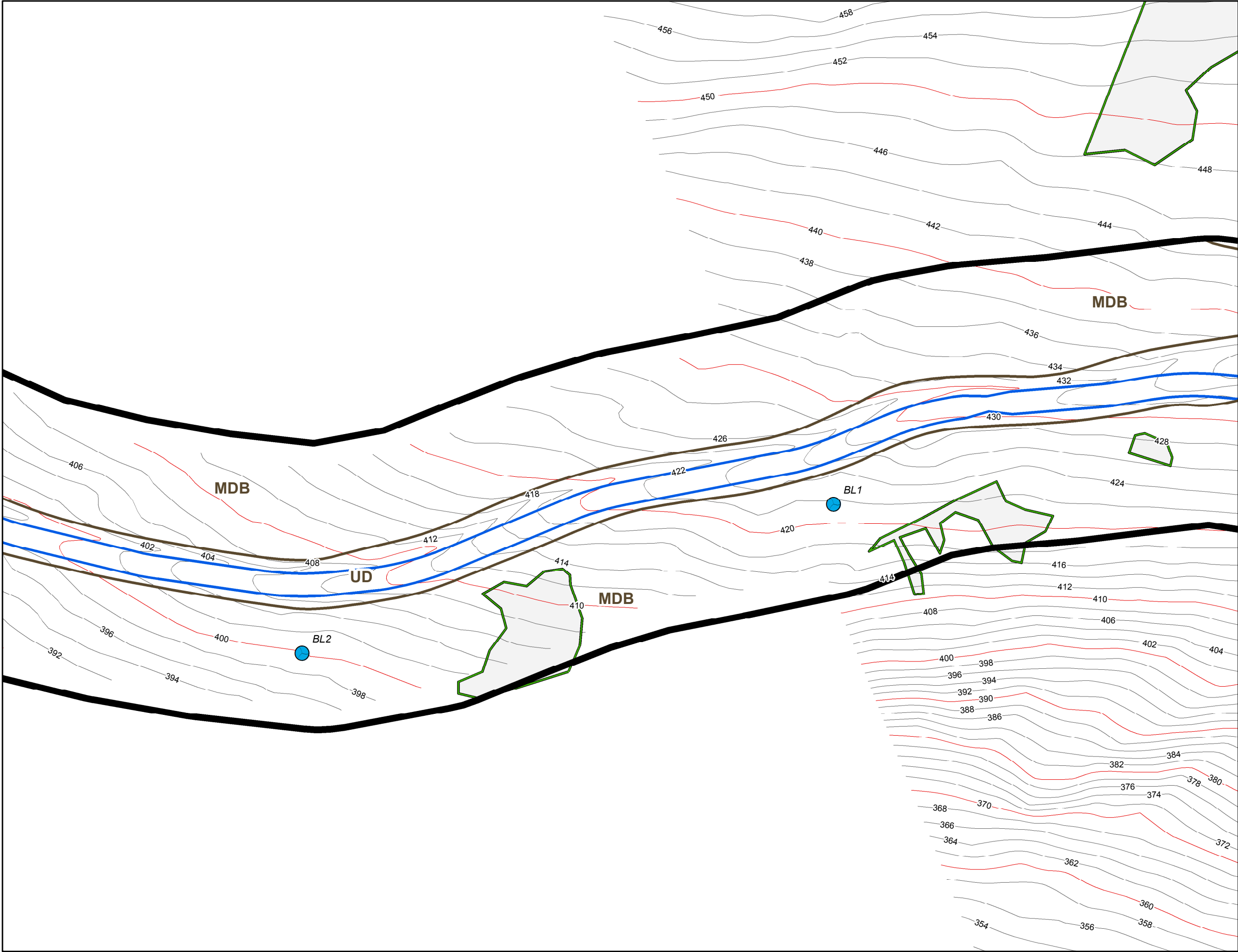


0 50 100 200 Feet
1 inch = 100 feet



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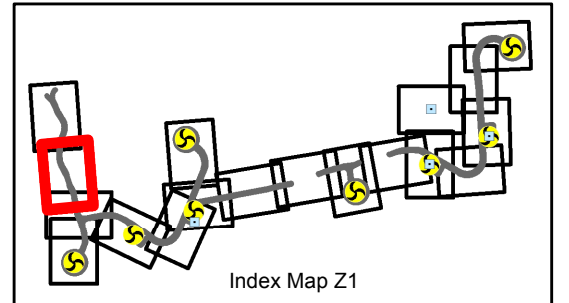


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Class L Soils Survey

Map: Z1-17

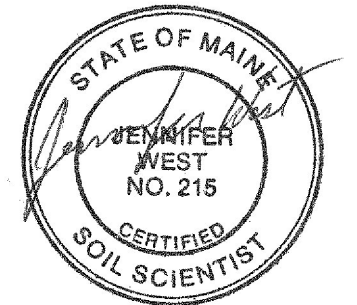
Hancock County, Maine



Site Features

- | | | | |
|---|--------------------------|---|----------------------------|
|  | Proposed Turbines |  | New Access Roads |
|  | Proposed Met Towers |  | Laydown Areas |
|  | Borings |  | Class L Soil Survey Extent |
|  | Test Pits |  | 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.



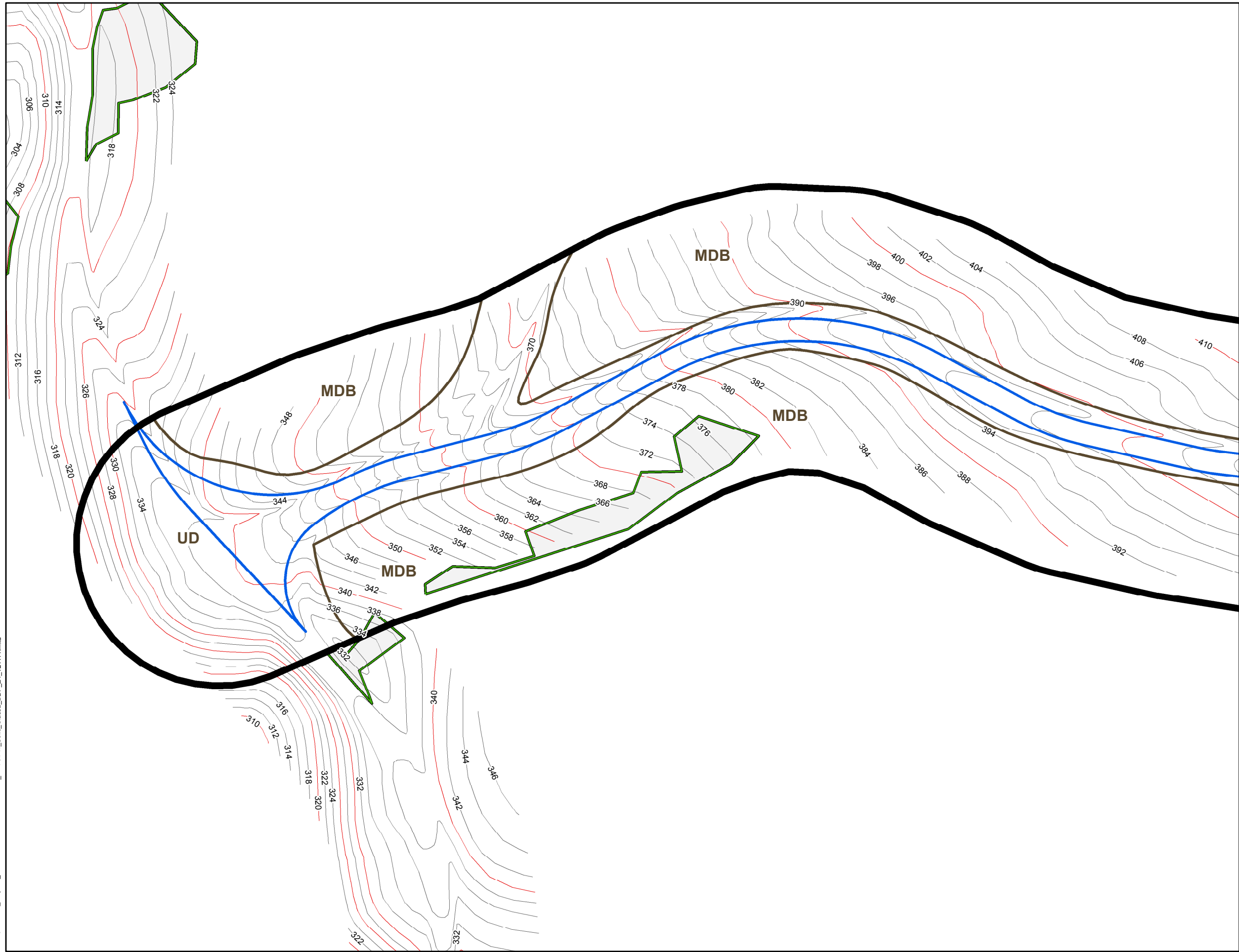
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1 inch = 100 feet



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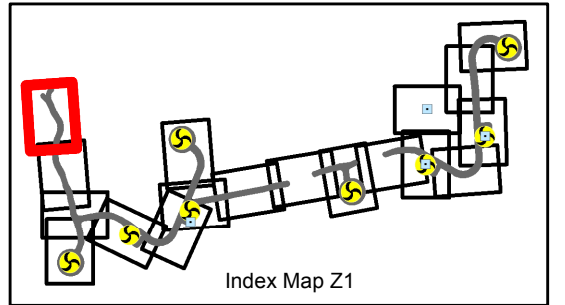


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Class L Soils Survey

Map: Z1-18

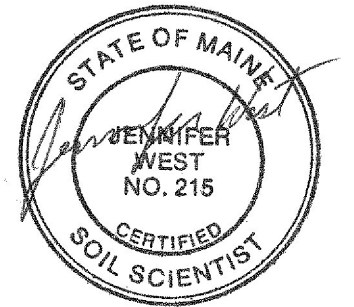
Hancock County, Maine



Site Features

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|---|--------------------------|---|----------------------------|
|  | Proposed Turbines |  | New Access Roads |
|  | Proposed Met Towers |  | Laydown Areas |
|  | Borings |  | Class L Soil Survey Extent |
|  | Test Pits |  | 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
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0 50 100 200 Feet

1 inch = 100 feet



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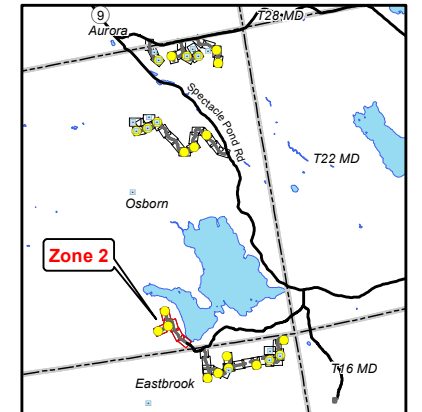


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Class L Soils Survey

Map: Zone 2 Index Map

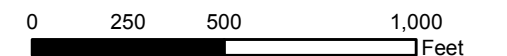
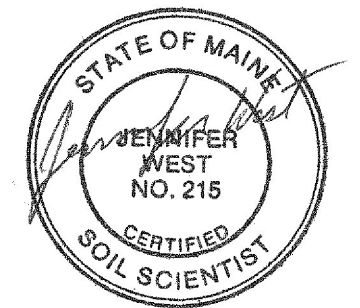
Hancock County, Maine



Site Features

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|---|---------------------|---|----------------------------|
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|  | Proposed Met Towers |  | Zone 2 Grids |
|  | New Access Roads |  | Class L Soil Survey Extent |

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

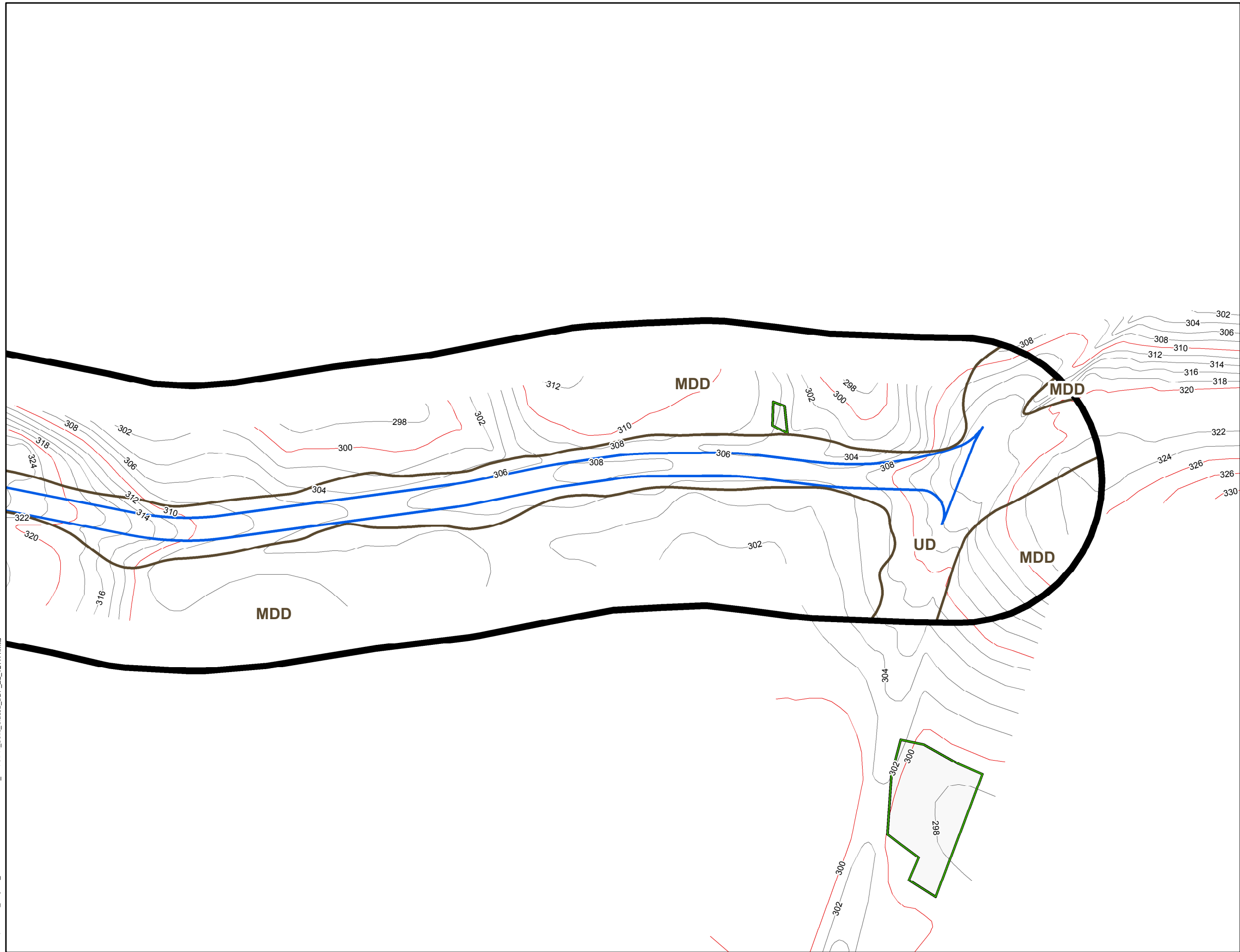


1 inch = 500 feet



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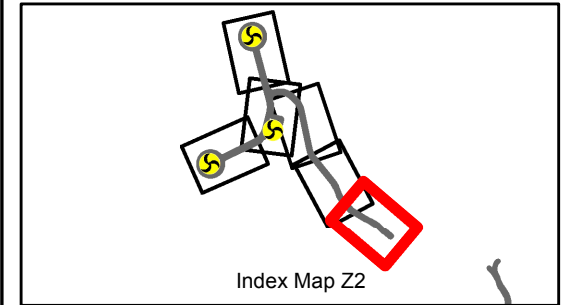


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Class L Soils Survey

Map: Z2-01

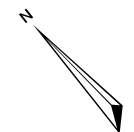
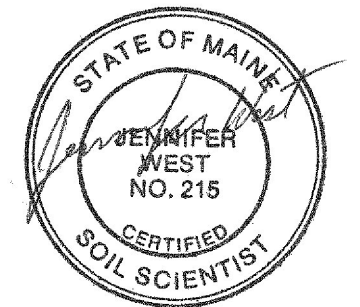
Hancock County, Maine



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.

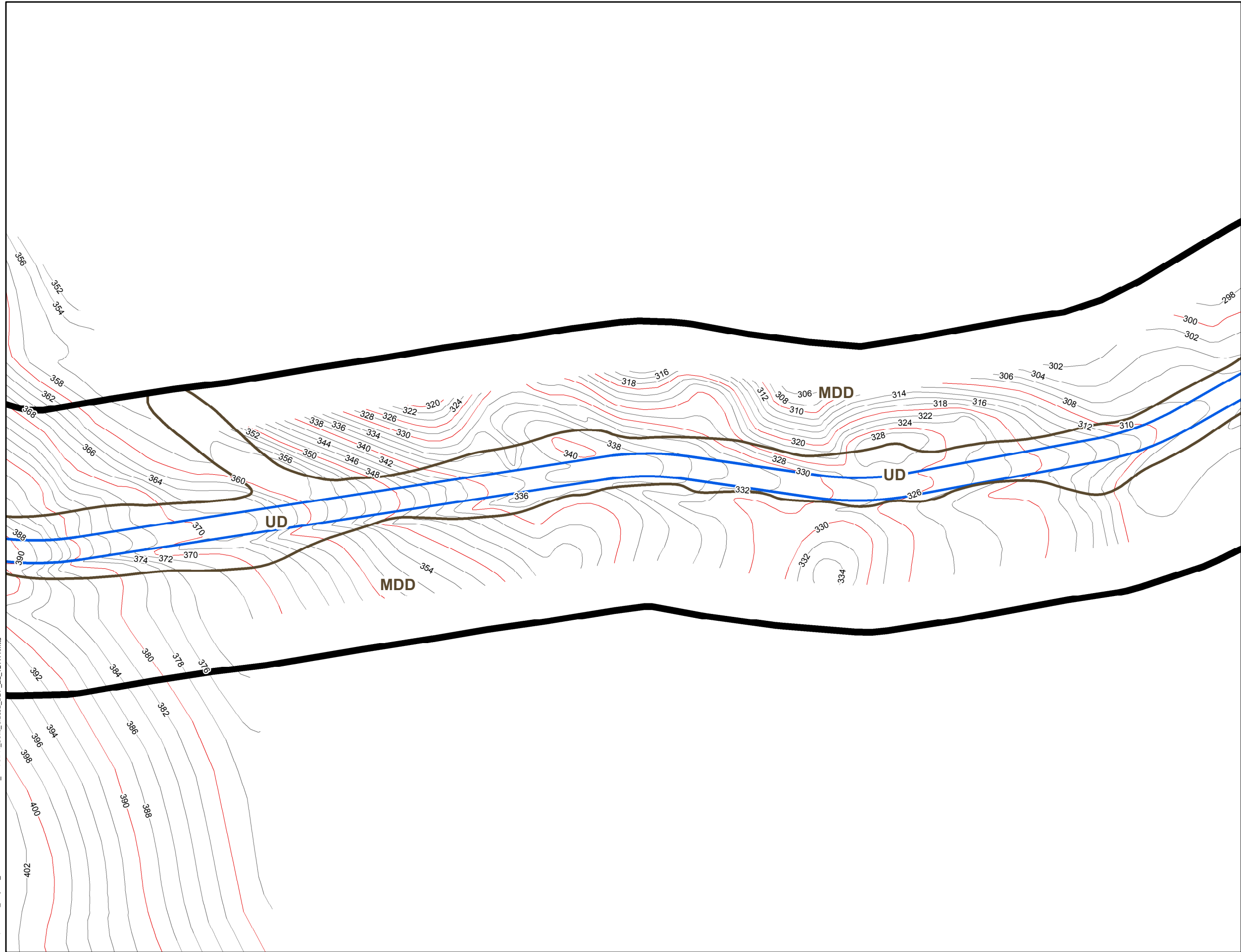


0 50 100 200 Feet
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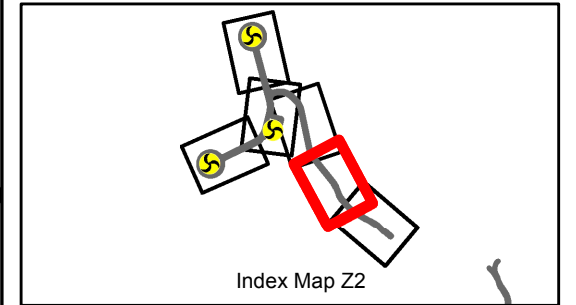


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Class L Soils Survey

Map: Z2-02

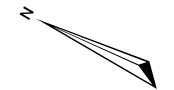
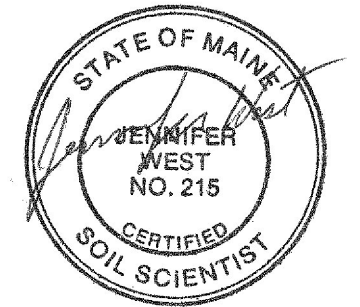
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Site Features

- | | | | |
|--|--------------------------|----------------------------|----------------------------|
| | Proposed Turbines | | New Access Roads |
| | Proposed Met Towers | | Laydown Areas |
| | Borings | | Class L Soil Survey Extent |
| | Test Pits | 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.

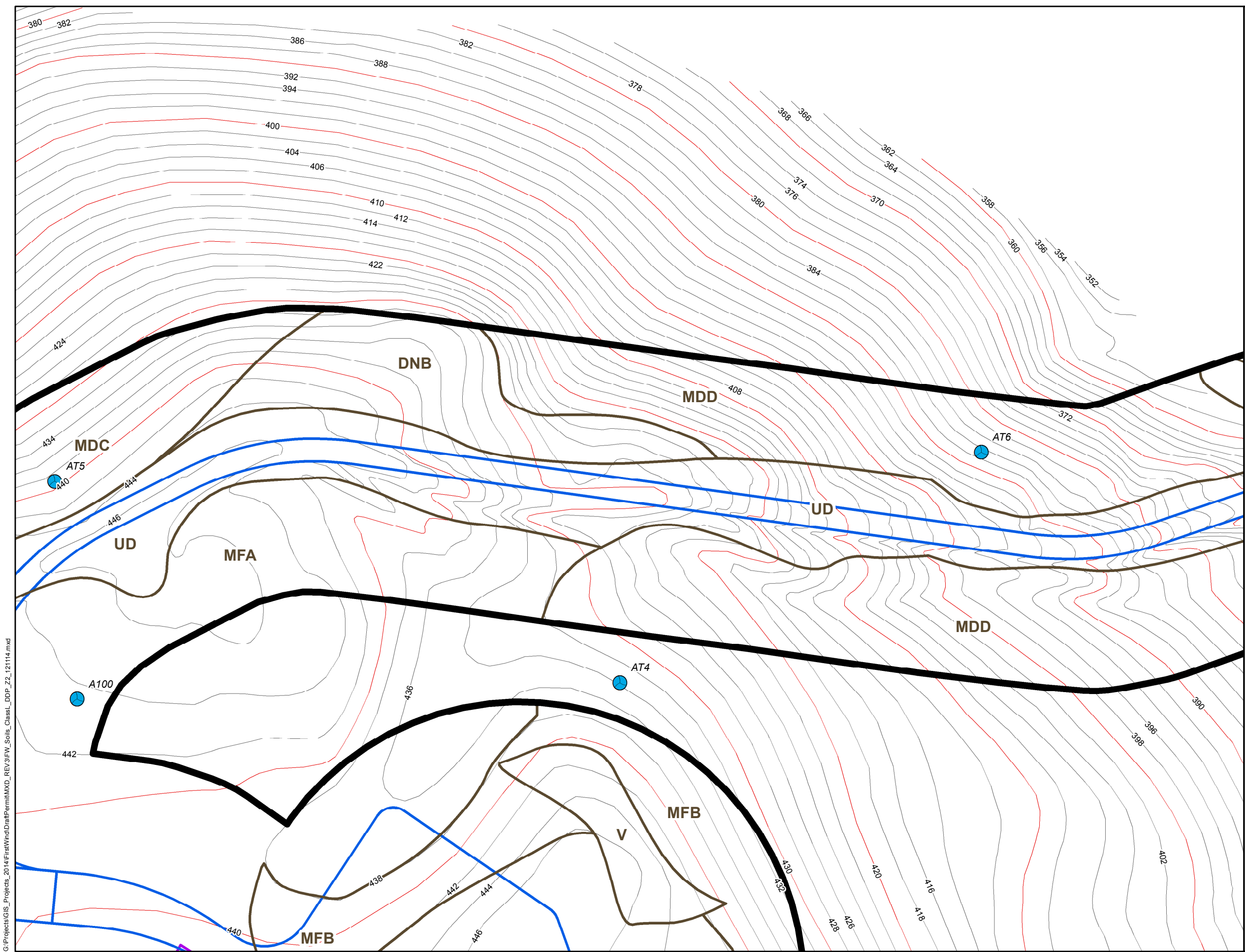


0 50 100 200 Feet
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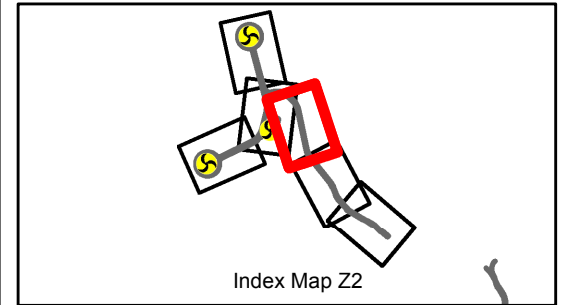


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Class L Soils Survey

Map: Z2-03

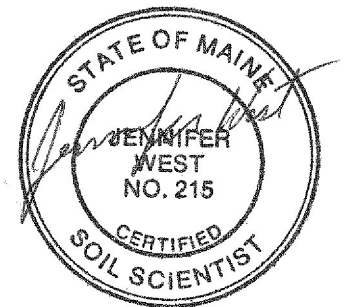
Hancock County, Maine



Site Features

- | | |
|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | 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.

