

Phase IA Precontact Period Archaeological Sensitivity of the Proposed Bowers
Wind Project, Carroll Plantation and Kossuth Township,
Penobscot and Washington Counties, Maine

By

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Introduction

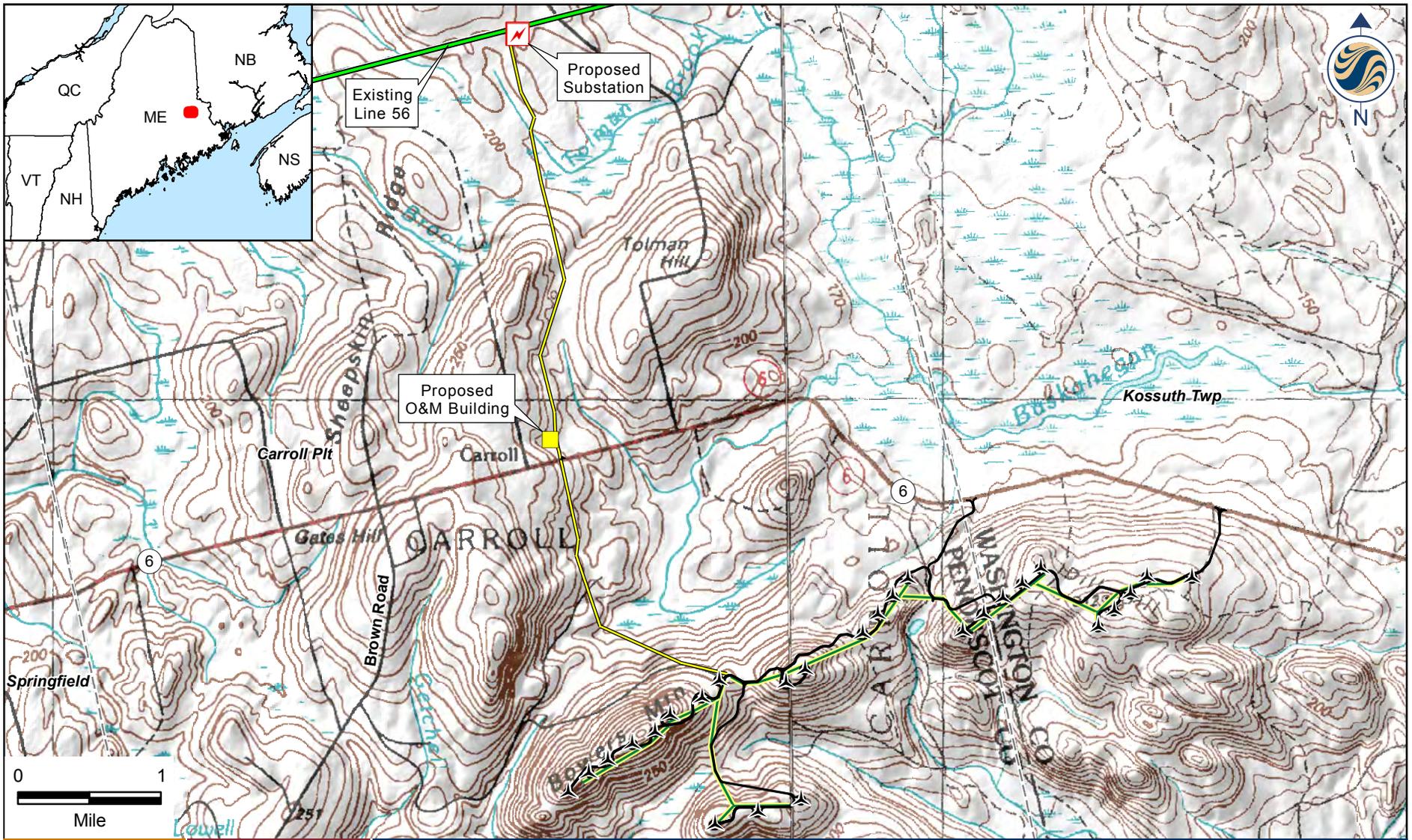
Champlain Wind, LLC, (Champlain) has proposed construction of the Bowers Wind Project (Project), a utility-scale wind energy facility to be located in Carroll Plantation, Penobscot County, and Kossuth Township, Washington County. Both townships are located within the Maine Land Use Regulatory Commission's jurisdiction (Figure 1). The following information was used in review and assessment of the project: the Project include up to 27 turbines, associated access roads, up to four permanent 80-meter meteorological towers, a 34.5-kilovolt electrical collector system, an electrical collection substation, and an Operations and Maintenance building (Figure 1).