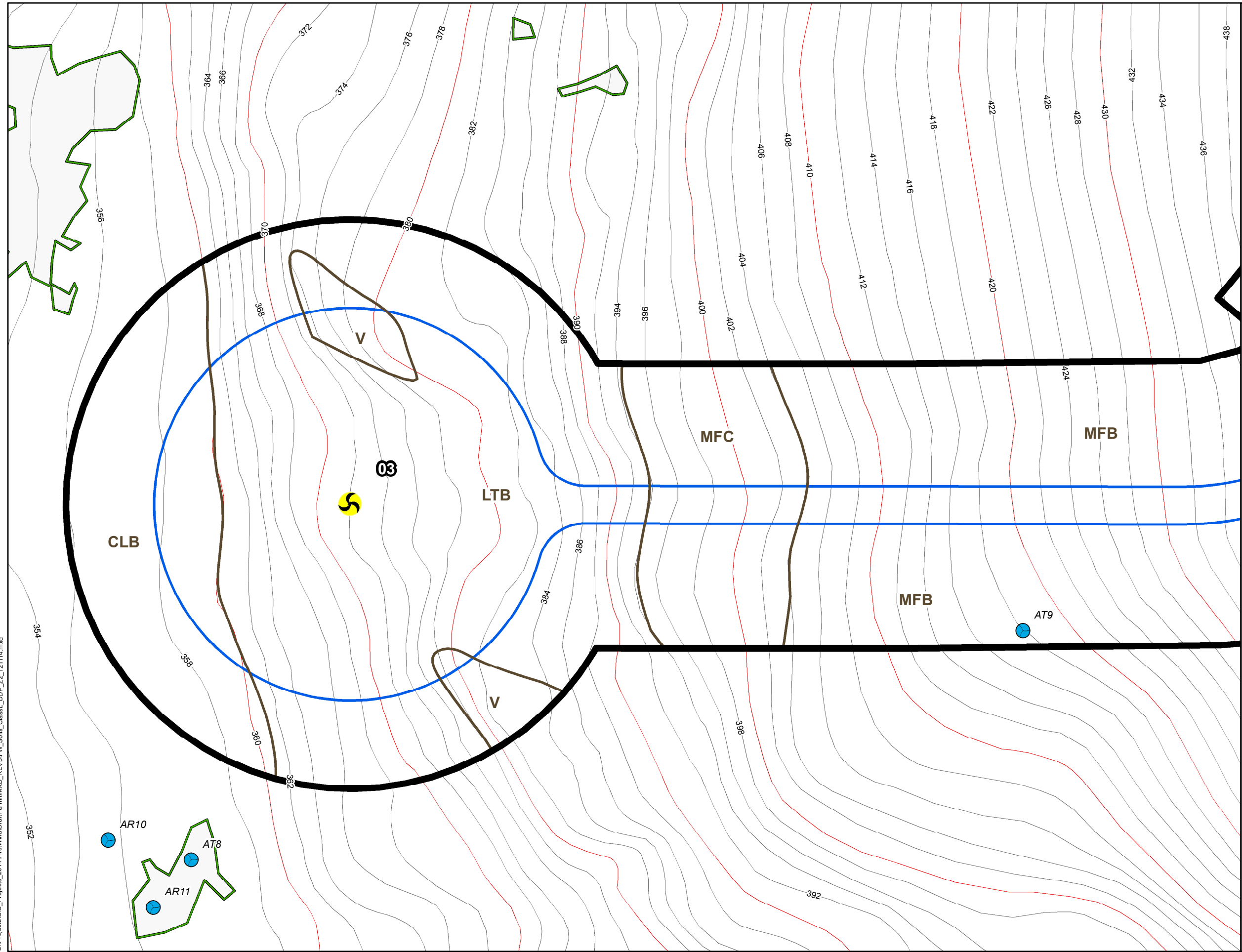


0 50 100 200 Feet
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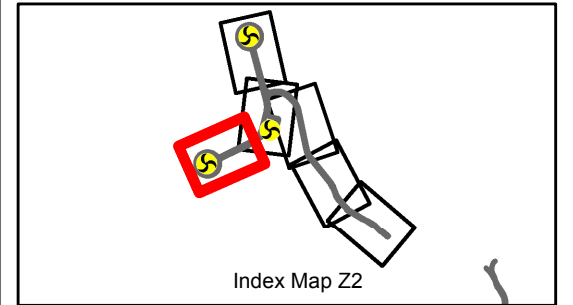


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Class L Soils Survey

Map: Z2-04

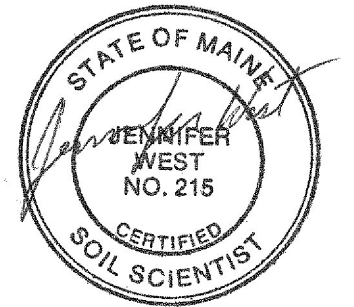
Hancock County, Maine



Site Features

- Proposed Turbines
- New Access Roads
- Laydown Areas
- Class L Soil Survey Extent
- 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.

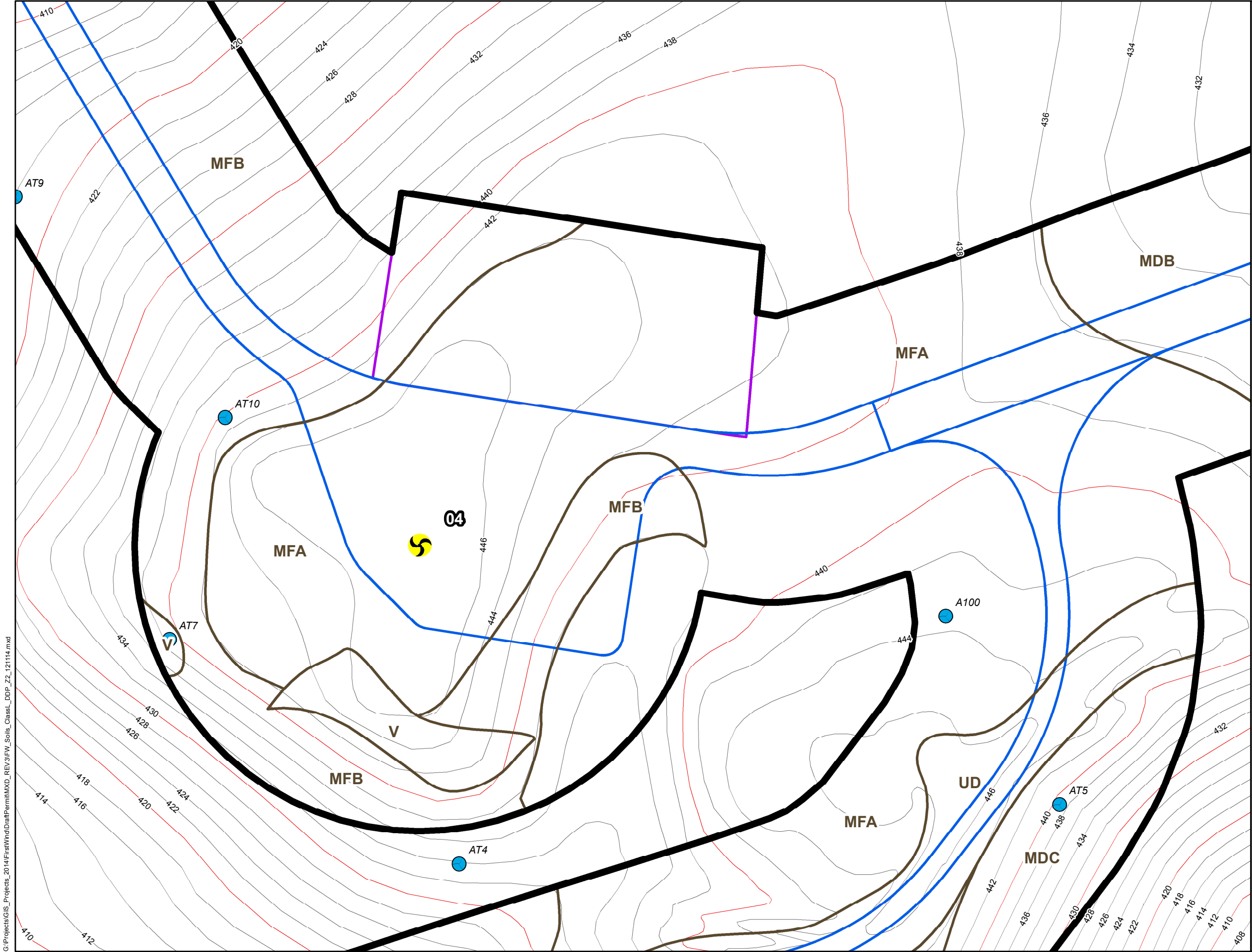


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1 inch = 100 feet



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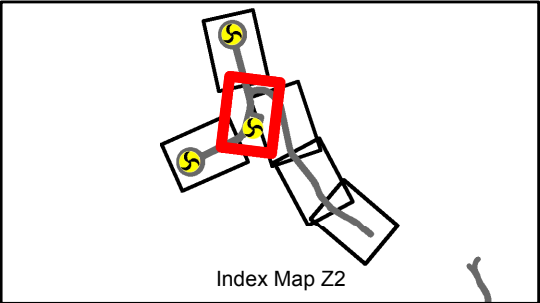


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Class L Soils Survey

Map: Z2-05

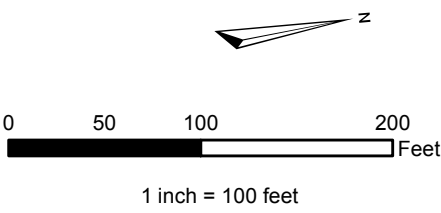
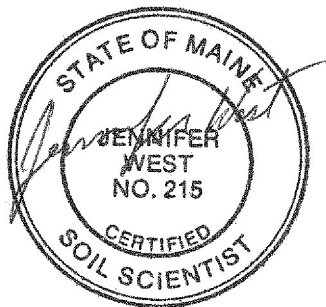
Hancock County, Maine



Site Features

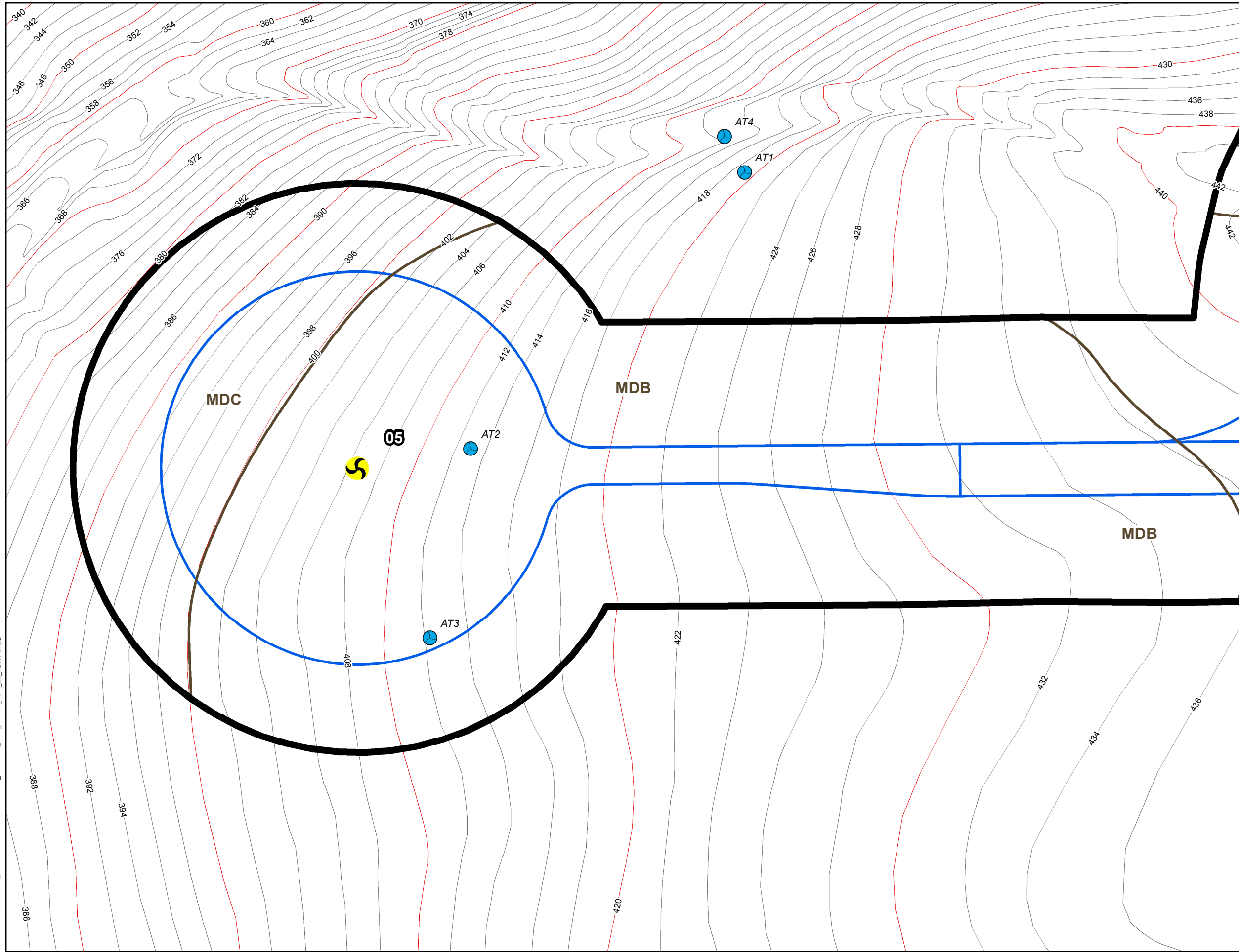
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| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | Delineated Wetlands |
| Soil Map Unit Boundaries | BGB Map Unit |
| | BPA Map Unit |

*Notes: A narrative and legend accompanies this map
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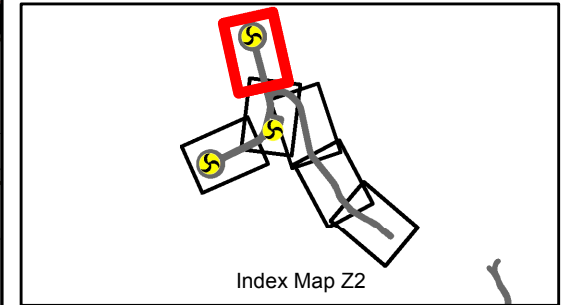


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Class L Soils Survey

Map: Z2-06

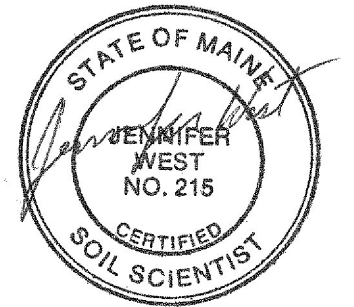
Hancock County, Maine



Site Features

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|  Proposed Turbines |  New Access Roads |
|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | 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
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0 50 100 200 Feet

1 inch = 100 feet

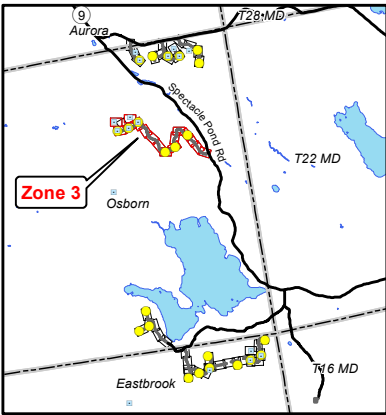


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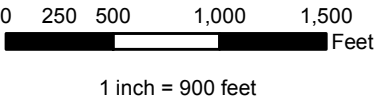
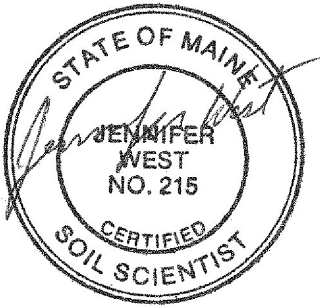
Weaver Wind Project
Class L Soils Survey
Map: Zone 3 Index Map
Hancock County, Maine



Site Features

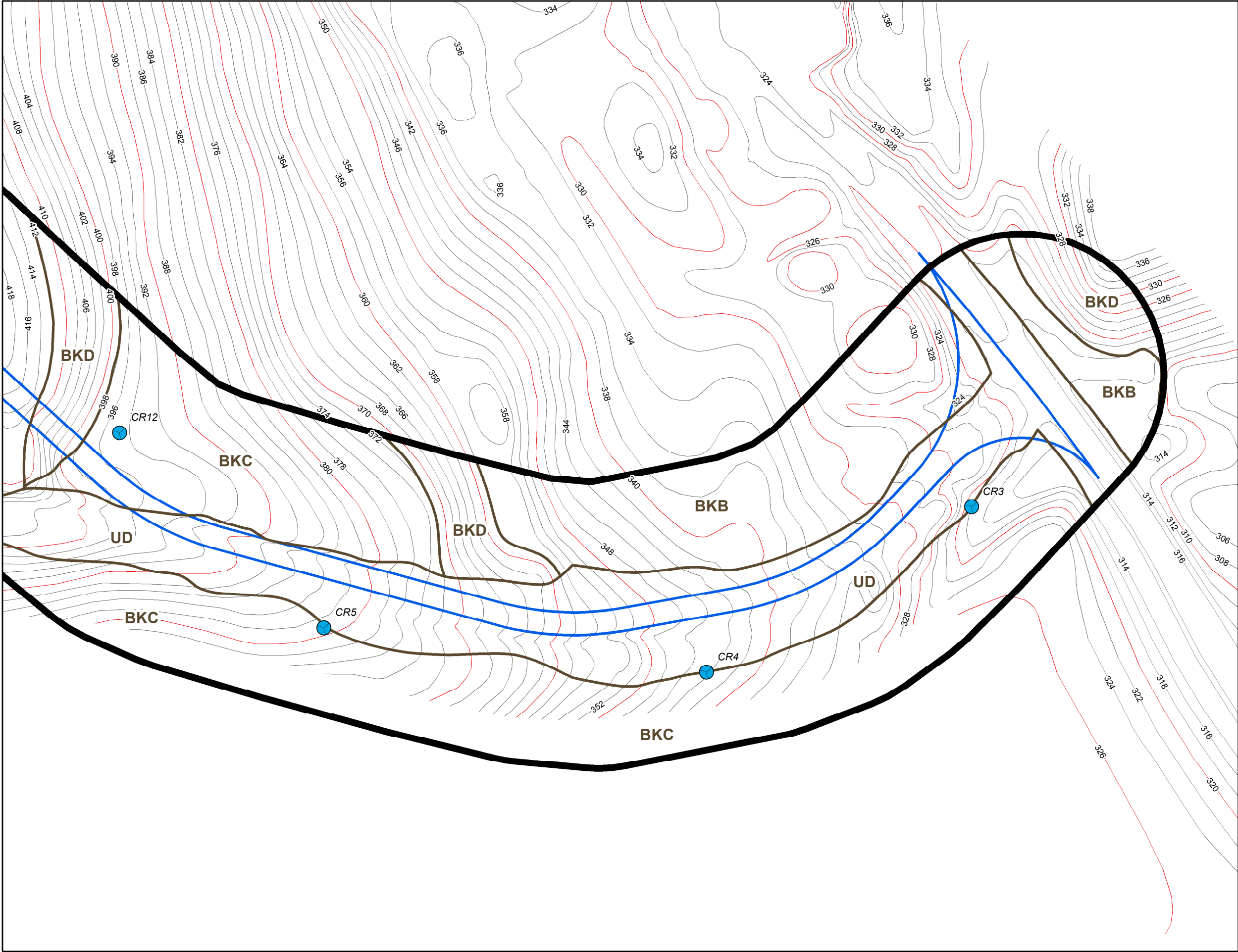
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|---|--|
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|  Proposed Met Towers |  Zone 3 Grids |
|  New Access Roads |  Class L Soil Survey Extent |

*Notes: A narrative and legend accompanies this map
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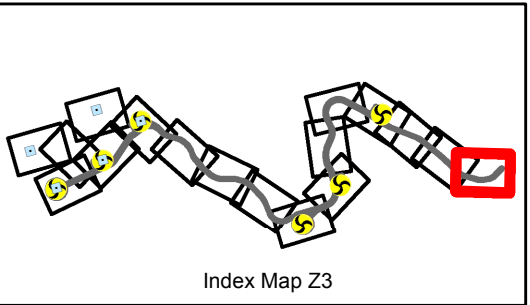


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Class L Soils Survey

Map: Z3-01

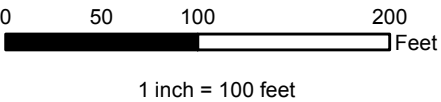
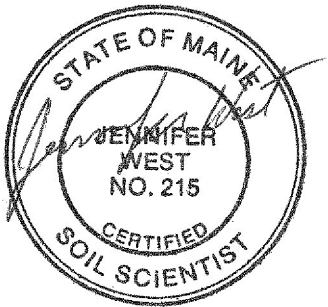
Hancock County, Maine



Site Features

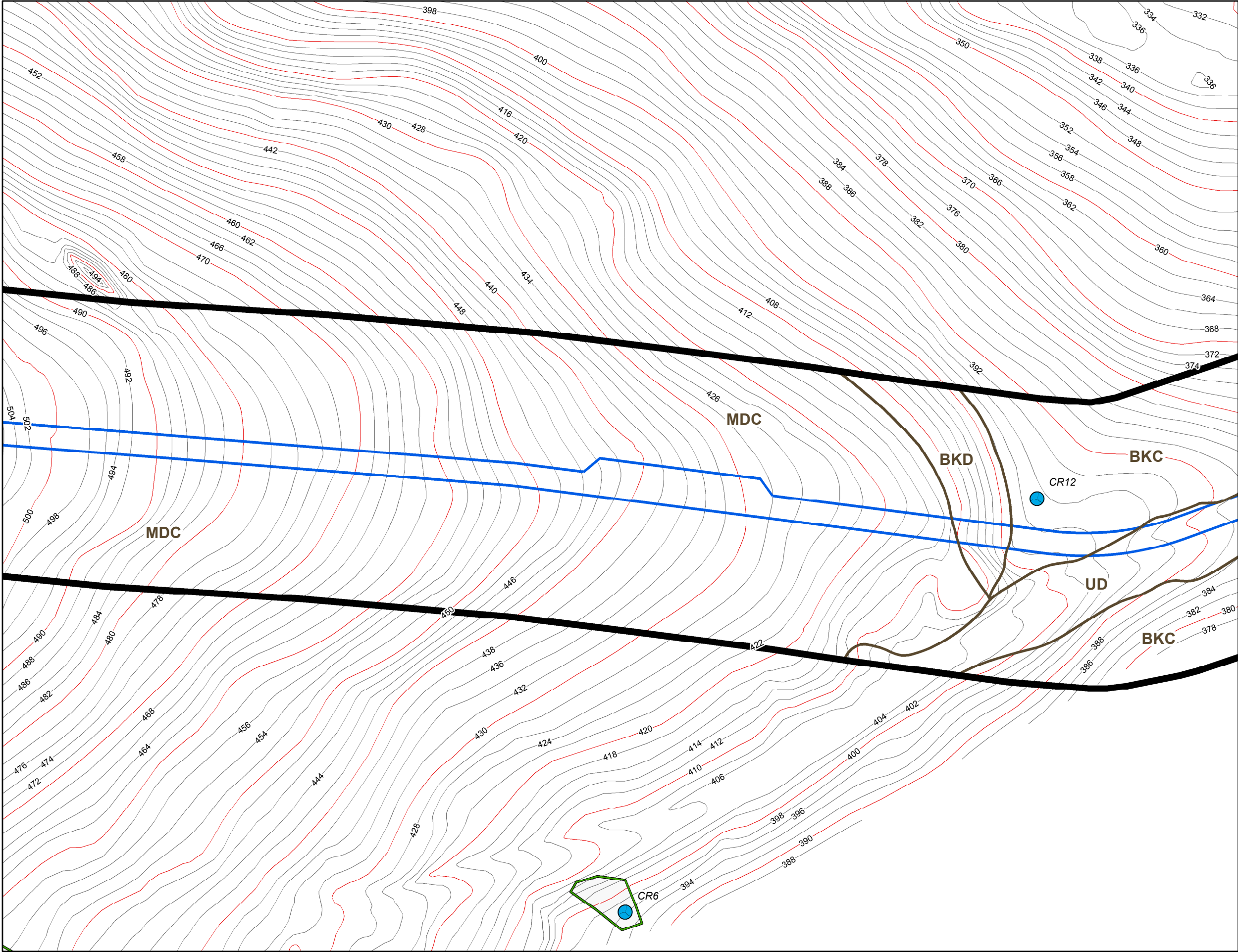
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| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | Delineated Wetlands |
| Soil Map Unit Boundaries | BGB Map Unit |
| | BPA Map Unit |

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



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Class L Soils Survey

Map: Z3-02

Hancock County, Maine

Index Map Z3

Site Features

	Proposed Turbines		New Access Roads
	Proposed Met Towers		Laydown Areas
	Borings		Class L Soil Survey Extent
	Test Pits	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.

STATE OF MAINE
JENNIFER WEST
NO. 215
CERTIFIED
SOIL SCIENTIST

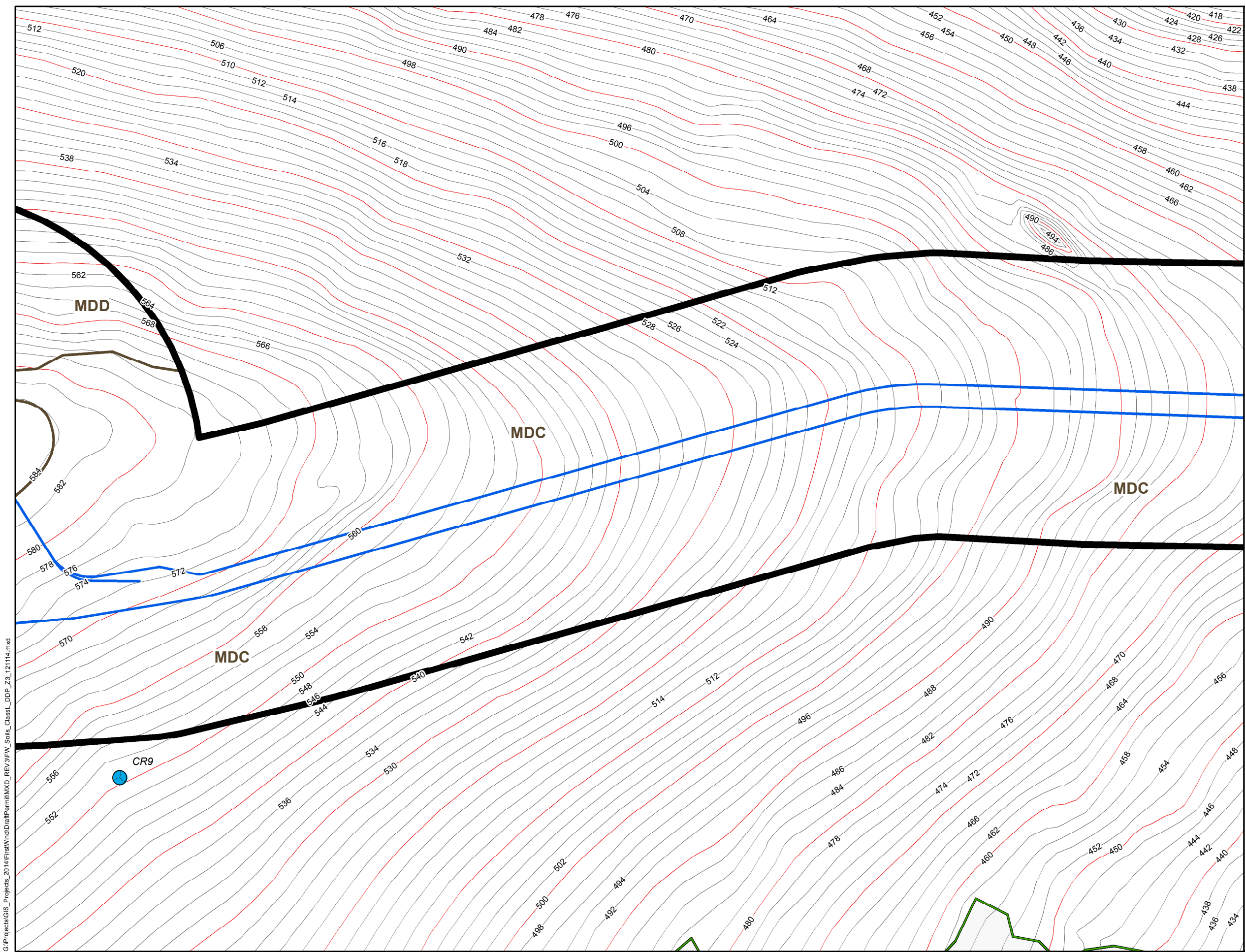
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1 inch = 100 feet

NORMANDEAU
environmental consultants

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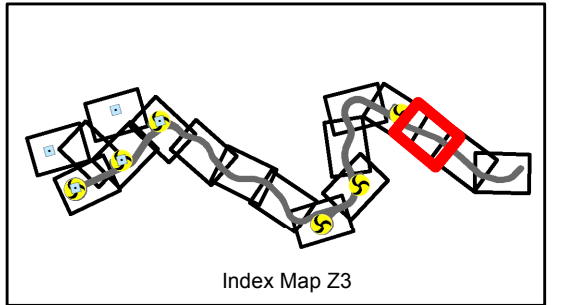


Weaver Wind Project











Class L Soils Survey

Map: Z3-03

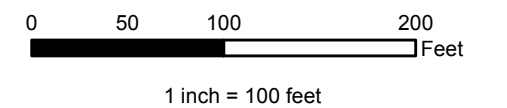
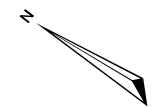
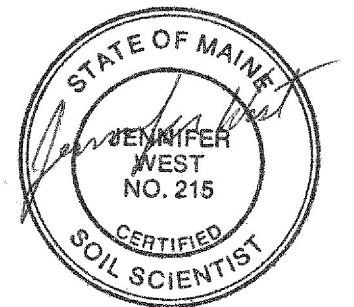
Hancock County, Maine



Site Features

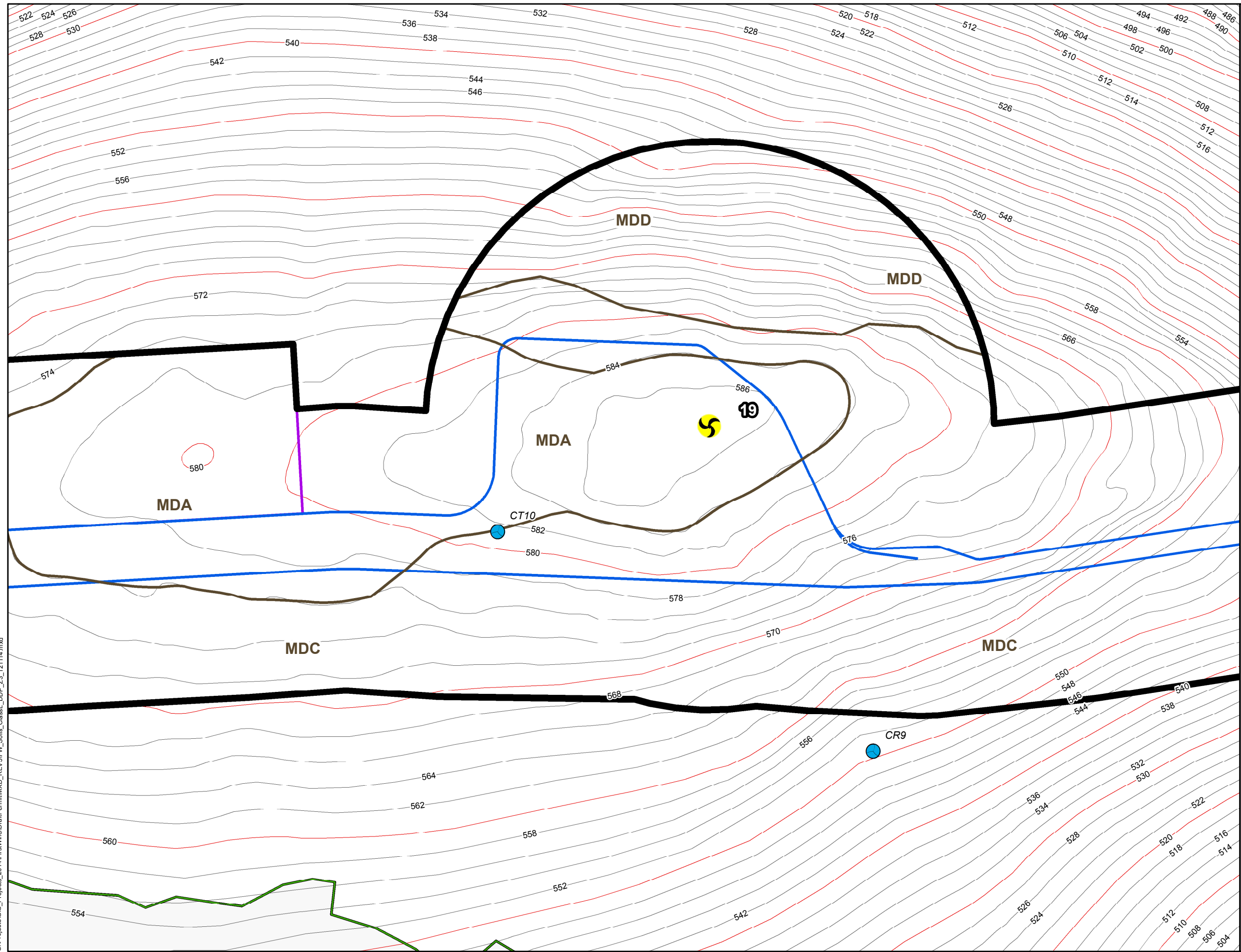
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|---|--------------------------|---|----------------------------|
|  | Proposed Turbines |  | New Access Roads |
|  | Proposed Met Towers |  | Laydown Areas |
|  | Borings |  | Class L Soil Survey Extent |
|  | Test Pits | Delineated Wetlands | |
|  | 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
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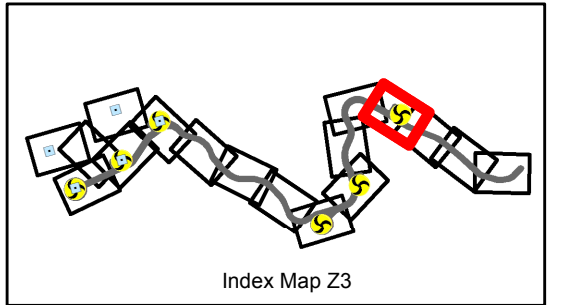


Weaver Wind Project

Class L Soils Survey

Map: Z3-04

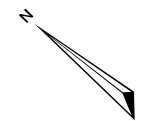
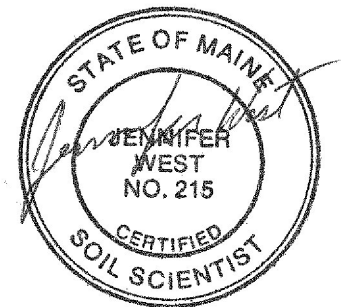
Hancock County, Maine



Site Features

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|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | 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.

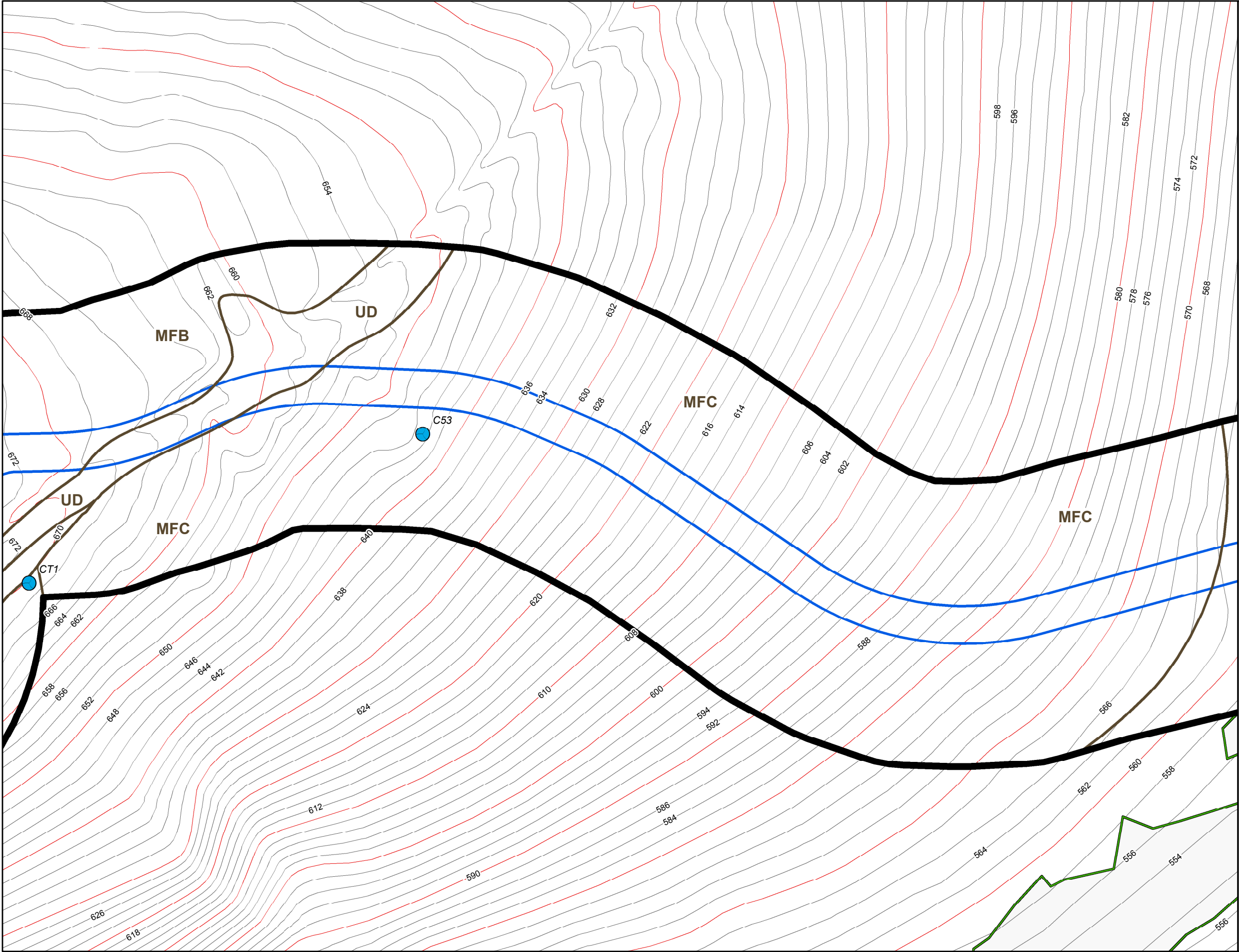


0 50 100 200 Feet
1 inch = 100 feet



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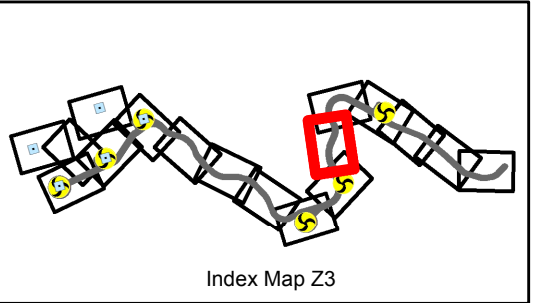


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







Class L Soils Survey

Map: Z3-06

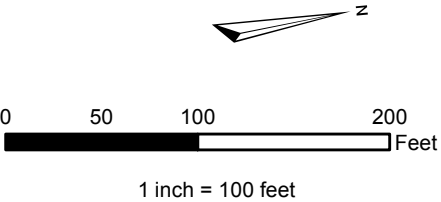
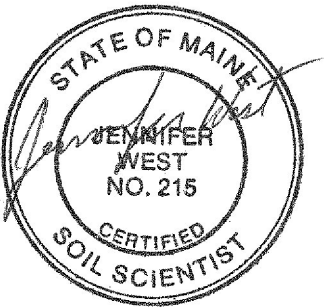
Hancock County, Maine



Site Features

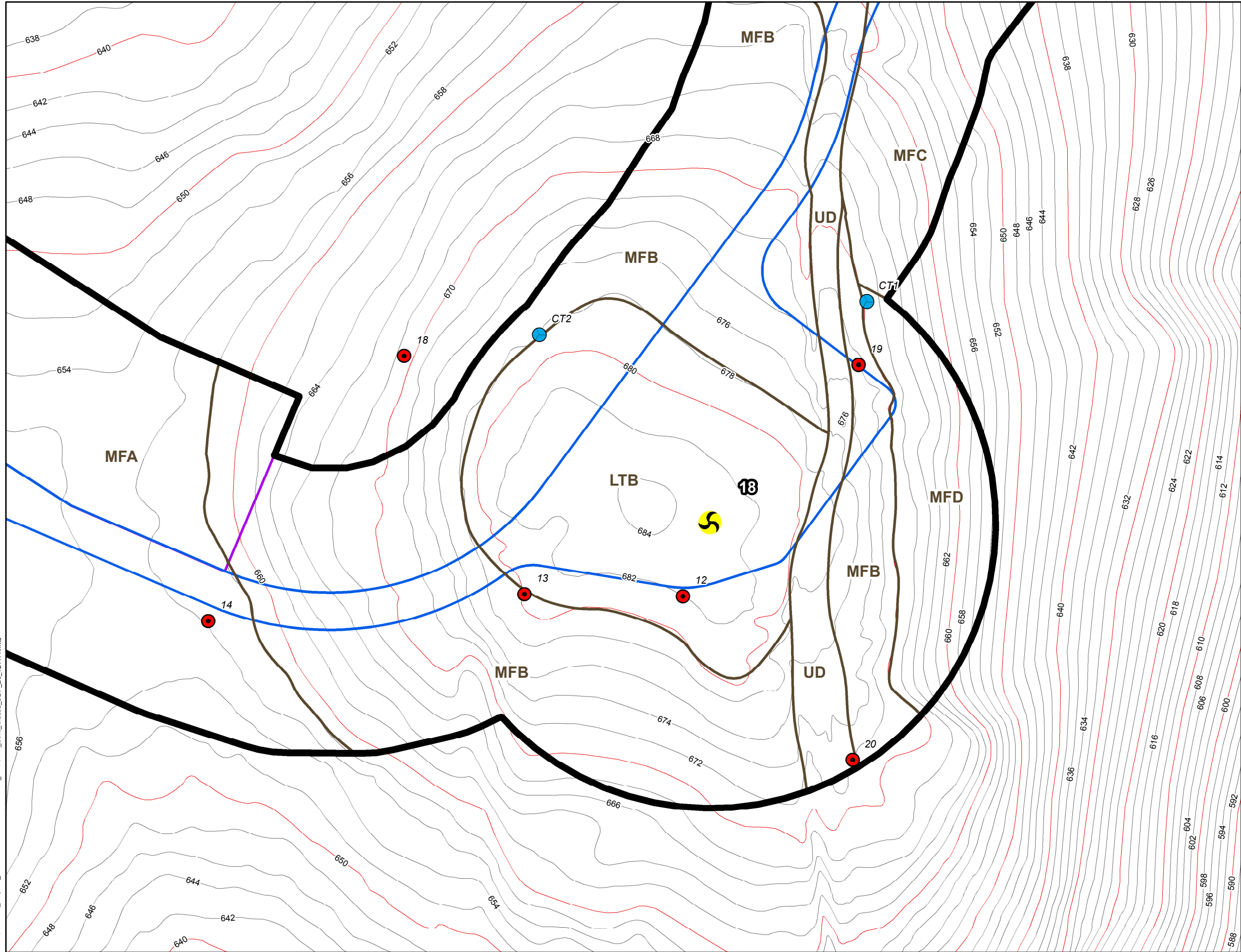
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|  Proposed Turbines |  New Access Roads |
|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | Delineated Wetlands |
|  Soil Map Unit Boundaries |  BGB Map Unit |
| |  BPA Map Unit |

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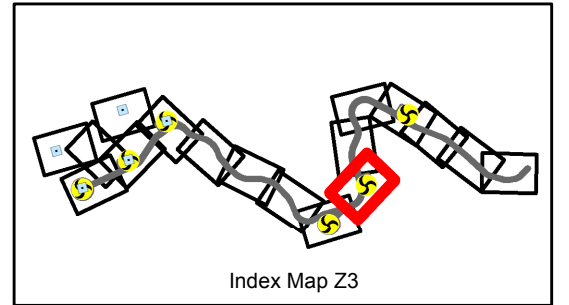


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Class L Soils Survey

Map: Z3-07

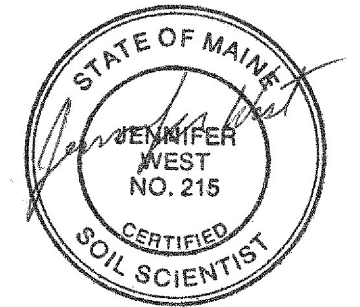
Hancock County, Maine



Site Features

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| | Proposed Turbines | | New Access Roads |
| | Proposed Met Towers | | Laydown Areas |
| | Borings | | Class L Soil Survey Extent |
| | Test Pits | 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
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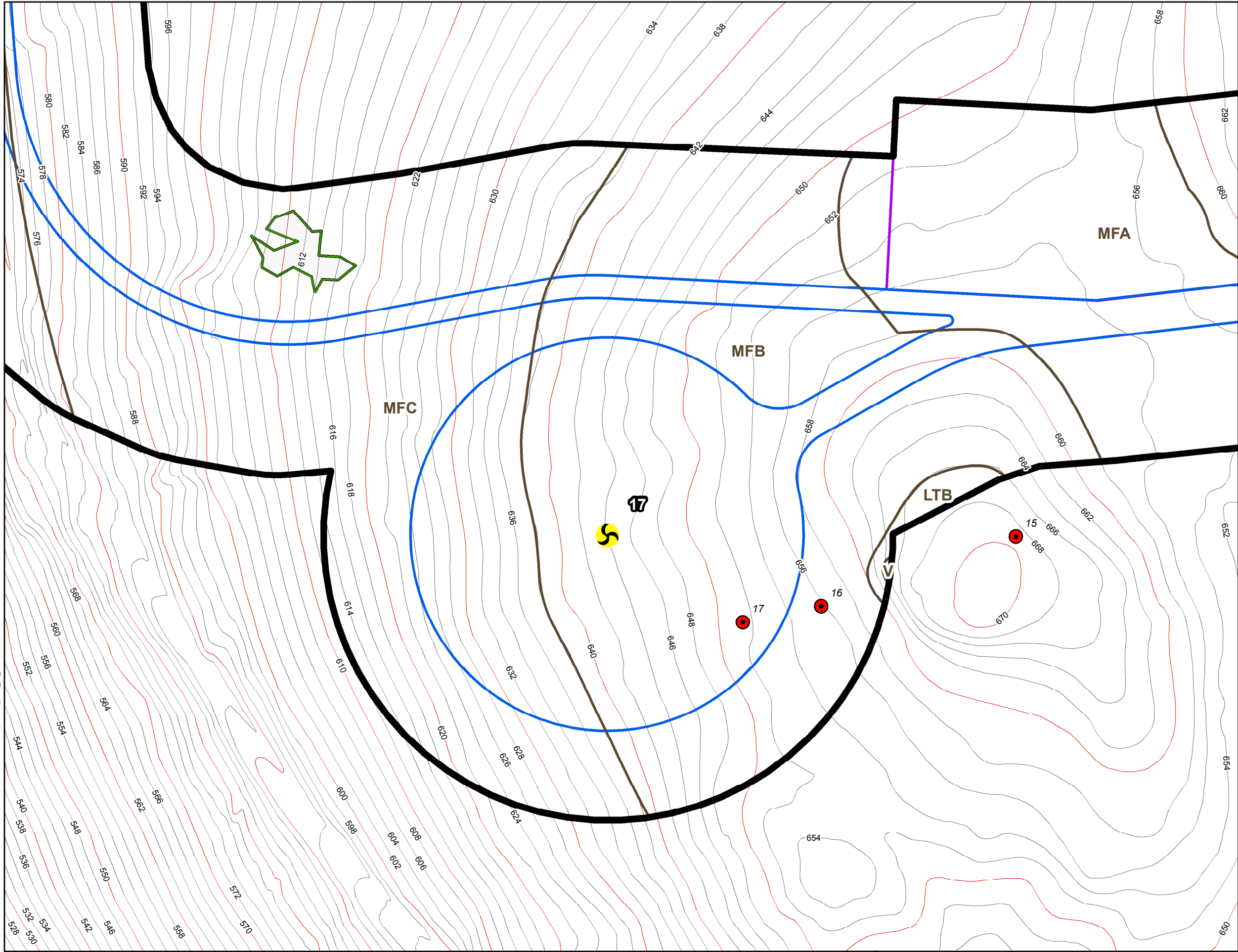


0 50 100 200 Feet
1 inch = 100 feet



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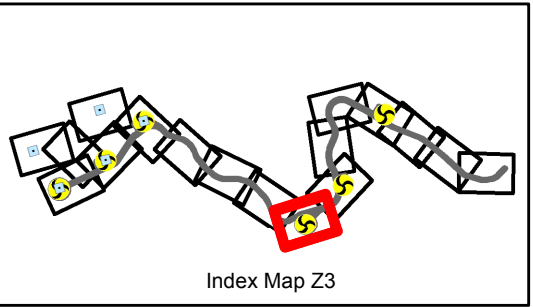


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Class L Soils Survey

Map: Z3-08

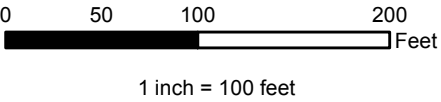
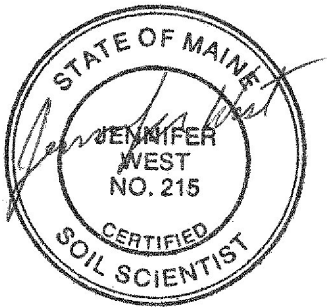
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Site Features

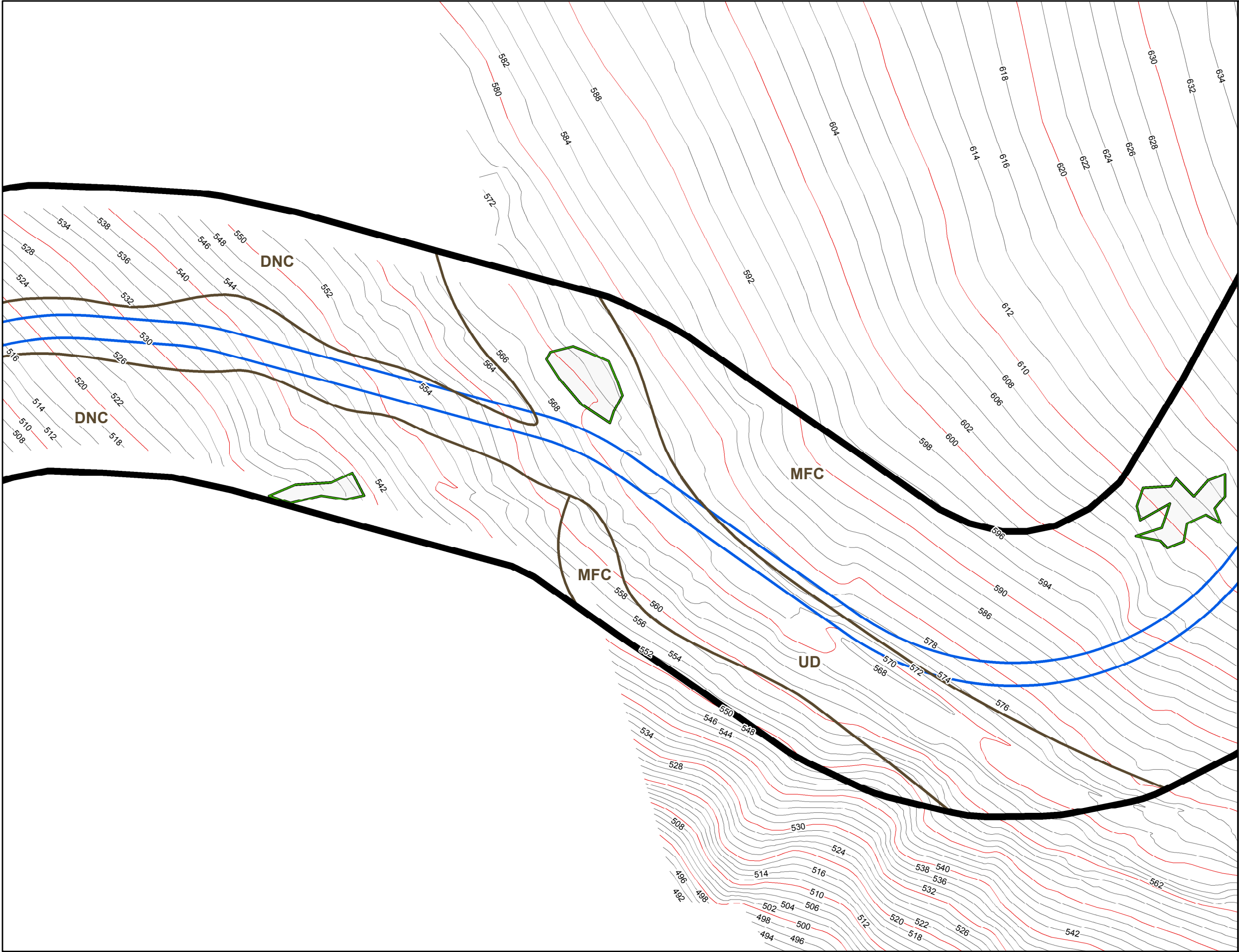
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|  Proposed Turbines |  New Access Roads |
|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | Delineated Wetlands |
|  Soil Map Unit Boundaries |  BGB Map Unit |
| |  BPA Map Unit |

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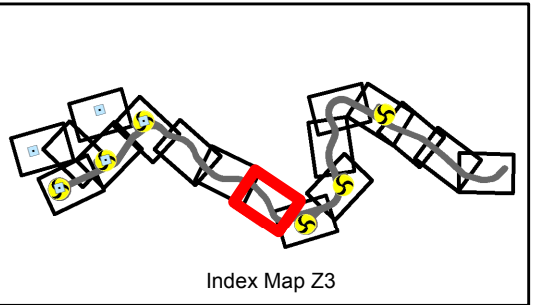


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Class L Soils Survey

Map: Z3-09

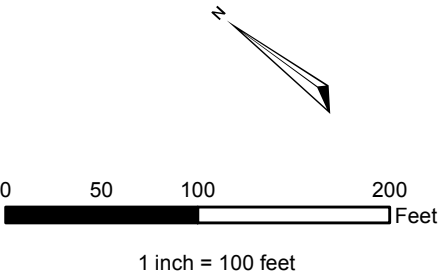
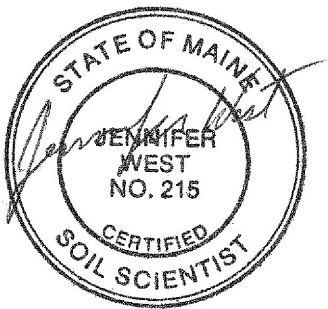
Hancock County, Maine