Methods for Precontact Period Review

An archaeological study of a project area is dependent on information regarding placement of project features. The assessment process is a cumulative activity for which each step or phase is dependent on completion of the prior task. The Phase IA study for the Bowers Wind Farm Project involved review of various maps, including topographic, geologic, and 20th-century USGS maps; review of archaeological information, including archaeological reports relevant to the project area, that is maintained at the Maine Historic Preservation Commission (MHPC) in Augusta, Maine; assessment of Precontact period archaeological sensitivity of the Project; and determination of whether and where additional field work involving subsurface excavation with small hand-tools may be necessary to identify known sites or test for other sites that may be present in sensitive areas. The general project area had previously received review for Precontact period archaeological sensitivity assessment and fieldwork as part of the Stetson Wind Project, which is located about 7.0 miles (11.2 km) north of the proposed project.

The MHPC was visited in June to gather archaeological data on the project area. Two USGS topographic maps (7.5 minute series) were examined that include the Project: maps 110B (Bowers Mountain, ME) and 111A (Dill Hill, ME). The proposed express collector line crosses two water bodies: Lindsey Brook in one location and Tolman Brook in one location. Most of the Project; however, is located on Bowers Mountain and Dill Hill where the proposed turbines are located. These areas are at high (over 1000.0 feet [305.0 m]) high elevations where there is no water, but where raw materials, such as lithics for stone tool making, might be present. There is one archaeological study that was undertaken immediately to the north of the Project at Stetson Mountain (Clark and Piacentini 2007). Completed in 2007, this study concluded that no Precontact period archaeological sites were present in the project vicinity (Clark and Piacentini 2007:6-12) (MHPC report no. 3486). The Clark and Piacentini (2007-6-12) report does provide a useful summary of the Precontact period cultural history of the area, which is not repeated here. It documents that Precontact period sites are present about 15.0 miles (24.0 km) west of the project area along the Mattawamkeag and Penobscot Rivers. In general, that culture history review documents that most habitation sites, at least those dating to less than 9,000 years ago, are found in close proximity (less than about 50 meters) to a water body, such as a stream, river, pond, lake, or wetland.

The bedrock geology of the area indicates that it is underlain rocks dating to the Cambrian through Caradocian periods. In particular rocks in the Bower Mountain area include black shales, thin bedded turbidites, and mafic volcanic rocks (Ludman, Hopeck, and Brock 1993). The only rocks observed during the field visit included turbidites that would not be suitable for the production of either chipped stone or ground stone tools.



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Legend

- Proposed Turbine Layout
- Express Collector Corridor
- Mountain Top Collector Corridor
- Proposed Access Road

Client/Project
 Bowers Mountain Wind Project
 Carroll Plt. and Kossuth TWP, Maine

Figure No.
1

Title
Site Location Map
 January 10, 2011

One surficial geology map (15 minute quadrangles) was also reviewed to identify what surficial geological deposits exist within the project (Holland 1986). This map shows that the area is draped in till with areas of exposed bedrock at higher elevations. Some of the lower areas around streams, such as the Baskanhegan and Tolman, may also have alluvium and Presumpscot Formation silt deposits.

Field Reconnaissance

A field visit was made to the Bowers Wind Project made on June 4, 2010. The project area was accessed from Route 6 in Carroll, Maine in Carroll Plantation. There is an extensive network of paved and gravel roads around the project area. The Bowers Mountain area was accessed from gravel roads. No outcrops of rock were observed, but rocks observed along road edges were neither suitable for chipped stone tool manufacture nor ground stone tool manufacture. The locations of the proposed operations and maintenance facilities were unknown at the time of the visual inspection of the project area; following the field reconnaissance, the location was identified and it is not located near any streams. The exact locations of the poles associated electrical collector system were not known at the time of the field visit. Once additional consultation with MHPC is complete, an additional field survey, and possible testing, is recommended for the stream crossings at Tolman Brook and Lindsey Brook.

Archaeological Assessment and Conclusion

Information presented above was gathered from a variety of sources including review of relevant literature and maps, search of state archaeological site files, and a field visit to the project area. Water proximity is a key variable for predicting site locations. In fact, 95% of all Precontact period sites in Maine are located adjacent to water (Spiess 1994). There are two streams potentially located within the Project, and after additional consultation with MHPC, one or both streams should be field checked and perhaps field tested. Although it is not possible to predict with any degree of accuracy what types of organic resources may have been available in the project area in the past (i.e., plant foods, animal food, medicinal plants), it is possible to check for highly valued inorganic materials, such as suitable stone for tool making. None is available in the project area. Although the proximity of other sites is not necessarily a good predictor of the presence of other sites, their presence oftentimes indicates that valuable resources must have been nearby. There are no reported sites from or nearby the Project area.

Based on review of these variables, water proximity, resource availability, and archaeological site proximity, the conclusion is drawn that the proposed Bowers Wind Project has low sensitivity for Precontact period archaeological resources except where noted above.

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