Site Features

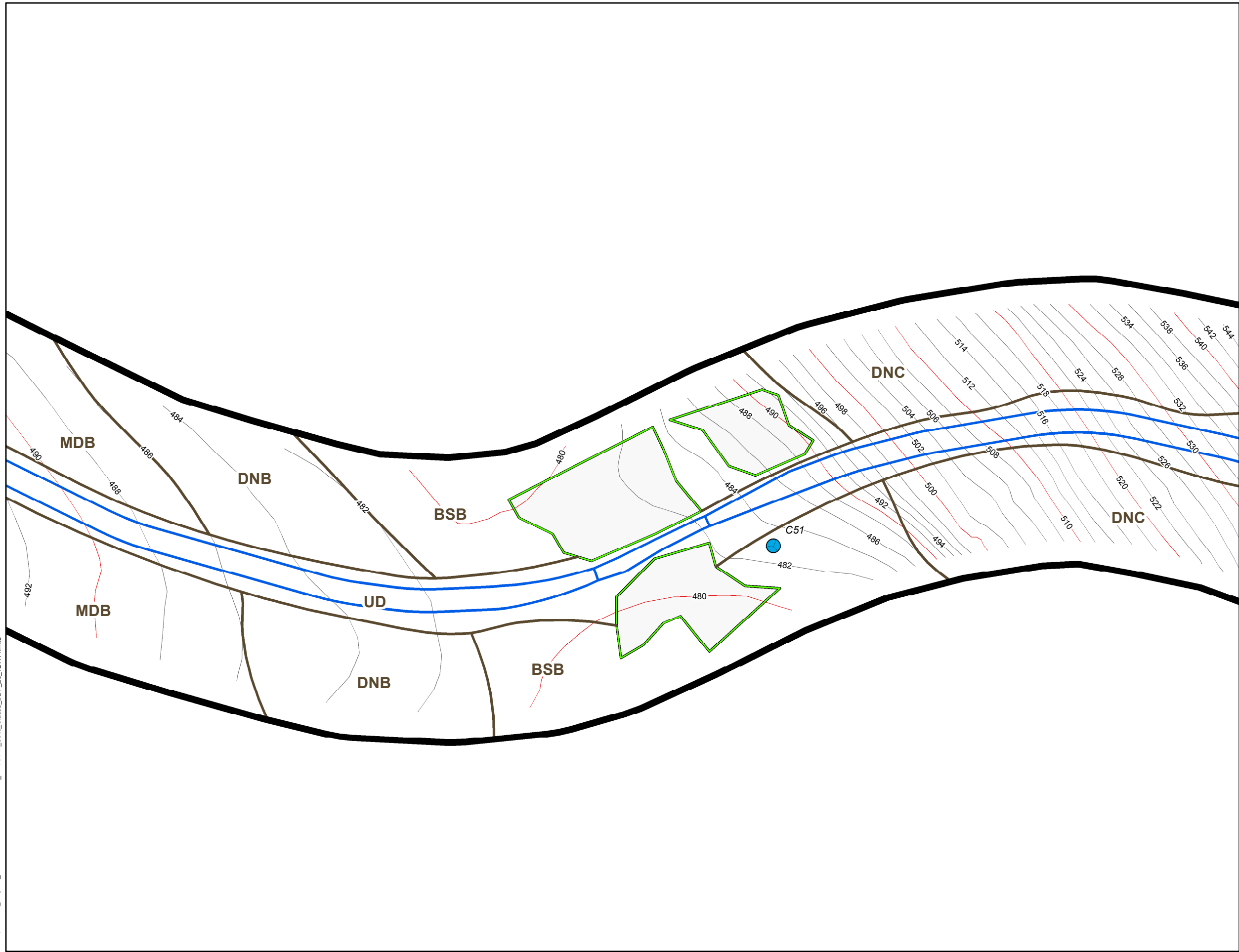
- Proposed Turbines
- Proposed Met Towers
- Borings
- Test Pits
- Soil Map Unit Boundaries
- New Access Roads
- Laydown Areas
- Class L Soil Survey Extent
- Delineated Wetlands**
 - BGB Map Unit
 - BPA Map Unit

*Notes: A narrative and legend accompanies this map
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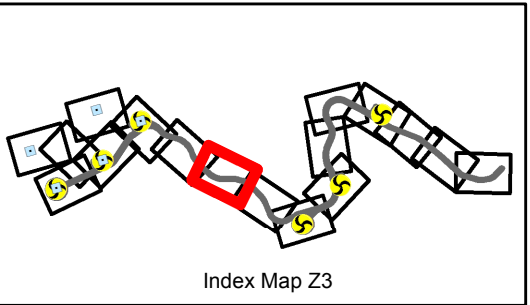


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Class L Soils Survey

Map: Z3-10

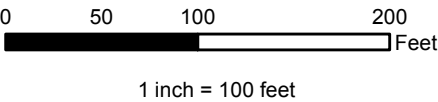
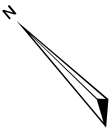
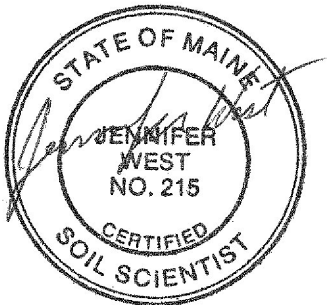
Hancock County, Maine



Site Features

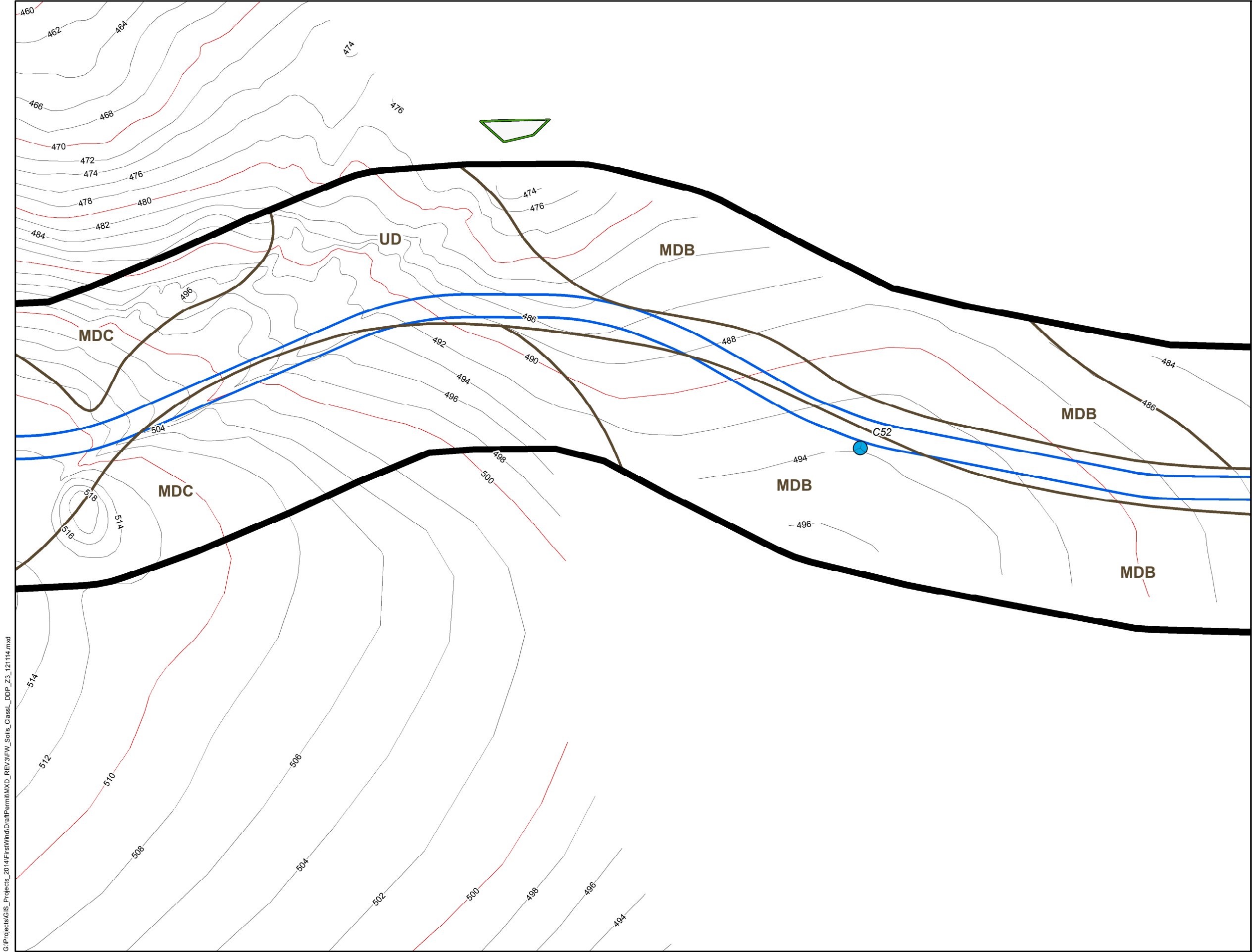
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|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | Delineated Wetlands |
|  Soil Map Unit Boundaries |  BGB Map Unit |
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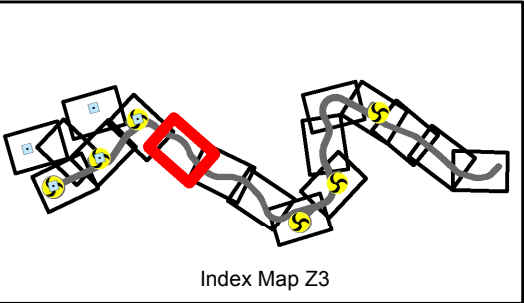


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







Class L Soils Survey

Map: Z3-11

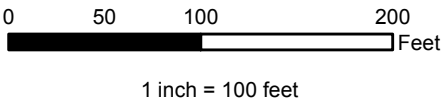
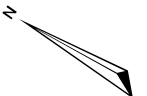
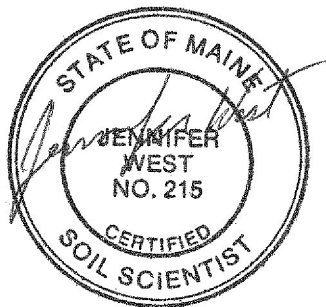
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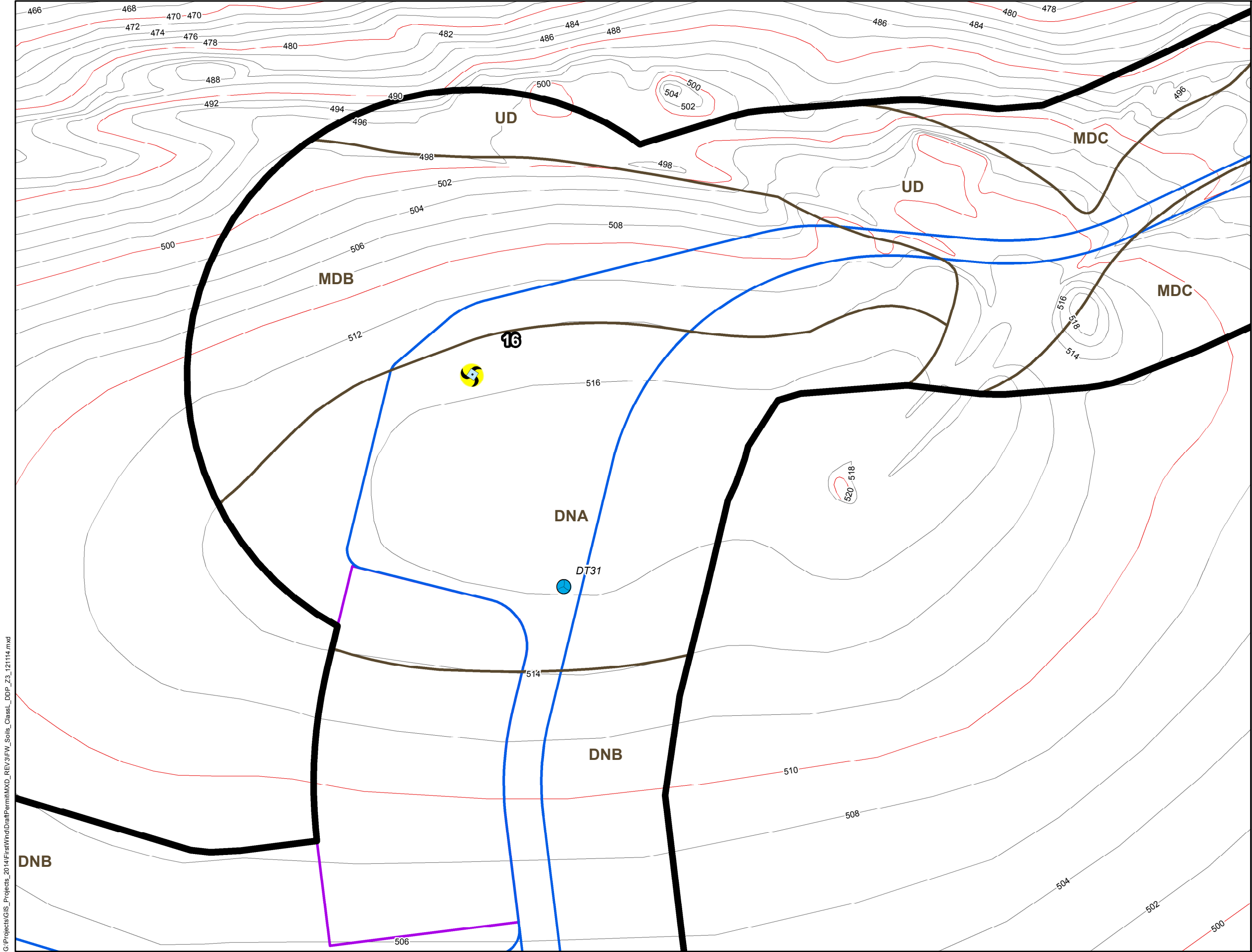
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|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | Delineated Wetlands |
|  Soil Map Unit Boundaries |  BGB Map Unit |
| |  BPA Map Unit |

*Notes: A narrative and legend accompanies this map
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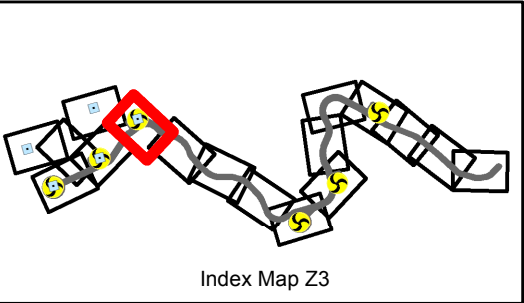


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Class L Soils Survey

Map: Z3-12

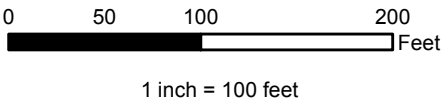
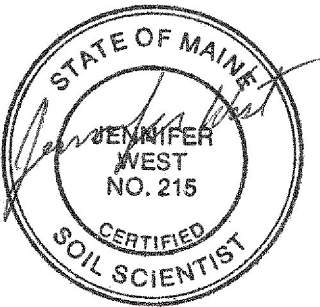
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Site Features

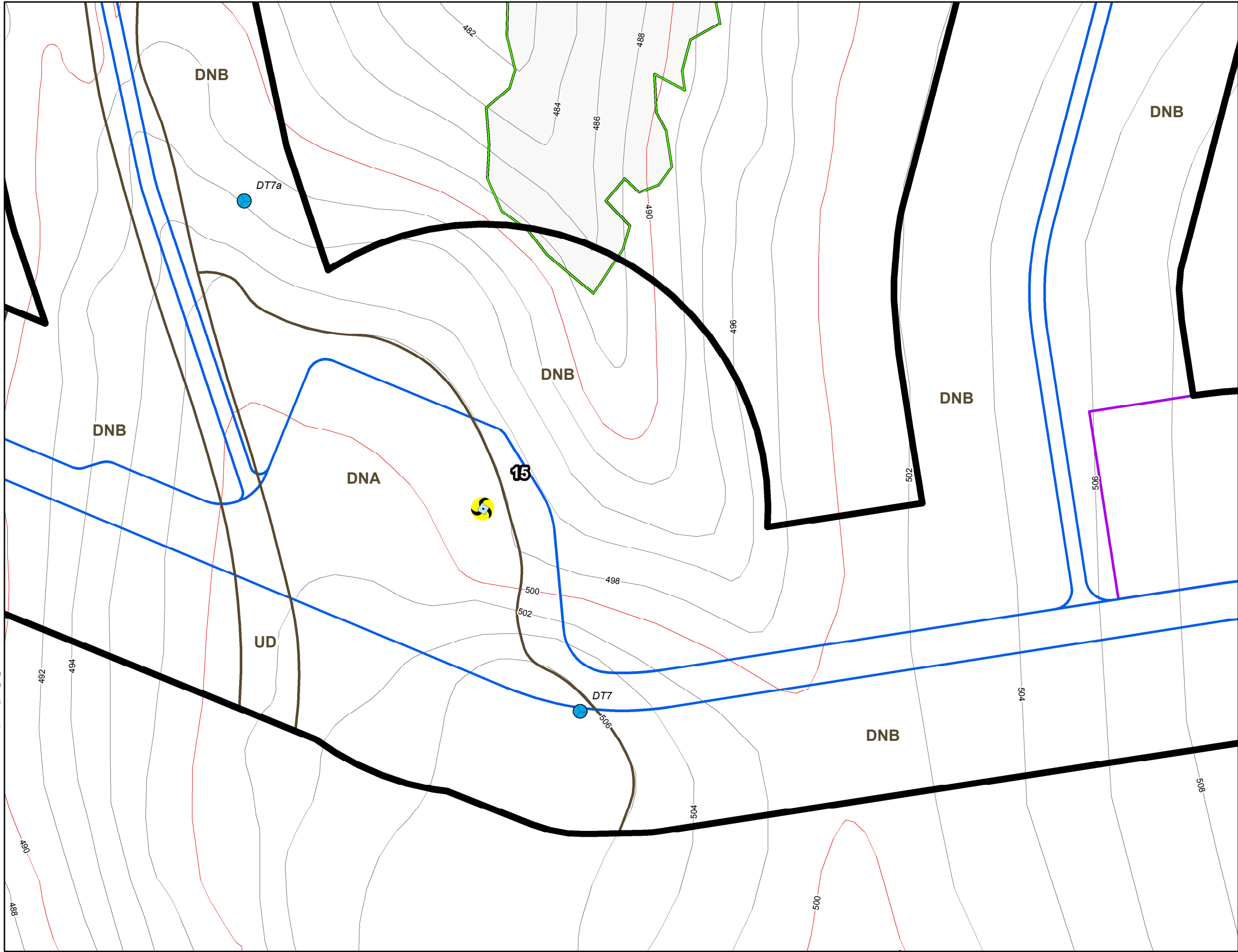
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|  Proposed Turbines |  New Access Roads |
|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | Delineated Wetlands |
|  Soil Map Unit Boundaries |  BGB Map Unit |
| |  BPA Map Unit |

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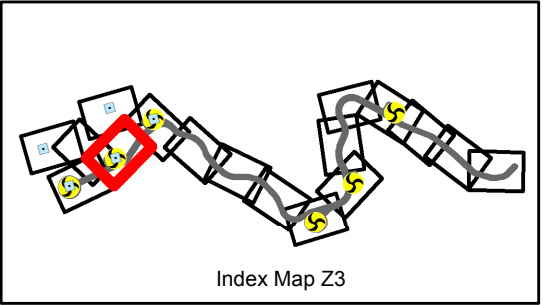
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Class L Soils Survey
Map: Z3-13

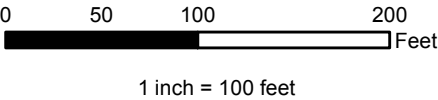
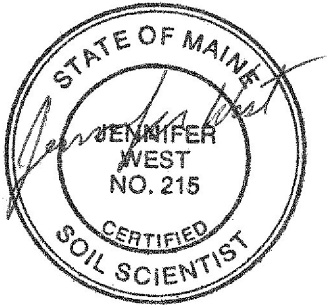
Hancock County, Maine



Site Features

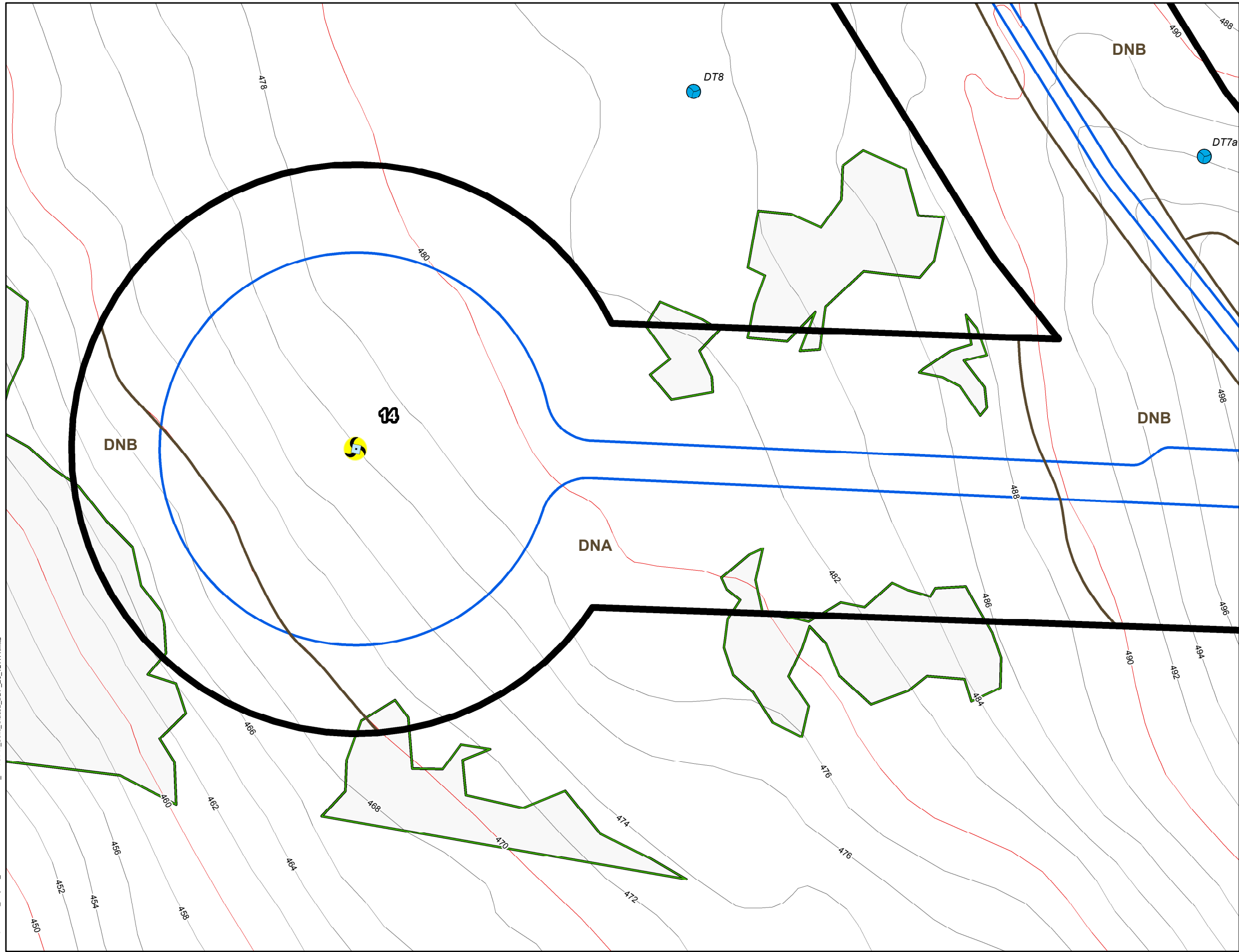
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| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | Delineated Wetlands |
| Soil Map Unit Boundaries | BGB Map Unit |
| | BPA Map Unit |

*Notes: A narrative and legend accompanies this map
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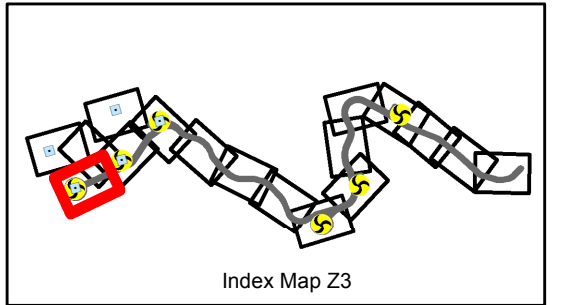


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Class L Soils Survey

Map: Z3-14

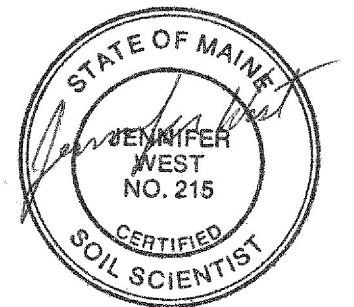
Hancock County, Maine



Site Features

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|  | Proposed Turbines |  | New Access Roads |
|  | Proposed Met Towers |  | Laydown Areas |
|  | Borings |  | Class L Soil Survey Extent |
|  | Test Pits | 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
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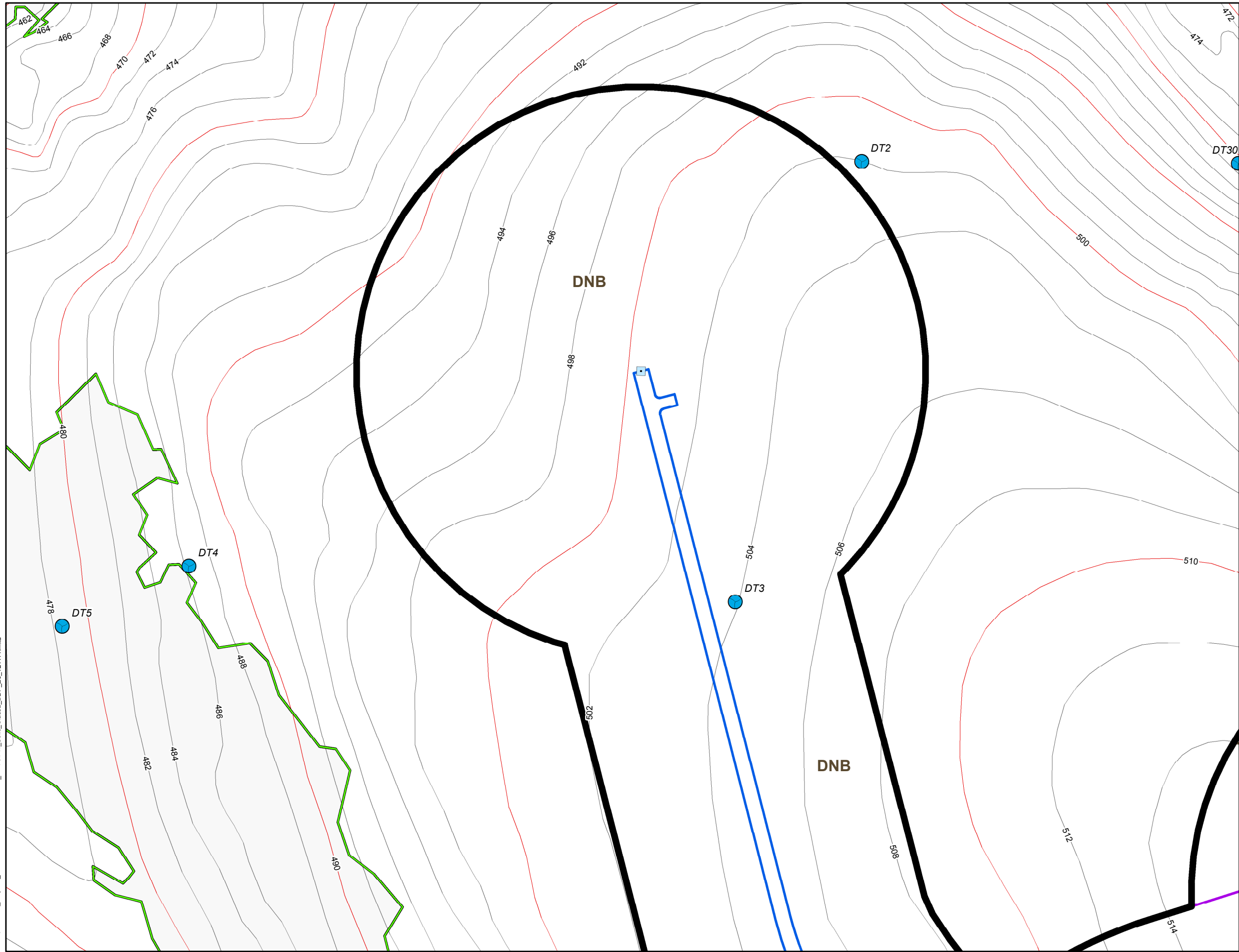


0 50 100 200 Feet
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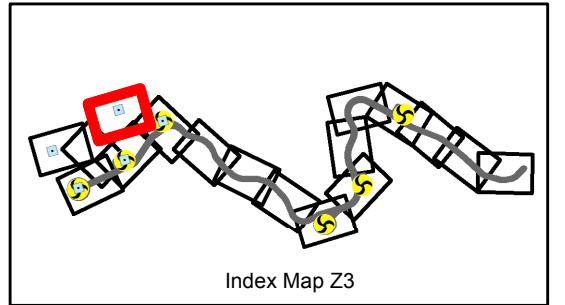


Weaver Wind Project











Class L Soils Survey

Map: Z3-15

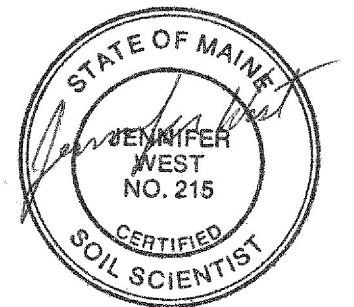
Hancock County, Maine



Site Features

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|  Proposed Turbines |  New Access Roads |
|  Proposed Met Towers |  Laydown Areas |
|  Borings |  Class L Soil Survey Extent |
|  Test Pits | 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
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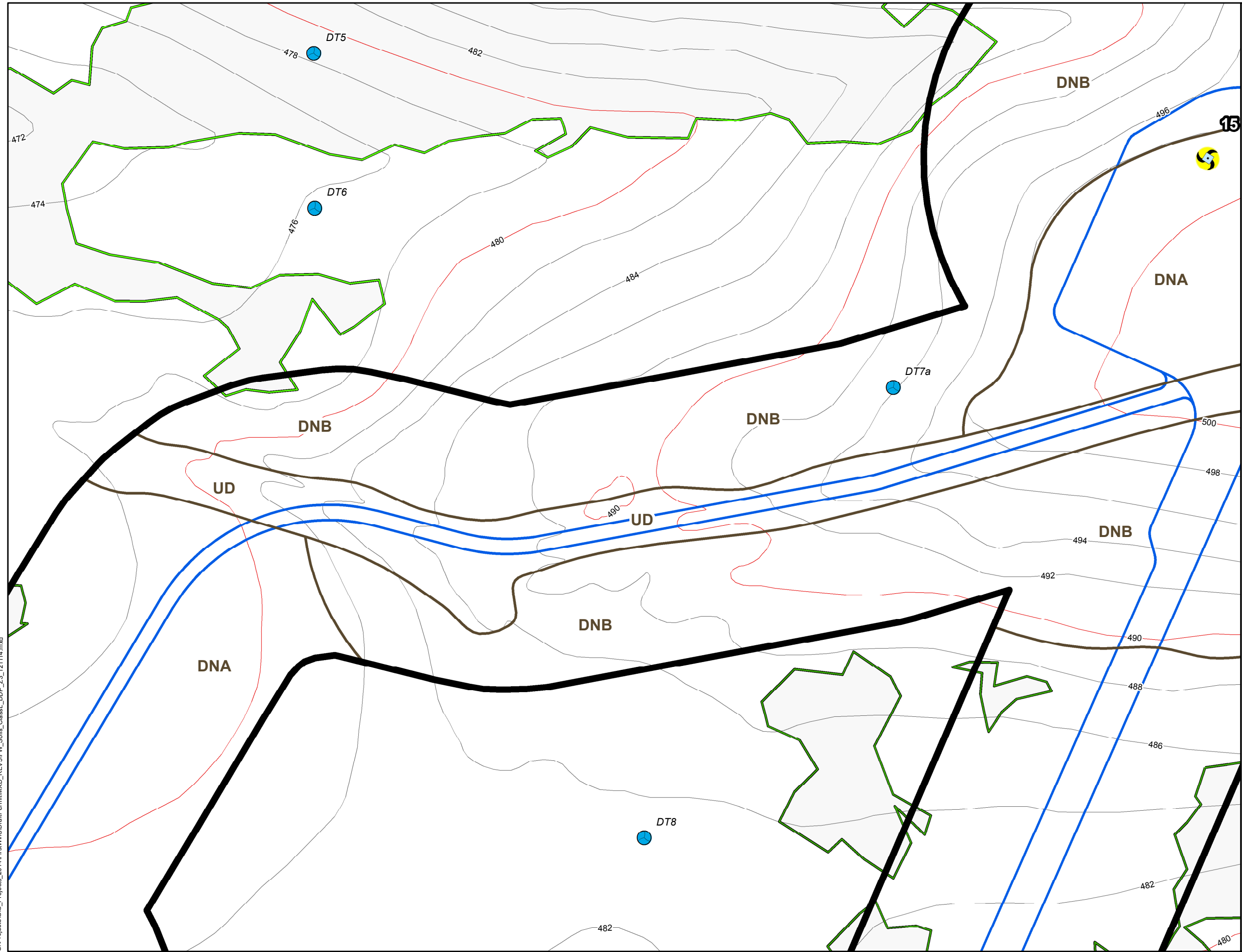


0 50 100 200 Feet
1 inch = 100 feet



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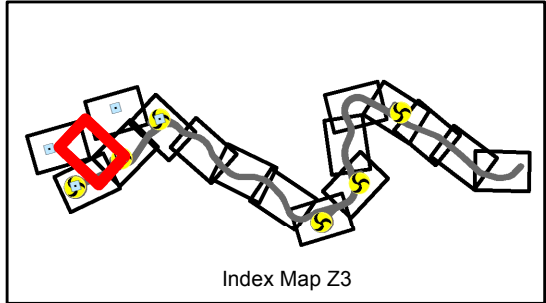


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Class L Soils Survey

Map: Z3-16

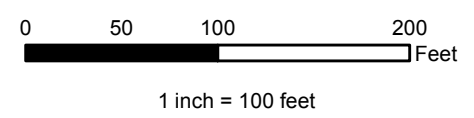
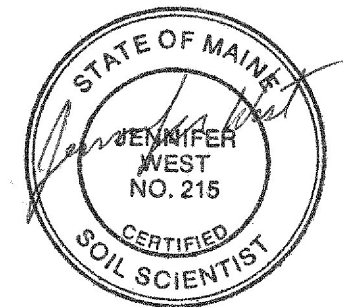
Hancock County, Maine



Site Features

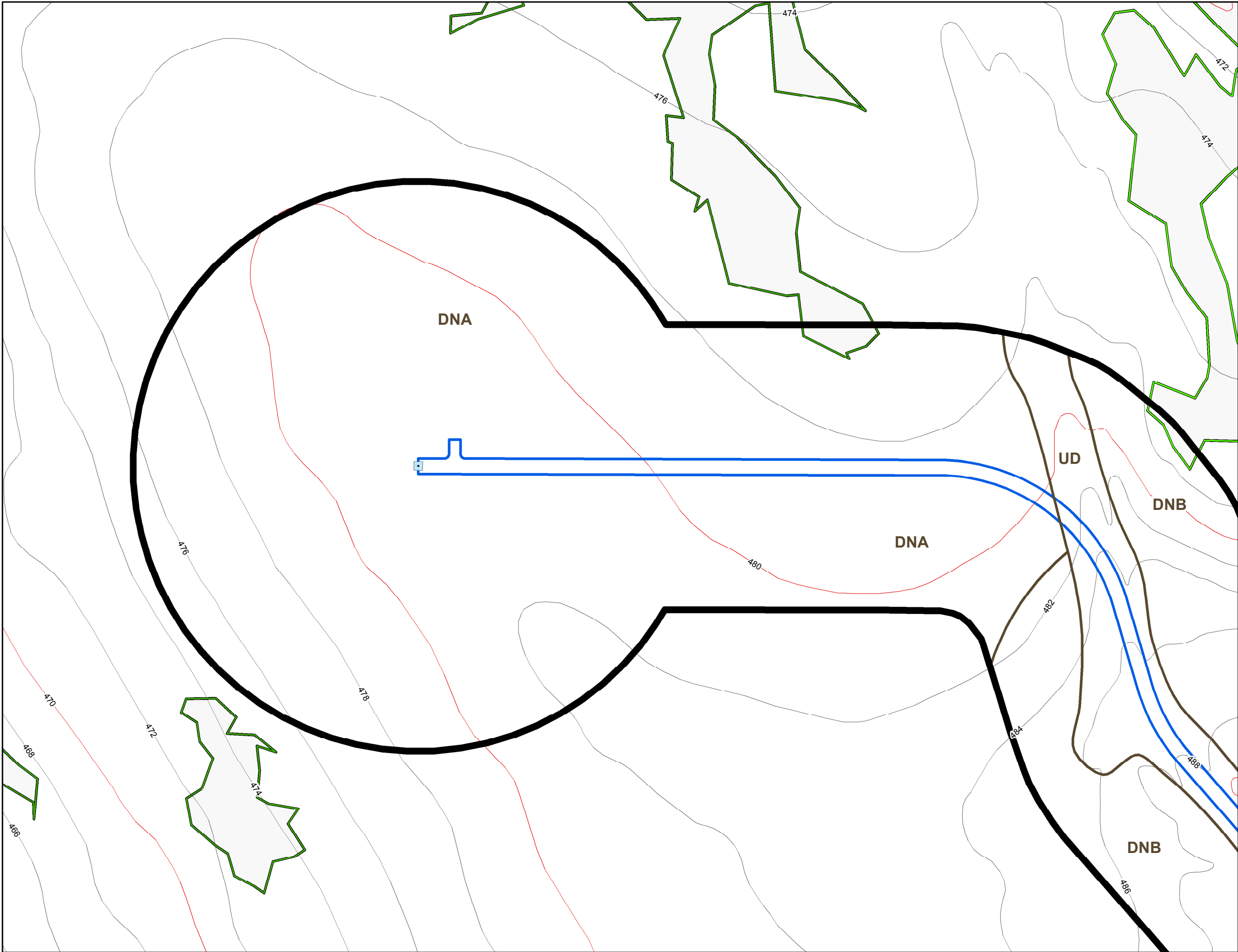
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| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | Delineated Wetlands |
| Soil Map Unit Boundaries | BGB Map Unit |
| | BPA Map Unit |

*Notes: A narrative and legend accompanies this map
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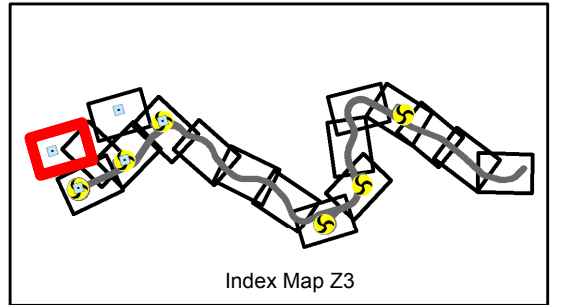


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Class L Soils Survey

Map: Z3-17

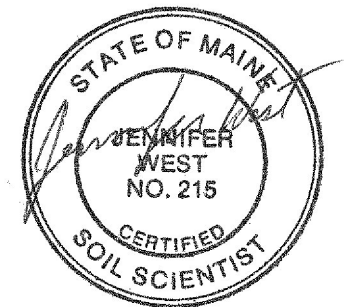
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Site Features

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|---|--------------------------|---|----------------------------|
|  | Proposed Turbines |  | New Access Roads |
|  | Proposed Met Towers |  | Laydown Areas |
|  | Borings |  | Class L Soil Survey Extent |
|  | Test Pits | 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
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0 50 100 200 Feet
1 inch = 100 feet

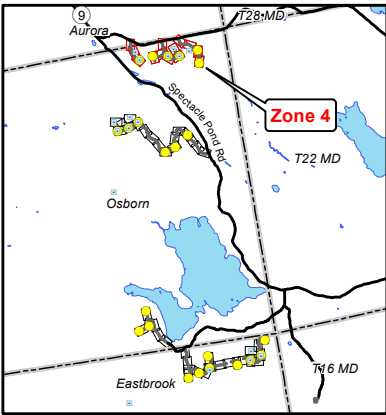


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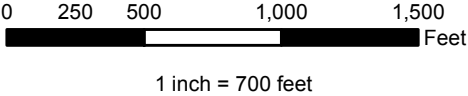
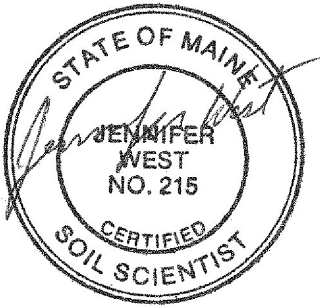
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Class L Soils Survey
Map: Zone 4 Index Map
Hancock County, Maine



Site Features

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

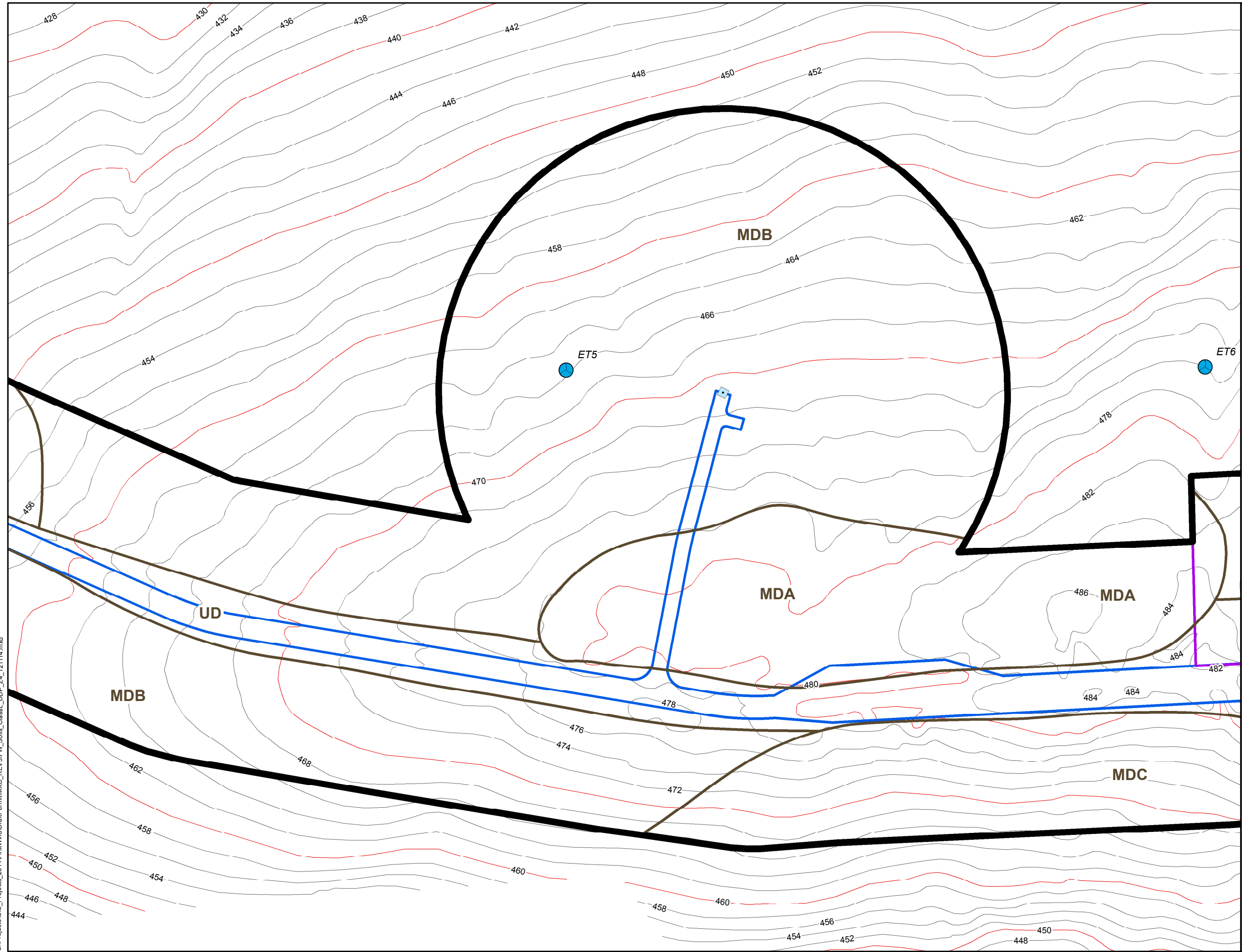
*Notes: A narrative and legend accompanies this map
Data provided by: James W. Sewall, ESRI & MEGIS



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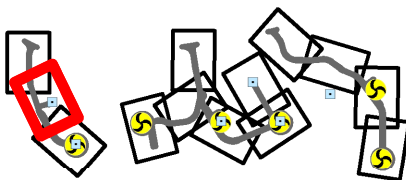


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Class L Soils Survey

Map: Z4-02

Hancock County, Maine

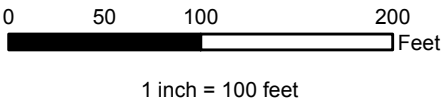
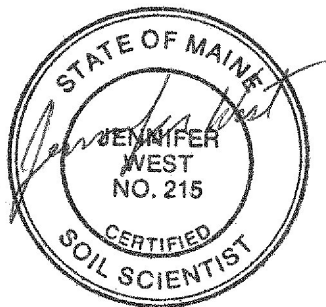


Index Map Z4

Site Features

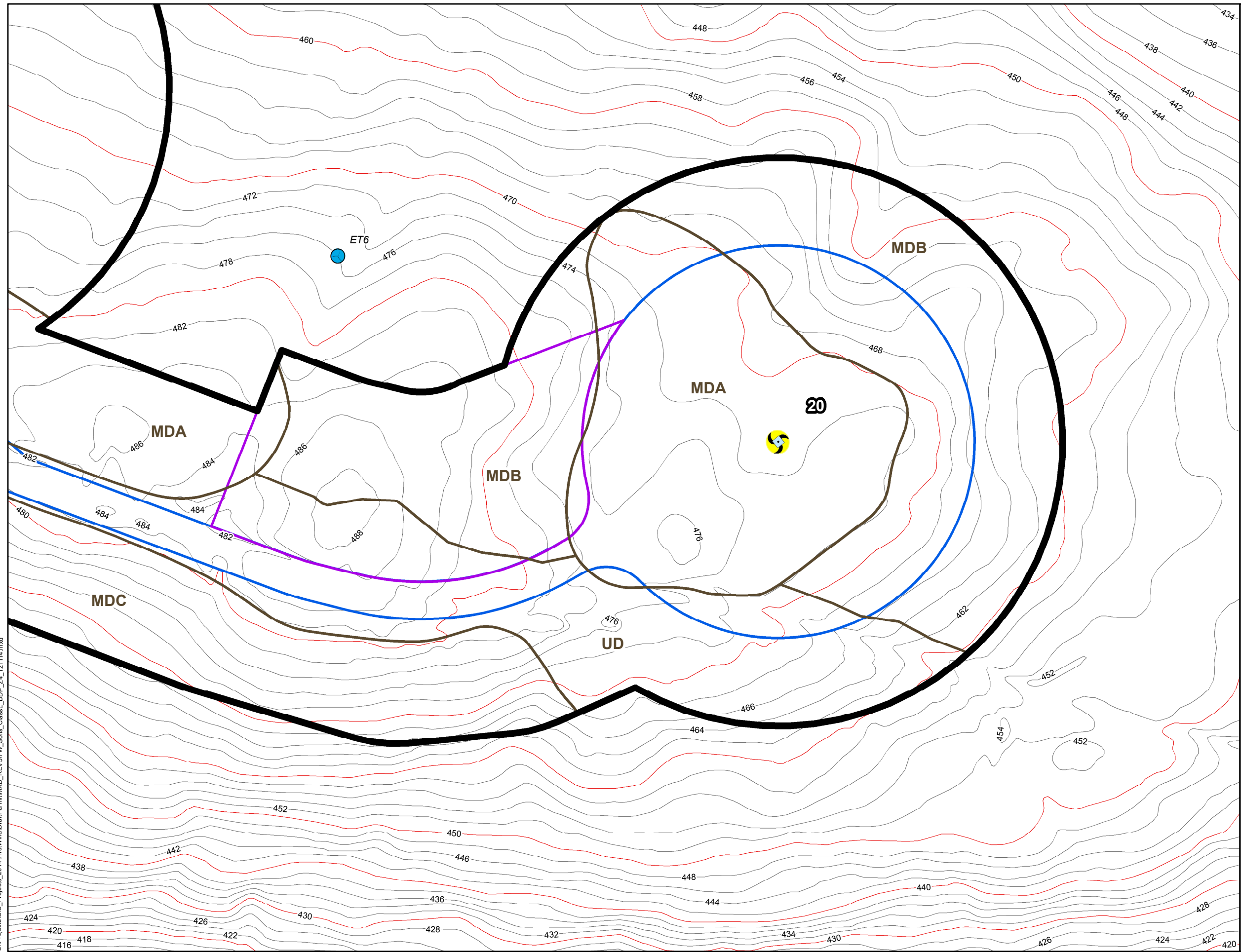
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|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | Delineated Wetlands |
| Soil Map Unit Boundaries | BGB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

*Notes: A narrative and legend accompanies this map
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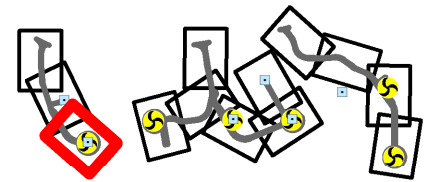


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Class L Soils Survey

Map: Z4-03

Hancock County, Maine

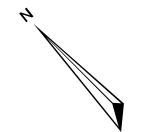
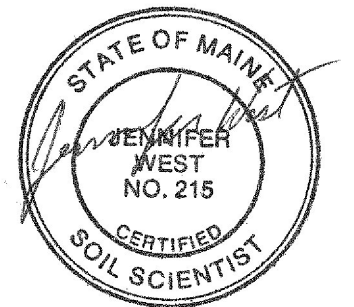


Index Map Z4

Site Features

- | | |
|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | 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.

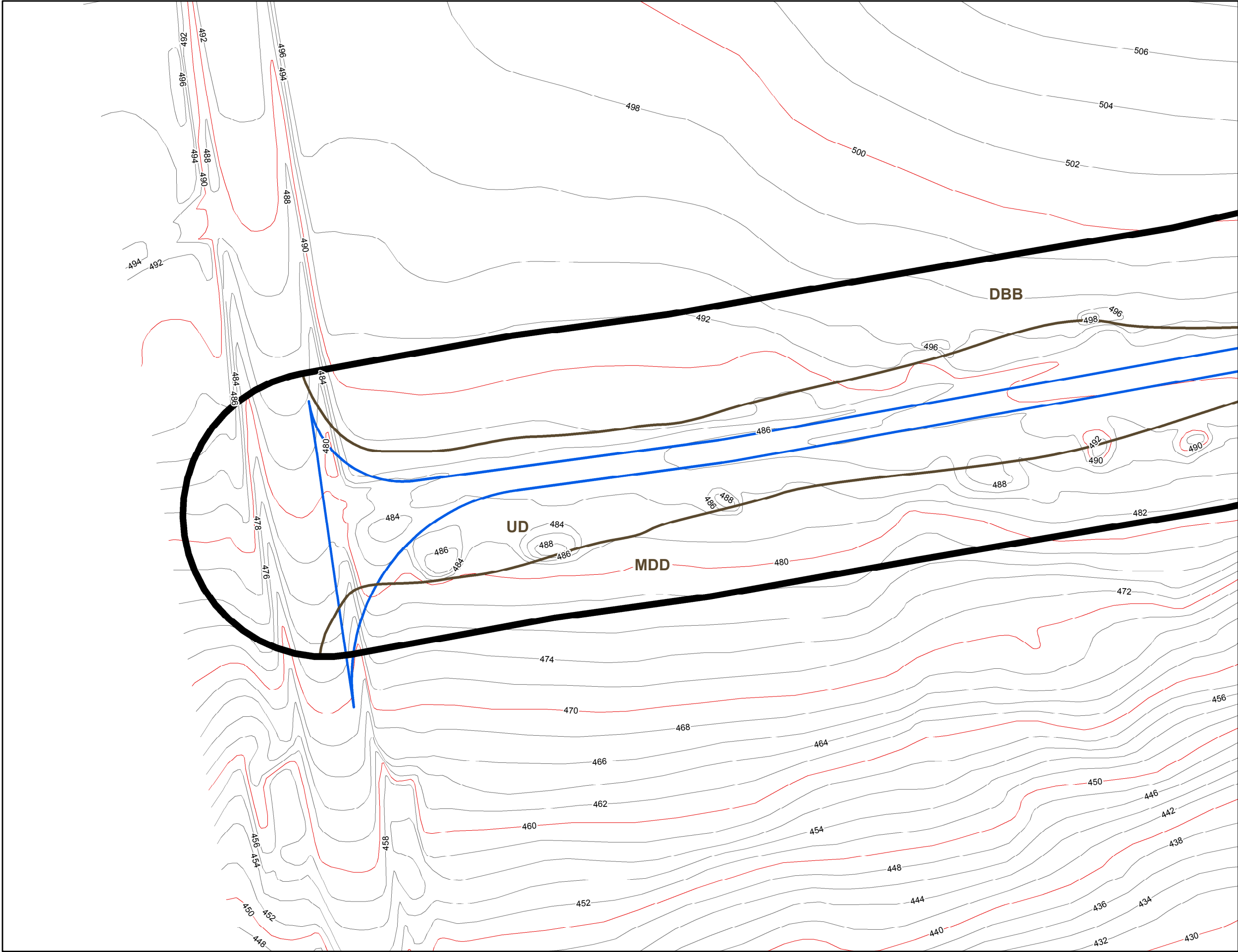


0 50 100 200 Feet
1 inch = 100 feet



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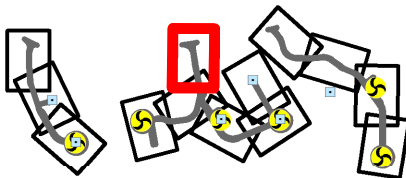


Weaver Wind Project

Class L Soils Survey

Map: Z4-04

Hancock County, Maine

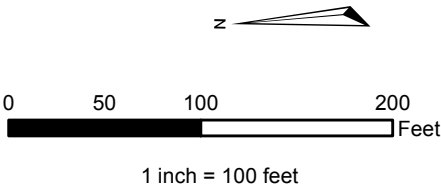
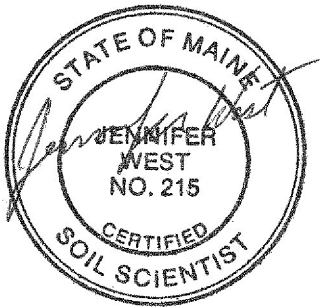


Index Map Z4

Site Features

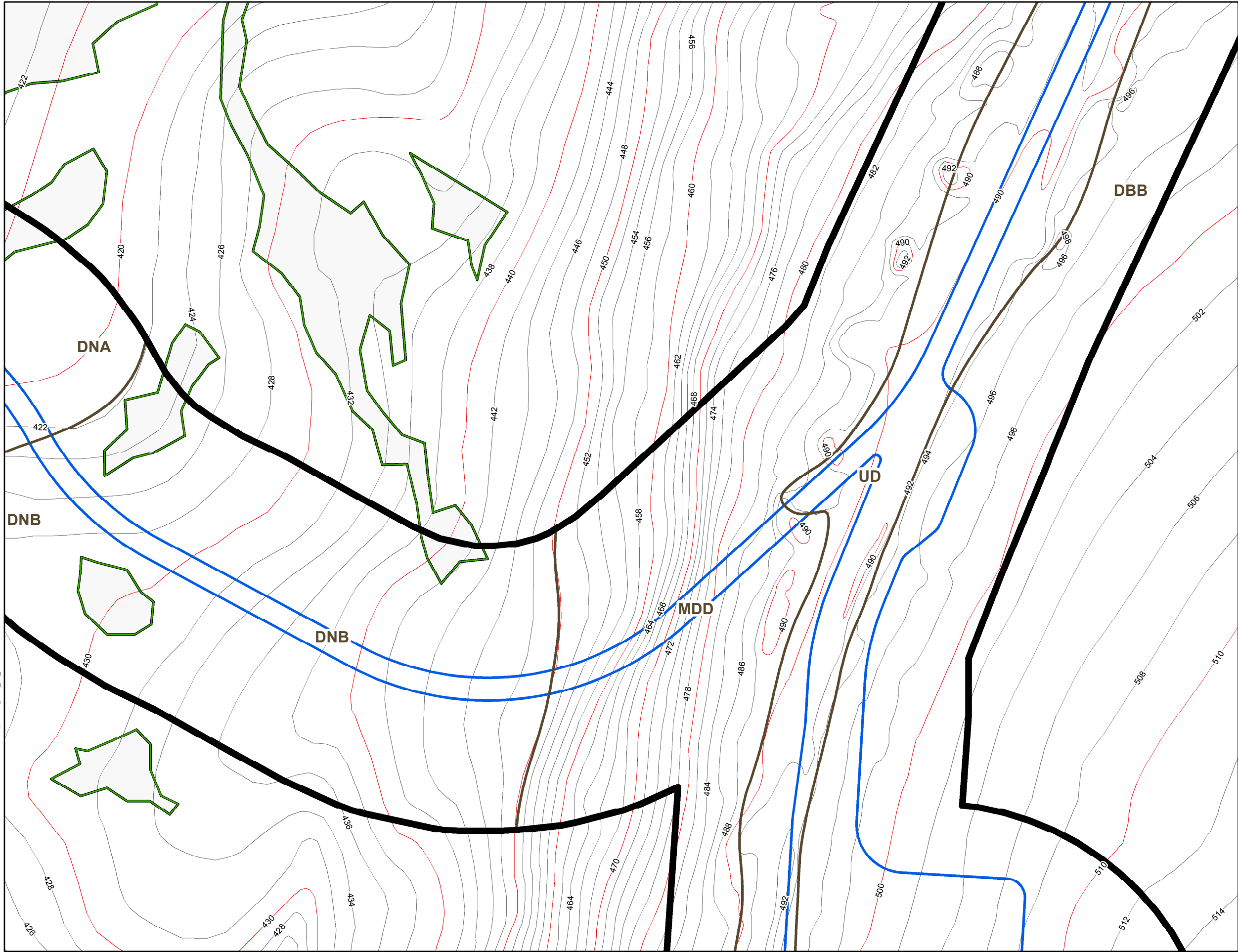
- Proposed Turbines
- New Access Roads
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- Class L Soil Survey Extent
- Proposed Met Towers
- Borings
- Test Pits
- Soil Map Unit Boundaries
- Delineated Wetlands
- BGB Map Unit
- BPA Map Unit

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



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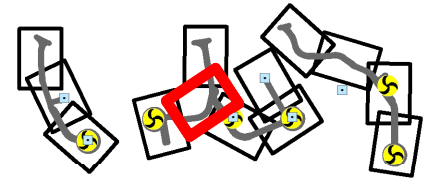


Weaver Wind Project

Class L Soils Survey

Map: Z4-05

Hancock County, Maine

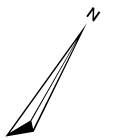
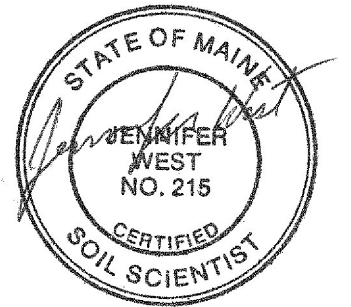


Index Map Z4

Site Features

- | | |
|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
| Proposed Met Towers | Laydown Areas |
| Borings | Class L Soil Survey Extent |
| Test Pits | 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.



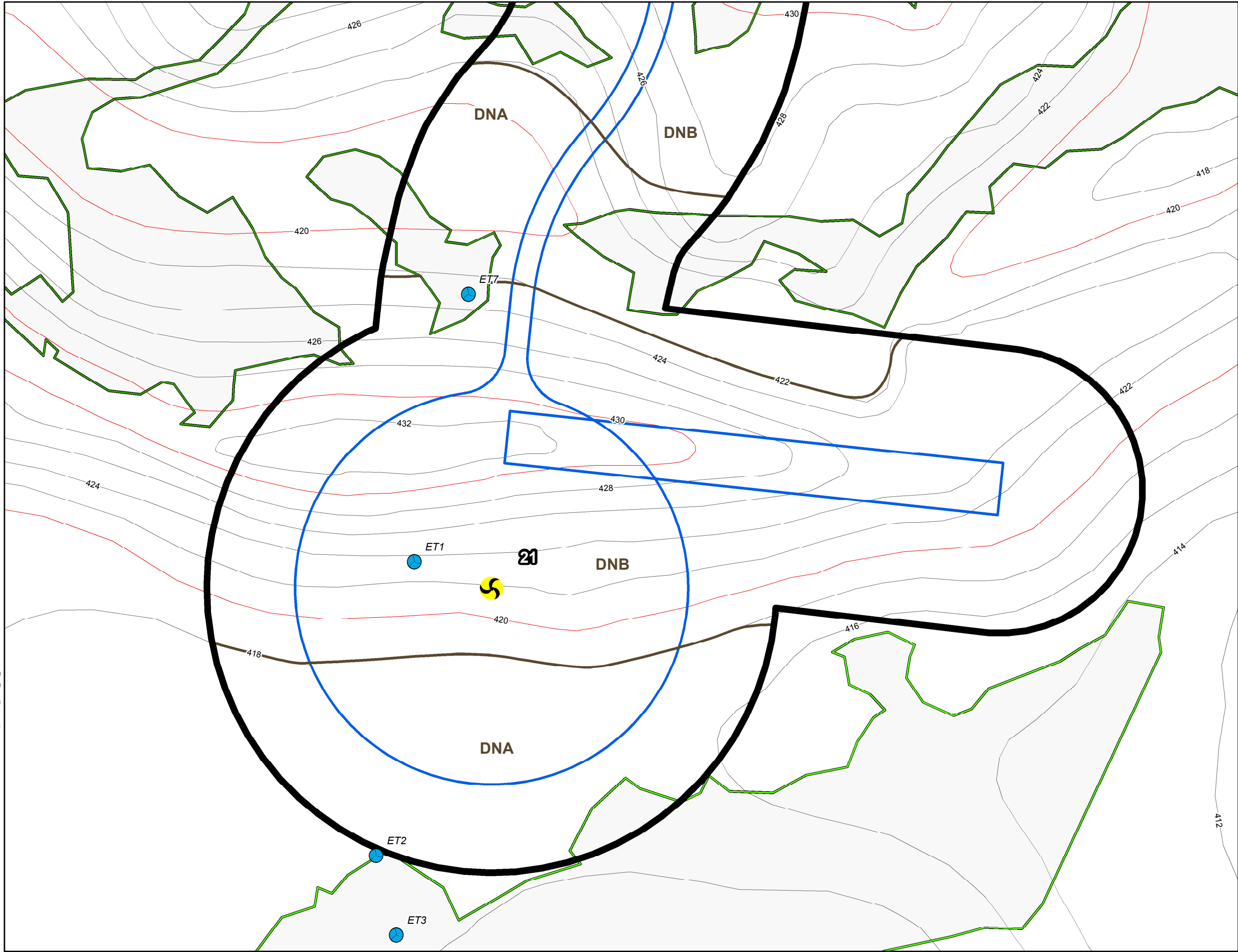
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1 inch = 100 feet



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Class L Soils Survey

Map: Z4-06

Hancock County, Maine

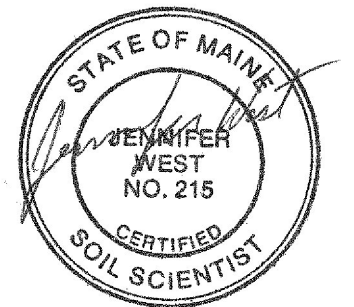


Index Map Z4

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| Soil Map Unit Boundaries | BGB Map Unit |
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Data provided by: Stantec, James W. Sewall & Aerial Survey Co.

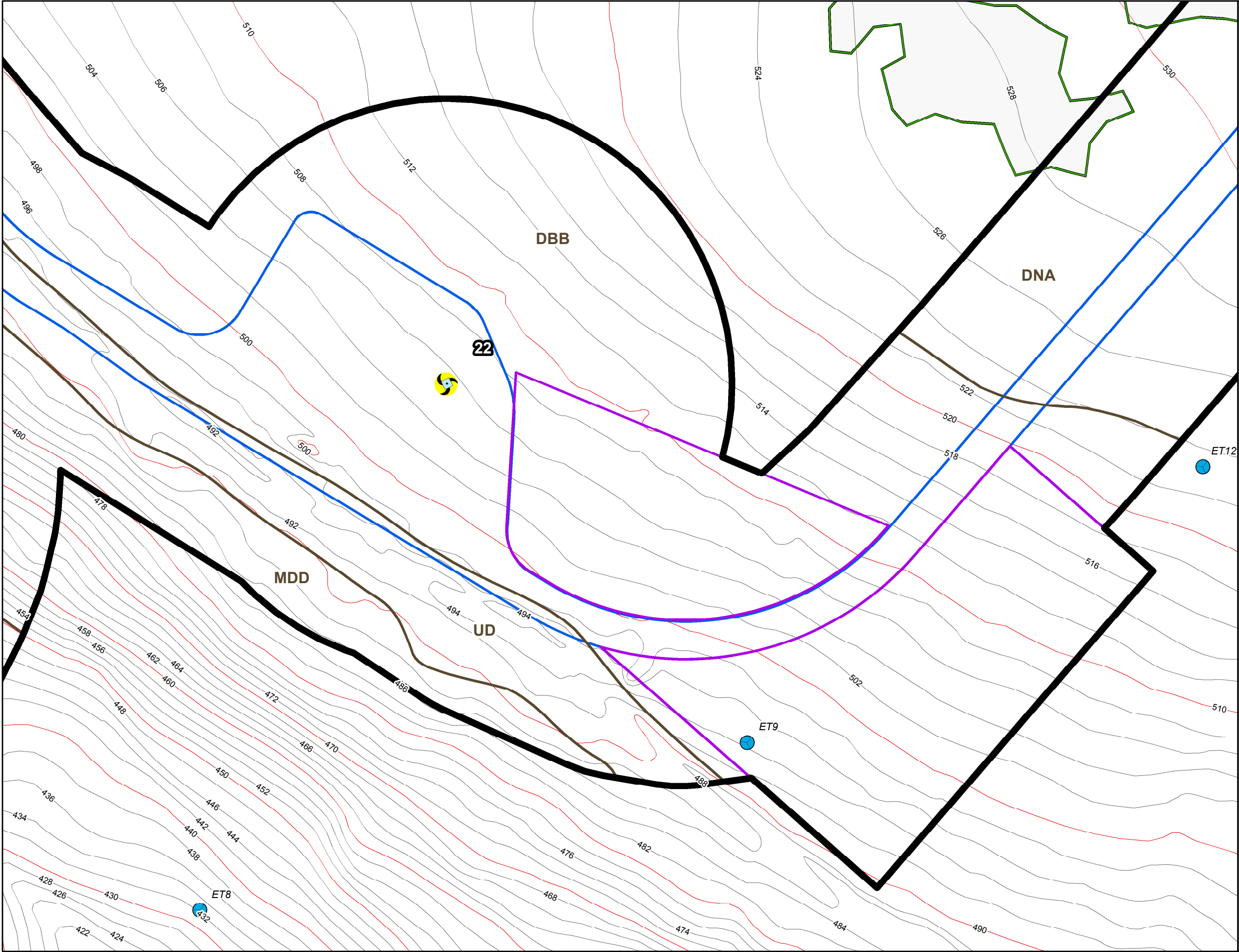


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1 inch = 100 feet



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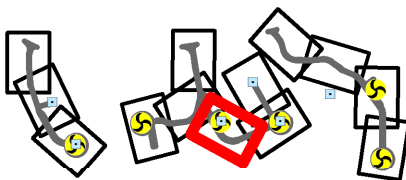


Weaver Wind Project

Class L Soils Survey

Map: Z4-07

Hancock County, Maine

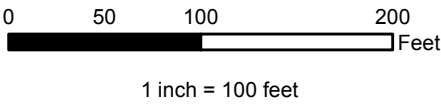
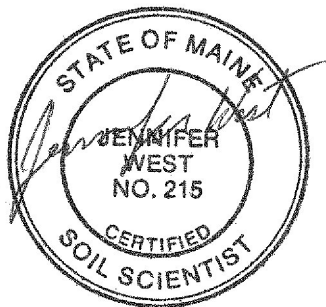


Index Map Z4

Site Features

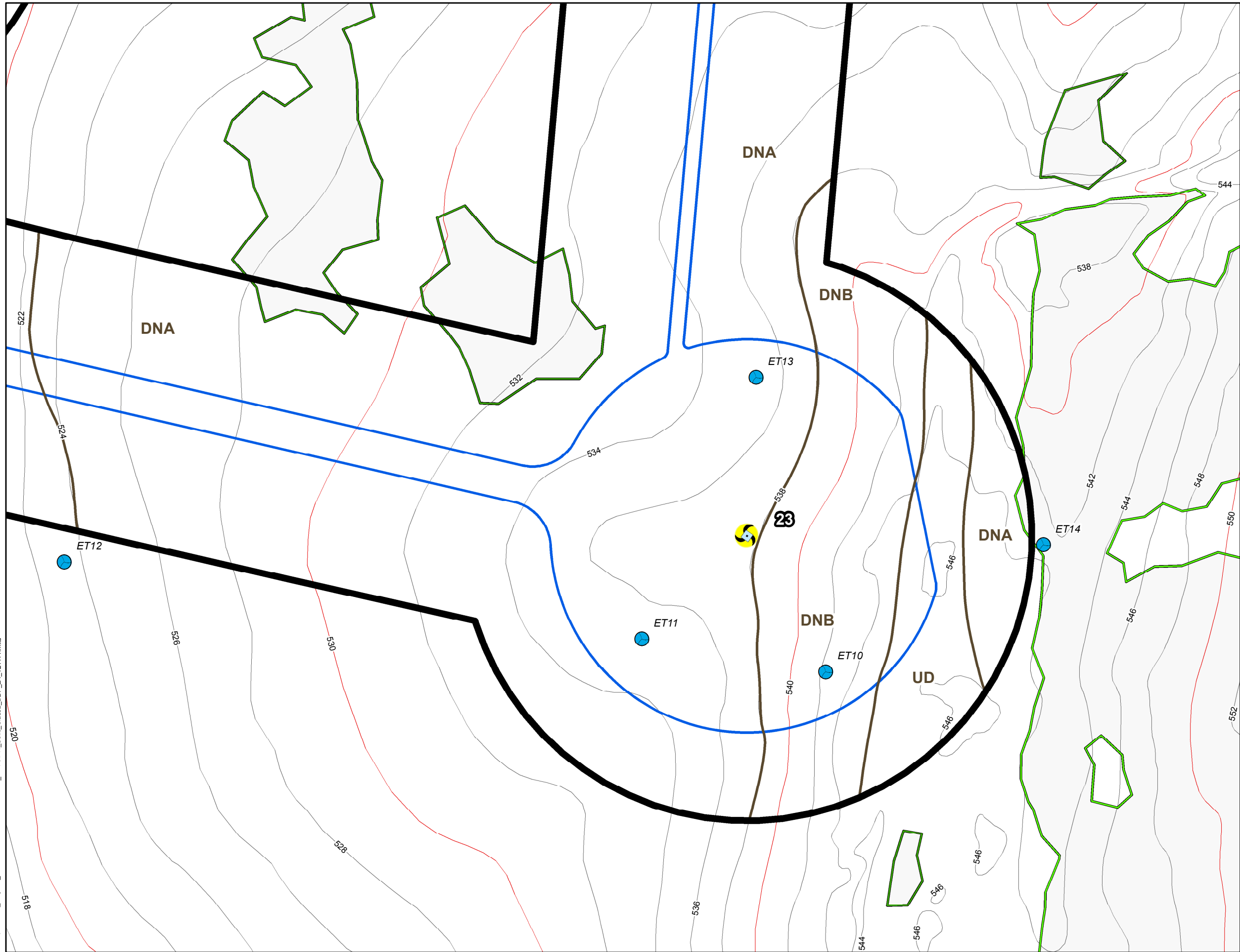
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|--------------------------|----------------------------|
| Proposed Turbines | New Access Roads |
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| Test Pits | Delineated Wetlands |
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| | BPA Map Unit |

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

Class L Soils Survey

Map: Z4-08

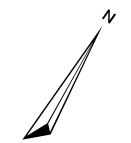
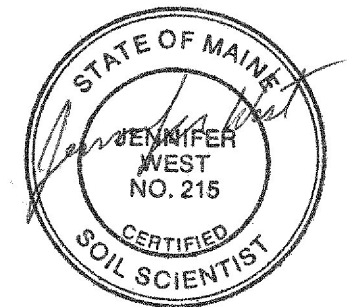
Hancock County, Maine



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
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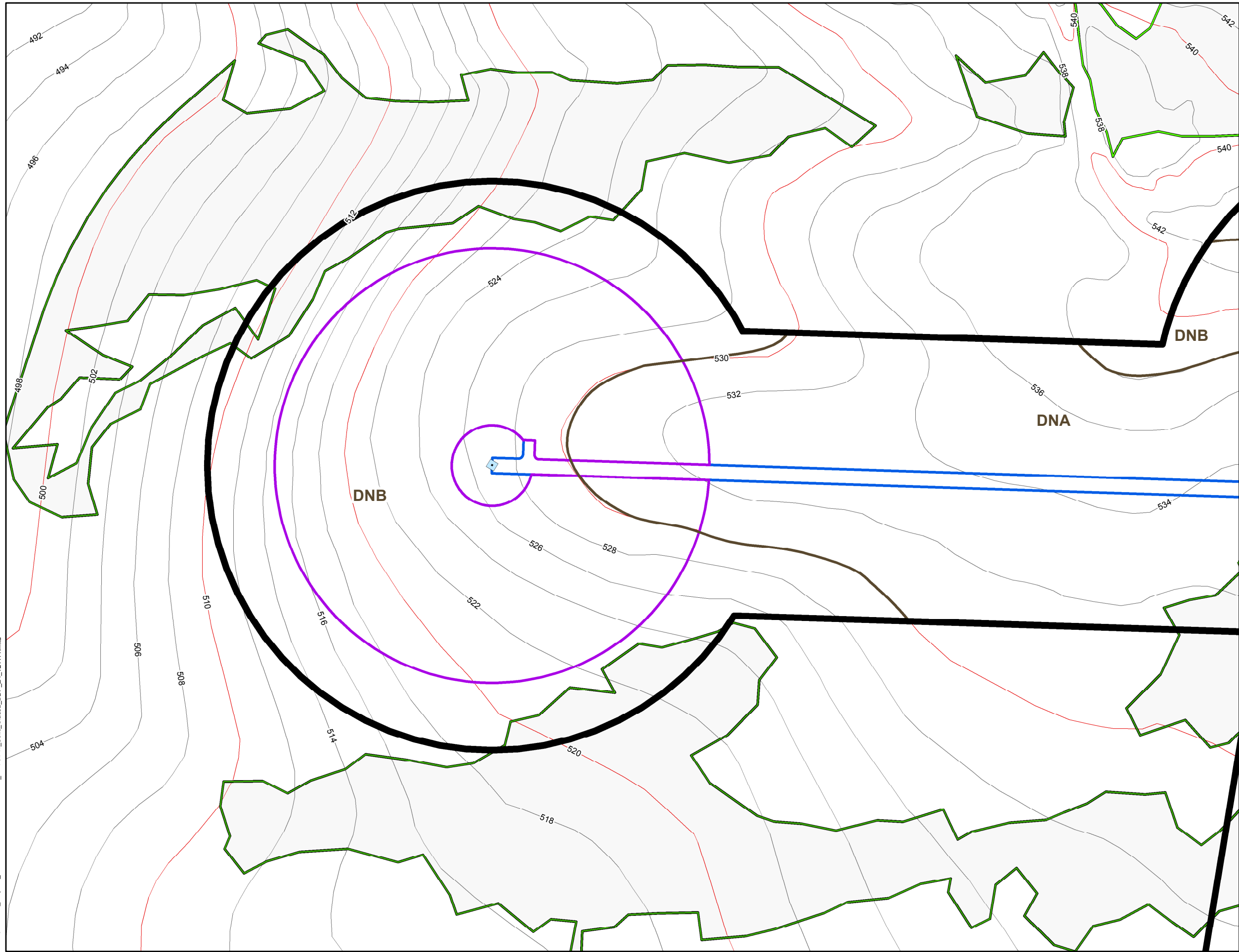


0 50 100 200 Feet
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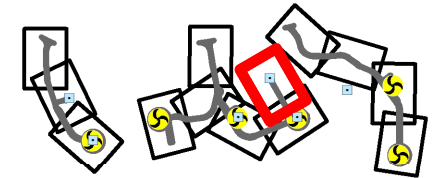


Weaver Wind Project

Class L Soils Survey











Map: Z4-09

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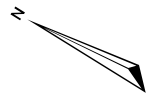
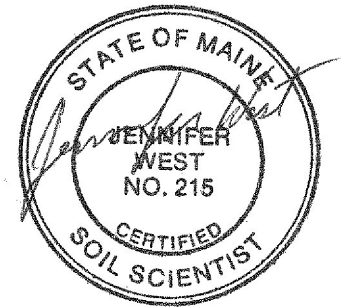


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Site Features

- | | | | |
|---|--------------------------|---|----------------------------|
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|  | Proposed Met Towers |  | Laydown Areas |
|  | Borings |  | Class L Soil Survey Extent |
|  | Test Pits | 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
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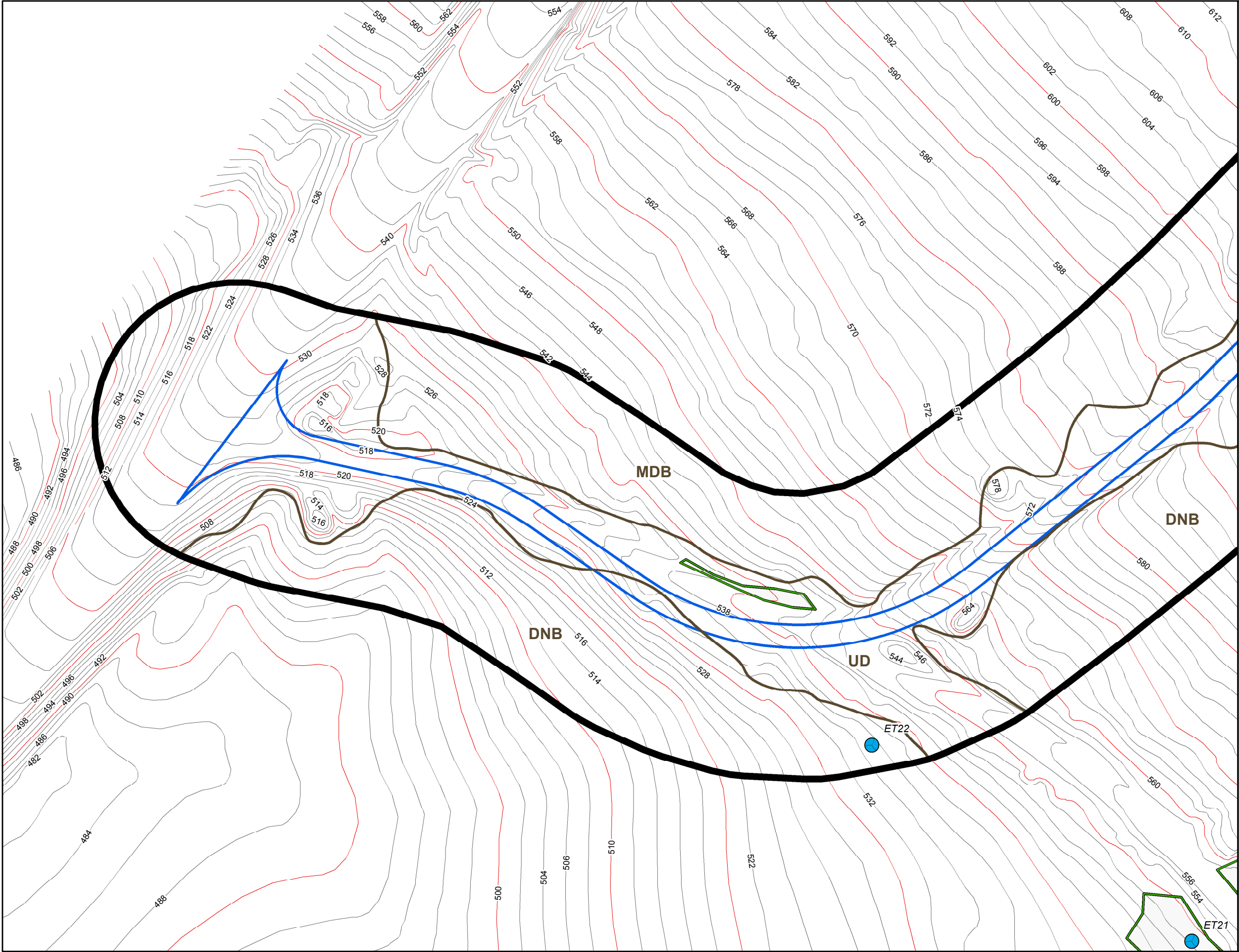


0 50 100 200 Feet
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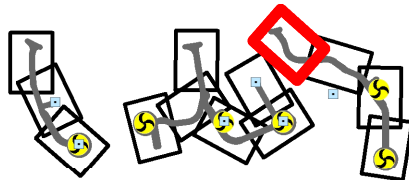


Weaver Wind Project

Class L Soils Survey

Map: Z4-10

Hancock County, Maine

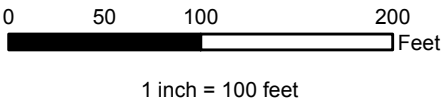
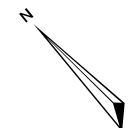
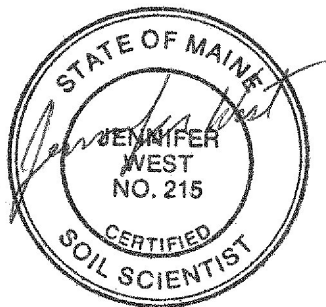


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Site Features

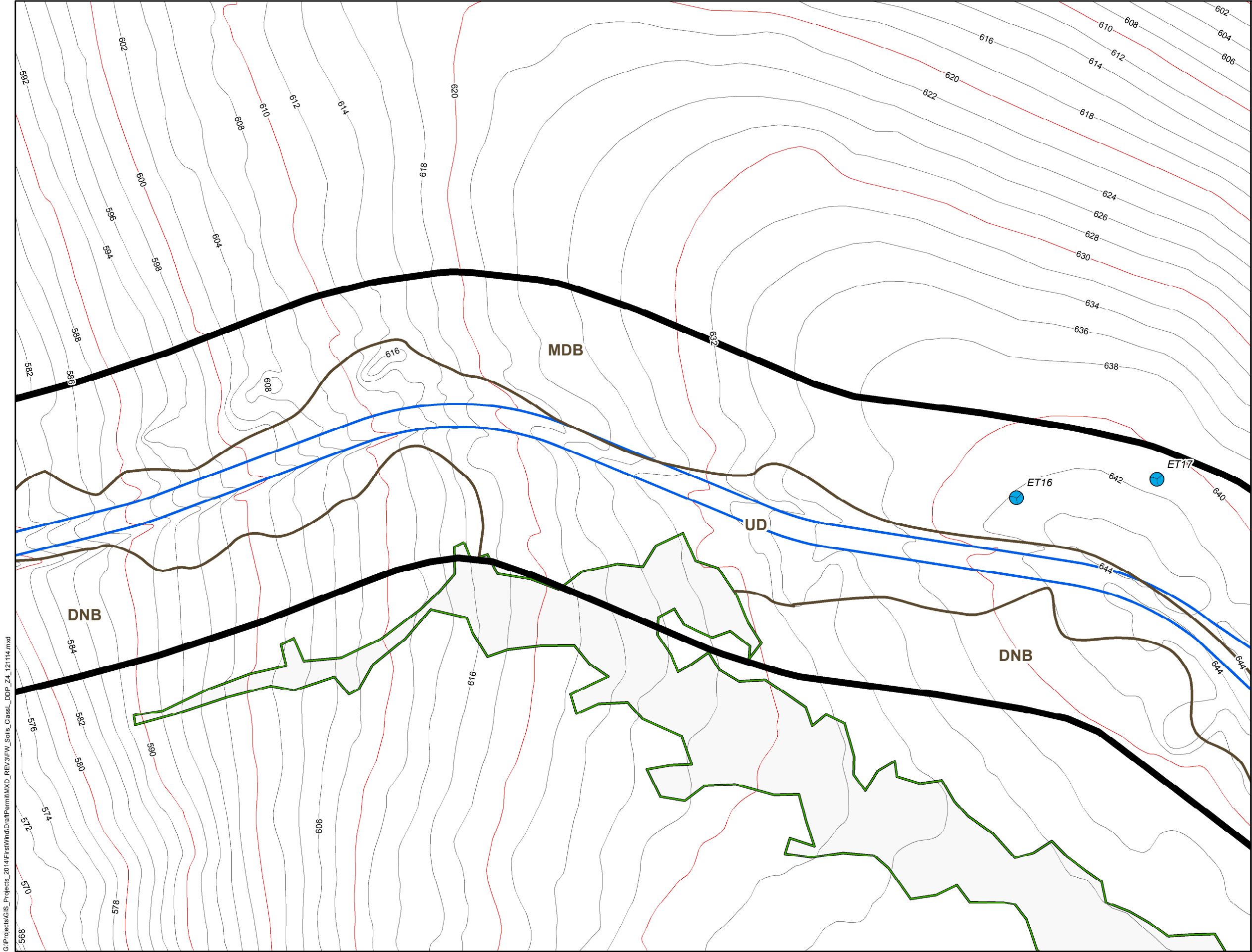
- Proposed Turbines
- Proposed Met Towers
- Borings
- Test Pits
- Soil Map Unit Boundaries
- New Access Roads
- Laydown Areas
- Class L Soil Survey Extent
- Delineated Wetlands**
 - BGB Map Unit
 - BPA Map Unit

*Notes: A narrative and legend accompanies this map
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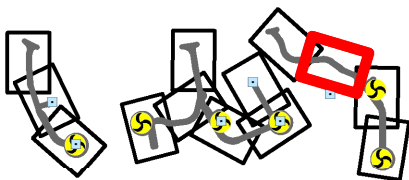


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Class L Soils Survey

Map: Z4-11

Hancock County, Maine

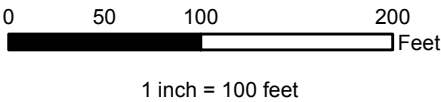
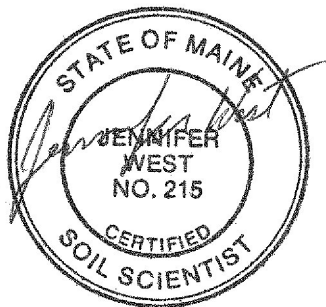


Index Map Z4

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- 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

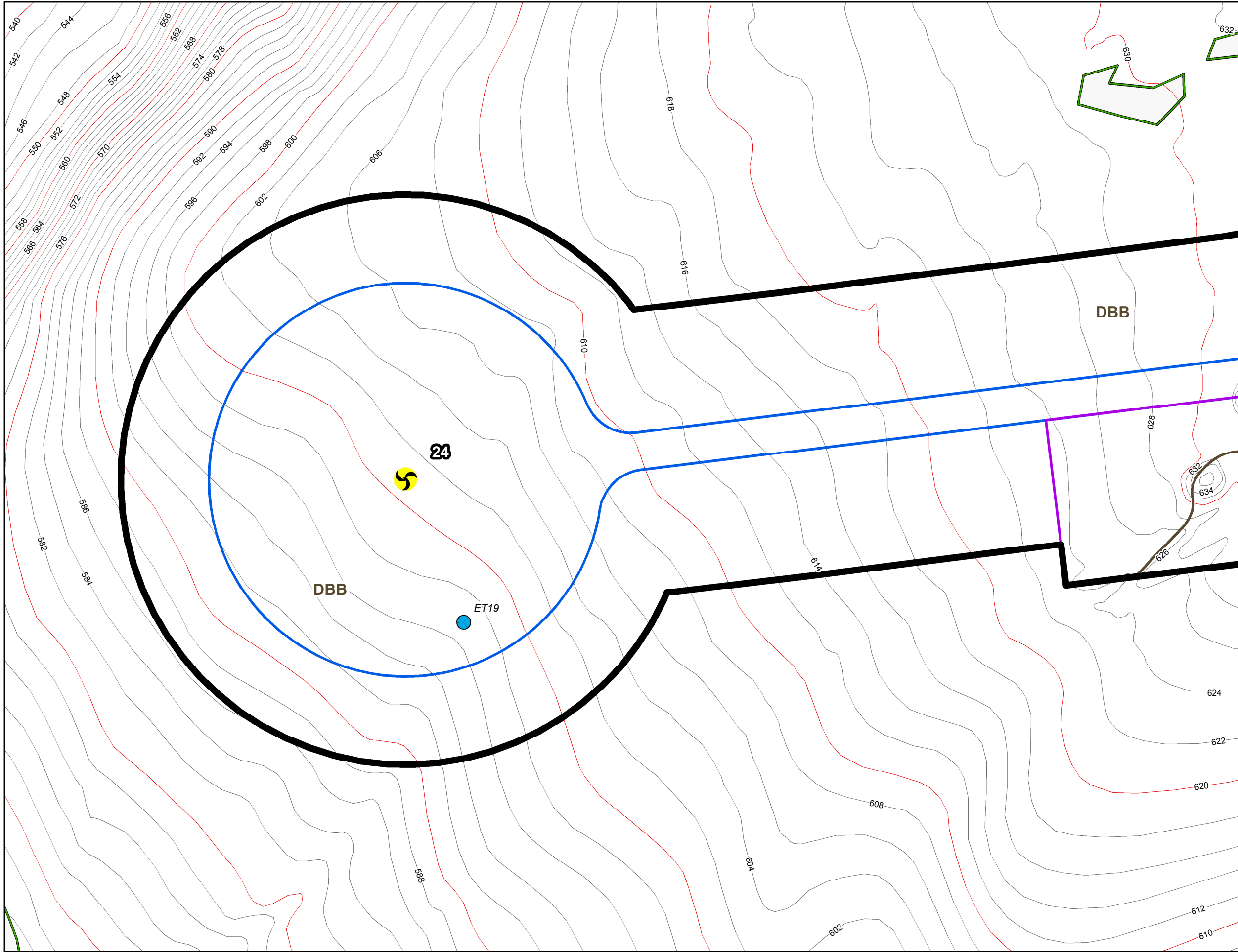
*Notes: A narrative and legend accompanies this map
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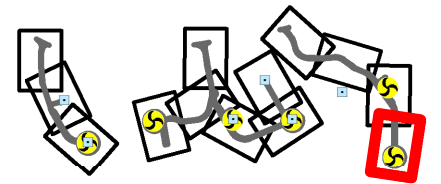


Weaver Wind Project

Class L Soils Survey

Map: Z4-13

Hancock County, Maine



Index Map Z4

Site Features



Proposed
Turbines



Proposed Met
Towers



Borings



Test Pits



Soil Map Unit
Boundaries

New Access
Roads

Laydown Areas

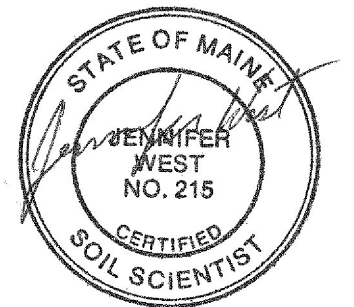
Class L Soil
Survey Extent

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

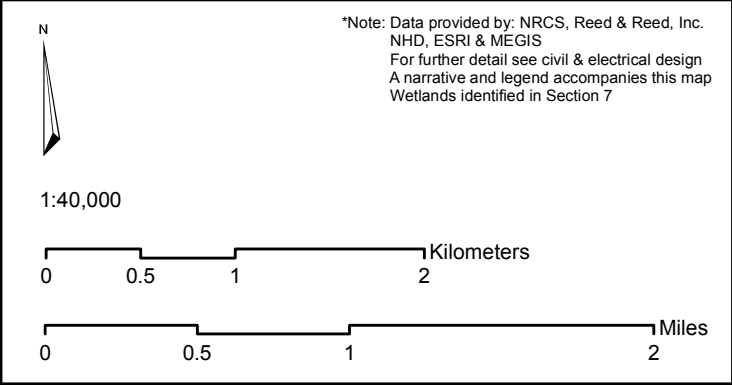
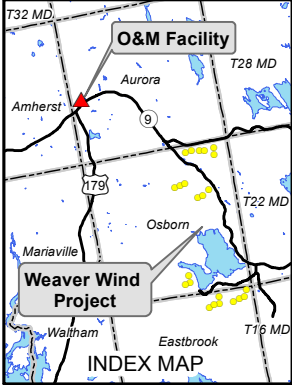
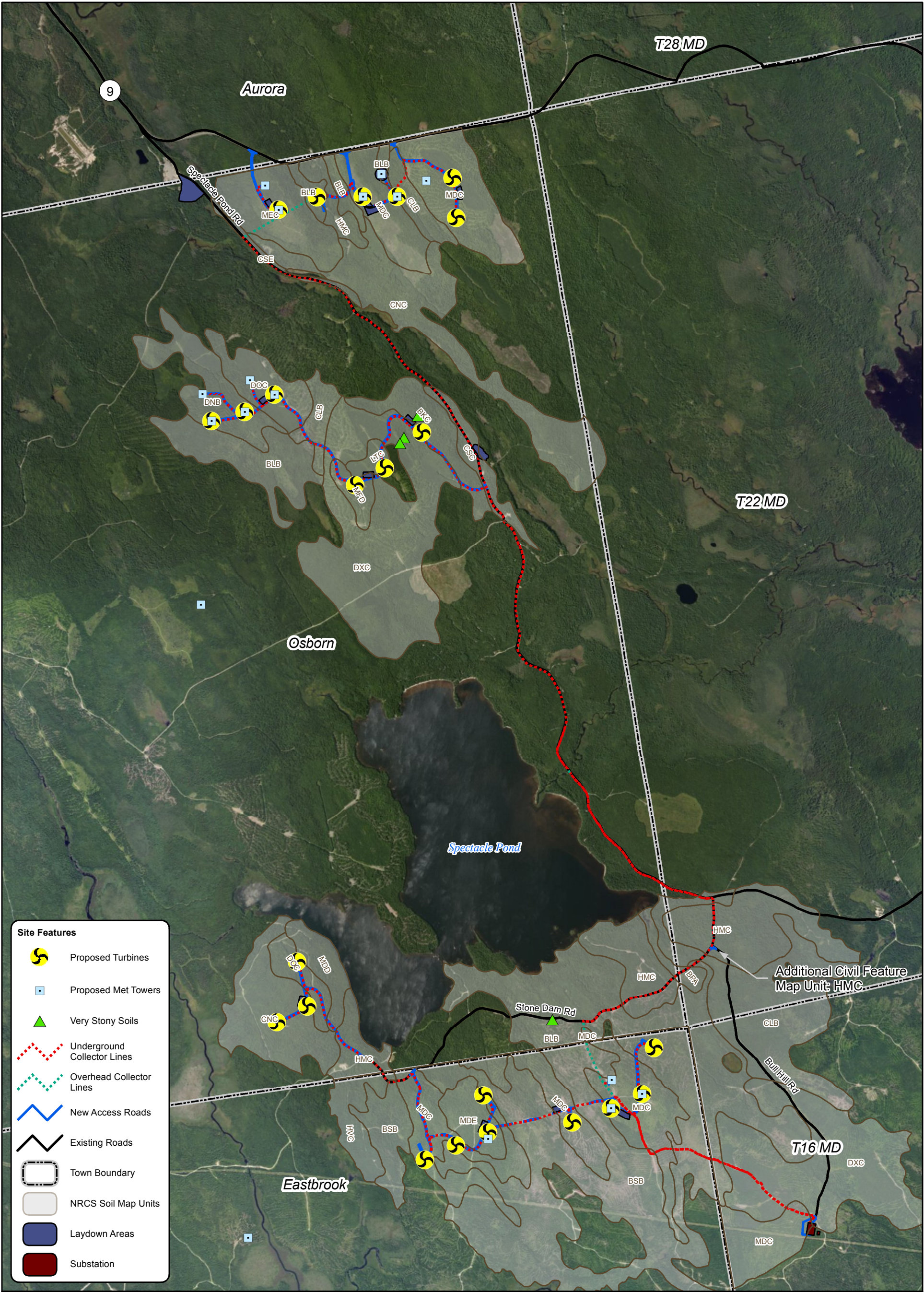
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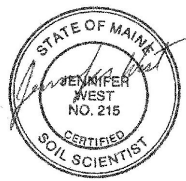
Appendix C-3

Class D Soil Mapping



Class D Soils Survey

Weaver Wind Project
Hancock County, Maine



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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

PROPERTY LOCATION		>> CAUTION: LPI APPROVAL REQUIRED <<	
City, Town, or Plantation	Aurora	Town/City	Aurora
Street or Road	Old Airline Road	Permit #	
Subdivision, Lot #	N/A	Date Permit Issued	Fee: \$ Double Fee Charged []
OWNER/APPLICANT INFORMATION		L.P.I. #	
Name (last, first, MI)	Hancock Wind, LLC	Local Plumbing Inspector Signature	
	<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Applicant	<input type="checkbox"/> Owner <input type="checkbox"/> Town <input type="checkbox"/> State	
Mailing Address of Owner/Applicant	C/O Dale Knapp, Stantec 30 Park Dr. Topsham, Maine 04086	The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.	
Daytime Tel. #	207-729-1199	Municipal Tax Map # Lot #	
OWNER OR APPLICANT STATEMENT		CAUTION: INSPECTION REQUIRED	
I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.		I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.	
Signature of Owner or Applicant _____ Date _____		(1st) date approved _____	
		Local Plumbing Inspector Signature _____ (2nd) date approved _____	

PERMIT INFORMATION			
TYPE OF APPLICATION <input checked="" type="checkbox"/> 1. First Time System <input type="checkbox"/> 2. Replacement System Type replaced: _____ Year installed: _____ <input type="checkbox"/> 3. Expanded System a. <25% Expansion b. ≥25% Expansion <input type="checkbox"/> 4. Experimental System <input type="checkbox"/> 5. Seasonal Conversion	THIS APPLICATION REQUIRES <input checked="" type="checkbox"/> 1. No Rule Variance <input type="checkbox"/> 2. First Time System Variance a. Local Plumbing Inspector Approval b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 3. Replacement System Variance a. Local Plumbing Inspector Approval b. State & Local Plumbing Inspector Approval <input type="checkbox"/> 4. Minimum Lot Size Variance <input type="checkbox"/> 5. Seasonal Conversion Permit	DISPOSAL SYSTEM COMPONENTS <input checked="" type="checkbox"/> 1. Complete Non-engineered System <input type="checkbox"/> 2. Primitive System (graywater & alt. toilet) <input type="checkbox"/> 3. Alternative Toilet, specify: _____ <input type="checkbox"/> 4. Non-engineered Treatment Tank (only) <input type="checkbox"/> 5. Holding Tank, _____ gallons <input type="checkbox"/> 6. Non-engineered Disposal Field (only) <input type="checkbox"/> 7. Separated Laundry System <input type="checkbox"/> 8. Complete Engineered System (2000 gpd or more) <input type="checkbox"/> 9. Engineered Treatment Tank (only) <input type="checkbox"/> 10. Engineered Disposal Field (only) <input type="checkbox"/> 11. Pre-treatment, specify: _____ <input type="checkbox"/> 12. Miscellaneous Components	
SIZE OF PROPERTY +/- 6.5 <input type="checkbox"/> SQ. FT. <input checked="" type="checkbox"/> ACRES	DISPOSAL SYSTEM TO SERVE <input type="checkbox"/> 1. Single Family Dwelling Unit, No. of Bedrooms: _____ <input type="checkbox"/> 2. Multiple Family Dwelling, No. of Units: _____ <input checked="" type="checkbox"/> 3. Other: <u>O+M Building</u> (specify) Current Use <input type="checkbox"/> Seasonal <input type="checkbox"/> Year Round <input checked="" type="checkbox"/> Undeveloped	TYPE OF WATER SUPPLY <input checked="" type="checkbox"/> 1. Drilled Well <input type="checkbox"/> 2. Dug Well <input type="checkbox"/> 3. Private <input type="checkbox"/> 4. Public <input type="checkbox"/> 5. Other (<i>Not yet on-site</i>)	

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)			
TREATMENT TANK <input checked="" type="checkbox"/> 1. Concrete a. Regular b. Low Profile <input type="checkbox"/> 2. Plastic <input type="checkbox"/> 3. Other: _____ CAPACITY: <u>1000</u> GAL.	DISPOSAL FIELD TYPE & SIZE <input type="checkbox"/> 1. Stone Bed <input type="checkbox"/> 2. Stone Trench <input checked="" type="checkbox"/> 3. Proprietary Device a. cluster array <input type="checkbox"/> c. Linear b. regular load <input type="checkbox"/> d. H-20 load <input type="checkbox"/> 4. Other: _____ SIZE: <u>200</u> <input type="checkbox"/> sq. ft. <input checked="" type="checkbox"/> lin. ft.	GARBAGE DISPOSAL UNIT <input checked="" type="checkbox"/> 1. No <input type="checkbox"/> 2. Yes <input type="checkbox"/> 3. Maybe If Yes or Maybe, specify one below: <input type="checkbox"/> a. multi-compartment tank <input type="checkbox"/> b. _____ tanks in series <input type="checkbox"/> c. increase in tank capacity <input type="checkbox"/> d. Filter on Tank Outlet	DESIGN FLOW <u>300</u> gallons per day BASED ON: <input type="checkbox"/> 1. Table 4A (dwelling unit(s)) <input checked="" type="checkbox"/> 2. Table 4C (other facilities) SHOW CALCULATIONS for other facilities O+M Building 10-15 Employees @ 15 GPD each <input type="checkbox"/> 3. Section 4G (meter readings) ATTACH WATER METER DATA
SOIL DATA & DESIGN CLASS PROFILE CONDITION <u>2</u> / All at Observation Hole # <u>1</u> Depth <u>30</u> " of Most Limiting Soil Factor	DISPOSAL FIELD SIZING <input type="checkbox"/> 1. Medium---2.6 sq. ft. / gpd <input checked="" type="checkbox"/> 2. Medium---Large 3.3 sq. ft. / gpd <input type="checkbox"/> 3. Large---4.1 sq. ft. / gpd <input type="checkbox"/> 4. Extra Large---5.0 sq. ft. / gpd	EFFLUENT/EJECTOR PUMP <input type="checkbox"/> Not Required <input checked="" type="checkbox"/> May Be Required <input type="checkbox"/> Required Specify only for engineered systems: DOSE: _____ gallons	LATITUDE AND LONGITUDE at center of disposal area Lat. <u>44</u> d <u>55</u> m <u>639</u> s Lon. <u>-68</u> d <u>32</u> m <u>556</u> s if g.p.s, state margin of error: _____

SITE EVALUATOR STATEMENT			
I certify that on <u>12/05/12</u> (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	SE #	12/12/12 Date
Dale F. Knapp Site Evaluator Name Printed	207-729-1199 Telephone Number	dale.knapp@stantec.com E-mail Address	

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.

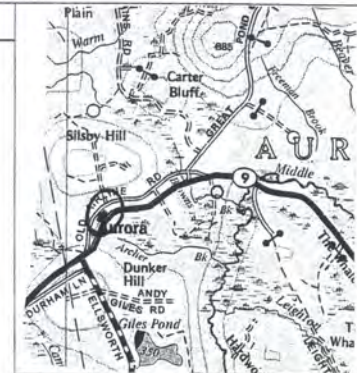
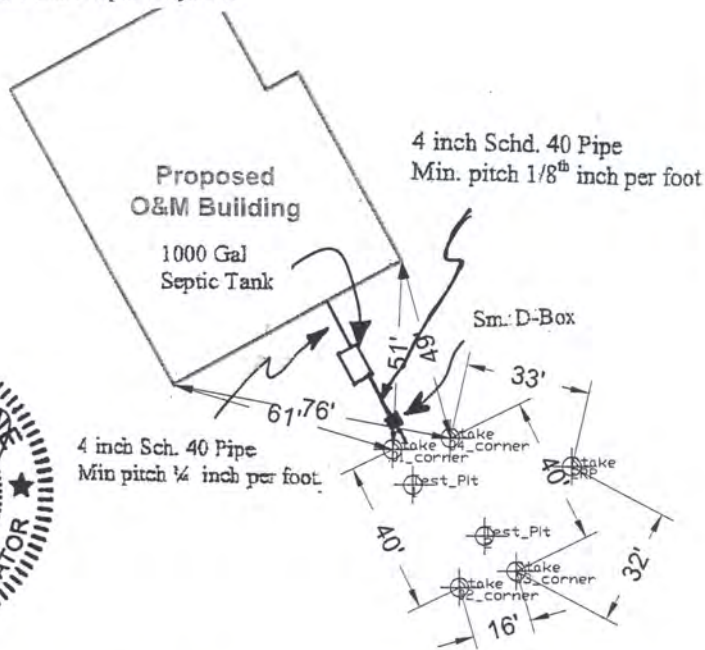
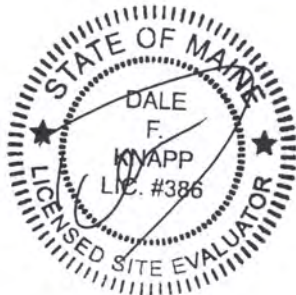
Owner's Name

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	
Loamy Sand		Lt. Yellow	
		Brown	
XXX	BED X	Rock	XXX
Note: Angled stones + cobbles present			

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

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	
		Brown	
XXX	BED X	Rock	XXX
Note: Angled stones + cobbles present			

Soil Classification <u>2</u> <u>AIII</u> Profile Condition	Slope <u>0-3</u> %	Limiting Factor <u>33</u> "	<input type="checkbox"/> Ground Water <input type="checkbox"/> 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

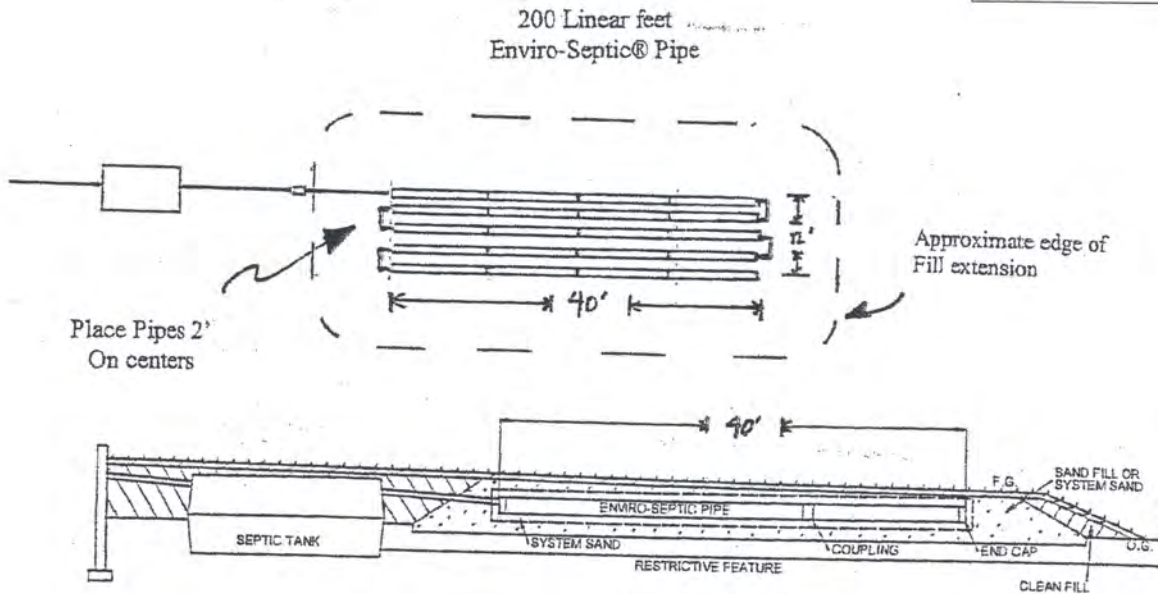
Old Airline Rd.

Owner's Name

Hancock Wind, LLC

SUBSURFACE WASTEWATER DISPOSAL PLAN

SCALE: 1" = 20 FT.



Note: Tank location may vary.

FILL REQUIREMENTS

CONSTRUCTION ELEVATIONS

Depth of Fill (Upslope)	18"	Finished Grade Elevation
Depth of Fill (Downslope)	18"	Top of Distribution Pipe or Proprietary Device
		Bottom of Disposal Area

-98"

-59"

-72"

ELEVATION REFERENCE POINT

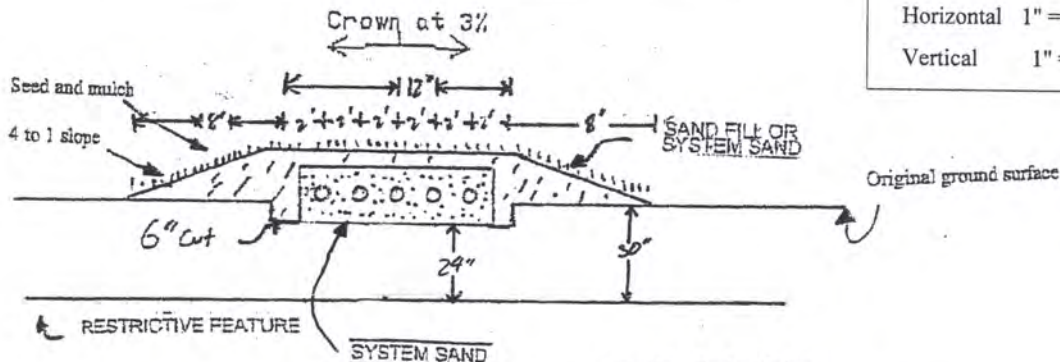
Location & Description: ERP Top of Stake @ 46" Above Ground
Reference Elevation: 0.00"

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 1/2" in diameter.

No gravel is smaller than 2mm/0.0767" in diameter. (It must not pass through a #10 sieve.)

Coarse Sand Quality Restrictions

No coarse sand is smaller than 0.5mm/0.0196" 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.

Site Evaluator Signature

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 O&M SITE	Owner or Applicant Name HANCOCK WIND, LLC
SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)		

Observation Hole # TP1 ■ Test Pit □ Boring

0 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0			DARK YELLOWISH BROWN	
6	SANDY	FRIABLE		NONE
12	LOAM		10YR 3/4	
18	XXXXX	BEDROCK	BROWN	XXXXXX
24				
30				
36				
42				
48				

Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 14 " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock
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Soil Series Name **Lyman** Hydrologic group **D**

Observation Hole # TP2 ■ Test Pit □ Boring

0 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0			DARK BROWN	
6	SANDY	FRIABLE		NONE
12	LOAM		7.5YR 3/3	
18	XXXXXX	BEDROCK	XXXXXX	XXXXXX
24				
30				
36				
42				
48				

Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 10 " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock
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Soil Series Name **Lyman** Hydrologic group **D**

Observation Hole # TP3 ■ Test Pit □ Boring

0 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0			DARK BROWN	
6	SANDY	FRIABLE		NONE
12	LOAM		7.5YR 3/4	
18			STRONG BROWN	
24	LOAM		7.5YR 4/6	
30			YELLOWISH BROWN	
36	XXX	TEST PIT LIMIT	10YR 5/4	XXX
42				
48				

Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 32 " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Soil Series Name **DIXFIELD** Hydrologic group **C**

Observation Hole # TP4 ■ Test Pit □ Boring

0 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0			DARK	
6	SANDY	FRIABLE	BROWN	NONE
12	LOAM		7.5YR 3/4	
18			BROWN	
24	XXXXXX	BEDROCK	XXXXXX	XXXXXX
30				
36				
42				
48				

Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 13 " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock
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Soil Series Name **Lyman** Hydrologic group **D**

Soil Scientist/ Site Evaluator Signature

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 # TP5 ■ Test Pit □ Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
SANDY		DARK BROWN	
LOAM	FRIABLE	7.5YR 3/4	NONE
		STRONG BROWN	
		7.5YR 4/6	
LOAM			
		YELLOWISH BROWN	
		10YR 5/4	
X X X	TEST PIT	LIMIT	X X X X

Soil Series Name DIXFIELD Hydrologic group C

Soil Classification 0-3 Slope 32 " Limiting Factor 32 " ☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Profile Condition Percent Depth

Observation Hole # TP6 ■ Test Pit □ Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
FINE SANDY		DARK	
LOAM	FRIABLE	YELLOW BROWN	NONE
		10YR 3/4	
LOAM		DARK YELLOW BROWN	
		10YR 4/4	
X X X	TEST PIT	LIMIT	X X X X
NOTE: Refusal at large stone			

Soil Series Name DIXFIELD Hydrologic group C

Soil Classification 0-3 Slope 14 " Limiting Factor 14 " ☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Profile Condition Percent Depth

Observation Hole # TP7 ■ 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	
LOAMY			
SAND		7.5YR 4/6	
		GRAYISH BROWN	FINE FAINT
SAND		10YR 5/2	
X X X X	TEST PIT	LIMIT	X X X X

Soil Series Name DIXFIELD Hydrologic group C

Soil Classification 0-3 Slope NONE " Limiting Factor NONE " ☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Profile Condition Percent Depth

Observation Hole # TP8 ■ Test Pit □ Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
SANDY		DARK BROWN	
LOAM	FRIABLE	7.5YR 3/4	NONE
LOAMY		STRONG BROWN	
SAND			
		7.5YR 4/6	
SAND		GRAYISH BROWN	FINE FAINT
		10YR 5/2	
X X X X	TEST PIT	LIMIT	X X X X

Soil Series Name DIXFIELD Hydrologic group C

Soil Classification 0-3 Slope NONE " Limiting Factor NONE " ☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Profile Condition Percent Depth

Soil Scientist Site Evaluator Signature

CSS/LSE #

Date

Town, City, Plantation AURORA, ME	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 9 ☒ Test Pit ☐ Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		DARK YELLOWISH	
6	FRIABLE	BROWN	NONE
12		10YR 3/4 BROWN	
18		10YR 5/3	
24	X X X TEST PIT LIMIT X X X X X X X		
30	NOTE: REFUSAL @ LARGE STONE		
36			
42			
48			

Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 14 " Depth	<input type="checkbox"/> Groundwater <input checked="" type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Soil Series Name DIXFIELD VARIANT Hydrologic group C

Observation Hole # TP 10 ☒ Test Pit ☐ Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		DARK YELLOWISH	
6		BROWN	NONE
12	FRIABLE	10YR 3/4	
18		YELLOWISH	
24		BROWN	
30		10YR 5/6	
36	X X X X X X BED ROCK X X X X X X X		
42			
48			

Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 34 " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock
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Soil Series Name Tunbridge Hydrologic group B

Observation Hole # TP 11 ☒ Test Pit ☐ Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		DARK YELLOWISH	
6	FRIABLE	BROWN	NONE
12		Yellow BROWN	
18		10YR 5/4	
24	X X X X X X BED ROCK X X X X X X X		
30			
36			
42			
48			

Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 16 " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input checked="" type="checkbox"/> Bedrock
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Soil Series Name Lyman Hydrologic group D

Observation Hole # TP 12 ☒ Test Pit ☐ Boring

0 " Depth of organic horizon above mineral soil

Texture	Consistency	Color	Mottling
0		Dark yellow	
6		BROWN	
12	FRIABLE	10YR 3/4	
18		Yellow BROWN	Few
24		10YR 5/4	Faint
30	X X X TEST PIT LIMIT X X X X		
36			
42			
48			

Soil Profile	Classification Condition	Slope 0-3 Percent	Limiting Factor 16 " Depth	<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock
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Soil Series Name MARLOW Hydrologic group C

Soil Scientist/ Site Evaluator Signature

CSS/LSE #

Date

Edits by Jennifer West,
ME CSS #215

Operations and Maintenance Facility

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

Proposed O + M

Observation Hole # <u>M14</u>		<input checked="" type="checkbox"/> Test Pit		<input type="checkbox"/> Boring	
" _____		Depth of organic horizon above mineral soil			
0	Texture	Consistency	Color	Mottling	
	<i>Similar to M13</i>				
	<i>Large boulder encountered</i>				
	<i>No bedrock</i>				
6					
12					
18					
24					
30					
36					
42					
48					
Soil		Classification	Slope	Limiting Factor	
Profile		Condition	Percent	Depth	
				<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock	
Soil Series Name			Hydrologic Group		
<i>Dixfield</i>					

Observation Hole # <u>M16</u>		<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	V FSL	FRIABLE	7.5YR 2.5/2		
	6					
	12	gravelly V FSL		7.5YR 3/4		
	18			2.5Y 5/3		
	24	very gravelly V FSL	FIRM	2.5Y 4/4	Redox GWS FAINT	
	30					
	36					
	42	EOB 68" no bedrock				
	48					
	Soil		Classification	Slope	Limiting Factor	
	Profile		Condition	Percent	Depth	
Soil Series Name <u>Dixfield</u>		Hydrologic Group		<input type="checkbox"/> Groundwater <input type="checkbox"/> Restrictive Layer <input type="checkbox"/> Bedrock		

Soil Scientist/Site Evaluator Signature

215
CSS/LSE#

11-24-14
Date

Town, City, Plantation <u>Aurora</u>	Street, Road, Subdivision <u>11-24-14</u>	Owner or Applicant Name <u>Weaver</u>
SOIL PROFILE DESCRIPTION AND CLASSIFICATION		(Location of Observation Holes Shown Above)

Proposed 0+M

Observation Hole # M17 ☒ Test Pit ☐ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	VFSL	FRIBLE	7.5YR 2.5/2	
6	↓	↓		
12	↓	↓	10YR 4/4	
18	↓	↓		
24	loamy fine sand	↓	2.5Y 4/3	
30	↓	FIRM	10YR 4/3	10YR 4/4 SW, FINE
36	↓		mixed	
42	EOE 68" No bedrock			
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 <u>Dixfield</u>			Hydrologic Group	

Observation Hole # M18 ☒ Test Pit ☐ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	VFSL	FRIBLE	7.5YR 2.5/2	
6				
12			10YR 3/4	
18	Loam	↓	2.5Y 5/3	
24	↓	↓		
30	↓	FIRM	2.5Y 4/3	
36				
42	Bedrock at 40"			
48	1112212222111111			

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 <u>Tunbridge</u>			Hydrologic Group	

Observation Hole # M19 ☒ Test Pit ☐ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	VFSL	FRIBLE	7.5YR 2.5/2	
6		↓		
12		↓	10YR 4/4	
18	gravelly loam	↓		10YR 4/4
24		↓	2.5Y 5/3	few, fine
30		FIRM		
36	↓			
42	Rotten Rock at 50"			
48	Bedrock at 55"			

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 <u>Tunbridge</u>			Hydrologic Group	

Observation Hole # M20 ☒ Test Pit ☐ Boring

" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	Very gravelly LS	FRIBLE	7.5YR 2.5/2	
6		↓		
12		↓	10YR 3/3	
18		↓		
24	gravel	FIRM	7.5YR 3/4	
30	↓	↓	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 <u>Tunbridge</u>			Hydrologic Group	

**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

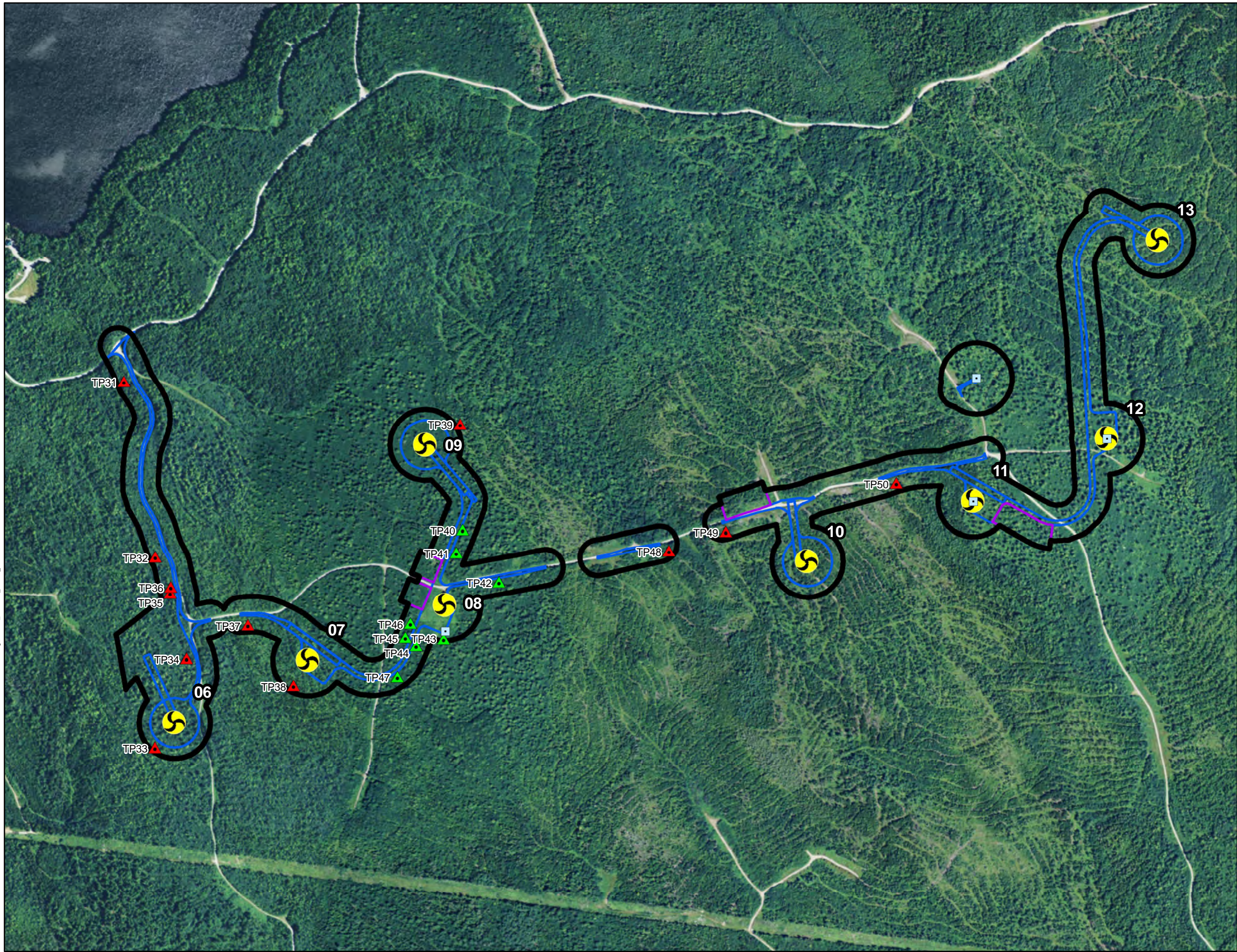
Suspected refusal on boulder

Summary of MDEP Requested Test Pits
Weaver Wind, LLC

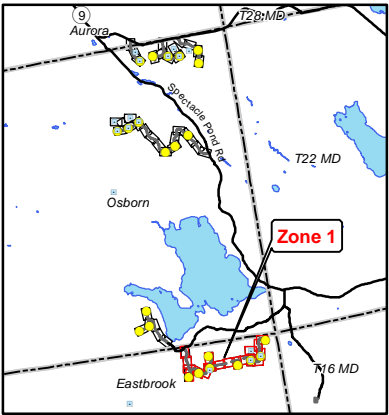
Test Pit	Depth to bedrock (from g.s.)	Test Pit Log
45	>5.0	
46	3' 4"	
47	>5.0	
48	>5.0	x
49	>5.0	x
50	>5.0	x

g.s.= ground surface

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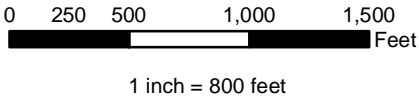
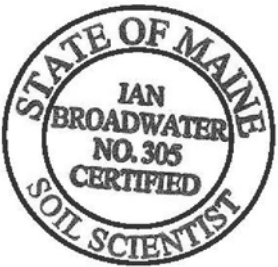


**MDEP Requested Test Pits
Weaver Wind Project
Map: Zone 1 Index Map**
Hancock County, Maine



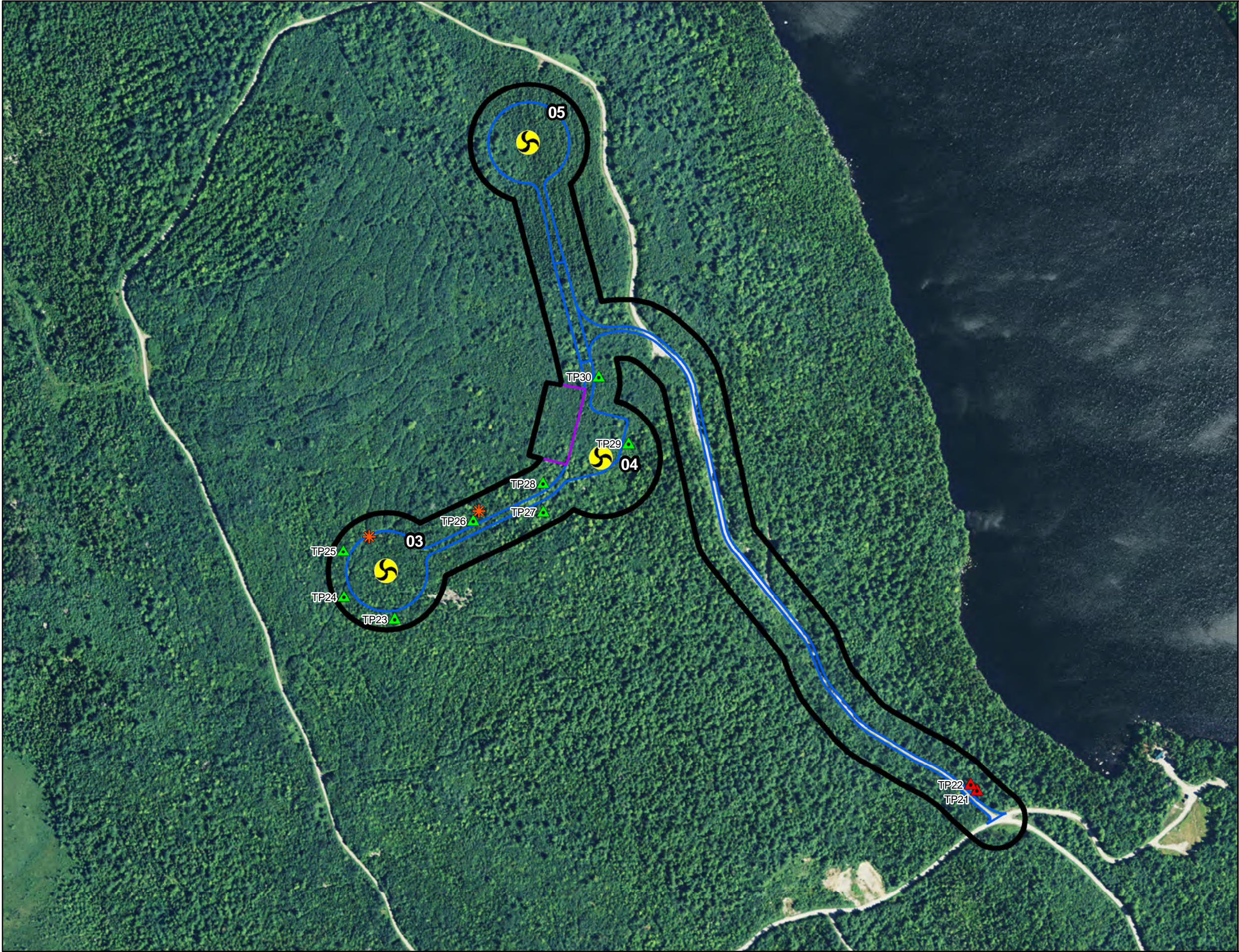
- Site Features**
- Proposed Turbines
 - Laydown Areas
 - Class L Soil Survey Extent
 - Proposed Met Towers
 - New Access Roads
 - Ledge/Outcrop Check
 - Need Test Pit
- Maine DEP Request**

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

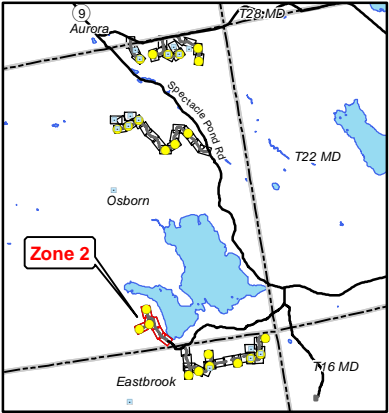


Normandeau Associates
550 Forest Ave., Suite 201
Portland, ME USA
04101

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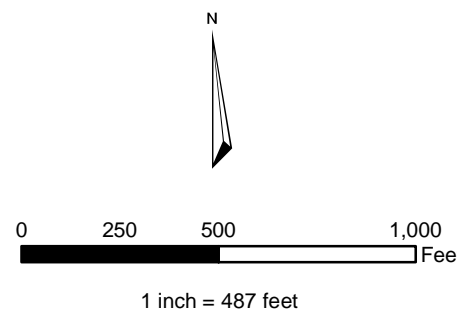
MDEP Requested Test Pits
Weaver Wind Project
Map: Zone 2 Index Map
Hancock County, Maine



Site Features

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

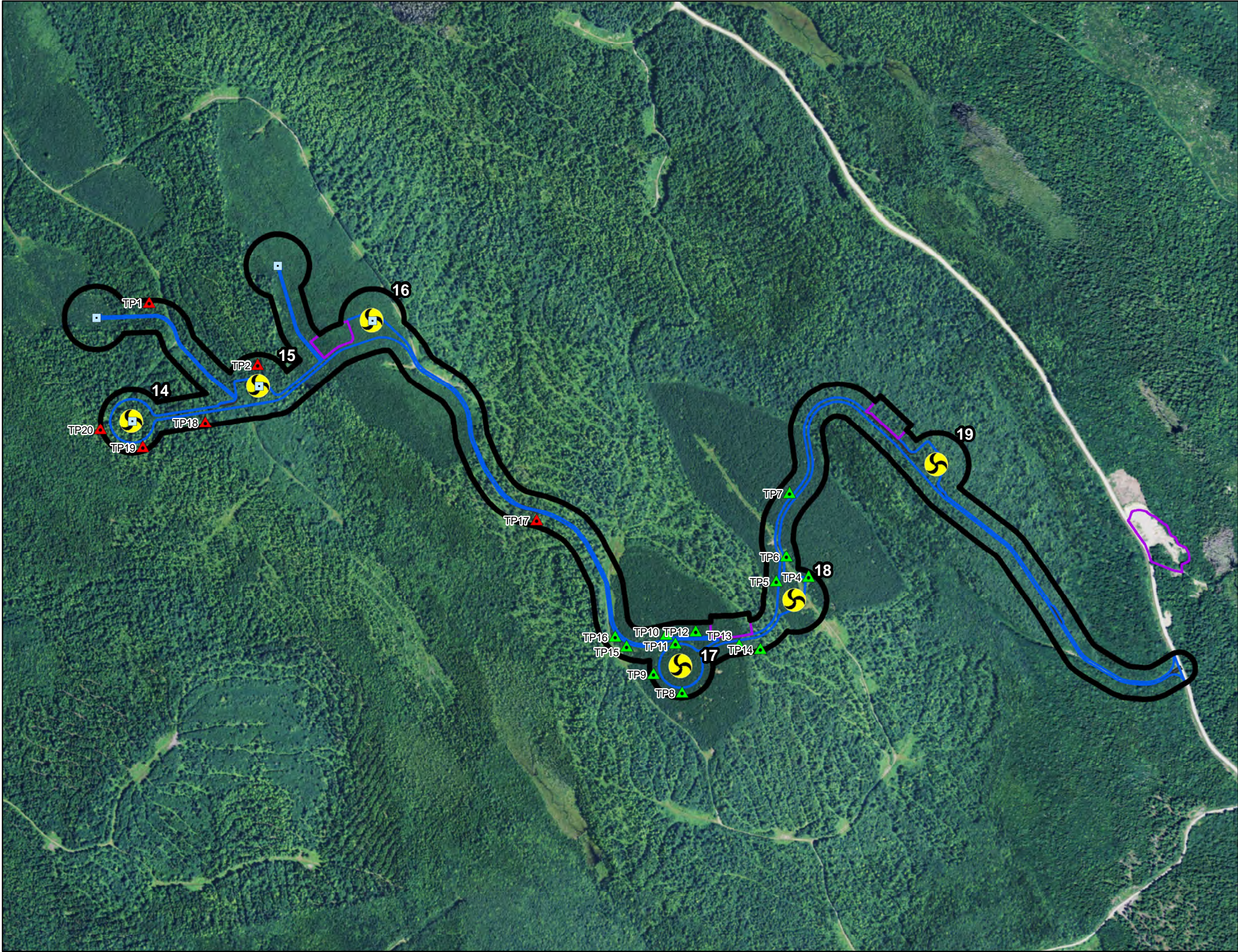
Data provided by: James W. Sewall, ESRI, NHD & MEGIS



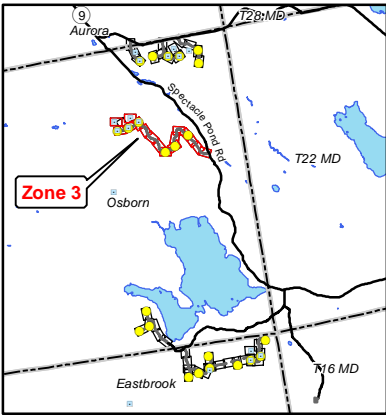
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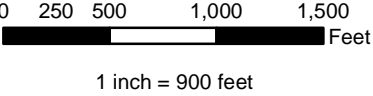
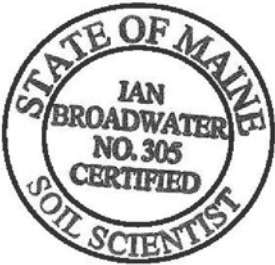
**MDEP Requested Test Pits
Weaver Wind Project
Map: Zone 3 Index Map**
Hancock County, Maine



Site Features

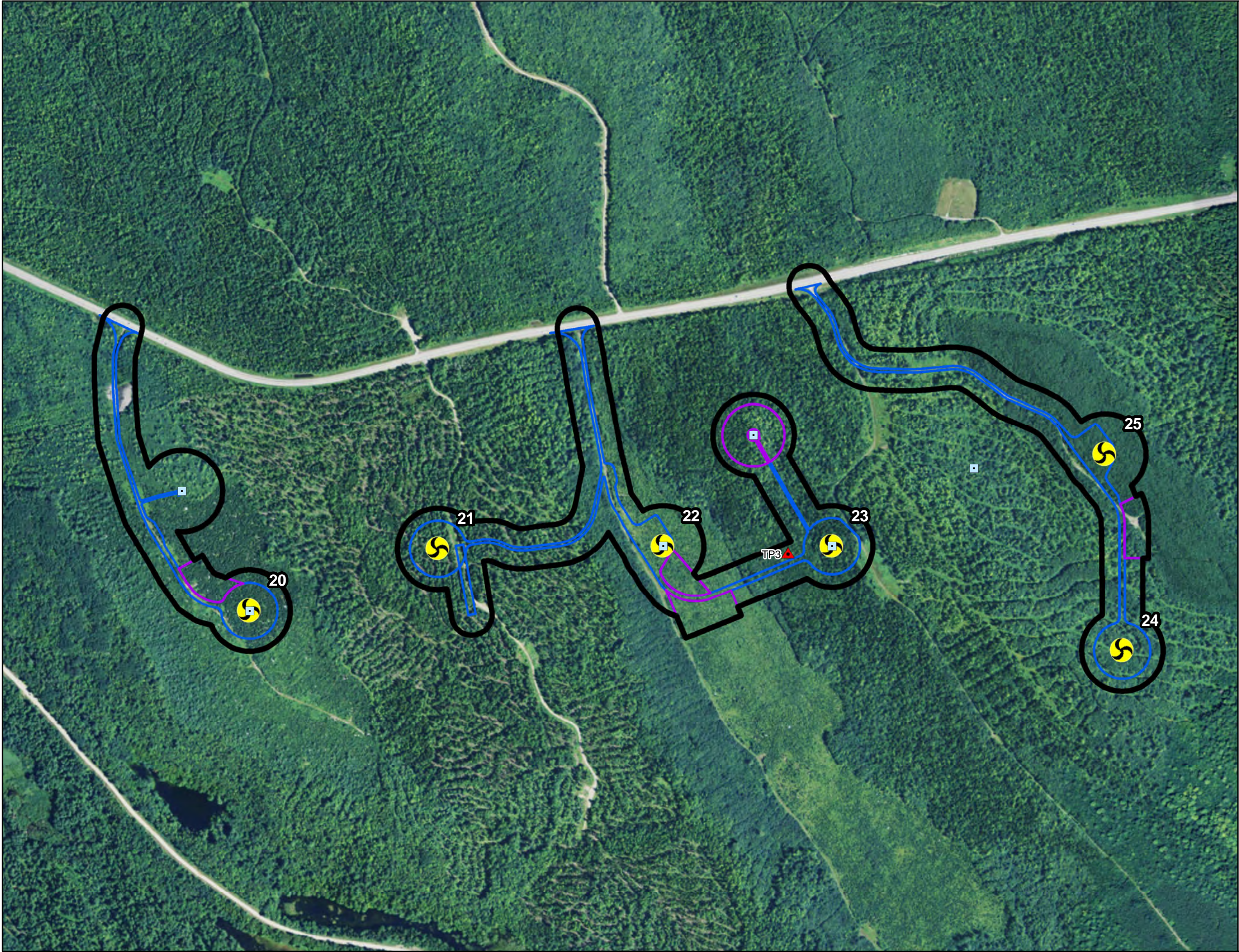
- | | |
|---|--|
|  Proposed Turbines |  Laydown Areas |
|  Proposed Met Towers |  Class L Soil Survey Extent |
|  New Access Roads | Maine DEP Request |
| |  Ledge/Outcrop Check |
| |  Need Test Pit |

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

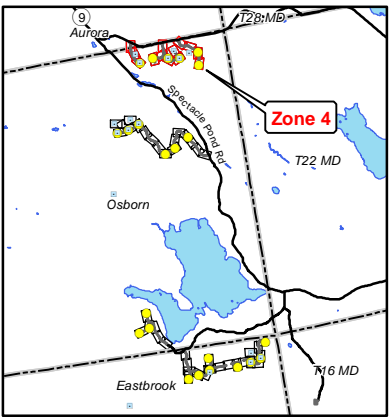


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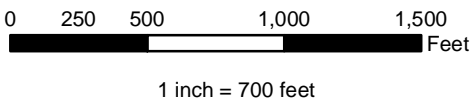


MDEP Requested Test Pits
Weaver Wind Project
Map: Zone 4 Index Map
Hancock County, Maine



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

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



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